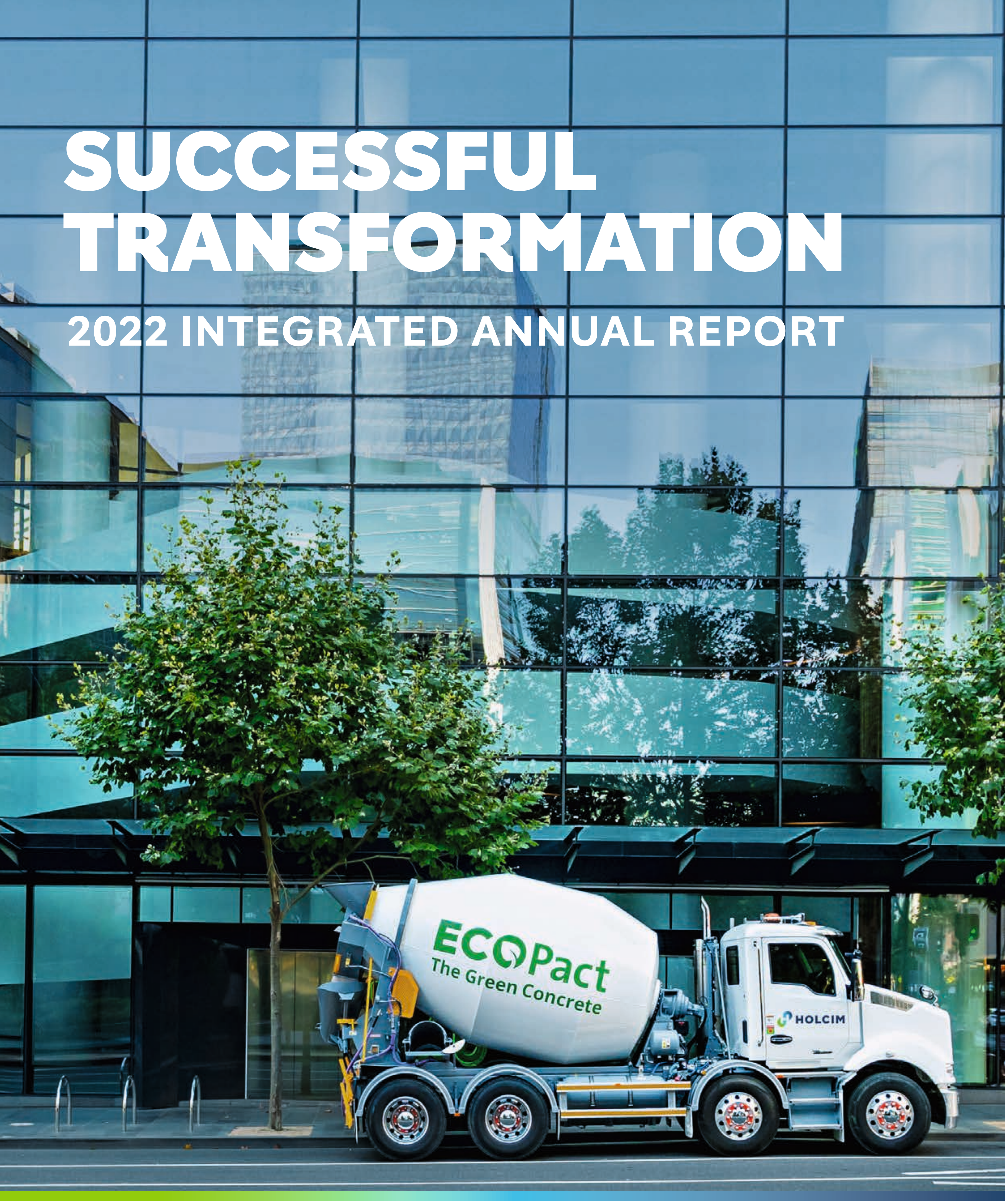
SUCCESSFUL TRANSFORMATION

2022 INTEGRATED ANNUAL REPORT



HOLCIM

2022 was a year of record performance and successful transformation for Holcim.

2022 HIGHLIGHTS

FINANCIAL

29.2 **Net sales** CHF BN	**9.5%** **Return on invested capital**
4.8 **Recurring EBIT** CHF BN	**0.9x** **Leverage ratio**

NON-FINANCIAL

–21% **Reduction in CO_2/ net sales**[1]	**304** **Freshwater withdrawn/ton cem. material** liters
22.5 **Contribution in social initiatives** CHF M	**6.8** **Construction & demolition waste recycled** m tons

[1] Scope 1 and Scope 2 CO_2 emissions/net sales compared to 2021

CONTENTS

Cover Image: ECOPact is the world's broadest range of green concrete, accounting for 13 percent of total ready-mix sales in 2022.

RECORD PERFORMANCE AND SUCCESSFUL TRANSFORMATION

In 2022 we delivered record performance and successful transformation, with Solutions & Products reaching 19 percent of net sales and our fast expansion in the most attractive market of North America, while strengthening our leadership in sustainability, with 21 percent lower carbon emissions[1] per net sales.

KEY HIGHLIGHTS

RECORD PERFORMANCE

29.2BN

Net sales CHF

4.8BN

Recurring EBIT CHF

3.5BN

Free cash flow[2] CHF

[2] After leases and before resolution with the US Department of Justice (DOJ)

See more on p. 14

SUCCESSFUL TRANSFORMATION

19%

Solutions & Products share of net sales

35%

North America share of net sales[3]

23

M&A transactions

[3] Net sales to external customers, excluding trading activities

See more on p. 26

LEADING IN SUSTAINABILITY

–21%

CO_2/net sales[4]

328M

EU Innovation Fund grant awards for CCUS EUR

AA

CDP double "A" list for Climate and Water

[4] 2022 Scope 1 + Scope 2 CO_2 emissions/net sales, compared to 2021

See more on p. 40

[1] 2022 Scope 1 + Scope 2 CO_2 emissions/net sales, compared to 2021

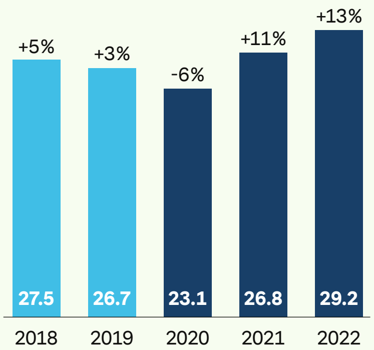
RECORD PERFORMANCE

FINANCIAL HIGHLIGHTS

NET SALES
CHF BN

29.2BN

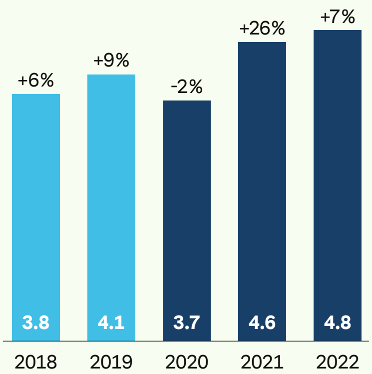
+12.9% LFL



RECURRING EBIT[1]
CHF BN

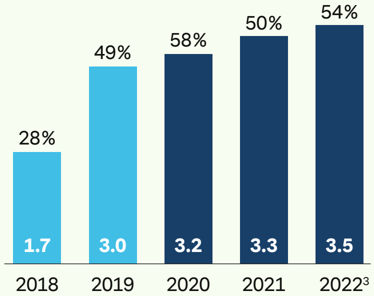
4.8BN

+7.2% LFL



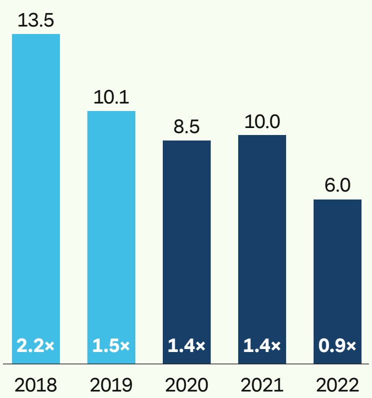
FREE CASH FLOW
AFTER LEASES[2] CHF BN
AND CASH CONVERSION %

3.5BN[3]



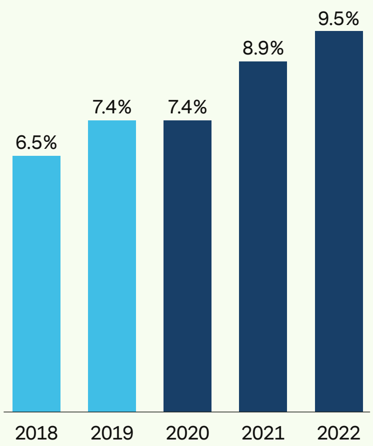
LEVERAGE RATIO[1]
AND NET FINANCIAL DEBT[1] CHF BN

0.9×



ROIC[1]

9.5%

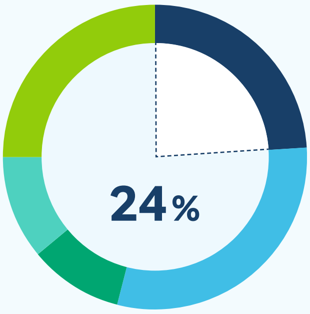


[1] 2018 is not restated for IFRS 16 "Leases"
[2] 2018 reflect the former alternative performance measure indicator "Free Cash Flow"
[3] Before resolution with the DOJ

SUCCESSFUL TRANSFORMATION

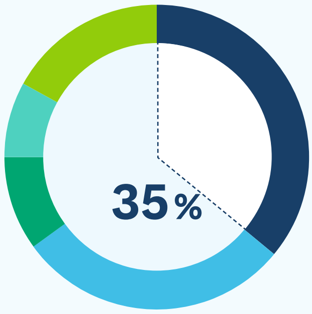
FAST EXPANSION IN THE MOST ATTRACTIVE NORTH AMERICAN MARKET[1]

NET SALES BY REGION %



2019

North America	**24%**
Europe	30%
Latin America	10%
Middle East Africa	11%
Asia Pacific	25%



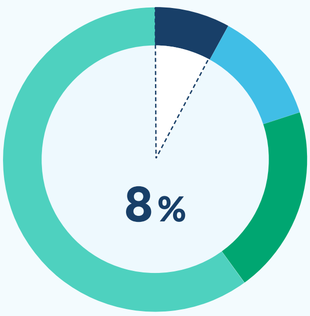
2022

North America	**35%**
Europe	30%
Latin America	10%
Middle East Africa	8%
Asia Pacific	17%

[1] Net sales to external customers, excluding trading activities

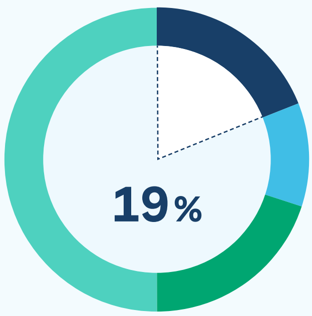
SOLUTIONS & PRODUCTS REACHING 19% OF NET SALES[1]

NET SALES BY SEGMENT %



2020

Solutions & Products	**8%**
Aggregates	12%
Ready-mix	20%
Cement	60%



2022

Solutions & Products	**19%**
Aggregates	11%
Ready-mix	19%
Cement	51%

[1] Net sales to external customers

LEADING IN SUSTAINABILITY

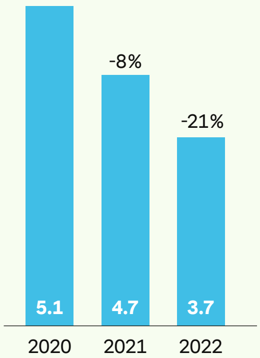
STRENGTHENING OUR SUSTAINABILITY PROFILE

21%

REDUCTION

in CO_2 per net sales compared to 2021[1]

REDUCTION IN CO_2/NET SALES %[1]



[1] 2022 Scope 1 + Scope 2 CO_2 emissions/net sales, compared to 2021

>10%

REDUCTION

in CO_2 per net sales targeted for 2023[1]

ADVANCING GREEN BUILDING SOLUTIONS

13%

ECOPact

Share of total ready-mix sales

27

ECOPlanet

Green cement markets

6.8

MILLION TONS

Construction & demolition waste recycled

RECOGNIZED ESG LEADER

MOODY'S

CDP A LIST 2022 CLIMATE WATER

Leader in ESG ratings

EU Innovation Fund

Grants of EUR 328m
to fund two carbon capture projects in Germany and Poland

SCIENCE BASED TARGETS

1.5°C
aligned 2030 targets validated by SBTi

OUR PURPOSE: BUILDING PROGRESS FOR PEOPLE AND THE PLANET

Holcim is Accelerating Green Growth to become the global leader in innovative and sustainable building solutions.

Building greener cities, empowering smart infrastructure from renewable energy to green mobility and improving quality of life for all.

We are at the forefront of decarbonizing building end-to-end, in line with our purpose to build progress for people and the planet.

IMPROVING LIVING STANDARDS FOR ALL

With our world building the equivalent of New York City every month, driven by rising population and urbanization, we need to build better with less. Materials like DYNAMax and 3D Tector Print make buildings that require up to 50 percent less material.

BUILDING GREENER CITIES

We're building greener cities with our sustainable building solutions, like Elevate's green roof in Thammasat University in Thailand, and ECOPact low-carbon concrete at Boston University's Data Science Center, with 30 percent lower CO_2 compared to conventional concrete.

EMPOWERING SMARTER INFRASTRUCTURE

Holcim solutions are essential to enabling the smarter infrastructure that our growing world needs, ranging from Milan's CityLife urban redevelopment project, which reimagines living and working in a car-free zone, to megaprojects such as Mexico's Maya train.

A NEW LEVEL OF STRENGTH

2022 was a pivotal year in Holcim's transformation.

"Thanks to the tireless efforts of our 60,000 employees, we have reached a new level of strength."

Dear Shareholders,
On behalf of Holcim's Board of Directors, I am pleased to share with you our very strong 2022 results. This was a record performance for Holcim. Thanks to the tireless efforts of our 60,000 employees, we have reached a new level of strength, with an expanded range of building solutions, a shift in our geographic footprint toward mature markets and a lower carbon footprint.

In every region of the globe, our employees have lived up to our purpose of building progress for people and the planet, advancing on our vision to become the global leader in innovative and sustainable building solutions. Our teams have achieved all this while continuing to deliver record results, quarter after quarter. I congratulate them for this extraordinary performance.

Making a bigger difference
Holcim is decarbonizing construction at every stage of a building's lifecycle. We are lowering the CO_2 footprint of new buildings with our low-carbon materials. We make existing buildings more energy efficient with solutions like roofing and insulation. We are leaders in circular construction, focused on turning old buildings into new ones. And because no single organization can do this alone, Holcim has been reaching out to all stakeholders who can help make construction more sustainable. Together we can advance our world's progress toward a net-zero economy.

In 2022 Holcim shared the message of decarbonizing building worldwide, speaking with audiences and influencers at events ranging from COP 27 to New York Climate Week to the Bloomberg New Economy Forum. We also worked at the cutting edge, engaging with the entrepreneurs and thought leaders who will develop the next generation of solutions – from researchers at MIT, to entrepreneurs in green mobility, to our partners developing next-generation solutions for carbon capture, usage and storage.

Dynamic portfolio management
A major aspect of our company's transformation has been to shift significantly toward mature markets, especially North America, and to divest our businesses in Brazil and India. Thanks to our employees' great dedication, agility and speed, the divestments have all gone flawlessly, from signing to closing. We are deeply grateful to our former employees from those markets.

Moving forward
I am pleased by the agreement reached by Lafarge SA with the US Department of Justice. This resolves a legacy issue which stood in stark contrast with everything that Holcim stands for as a company. Across its business worldwide, Holcim operates according to the highest standards of governance, ethics & integrity with zero tolerance for any breaches. Our 60,000 people around the world stand by these principles every day.

We are committed to building value for all stakeholders, including our employees. In this context, I commend our colleagues for the important work they are doing to improve Health & Safety. More work remains to be done to reach our goal of zero harm. Our employees' well-being is of utmost importance, and nothing we do is worth putting that at risk.

Successful transformation
By the end of the year we had taken considerable strides toward our goal of becoming a global leader in innovative and sustainable building solutions. It is incredibly gratifying to see how our people have united around our company's transformation. I hope you will enjoy seeing the record of their progress on the pages that follow.

A personal word
This will be my last letter to you as Chairman of this great company. I thank you, dear shareholders, for your support over the last 13 years. My thanks also go out to the current and former employees who have made me so proud to be part of this organization. You have my best wishes for the future. I am certain the best is yet to come.

On behalf of the Board of Directors and our entire company, I offer my most heartfelt thanks to you, dear shareholders, for your continued trust and support.

BEAT HESS
Chairman

2.50
Proposed dividend per share
CHF

"It is incredibly gratifying to see how our people have united around our company's transformation."

RECORD PERFORMANCE AND SUCCESSFUL TRANSFORMATION

We've made a decisive shift in our portfolio, our markets and our sustainability profile.

“Holcim has never been stronger.”

Dear shareholders,
2022 was a record year for Holcim. Our 60,000 people worldwide delivered a record performance from all four business segments and around the world. Our teams achieved all this while keeping our customers running, without interruption, despite challenges ranging from geopolitical uncertainty to inflationary pressure.

In 2022 we delivered record financial results. Whether it is net sales, Recurring EBIT, ROIC or the strength of our balance sheet, Holcim has never been stronger. This gives us the freedom to invest in our future and further accelerate green growth with continued acquisitions and the ongoing decarbonization of our operations.

Successful transformation
Our company's transformation was led by our fast expansion in Solutions & Products. We're generating profitable growth in the most attractive construction segments, including roofing, insulation, facades and tile adhesives. From 8 percent of net sales in 2020, the segment delivered 19 percent of our net sales in 2022, on the way to 30 percent by 2025.

Over the past two years we have developed a USD 4 billion platform in the highly attractive USD 40 billion North America roofing market. As proven by our 19 percent EBIT margins in 2022, roofing is an excellent strategic fit for Holcim. We're focused on the most value-adding side of the business, with advanced membranes and system selling, with innovative and proprietary solutions from insulation to smog-reducing granules to repair systems. With over 70 percent of sales coming from re-roofing and great cross-selling potential with our other solutions, like ECOPact low-carbon concrete, we have great growth opportunities ahead.

◀ *Addressing the global leadership team at the 2022 Senior Leaders' Meeting.*

Watch video online here

Bloomberg New Economy Forum, Singapore, November 2022.

29.2BN
Net sales
CHF

4.8BN
Recurring EBIT
CHF

37%
Recurring EBIT from North America[1]

19%
Net sales from Solutions & Products[2]

–21%
Reduction, CO_2/net sales[3]

Expansion in North American market
In 2022 we expanded into the most attractive North American market, representing 35 percent of net sales – up from 24 percent three years ago – and 37 percent of our Recurring EBIT[1]. In 2023 we expect net sales from North America to be around 40 percent and Recurring EBIT to be above that.

We also grew in other core markets in Europe and Latin America. These regions are at the forefront of sustainable building trends, powered by green stimulus as well as demand for low-carbon and energy-efficient building. With our innovative and green building solutions, Holcim is in a prime position to be the partner of choice for our customers to meet their sustainability goals.

Leading in sustainability
Sustainability is a top priority at Holcim. This year we reduced our CO_2 emissions per unit of net sales by over 20 percent and we will lower them by over 10 percent in 2023.

In 2022 we achieved key green growth milestones, from our low-carbon concrete ECOPact reaching 13 percent of ready-mix net sales, to scaling up ECOPlanet low-carbon cement in 27 markets.

Advancing our sustainability leadership, we upgraded our net-zero targets to align with the 1.5° C scenario as validated by the SBTi. We ranked first in our industry in Moody's ESG ratings, and were one of only a handful of companies to receive the CDP's prestigious double "A" ranking for Climate and Water. Recognizing the scalability of our decarbonization technologies, the EU Innovation Fund granted us two awards for carbon capture projects in Germany and Poland, for a total of EUR 328 million.

A new company profile
Building on this year's record results, we enter 2023 with renewed focus on delivering superior performance, continuing our fast-paced transformation and leading in sustainability. We've made seven acquisitions so far, including Duro-Last, a roofing systems leader in the most attractive North American market, as well as a range of bolt-ons in Europe and the US. We are committed to keep up this fast pace.

Thank you, dear shareholders, for the trust you have placed in us. We look forward to building progress together.

JAN JENISCH
CEO

1 Excluding corporate costs
2 Net sales to external customers
3 Scope 1 + Scope 2 CO_2 emissions/net sales, compared to 2021

MEET OUR LEADERSHIP TEAM

A diverse and talented team of experts dedicated to decarbonizing building for a net-zero future and making Holcim the global leader in innovative and sustainable building solutions.

FELICIANO GONZÁLEZ MUÑOZ
Head Human Resources

MATHIAS GÄRTNER
Head Legal & Compliance

GÉRALDINE PICAUD
Chief Financial Officer

OLIVER OSSWALD
Region Head, Latin America

JAMIE M. GENTOSO, P.E.
Global Head, Solutions & Products

JAN JENISCH
Chief Executive Officer

TOUFIC TABBARA
Region Head, North America

MAGALI ANDERSON
Chief Sustainability and Innovation Officer

MILJAN GUTOVIC
Region Head, Europe

MARTIN KRIEGNER
Region Head, Asia Middle East Africa

Read full biographies on p. 106–110

RECORD PERFORMANC

In 2022 we delivered across all key metrics of Strategy 2025 – Accelerating Green Growth.

▲ *HSG Learning Center, Switzerland built with ECOPact+. The building has 10% less CO_2 and 20% recycled construction and demolition waste (CDW) inside*

IN THIS SECTION

MEGATRENDS AND OPPORTUNITIES

The future of construction
With today's megatrends, from the rise in population and urbanization to improving living standards, the construction sector has never been more attractive. It has an essential role to play to build a net-zero future that works for all – from our homes, schools and hospitals, to our roads, bridges, railways and more.

We must build – and we must build sustainably. That is because building accounts for 38 percent of the world's CO_2 emissions today, with 30 percent generated at the construction phase and 70 percent linked to buildings in use.

At Holcim sustainability is at the core of our "Strategy 2025 – Accelerating Green Growth", to decarbonize building across its entire lifecycle to build better with less: from our operations and our products to construction and buildings in use, all the way to driving circular construction.

We do that first with concrete. Concrete is the indispensable building material for a growing, urbanizing world. No other material matches its performance benefits.

A state-of-the art example of smart design. "The Cloudscape of Haikou" project, China. Designed by MAD Architects

Concrete: the material for a net-zero future

Sustainable: Concrete is local, affordable, and infinitely recyclable. We are decarbonizing it with our ECOPact green concrete and leveraging its thermal properties for energy efficiency. Acting as a carbon sink, concrete reabsorbs more than 20 percent of the CO_2 emitted in its production throughout its lifespan.

Versatile: Concrete opens infinite possibilities with its design flexibility, making it the ideal material to make everything from high-rise buildings and infrastructure to affordable housing, from 3D printing to high-strength prefabricated structures.

High-performing and resilient: Concrete protects our homes, cities and infrastructure like no other material, resisting disasters, from fires and floods to earthquakes.

As part of "Strategy 2025 – Accelerating Green Growth" we aim to make green building the norm, constantly developing new smart design solutions, and targeting 25 percent of our ready-mix concrete sales from ECOPact low-carbon concrete by 2025.

POPULATION GROWTH

Our world's population is expected to grow 22 percent by 2050, from 7.8 billion today to 9.7 billion.

BETTER LIVING STANDARDS

The world demands better living standards and more efficient infrastructure. Construction is essential to improving people's quality of life.

1.9BN
Population increase by 2050

URBANIZATION AND MEGACITIES

Approximately 2.5 billion more people are expected to live in cities by 2050. We need to build the equivalent of New York City every month.

INNOVATION-DRIVEN BUILDING

Innovation-driven building technologies are in greater demand than ever before, especially light and modular construction solutions.

2.5BN
Increase in urban population by 2050

SUSTAINABLE CONSTRUCTION SOLUTIONS

Demand for sustainable construction solutions is being driven by increasing resource scarcity and the world's transition to net-zero.

REPAIR & REFURBISHMENT

Most of the buildings that exist today will still be in use in 2050. We help customers repair & refurbish those buildings to make them more sustainable while in use.

80%
of Europe's building stock will still be in use in 2050

STRATEGY 2025 – ACCELERATING GREEN GROWTH

▲ Sport Hall Dolni Brezany, Czech Republic built with Firestone's UltraPly TPO waterproofing membrane

ACCELERATING GROWTH

With today's megatrends the construction sector has never been more attractive. In this context, we will accelerate growth across all our markets with leading profitability and cash flow. Holcim's profitable growth will be driven by innovative and sustainable building solutions, from ECOPact green concrete to energy-efficient roofing systems. We will lead the green transformation of materials with solutions like ECOPlanet, including by using 20 percent construction & demolition waste inside. We will further fuel our growth with bolt-on acquisitions in mature markets in the aggregates and ready-mix concrete businesses. Strengthening our performance, we will scale up digitalization across our value chain, from operations and distribution to our building solutions and customer experience.

▲ Nike's EMEA distribution center, Belgium

EXPANDING SOLUTIONS & PRODUCTS

We will reach 30 percent of Group net sales in Solutions & Products by 2025. Growing closer to our customers, this business will expand its range of integrated solutions and systems from roofing and insulation to facades and tile adhesives, driving energy efficiency and green retrofitting. Roofing sales are delivering double-digit growth in the USD 40 billion North America roofing market and we are on track to reach our 2025 target of USD 4 billion in roofing sales two years ahead of schedule.

29.2BN
Net sales
CHF

4.8BN
Recurring EBIT
CHF

0.9x
Leverage ratio

9.5%
Return on invested capital

LEADING IN SUSTAINABILITY & INNOVATION

Sustainability is at the core of our strategy. We were the first global building materials and solutions company to have our 2030 and 2050 net-zero targets validated by the Science Based Targets initiative (SBTi) for all scopes. This year the SBTi approved our upgraded near-term targets in line with the 1.5°C science-based framework. We will remain at the forefront of green building solutions, with 25 percent of ready-mix net sales coming from ECOPact, with at least a 30 percent lower CO_2 footprint. Driving circular construction, we will recycle 10 million tons of construction & demolition waste by 2025. We will continue to deploy smart technologies, from 3D printing using 50 percent less materials, to innovative low-emission raw materials like calcined clay. We will further develop next-generation technologies including over 50 projects in carbon capture, usage and storage and mineralization, in line with our net-zero journey.

▲ *Pian-Médoc School, France built with ECOPact, 90–115 kg lower CO_2 footprint per m^3*

DELIVERING SUPERIOR PERFORMANCE

Our "Strategy 2025 – Accelerating Green Growth" financial targets are:

- 3-5 percent net sales growth (like for like)
- Over-proportional increase in Recurring EBIT (like for like)
- 45 percent cash conversion
- 10 percent return on invested capital in 2025
- Ratio of net financial debt to EBITDA of under 1.5× in 2025

The strategy includes ambitious 2025 sustainability targets in line with Holcim's net-zero roadmap, validated by the SBTi:

- 25 percent of ready-mix sales from ECOPact, with at least a 30 percent lower CO_2 footprint
- 10 million tons of construction & demolition waste recycled in our products
- Green CAPEX of CHF 500 million
- >40 percent of financing agreements linked to sustainability goals

We will deliver these results by fostering an engaged, diverse, inclusive and high-performance culture while operating at the highest level of ethics and integrity.

▲ *Seven Gardens Oak House quarter, Wiesbaden, Germany, built with DYNAMax ultimate performance concrete*

13%
of total ready-mix net sales from ECOPact green concrete

6.8
MILLION TONS
of construction & demolition waste recycled

403M
Green CAPEX
CHF

RECORD RESULTS IN 2022

Impressive growth trends across all regions are driving our leading profitability and cash flow.

Continued record performance and successful transformation
In a year of historic transformation with 23 M&A transactions, Holcim delivered record full-year 2022 performance while accelerating green growth.

We achieved this through the expansion of Solutions & Products, with six acquisitions, as well as 13 bolt-ons in 2022 that had a positive impact on our margins in aggregates and ready-mix concrete. These moves were complemented by the divestments of our India and Brazil businesses, which delivered combined cash proceeds of USD 7.3 billion, giving us the opportunity to seize growth opportunities while protecting our strong balance sheet.

With these achievements we have kept up our growth momentum while further accelerating our decarbonization, significantly improving our sustainability profile this year. With this continuously strong performance we upgraded our guidance for net sales, Recurring EBIT and leverage over the year and announced a share buyback program in the third quarter.

Accelerating green growth around the world, Holcim's growth trends are as follows:

North America was our strongest region for accelerating growth in 2022. This dynamic market accounted for 35 percent of our net sales and 37 percent of Recurring EBIT in the year[1].

▲ *Parndorf Shopping Center, Austria, built with Firestone's RubberGard EPDM roofing system*

Traditionally a leader in the materials business, we are now a regional leader in roofing, which is critical to enhancing the energy efficiency of building. In February 2023 we signed an agreement to acquire Duro-Last, another leading brand in commercial roofing, to accelerate growth in this highly profitable segment. Combined with our drive to make low-carbon OneCem our standard cement offer across North America, we are in a good position to capitalize on the region-wide trend toward sustainable building materials and technologies. To reach more green building professionals and showcase how our solutions can enable green building at scale, we went to Greenbuild in San Francisco for the first time this year. Green building solutions are expected to be in high demand, boosted by the US Inflation Reduction Act as well as the USD 1.2 trillion Infrastructure Investment and Jobs Act (see box). We expect to generate around 40 percent of our net sales and over 40 percent of Recurring EBIT in North America in 2023.

[1] Net sales to external customers, excluding trading activities. Recurring EBIT excludes corporate costs.

Our Europe region is leading our company's decarbonization – a key factor to sustaining our competitive advantage. We continuously and systematically accelerate the use of alternative fuels and low-emission raw materials as we prepare for changes in the carbon pricing mechanism in the European Union.

Seven of our 13 bolt-on acquisitions in aggregates and ready-mix concrete were in Europe, further accelerating green sales from ECOPact to ECOPlanet. Solutions & Products have helped us diversify our earnings in a dynamic and resilient European construction market, especially in repair & refurbishment, for which we have recently acquired a range of leading brands in specialty building solutions (see page 32). With this uplift from our green product portfolio we expect Europe to have another strong 2023 in accelerating growth.

Healthy economic fundamentals are driving construction in Latin America. Combined with our strong asset and market positions, we are in an excellent position to help improve living standards across the region, supporting sustainable urbanization and infrastructure. Building on our success with ECOPact green concrete, we successfully launched ECOPlanet green cement across all markets, where it is playing a central role in a wide variety of housing projects to building key infrastructure, such as the Maya train in Mexico. We also continue to grow the retail Disensa franchise and expanded in Solutions & Products with Gaco roofing products.

The world's fastest-growing megacities are concentrated in Asia, Middle East & Africa. We're introducing ECOPact and ECOPlanet to accelerate green construction across those markets, providing the affordable housing and green infrastructure that this growing region demands. In Kenya we are showcasing how smart design can meet those needs at Mvule Gardens, a 52-unit housing facility that is Africa's largest 3D printed affordable housing project. In Egypt we are using ECOPlanet green cement to build Africa's tallest tower, the Iconic Tower outside Cairo, to deliver a CO_2 savings of 60 percent. Airium™, our mineral insulating foam, is showing progress in Algeria and Morocco, providing affordable, sustainable and 100 percent recyclable insulation for all seasons.

Driving attractive shareholder returns

At Holcim our agenda for growth is underpinned by a commitment to disciplined value creation. The transformational shifts in our portfolio in 2022 have been funded through divestments that delivered cash proceeds of USD 7.3 billion, primarily from India and Brazil.

Governments driving green building: from the US to the EU

The public sector plays an essential role in scaling up green building by evolving sustainable building norms and incentives and by putting green procurement to work. These are key growth drivers for our green building solutions.

In the United States, for example, the Bipartisan Infrastructure Bill includes USD 1.2 trillion that prioritizes rebuilding US roads, bridges, and rail. The Buy Clean Initiative promotes the use of US-made, low-carbon construction materials. The Inflation Reduction Act (IRA) includes USD 369 billion in subsidies for green technology investment in the US – including carbon capture, usage and storage (CCUS), low-carbon building materials, Environmental Product Declarations (EPDs) and industrial decarbonization projects.

In Europe, the European Commission has put forward a Net-Zero Industry Act to focus investment on strategic projects along the entire supply chain. The plan includes a European Sovereignty Fund to boost the resources available for upstream research, innovation and strategic industrial projects key to reaching net zero. It also aims to create the right regulatory environment for critical sectors of the economy to reach net zero.

Other policies, such as RE2020 in France, target building emissions directly. The aim of RE2020 is to reduce the impact of new buildings on the climate by taking into account all of the building's emissions over its life cycle. By introducing carbon footprint thresholds for new buildings beginning in 2022, then making additional reductions every three years, RE2020 will drive a 34 percent CO_2 reduction in construction by 2031. RE2020 is the most advanced regulatory program in the world to date.

These forward-looking policy initiatives will drive growth of our green building solutions.

BOLT-ONS

13
bolt-ons in aggregates and ready-mix concrete

RECORD RESULTS IN 2022 CONTINUED

◀ *Holcim employees in France – members of the EVP campaign*

The transactions also allowed us to reward our shareholders with a share buyback program of up to CHF 2 billion, all while maintaining a record leverage ratio of 0.9 as of the end of 2022. Capital efficiency has been growing steadily for the past five years, with return on invested capital up from 8.9 percent in 2021 to 9.5 percent for 2022. We remain confident that we will reach our 10 percent target for return on invested capital in 2025. We are committed to continued profitable growth and value-creative M&A, maintaining strict value discipline. We will keep our strong balance sheet, with debt leverage below 1.5×, and deliver continued attractive returns to shareholders.

Sustainability at our core

When we announced Strategy 2025, we made a commitment to putting sustainability at the core of our strategy. Our 2022 results show how we have put that principle into practice.

On one side we are greening our own operations (see pages 50–53). On the other we are acquiring businesses in Solutions & Products. These are high-margin, capital-light businesses that play an essential role to make buildings sustainable in use by driving energy efficiency and green retrofitting. With solutions in roofing and insulation we can help our customers tackle the emissions that come from operating buildings. These account for 70 percent of building emissions, while 30 percent of emissions come from construction.

In making this transformation we have delivered record returns quarter on quarter, with free cash flow after leases in 2022 of CHF 3.5 billion[1], for a cash conversion of 54 percent, or well ahead of our Strategy 2025 target. This is the fourth consecutive year in which our free cash flow after leases[1] has exceeded CHF 3 billion.

[1] Before resolution with the DOJ

Green CAPEX

We are focused on increasing the share of Green CAPEX year on year, to reach at least CHF 500 million by 2025. In 2022 our Green CAPEX was CHF 403 million, spread across projects covering biodiversity, improving air and water quality, driving the circular economy, improving the carbon efficiency of our construction processes, decarbonization, clean energy and improving the lives of our people and communities.

With total CAPEX of CHF 1.4 billion in 2022, we remained firmly committed to our target of keeping CAPEX below CHF 1.4 billion this year.

Sustainable financing

In line with our ambition to link our financing to our sustainability performance, 38 percent of our financing is now linked to our climate, water and safety goals as well as ESG performance.

Eight Gardens, London that has ECOPact green concrete inside with 64 percent lower CO_2

CREATING VALUE FOR ALL

FOR OUR CUSTOMERS

With our broad range of green building solutions, we are helping our customers meet their sustainability goals. This starts with low-carbon solutions like ECOPact green concrete and Elevate roofing systems. Our Global Innovation Center leads a global network of R&D centers to continuously develop solutions that help our customers meet their sustainability goals and obtain the world's most prestigious green building recognitions, such as LEED®, BREEAM® and WELL®.

LEED
LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN

>450

New products delivered

13%

ECOPact share of total ready-mix net sales

See more on p. 38

FOR OUR PEOPLE

We are committed to creating an inclusive and high-performance culture of empowerment and continuous learning. We are especially focused on promoting diversity and empowering young talent in strategic priority areas, such as decarbonization and digitalization. Through annual employee engagement surveys of our 60,000 Holcim people working worldwide, we ensure our people can realize their full potential and accelerate green growth.

78%

Participation in employee satisfaction survey

3.8/5

Employee engagement rate

See more on p. 66

FOR THE PLANET

We are becoming a net-zero company with 1.5°C targets validated by the Science Based Targets initiative (SBTi). We are on a mission to decarbonize building with circularity at the core of everything we do, leading our industry in circularity. We build for nature to protect the environment by using transformative rehabilitation plans and use a science-based methodology to restore and preserve biodiversity and water while bringing more nature into cities.

CDP
DISCLOSURE INSIGHT ACTION
A LIST 2022
CLIMATE WATER

AA

CDP double "A" list for climate and water

6.8M

Tons of construction and demolition waste recycled

See more on p. 42

FOR COMMUNITIES

At Holcim we embed human rights across our activities. We put our business to work to empower communities, for example in partnership with Habitat for Humanity in Mexico and the Philippines. We became a founding member of the Roof Over Our Heads campaign to improve the lives of people in informal settlements. From health and education to skills development, these initiatives are improving the well-being of people in our communities around the world.

22.5M

Contribution to social initiatives
CHF

98%

Holcim sites covered by Human Rights Impact Assessments

See more on p. 72

FOR OUR SHAREHOLDERS

In 2022 we delivered record performance and successful transformation for our shareholders. Net sales, Recurring EBIT, debt leverage and return on invested capital all reached record levels, while at the same time our Solutions & Products segment reached 19 percent of net sales, our geographic footprint shifted into mature markets, and we strengthened our sustainability profile with 21 percent[1] lower carbon emissions per net sales vs. 2021.

2.50

Proposed dividend per share
CHF

4.96

EPS[2]
CHF

See more on p. 78

[1] Scope 1 + Scope 2 emissions
[2] before impairment and divestments and DOJ resolution

MATERIAL PRIORITIES

Materiality provides an essential lens through which we determine our approach for building long-term value for all our stakeholders. We conducted a new materiality assessment in 2022.

See the results on pages 114–115 in the complete 2022 Integrated Annual Report.

SUCCESSFUL TRANSFORMAT

In 2022 we expanded Solutions & Products and shifted toward core markets.

▲ *National Cultural Center, Baku, Azerbaijan designed by Zaha Hadid Architects built with Elevate's roofing systems*

TION

IN THIS SECTION

STEPPING INTO THE FUTURE

In December 2022, our Board of Directors and Executive Committee visited Solutions & Products facilities in North America. This visit showcased Holcim's successful transformation as a global leader in innovative and sustainable building solutions.

We're developing a USD 4 billion platform in the fast-growing USD 40 billion North America roofing market.

Repair and renovation account for a growing share of our roofing business, making it a highly resilient growth engine for our company.

By getting specified early in the design phase, we are opening tremendous cross-selling opportunities.

OUR BUSINESS MODEL

In line with Strategy 2025 – "Accelerating Green Growth," we have evolved the efficiency of our organizational model, integrating key markets that share similar growth dynamics into one Asia, Middle East & Africa (AMEA) region. AMEA joins the other regions of Europe, North America and Latin America. Our Solutions & Products segment is a proven growth engine for our Group, delivering 19 percent of net sales in 2022.

GLOBAL LEADER IN INNOVATIVE AND SUSTAINABLE BUILDING SOLUTIONS

ECOPact ECOPlanet Aggneo DYNAMax Hydromedia

NORTH AMERICA

North America is our number-one region, where we are leading the shift to sustainable building from foundation to rooftop – from commercial to residential, new building to renovation – accelerated by government programs and incentives, such as the Inflation Reduction Act and Buy Clean Initiative in the US. We are ready to capture this growth dynamic with our innovative and sustainable building solutions, helping our customers achieve their sustainability goals.

EUROPE

Our Europe region is at the forefront of decarbonizing building. It offers the most advanced sustainability profile in the Holcim Group, from green operations and solutions to next-generation technologies like carbon capture, usage and storage. Europe is leading the roll-out of green solutions for construction and the decarbonization of buildings through their lifetime, advancing low-carbon construction and making buildings sustainable in use. This green growth momentum is accelerated by policies from all levels of government, such as the EU Net Zero Industry Act to Germany's Climate Protection Act and France's RE2020, as well as advanced building norms driven by ESG and customer demand.

LATIN AMERICA

In the Latin America region we delivered strong results based on healthy economic fundamentals combined with our strong asset and market positions. These put us in position to help improve living standards across the region, advancing sustainable urbanization and infrastructure.

ASIA, MIDDLE EAST & AFRICA

In the Asia, Middle East & Africa region we are introducing green building solutions like ECOPact and ECOPlanet and enabling smart design with technologies like 3D printing. Holcim is building the affordable housing and green infrastructure that this region demands.

SOLUTIONS & PRODUCTS

Delivering 19 percent of our revenues in 2022, the Solutions & Products segment is a proven growth engine, offering products in attractive segments with above-market growth and pricing power. Holcim has proven itself to be the best owner for the businesses it has acquired, extracting maximum potential through its scale, technology, innovation, investment and aligned priorities.

The Solutions & Products offer includes roofing, insulation, tile adhesive and facade solutions, as well as asphalt and precast solutions. The segment generates continuous growth through sustainability & innovation, and from the growing and resilient demand in repair and refurbishment. Solutions & Products' value-added products deliver premium pricing power through system and specification selling. Solutions & Products reduces the carbon footprint of buildings in use while offering higher cash conversion and lower capital intensity. Through this segment, Holcim is acquiring businesses that provide platforms for further growth.

ROOFING AND INSULATION

Holcim combines some of the most iconic brands in roofing, insulation and waterproofing. Our product offering ranges from pitched residential roofs to flat commercial roofing to cover the full range of roofing system applications as well as wall insulation solutions. Today we are becoming a USD 4 billion player (pro forma) in the USD 40 billion North America roofing market. With nearly 3,000 employees globally, our roofing and insulation brands strive to lead the industry with innovative solutions.

SPECIALTY BUILDING SOLUTIONS

Specialty Building Solutions covers a range of strong European brands in advanced mortars, tile adhesives and facades. All have built a solid reputation by leading their segments with premium solutions and innovative products. The largest is PRB, offering an innovation-driven portfolio ranging from coatings and insulations to adhesives and flooring systems. PRB is an established leader in sustainability, constantly innovating for easy-to-use, high-performance products.

▲ McLaren Technology Center, UK with Elevate's RubberGard, a fully adhered system working

EXPANDING SOLUTIONS & PRODUCTS

With 19 percent of net sales in Solutions & Products this year, we are ahead of schedule in reaching our 2025 target of 30 percent.

◀ *Elevate solar roof at Apple Park, Cupertino, USA*

Since the acquisition of the Elevate roofing business in 2021 (formerly Firestone roofing, wall and lining systems), we have been acquiring new, innovation- and brand-driven businesses to broaden our Solutions & Products offer, including by signing an agreement to acquire Duro-Last in February 2023. The Solutions & Products business segment delivered 19 percent of our net sales in 2022 from just 8 percent of net sales in 2020. That increase gives us every confidence that we will reach our target of 30 percent Group net sales in Solutions & Products by 2025.

Solutions & Products serves new construction as well as the growing repair & refurbishment market, making it a recession-proof growth engine for our company. Largely targeted at lowering the carbon footprint of buildings in use, the Solutions & Products segment also generates more cash at lower capital intensity than other construction businesses.

Solutions & Products has two main divisions: Holcim Building Envelope and Specialty Building Solutions, as well as incorporating asphalt and precast solutions.

Holcim Building Envelope combines strong and well-regarded brands with a long history and well-recognized expertise in roofing, insulation and waterproofing. The division's product offering ranges from flat commercial roofing systems under the Elevate brand to pitched residential roofs under the Malarkey brand. Elevate

Roofing is a unique and attractive market

Holcim's successful transformation has been driven by fast expansion of Solutions & Products and into the most attractive North America market. Roofing has been the key to this, especially with Elevate in the commercial segment and Malarkey in residential. With the February 2023 agreement to acquire Duro-Last, another proven growth engine in the North America commercial roofing market, we expect 2023 net sales from roofing to exceed USD 4 billion (pro forma) – two years ahead of target.

Ever-growing roofing market
Roofing offers a unique and attractive business model. It is innovation-, sustainability- and brand-driven, offering significant pricing power for the market's strongest players.

Roofing offers a large, addressable market. North America alone accounts for USD 40 billion. The market in flat roofing especially is expanding quickly, driven by roofs which waterproof the building and provide functions such as cooling with high reflectivity, improving the building's overall energy efficiency.

System and value selling
Roofing offers system and value selling at its best, where sales of the membrane can be tripled through accessories, insulation and warranty business. Roofing also offers substantial opportunities for cost savings and cross-selling (see page 38).

Resilient repair market
Roofing is driven by growing and resilient demand in repair and refurbishment, resulting in lower cyclicality, making the business recession-proof.

Financial performance
From commercial flat roofs to residential shingles, we have proven that Holcim is the best owner of these assets. We have generated a significant increase in profitability of those businesses, with a Recurring EBIT margin of 19% in commercial roofing.

Perfect strategic fit for Holcim
Roofing is a perfect strategic fit for our business. It strengthens our range of sustainable building solutions, helping our customers to achieve their sustainability goals.

4 BN
Net sales in roofing to reach USD 4 billion 2023, pro forma

ROOFING PLATFORM

ELEVATE
SES polyurethane systems
Malarkey Roofing Products
Polymers Sealants North America
DURO-LAST[1] THE WORLD'S BEST ROOF.

[1] Proposed acquisition of Duro-Last announced in February 2023 and subject to customary closing conditions.

ONGOING EXPANSION IN HIGHLY ATTRACTIVE ROOFING BUSINESS

- **Attractive and large building materials segment** expected to **grow over-proportionally**
- Holcim to **reach USD 4 billion net sales pro forma in 2023**
- **Holcim sales of over 70% in re-roofing,** a non-discretionary expense
- **~80% of sales in systems selling**

Cambridge Riverside with white Duro-Last membrane in Cambridge, MA, USA

EXPANDING SOLUTIONS & PRODUCTS CONTINUED

commercial roofing has a significant nationwide footprint and is strongest in the eastern US, with clear plans to expand into the western US, Canada, Latin America and Europe. Malarkey is a market leader in residential roofing in the western US, where it is well known for offering one of the most sustainable, longest-lasting and most circular roofing shingles on the market. An average Malarkey roof upcycles 3,200 plastic bags and five tires, while our smog-reducing granules act as the equivalent of two trees. Re-roofing accounts for the majority of sales in both segments.

Holcim Building Envelope, and especially Elevate commercial roofing, benefits from system selling – delivering complete roofing and insulation solutions that are backed by warranty and technical teams to build a loyal and profitable base of Elevate customers. Holcim Building Envelope is also highly engaged with owners, architects, engineers and others in the design phase to engage in specification selling to scale up of our solutions across all our markets.

In the second half of the year we added two businesses to Holcim Building Envelope. The first was SES Foam, an advanced energy-efficiency and spray foam insulation system. Spray foam insulation represents the fastest growing kind of insulation, positioning us as a top-four player in the US market. We also welcomed Polymer

54%
Solutions & Products net sales growth

▼ *Designer Shingles shown in Natural Wood in Aurora, Colorado*

Sealants North America, which is a highly synergistic adhesives and accessories producer that expands Elevate's vertical integration. The integration of both businesses will allow us to widen our spectrum of waterproofing solutions even further and expand our reach into the USD 40 billion North America roofing market.

With nearly 3,000 employees globally, Holcim Building Envelope brands strive to lead the industry with innovative solutions.

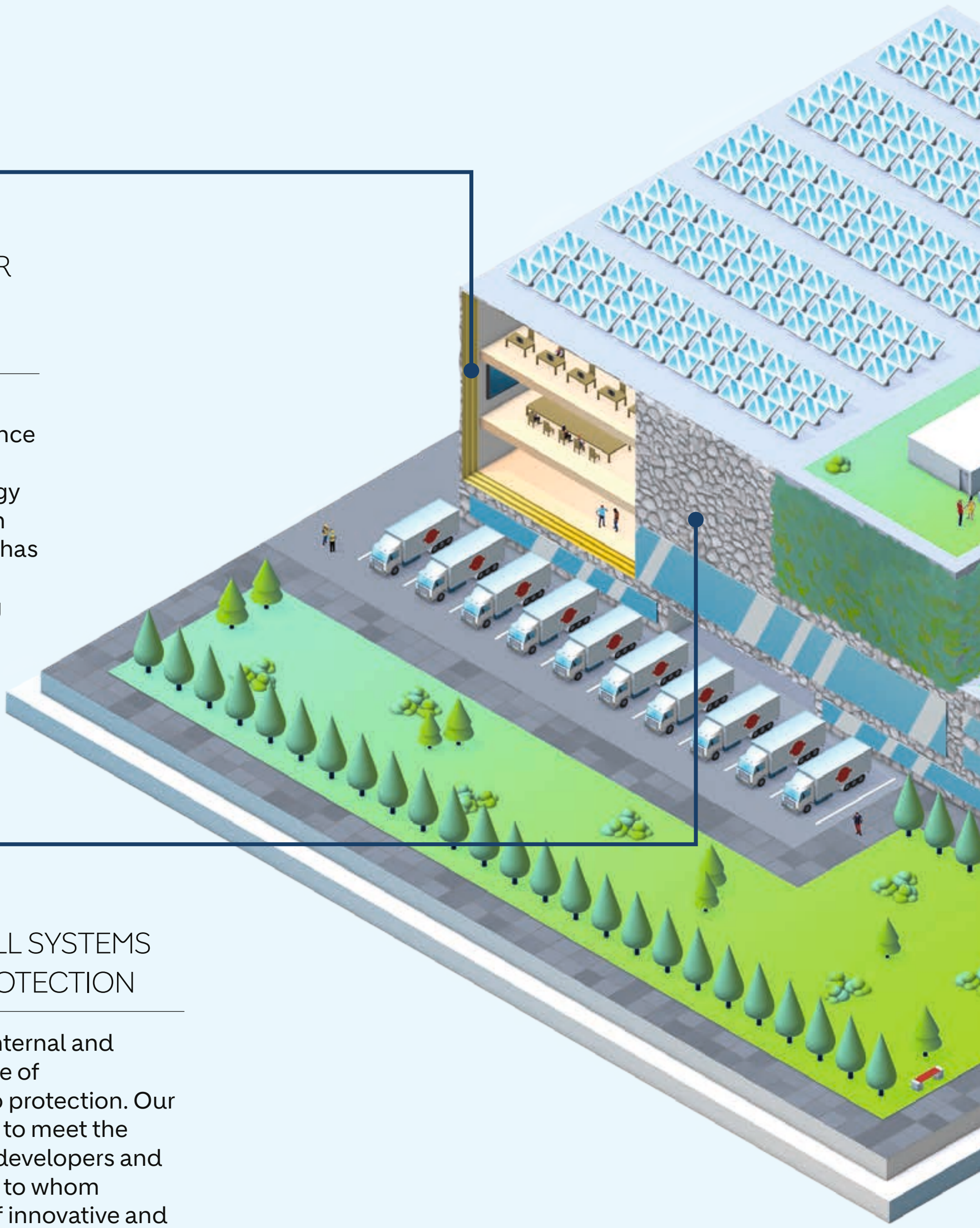
Our other division in Solutions & Products is Specialty Building Solutions. It comprises five strong brands in mortars and construction chemicals and is concentrated mostly in Europe. The largest of these is PRB, which was the biggest independent specialty building solutions provider in Europe when we acquired it. PRB is ideally positioned for the innovation-driven, premium and high-growth repair & refurbishment market. Other businesses in the division include Compaktuna, a Belgian-based premium mortar supplier, Izolbet from Poland, which focuses on the highly attractive repair & refurbishment market, and Cantillana, a leading Belgian specialty building solutions providers with experience in façade construction systems and external thermal insulation composite systems. The broad range of product offerings include mortars, tile adhesives and facades. Specialty Building Solutions also provides a platform to build existing Holcim brands, such as Tector. All five brands have built a solid reputation by leading in their segments with premium solutions and innovative products.

Our entire Solutions & Products segment benefits from global trends in repair & renovation. In mature markets such as Europe, where up to 80 percent of the building stock needed by 2050 is already built, green retrofitting is a major growth driver.

▲ *SES Spray Foam solved design challenges in the restoration of the National Museum of Women in the Arts in Washington, D.C.*

166%
Solutions & Products Recurring EBIT growth

ATTRACTIVE SEGMENTS WITH ABOVE MARKET PROFITABLE GROWTH



INSULATION

THERMAL INSULATION SYSTEMS FOR ENERGY EFFICIENCY & GREEN RETROFITTING

Holcim offers high performance insulation solutions that greatly enhance the performance and energy efficiency of our customers' buildings. Our patented ISOGARD technology has the highest thermal efficiency per inch in the market, while our SucraSeal Spray Foam has the highest bio-content in the industry. Our innovative solutions suit all types of building projects, from new builds to renovations, playing an increasing role in the repair and green retrofitting space.

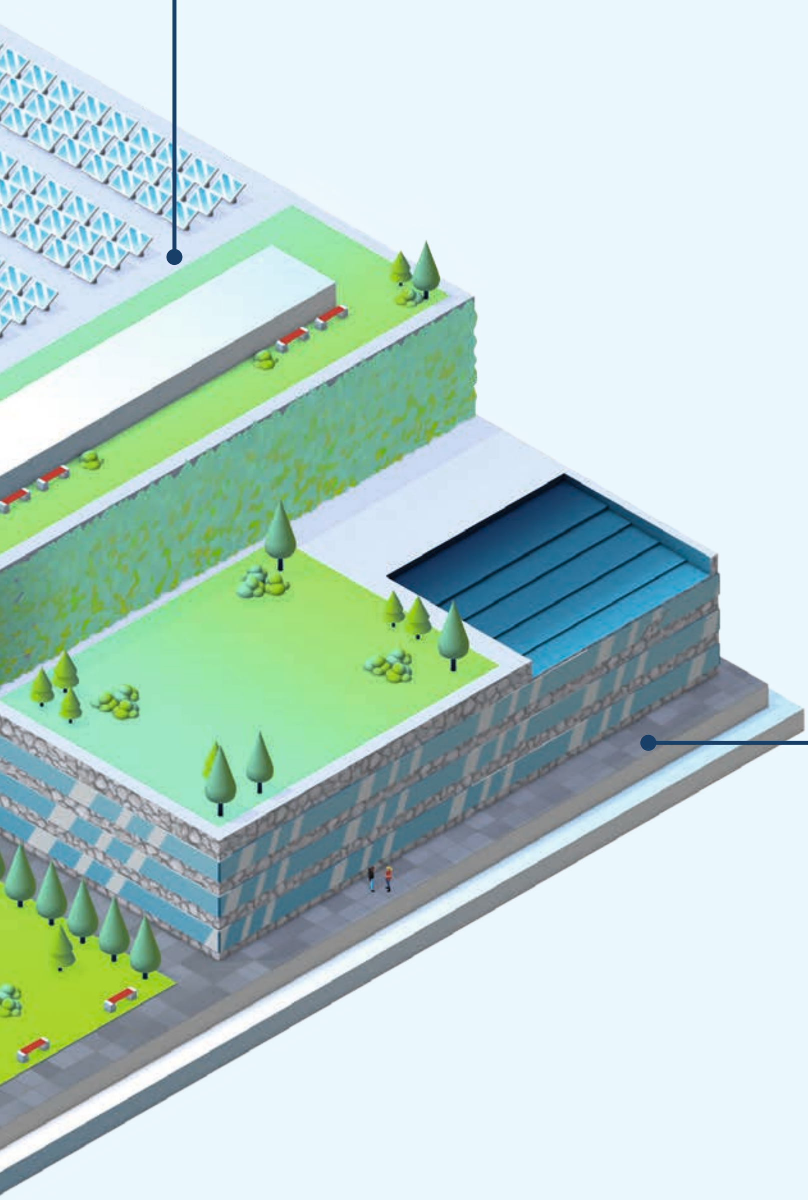
FAÇADES

INTERNAL & EXTERNAL WALL SYSTEMS FROM DECORATION TO PROTECTION

Our façade offering cuts across internal and external wall systems, with a range of functionalities from decoration to protection. Our offer spans different applications to meet the needs of architects, contractors, developers and public authorities – key specifiers to whom we can sell our complete range of innovative and sustainable building solutions.

GREEN BUILDING SOLUTIONS

To build better with less we offer the broadest range of green building solutions, from ECOPact, which reduces the carbon footprint of concrete by at least 30 percent, to DYNAMax, which reduces the material demand for building.



ROOFING

FROM COMMERCIAL FLAT ROOFS TO RESIDENTIAL SHINGLES

Roofing is a unique and attractive business (see page 33), key to making cities greener and more sustainable while making buildings more energy-efficient and resilient. Our range of solutions cuts across flat roofing systems, from cool and green to solar-enabling roofs, for commercial applications from warehouses to data centers. For residential applications we offer the most sustainable and circular shingles that are Green Circle certified.

TILE ADHESIVES

ADVANCED SYSTEMS, DECORATIVE & FUNCTIONAL

Tile adhesives are a growing category within our range of advanced mortars. They are highly specialized, innovation-driven building solutions, tailored for a variety of conditions and materials. Our products are designed for applications ranging from foundations to swimming pools.

ECOPact Hydromedia Aggneo
ECOPlanet DYNAMax

HELPING OUR CUSTOMERS MEET THEIR SUSTAINABILITY GOALS

Cross-selling for green growth

By combining Holcim green solutions such as ECOPact low-carbon concrete and Elevate energy efficient roofing systems, we offer a full-system approach to decarbonize our customers' buildings, from foundation to rooftop.

At Amazon's distribution center in Maple Grove, Minnesota, for example, we delivered 100,000 m² of roofing solutions as well as 100,000 m³ of concrete. Our broad offer across materials and solutions puts us in a strong position to reach specifiers with our differentiated and sustainable solutions, particularly for warehouses and big data projects such as the one in Maple Grove. Such projects account for a rapidly growing share of building across our markets.

This builds on a legacy of collaboration between the two companies, such as at Amazon's iconic headquarters in Seattle (below), where ECOPlanet delivered an 80 percent CO_2 reduction.

"Holcim allows AWS to further reduce the emissions associated with building our data centers, and creates opportunities to make our infrastructure more sustainable going forward."

GURMEET SETHI
Head of AWS Data Center Procurement for the Americas

GREEN BUILDING SOLUTIONS

ELEVATE
+
ECOPact
+
ECOPlanet

Amazon's iconic headquarters in Seattle, where ECOPlanet delivered an 80 percent CO_2 reduction

Amazon builds low-carbon with Holcim

Holcim and Amazon Web Services (AWS) are working together to make AWS data centers in the US more sustainable. The partnership follows AWS's new design standards, which requires that its new US data centers use concrete with 20 percent lower embodied carbon versus standard concrete. Holcim delivered a tailor-made ECOPact mix that nearly doubled that ambition, decreasing embodied carbon by nearly 40 percent.

"New ideas, new technologies and new requirements are changing the ways we design, build and grow," said Cedric Barthelemy, Regional Head, Mid-Atlantic with Holcim. "AWS is known for its bold thinking across business models, and that extends to its approach to sustainability. Our partnership pairs their experience in data warehousing and our expertise in designing low-carbon concrete to achieve a more sustainable built environment."

As innovation leaders of their respective industries, Holcim and AWS prioritized the collaboration of engineers, architects, developers and builders early in the planning to achieve close to 40 percent CO_2 reduction with ECOPact in its new data centers

Holcim and AWS are looking for ways to improve CO_2 savings on future projects, especially as the new AWS design standards go global.

"Amazon gave us a target for decarbonization – then we doubled it with ECOPact."

CEDRIC BARTHELEMY
REGIONAL HEAD, MID-ATLANTIC

LEADING IN SUSTAINABILITY

Holcim is a leader in low-carbon and energy efficient solutions, reducing CO_2 intensity and scaling up circular construction.

▲ Thammasat University Rooftop Farm (TURF), Asia's largest rooftop farm with Firestone's UltraPly TPO 1.5mm–20,000m² green roof in Thailand

IN THIS SECTION

LEADING IN SUSTAINABILITY & INNOVATION

We are pushing the boundaries of innovation to decarbonize building.

Our strong sustainability focus is embedded within all our operations and is oriented around four key pillars: climate & energy, nature, people and circular economy. The Climate & Energy pillar is addressed on pages 42 and 48–61. Nature is on pages 42–43. Circular economy is on pages 60–63 and the People pillar is on pages 72–73.

Climate & Energy
In keeping with our purpose to build progress for people and the planet, Holcim was the first global building materials and solutions company to have its 2030 and 2050 net-zero targets validated by the Science Based Targets initiative (SBTi) for all scopes.

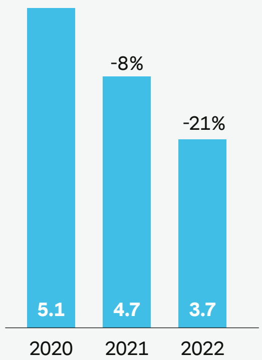
In 2022 we took that leadership further by upgrading our 2030 targets to be aligned with the 1.5°C scenario. The SBTi approved these revised near-term targets as consistent with their 1.5°C science-based framework (see table below). Our 2030 targets are also adjusted to reflect recent divestments and the optimization of our portfolio, aligning with the requirements of the Global Cement and Concrete Association's "Sustainability Framework Guidelines" and International Greenhouse Gas Protocols. To learn more about the steps we are taking to reach net zero by 2050, see Green Operations, beginning on page 50. Our next Climate Report will give full details of our net-zero journey in April 2023.

Nature
Holcim is one of the few global companies committed to increasing biodiversity based on transformative rehabilitation plans. We were the first in our sector committed to replenishing freshwater. These goals were set out by the Nature strategy established in 2021 and are supported by the Nature Policy we launched in 2022, also a first for our sector.

SCIENCE BASED TARGETS

CDP A LIST 2022
CLIMATE WATER

REDUCTION IN CO_2/NET SALES %[1]



[3] 2022 Scope 1 + Scope 2 CO_2 emissions/ net sales, compared to 2021

Top marks in water and climate

In 2022 we received A scores for both climate change and water security by the CDP. Holcim is one of 15 companies that achieved a double 'A' out of more than 15,000 companies scored, validating our position as a sustainability leader in the building materials industry. This is the third consecutive year that we have appeared on the CDP's "A List," reflecting our vision to become the global leader in innovative and sustainable building solutions.

Biodiversity

To measure biodiversity on the land we manage we use the Biodiversity Indicator Reporting System (BIRS), a methodology developed in partnership with International Union for Conservation of Nature (IUCN). With the BIRS we will establish biodiversity baselines for all our managed land by 2024, and use the same method to confirm our positive biodiversity impact by 2030.

This year we met both of our 2022 biodiversity targets: to have rehabilitation plans for our quarries, and to have biodiversity management plans in place for all quarries located in high biodiversity value areas. On a global level, 48 percent of our sites now have a biodiversity baseline, well on track to meet our ambitious 2024 target.

Notable biodiversity recognitions include the outstanding restoration of Ripon City Quarry in North Yorkshire (UK), which won the award for “Restoration” at the 2022 Union Européenne des Producteurs de Granulats (UEPG) Sustainable Development Awards. The restored quarry is now called the Ripon City Wetlands and is operated by the Yorkshire Wildlife Trust. Our La Chanta quarry in Spain received a Special Mention for its innovative rehabilitation process and prioritization of biodiversity.

We are committed to doing our part to fully implement the biodiversity related transparency agreed at COP15 in Montreal (Target 15). We are actively engaging with the Science Based Targets Network, and our representative serves as part of the Taskforce on Nature-related Financial Disclosures.

Park viewpoint developed by the Holcim Innovation Center, featuring a hybrid adaptive roof

Cerro Blanco, Guayaquil

Located just outside Ecuador’s largest city of Guayaquil, Cerro Blanco is one of the last remaining tropical dry forests in the country.

Holcim owns part of this precious ecosystem, which is home to more than 1,400 diverse species of flora and fauna. In 2022, we launched the Cerro Blanco Protected Forest Master Plan to provide visitors with a new learning center to discover the link between nature and architecture.

LEADING IN SUSTAINABILITY & INNOVATION CONTINUED

Water

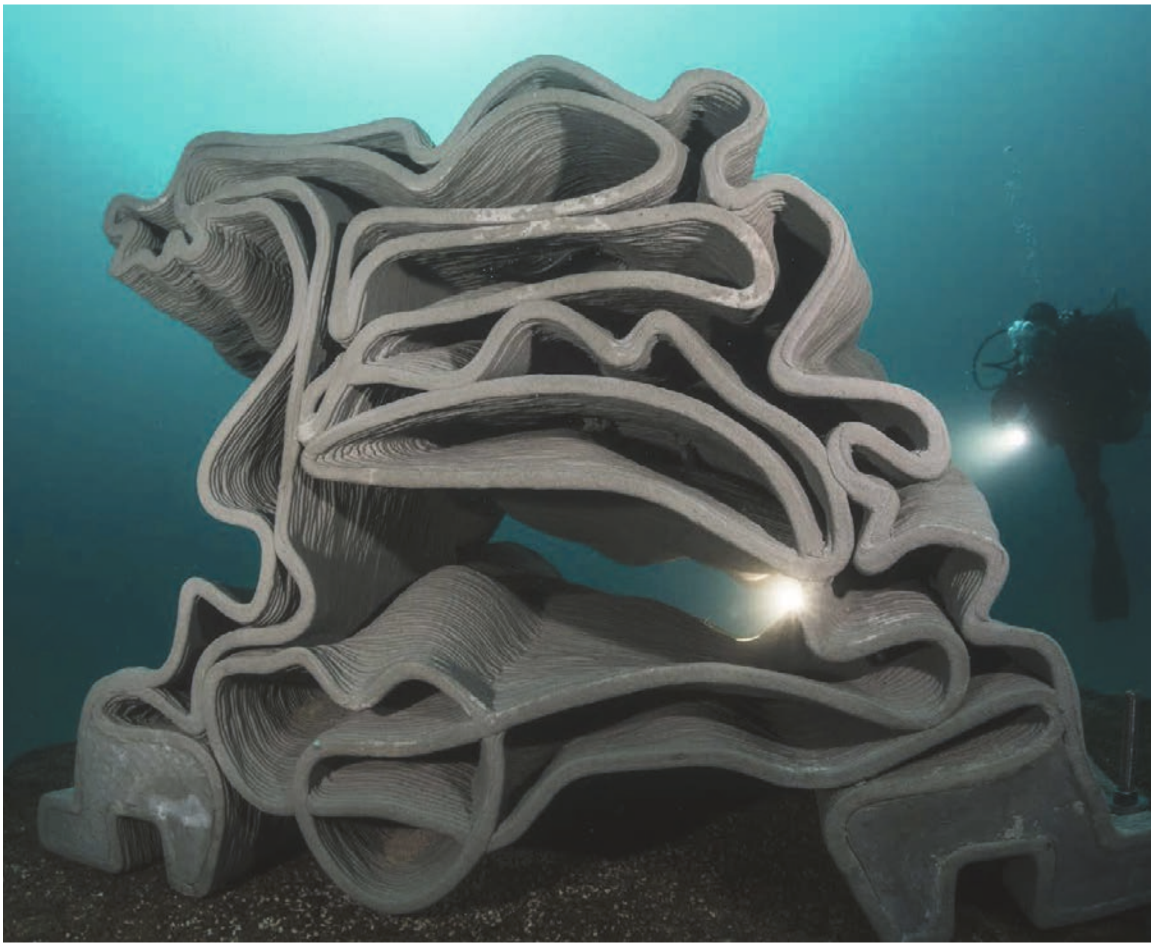
To meet our water commitments we prioritize sites in medium to high water-risk areas, which we define using the World Resources Institute (WRI) Aqueduct tool. Twenty-four percent of our sites fall into this category.

In 2022, we reduced freshwater usage at those sites by 11 percent. We achieved this through projects such as the water recycling system we built in Bulacan in the Philippines, where we now reuse water consumed for cooling, which is the most water-intensive phase of cement operations. The Bulacan plant is also noteworthy for using harvested rainwater, which covered 45 percent of the plant's water needs in 2022.

We are scaling up our impact through partnerships. In 2022 we became a Board member of the 50L Home Coalition, which aims to address urban water crises around the world. We also joined the Water Resilience Coalition to continue protecting the world's freshwater resources. In this role we will ensure our water-positive impact methodology aligns with the Coalition's Net Positive Water Impact concept, then share our methodology with other companies.

WE SUPPORT WATER RESILIENCE COALITION

50L HOME



Bioactive concrete reef in the Mediterranean Ocean made by 3D concrete printing.

Innovation
Innovation is one of the keys to our success. We operate in an open innovation ecosystem, working with hundreds of start-ups, like-minded companies and leading academic institutions, from MIT to ETH Zurich.

It all begins with our researchers working in the Switzerland Technology Center as well as our industry-leading Holcim Innovation Center in Lyon, France. To spread innovation across our markets, researchers from the Innovation Center work in close collaboration with our network of regional innovation hubs. Together with our commercial teams, they support our customers for all their building needs from concept to creation. Our experts cut across all fields of building, from masons to engineers to material scientists, to experts in artificial intelligence and data mining. The Innovation Center drives cutting-edge research in more than 15 areas, from CO_2 reduction to ultra high strength concrete and 3D printing. Through this system we launched over 450 new products in 2022.

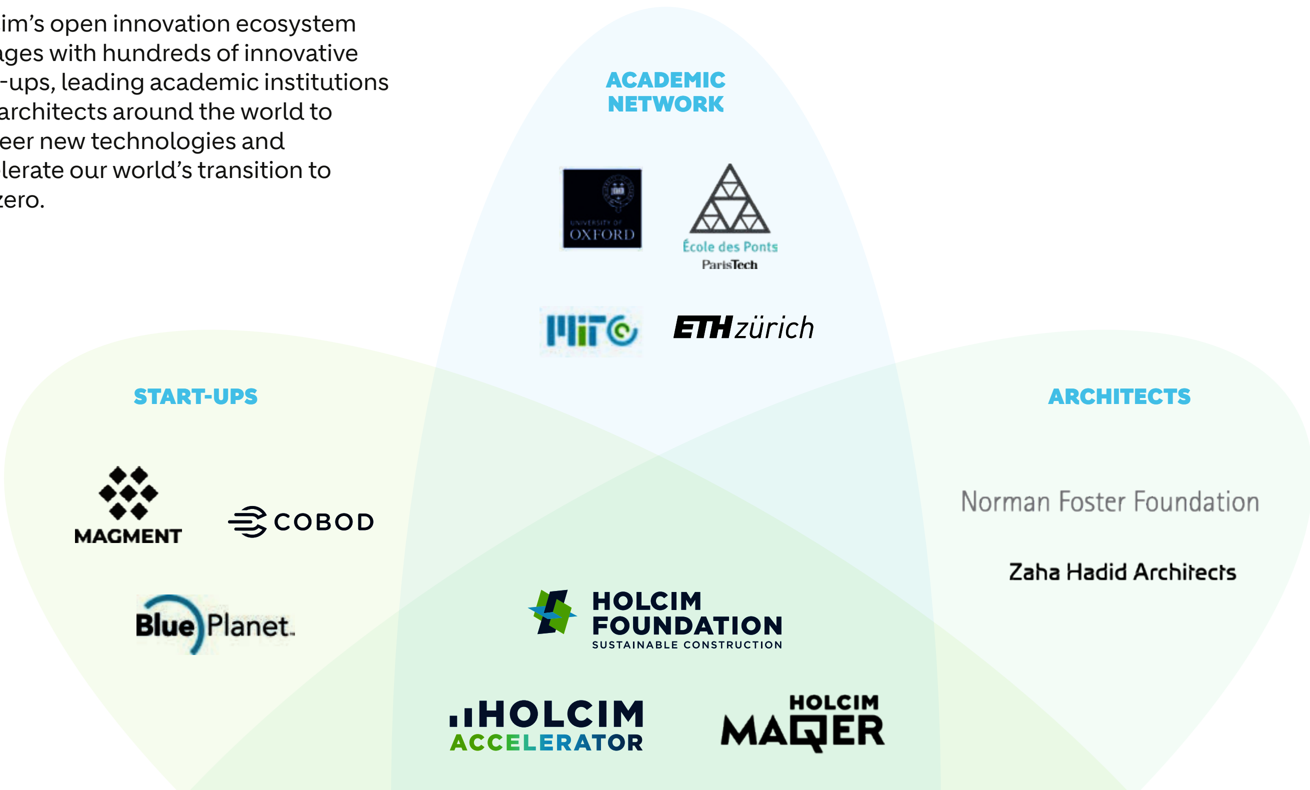
Next-generation materials
One of our primary aims in 2022 was to develop the next generation of our green concrete, ECOPact. ECOPact already delivers 100 percent performance with at least 30 percent lower carbon footprint. Our aim now is to take the carbon reduction even steeper, particularly by incorporating a greater variety of low-emission raw materials into their green formulation. For more details on this crucial line of research, see page 52.

One of the most important innovative raw materials is construction & demolition waste, so that we can drive a truly circular construction. We also passed a major milestone in 2022, creating clinker from 100 percent recycled material. By mid-2023 we expect to complete our journey to 100 percent recycled concrete with a social housing project in France.

Intellectual assets
With the largest innovation capability of the industry, we draw on 300 patent families and more than 80 percent of our researchers' time is dedicated to advancing green construction.

Open innovation at Holcim

Holcim's open innovation ecosystem engages with hundreds of innovative start-ups, leading academic institutions and architects around the world to pioneer new technologies and accelerate our world's transition to net-zero.



LEADING IN SUSTAINABILITY & INNOVATION CONTINUED

Sustainability accounts for two-thirds of the patent portfolio – 45 percent directly relating to low-carbon solutions such as carbon capture and innovative low-emission raw materials, while another 20 percent are related to other sustainability drivers such as 3D printing, a great example of smart design that can reduce material use by up to 50 percent.

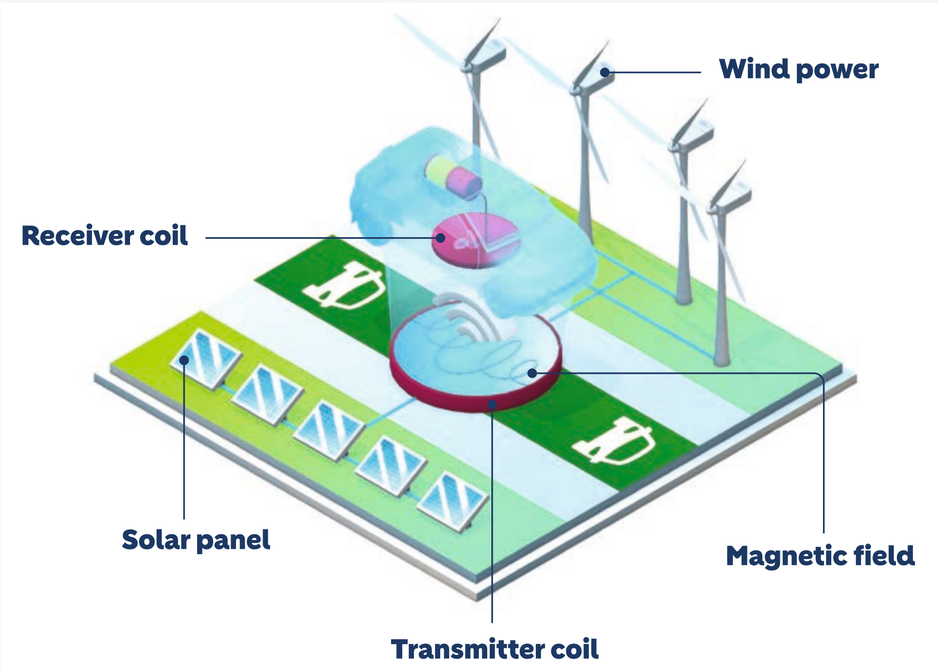
We work with over 40 leading universities around the world in fields ranging from materials science to civil engineering to sustainable construction. One such partnership is with the MIT Climate and Sustainability Consortium, where we are working on a lighthouse project to demonstrate a truly circular system where a building can be assembled and reassembled multiple times.

Working with start-ups
We partner with hundreds of start-ups around the world, enlisting the brightest minds to help us lead the next frontier of building solutions. These collaborations help expand our offering of low-carbon solutions as part of our journey to net zero.

We invest in start-ups to accelerate the development of next generation technologies. For example in 2022 we invested in Magment, a German startup that is developing a magnetizable concrete technology for road surfaces (see box, page 37). Magment enables electric vehicles to recharge wirelessly while in motion. Known as "inductive charging," this breakthrough concrete-based solution reduces the need for charging stations while saving time. Magment's technology is operating today at a few sites in Munich.

Electrified, emission-free transportation

Magment and Holcim are developing a breakthrough concrete-based technology to reinvent the way electric vehicles are charged. Also known as wireless charging or cordless charging, inductive charging uses a transmitter coil to create a magnetic field that charges the vehicle's battery. The technology can be applied to an entire length of highway, as the US Pennsyvania Turnpike Commission is currently piloting, to charge a vehicle in motion. When coupled to a renewable energy source, such as solar or wind, the charging generates zero emissions.



Envisioning the technology on a much larger scale, Holcim and Magment are now working with the US Pennsylvania Turnpike Commission to build an inductive charging lane into the nation's first superhighway by 2030, supporting the country's shift towards green mobility.

In 2022 we became an investor in COBOD International, a global leader in 3D construction printing, to advance world-class 3D printing materials, robotics and automation. Building on the collaboration we started in 2019, we are now looking to COBOD to further advance our innovative range of proprietary ink TectorPrint, which is tailored for 3D printing.

Holcim and COBOD have successfully collaborated on a range of innovative building projects, from 3D-printed windmill tower bases with GE, to the world's first 3D-printed school in Malawi and Africa's largest 3D-printed affordable housing project in Kenya.

We also became an investor in BluePlanet, a leader of capturing CO_2 into building materials through a process called mineralization. Blue Planet's novel process sequesters carbon emissions into aggregate that can make concrete carbon-negative. Each ton of Blue Planet's aggregate can mineralize up to 440 kilograms of CO_2, preventing it from reaching the atmosphere.

A series of programs drive our open innovation ecosystem, beginning with our own start-up incubator, the Holcim Accelerator. This program offers a unique and intensive six-month acceleration program to foster innovation collaboration along the construction value chain with a powerful mix of entrepreneurial, business and technical expertise, with the aim of accelerating sustainable construction and disruptive solutions. We launched the third season of the program in January 2022, when it was kicked off by explorer Bertrand Piccard. As a pioneer of sustainable technologies and solutions and pilot of the world's first solar-powered around-the-world flight, Bertrand Piccard's Solar Impulse Foundation has endorsed a range of our solutions as good for the climate and business, from ECOPact to TectorPrint.

We assess more than 500 digital start-ups every year. Holcim MAQER plays a special role in this work by connecting technology companies to actual use cases across our entire value chain, from quarry to customer. Collaborating with start-ups, thought leaders and corporations, Holcim MAQER finds the most impactful technologies to help build a smarter, greener and more inclusive world. Through MAQER we also organize or take part in several 'hackathons' every year, such as HackZurich and PropCON in Tel Aviv, advancing topics such as zero-carbon construction and 3D printing.

THE PLANTS OF TOMORROW

The Plants of Tomorrow initiative improves performance, circularity and carbon neutrality.

DIGITALIZING OUR PLANTS

270
Sites

1,600
Deployments

27,000
Innovators

3,000
Users worldwide

42
Proprietary solutions

Applied innovation

We apply innovation across our plants to drive more efficient and sustainable operations. The Plants of Tomorrow initiative brings together a range of innovations aimed at improving performance, circularity and carbon neutrality. We aim to accerelate the adoption of new technologies and solutions across our entire value chain, from quarry to lorry.

To date, we have deployed more than 800 applications across 180 plants, utilizing technologies from automation and robotics to artificial intelligence and digital twins. By 2025 we will reach more than 5,000 deployments.

>500
Start-ups assessed per year

DECARBONIZING BUILDING

From our operations to our products to buildings in use, we are decarbonizing building for a net-zero future

GREEN OPERATIONS

DECARBONIZING HOLCIM

We are decarbonizing Holcim with green operations, from green energy and mobility to green product formulation, all the way to next generation technologies like carbon capture, usage and storage.

Learn more on pages 50-53.

CIRCULAR CONSTRUCTION

BUILDING NEW FROM OLD

We drive circular construction to build new from the old. As a world leader in recycling we put circularity at the core of everything we do. In Switzerland we launched the world's first cement with 20 percent recycled construction and demolition waste, and upcycle plastic bags in roofing systems.

Learn more on pages 60-61.

BUILDING BETTER WITH LESS

DECARBONIZING CONSTRUCTION

We offer the broadest ranges of low-carbon materials such as ECOPact green concrete, delivering 100 percent performance with at least 30 percent less CO_2; as well as enabling smart design systems like 3D printing that can reduce material use by up to 50 percent.

Learn more on pages 54-57.

MAKING BUILDINGS SUSTAINABLE IN USE

DECARBONIZING CITIES

Holcim Solutions & Products, from roofing to insulation, are making buildings more sustainable in use to decarbonize our cities, driving energy efficiency and green retrofitting.

Learn more on pages 58-59.

GREENING OUR OPERATIONS

From energy and mobility to product formulation and next-generation technologies, we are lowering the carbon footprint of our operations.

Energy

We source 28 percent of our thermal energy from biomass, alternative fuels and materials at the end of their life. Using these alternative energy sources helps solve society's growing waste disposal problems and reduces our use of fossil fuels.

Some of our European plants source over 80 percent of this energy from such alternative sources, delivering a high-yield source of energy for producing heat. At a global level, this approach diverted 5 million tons of waste from incineration or landfill in 2022.

Electricity is our other major category of energy use. Here we are moving to decarbonized sources wherever we can, such as solar, wind and hydropower, with Colombia, Switzerland and other advanced markets already operating with 100 percent renewable electricity. Our goal is to reach at least 65 percent renewable electricity by 2030. Where these are not available we are installing solar and wind facilities on our own premises.

We are also pioneers in recovering the waste heat from our operations to generate electricity. Seven waste heat recovery systems operate across our Group today, generating 318 gigawatt hours of carbon-free electricity, equivalent to a carbon savings of 165,000 tons each year. Eighteen more waste heat recovery units are planned.

28%
Share of thermal energy from alternative sources

5M
Tons of waste diverted from landfill

By 2030 we plan to source 65 percent of our electricity from decarbonized sources like solar.

We use a range of electric mobility options in Europe, North America and Latin America.

Mobility

We are leading the transition to green mobility from our quarries to cities, using the greenest and most efficient transport options from electric and biofuel-powered vehicles to railways and barges. We are deploying electric fleets across our operations, from autonomous e-vehicles in our quarries to long haul e-trucks to distribute our materials. We digitalize our transport and logistics with proprietary digital technology platform to optimize load and route efficiency, safety and carbon footprint.

One of the most exciting initiatives is to electrify our own fleet of ready-mix concrete trucks. We are currently piloting a model in Europe that can reduce the carbon emissions by up to 80 percent compared to conventional ready-mix trucks, with the aim to deploy an electric fleet across the region in the coming years. These will reduce the carbon emissions that come from transporting our materials to customers as well as among factories and distribution terminals.

Reducing maritime emissions in the US
We are a founding member of the Blue Sky Maritime Coalition, an industry group which seeks to reduce carbon emissions from waterborne transport in the US through innovation. Because our US business transports a significant amount of material on the ocean, Great Lakes and inland waterways, reducing maritime emissions is a priority in that market.

Transportation currently accounts for 13 percent of our total Scope 3 carbon emissions and can be tackled largely by shifting to a net-zero fleet, as well as working with transport suppliers who share that same commitment.

> **"Introducing electric vehicles into our operations is essential to reach net-zero emissions."**
>
> **ALEXANDER SCHELD**
> Global Head of Cement Logistics

GREENING OUR OPERATIONS CONTINUED

◀ *Exploring green formulation at the Holcim Innovation Center*

48%
Potential CO_2 reduction from calcined clay

Green formulation

We offer the world's broadest range of green building solutions. These are enabled by our expertise in green formulation, where we use innovative low-emission raw materials to decarbonize our concrete and cement mixes.

One such material is calcined clay. Obtained through the calcination of natural clays at a relatively low temperature, calcined clay is a mineral powder that emits four times less CO_2 during production than clinker, delivering building materials with up to 48 percent less CO_2. Clay is one of the most abundant natural materials worldwide, making it a highly scalable solution for producing low-carbon building materials.

We are expanding this innovation globally. ECOPlanet products using calcined clay cement are currently available in Italy and France, and industrial trials are underway across all regions.

In 2023 we launched Europe's first calcined clay low-carbon cement operation at our Saint-Pierre-la-Cour plant in France. The plant will deliver ECOPlanet green cement with a significantly lower CO_2 footprint compared to standard cement (CEM I). This advanced production line, a world's first, runs on our proximA Tech proprietary technology, and will produce up to 500,000 tons of low-carbon cement per year.

> **"With innovative raw materials, from calcined clay to construction & demolition waste, we are scaling up green construction."**
>
> **MILJAN GUTOVIC**
> Region Head, Europe

Next-gen tech

To accelerate our net-zero journey we are developing next-generation technologies, especially carbon capture, utilization and storage (CCUS). We are running over 50 CCUS and mineralization projects around the world, recycling the CO_2 from our plants across a range of applications from fuel and plastics to agriculture.

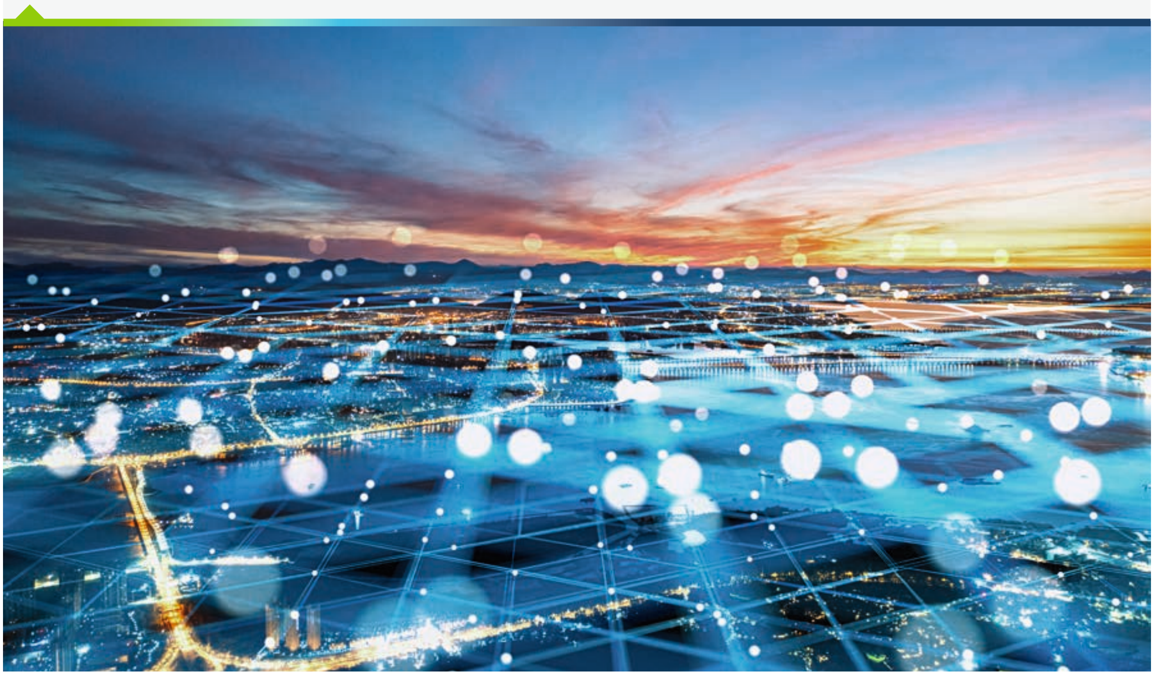
In 2022 we received strong support for this approach from the European Innovation Fund, which awarded us two grants totaling EUR 328 million for CCUS projects in Poland and Germany. The project in Germany will capture carbon from our Lägerdorf plant, then turn it into synthetic fuel for the mobility sector and as feedstock for the chemical industry. In Poland we are building an end-to-end CCS chain, starting with CO_2 capture from our site in Kujawy to offshore storage in the North Sea, with the vision to be a net-zero plant by 2027. Both projects aim to develop highly replicable carbon capture solutions to drive the decarbonization of the building sector.

In Canada our Exshaw Plant is one of ten projects under evaluation for support from the “Call to Action” initiative of Canada’s Strategic Innovation Fund (SIF). The SIF supports large-scale, transformative and collaborative projects that help position Canada to prosper in the global economy. With total funding estimated at CAD 457 million, the proposed project will encompass front-end engineering design (FEED) studies and construction of carbon capture, transportation and sequestration infrastructure for the plant.

Other next-generation solutions come from our Plants of Tomorrow program (page 47), which is deploying tools from robotics to predictive maintenance that can help green our operations.

>50
CCUS and mineralization projects

328M
EU Innovation Fund grant awards
EUR, 2022



BUILDING BETTER WITH LESS

Holcim is a key player in making low-carbon construction possible at scale around the world.

The Ellinikon, Greece, will be Europe's largest urban regeneration project

At Holcim we are building better with less to decarbonize construction.

We are making low carbon construction possible at scale around the world from Zurich to New York and Mexico to Manila with our green building materials. We launched the world's broadest ranges of green concrete with ECOPact and green cement with ECOPlanet, delivering 100 percent performance with at least 30 percent less CO_2, in line with the most advanced sustainability certifications, from LEED® and BREEAM® to WELL®.

ECOPact in urban regeneration

One of the most exciting applications of our green materials comes from Greece, where we are part of the Ellinikon, the largest urban regeneration project in Europe, supplying ECOPact green concrete.

An EUR 8 billion project of Lambda Development, Greece's leading real estate developer, the Ellinikon is the largest privately-funded investment in Greek history. Designed by Foster + Partners, the urban development on the Athens Riviera will be three times the size of Monaco, spanning 6.2 million m^2.

Green building solutions

When it comes to building a net-zero future, our materials play an essential role across a building's entire life cycle.

The construction sector represents 38 percent of the world's global CO_2 emissions. Thirty percent of these emissions are generated at the building phase. We address this phase at scale with the world's first and broadest ranges of green concrete, ECOPact, and green cement, ECOPlanet, offering 100 percent performance with CO_2 reduction of at least 30 percent.

The remaining 70 percent of emissions result from the building in use. We tackle this stage with our advanced solutions for energy efficiency and renovation, from our roofing systems to our insulation products like Airium. Across all these applications, we are driving circular construction to reduce, reuse and recycle materials wherever we can.

We also decarbonize building with smart design and solutions like DYNAMax, carbon prestressed concrete and Rippman flooring systems. These solutions use less material per square meter of building or infrastructure, which translates into lower embodied carbon compared to conventional materials.

> **"With Holcim we can build better with less – emitting less carbon and consuming less natural resources – on a global scale."**
>
> **PROFESSOR JOSEF KURATH**
> Founder of CPC and professor at the ZHAW School of Architecture, Design and Civil Engineering

The Ellinikon will include residential, office and retail buildings, as well as medical, educational, sports and cultural facilities, all of which will meet the highest sustainability standards. By using ECOPact green concrete, the project will reduce CO_2 emissions significantly compared to standard concrete.

In Monterrey, Mexico, ECOPact delivered a 30 percent CO_2 savings for GP Vivienda, a developer focused on building housing projects for all tiers of the market – from large affordable housing developments to more exclusive communities – all across the city's metropolitan area.

This is a critical need for Mexico's third largest city, whose population of 5 million people is growing every year. By 2030, an extra 600,000 people will need a place to live.

As a customer who shares our commitment to sustainability, GP Vivienda contacted Holcim to find out about products that can successfully reduce emissions for its projects in and around Monterrey. After discussions with Holcim, GP Vivienda chose ECOPact, the world's broadest range of green concrete. By the end of 2022, Holcim Mexico had supplied more than 50,000m³ of ECOPact for their developments.

Smart design

Another way to build better with less is to empower smart design. Technologies like 3D printing allow builders to reduce material use by up to 50 percent. We make this possible with proprietary technologies such as our 3D concrete

ECOPact
ECOPlanet
DYNAMax
TectorPrint

▼ *Eulach footbridge in Winterthur, Switzerland, built with CPC, weighing 75 percent less than with traditional concrete*

BUILDING BETTER WITH LESS CONTINUED

printing ink, TectorPrint. With 3D printing we are rapidly meeting critical building needs for markets as diverse as Malawi, Kenya, France and Austria. 14Trees, our joint venture with the UK's British International Investment Group, received 2022 FT/IFC Transformational Business Awards for this work in Africa, where we are 3D printing homes and schools.

DYNAMax, our ultimate performance concrete, also enables smart design by reducing material use, which increases living space for occupants at the same time. In Bucharest, for example, we used DYNAMax to build the MIRO office park, which features 23,000 square meters of leasable area spread out over five levels with a large outdoor plaza. MIRO is one of the first buildings in Romania achieving the BREEAM Excellent rating, as well as the WELL Platinum certification for optimized office spaces which improve health and well-being through design.

Speedwell, one of Romania's most dynamic developers and promoters of sustainable buildings, chose DYNAMax for this visionary project. DYNAMax allowed them a faster construction pace and required less materials compared to conventional solutions. Thanks to the use of DYNAMax, Speedwell was able to reduce the concrete volume in the building core by one-third and thus reduce the carbon footprint of the structure by 25 percent compared to conventional concrete.

CIRCULAR BY DESIGN

Striatus was designed to place material only where needed, significantly reducing its environmental footprint. With no reinforcement and using dry assembly without binders, it can be repurposed repeatedly.

Global product campaign: ECOPact green concrete - the world's broadest range of low-carbon concrete

Materials of the future

We are constantly searching for low-carbon materials that can help the world build better with less using smart design. One breakthrough in 2022 was carbon prestressed concrete (CPC), one of our innovative precast solutions. CPC won the Bauma Innovation Award 2022 in the "Construction" category and was certified as a cradle-to-cradle™ solution in Germany.

Using high-strength concrete reinforced with prestressed carbon fibers, CPC slabs use a proprietary process and patented technology that gives them the same load-bearing capacity as traditional reinforced concrete slabs while being up to five times thinner and lighter. In addition to enabling resource-efficient construction systems, the absence of steel means extending its service life up to 100 years, at the end of which the CPC systems can be disassembled and reused or fully recycled.

We recently used CPC to build a footbridge in Switzerland. With timber, this nine-meter span would weigh 26 tons. With CPC, the same footbridge weighs an extremely low 14 tons. That's 46 percent less than timber.

Over the whole service life, the CO_2 footprint of the CPC bridge is up to three times lower than a timber bridge. CPC is a key element of industrializing construction similar to timber solutions, but with superior performance and a lower embodied carbon footprint. Through smart design, CPC helps us build better with less: construction systems using the thin, precast plates of concrete reduce material use by up to 80 percent and CO_2 emissions by up to 75 percent, driving industrialized, circular and low-carbon construction.

Environmental performance: verified

To demonstrate the environmental profile of our solutions in a transparent way, we provide accurate, third-party verified information on CO_2 savings with environmental product declarations (EPDs). In the US, for example, our OneCem and ECOPact green solutions are all backed with EPDs. All our countries are now building their EPD roadmap so that our customers can generate EPDs on demand, with plant and product-specific data, to verify their low-carbon benefits. We offered 1,840 EPDs as of the end of 2022.

Read more online here

MAKING BUILDINGS SUSTAINABLE IN USE

We are decarbonizing cities with our broad range of solutions from roofing to insulation, driving energy efficiency and green retrofitting.

Futuristic Kindergarden, Galicia, Spain – 640 m² circular roof was covered with UltraPly TPO thermoplastic roofing membrane

ELEVATE

Malarkey Roofing Products

ISOGARD™ HD

PRB Produits de Revêtement du Bâtiment

cantillana

Hydromedia

Seventy percent of the CO_2 emissions in the construction sector are generated by buildings in use. We're expanding our solutions, from roofing and insulation to advanced mortars and green retrofitting, to reduce this footprint.

Energy efficiency

A building's roof plays an essential role in determining its energy efficiency. We are becoming a global leader in this segment, on target to reach USD 4 billion (pro forma) in net sales by 2025, with solutions ranging from Elevate's green, cool and solar-enabling flat roof systems, all the way to Malarkey's sustainable residential shingles. In 2022 we crossed a milestone by transitioning all of Elevate's insulation board production facilities to ISOGARD™, meaning that all of them now make roofing insulation that provides maximum thermal efficiency, which translates to lower operational emissions (see box).

Green retrofitting

In some regions, up to 80 percent of the existing building stock will still be in use by 2050. Our green retrofitting systems make them last longer in a sustainable way. Complementing the "new build" market, our range of specialty building solutions generate up to 80 percent of their sales in the repair market, from PRB's facade systems to Cantillana's insulation boards.

Bringing nature into cities

In addition to reducing the operational emissions of buildings, our products bring more nature into cities to make cities more livable. For example our green roofs bring vegetation and nature into cities, reducing the heat island effect and improves air quality. Hydromedia permeable concrete recharges groundwater, allowing urban forests to grow and limiting the impact of heavy floods.

All Malarkey shingles are GreenCircle Certified thanks to their smog-reducing technology and use of upcycled materials

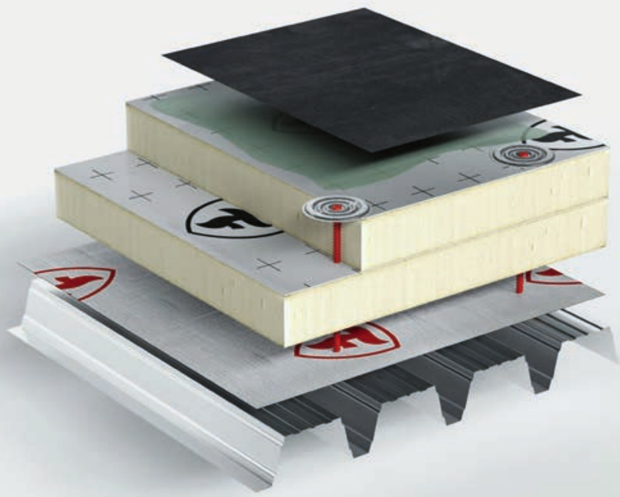
Improving air quality

With the 2022 acquisition of Malarkey, we entered residential roofing. In addition to improving home insulation, Malarkey's shingles are also the most sustainable in the market. Malarkey Roofing Products won the prestigious Green Circle certification for upcycling about 3,200 plastic bags for the average roof.

Malarkey shingles also improve air quality. In 2018, Malarkey integrated smog-reducing technology across its entire product range. That means each average-sized roof has the smog-fighting capacity of two to three trees so that now, 400,000 roofs later, Malarkey has applied the equivalent of over 1 million trees of smog-reducing power.

WHY ISOGARD™

Roof insulation acts as a barrier to heat loss and gain, improving a building's overall energy efficiency. Elevate ISOGARD™ provides better thermal performance compared to leading competitive products on the market today.



CIRCULAR CONSTRUCTION

We are driving circular construction to build new from the old.

At Holcim we see circularity as the business opportunity of our time.

Circular construction is essential to decarbonizing building. That means recycling materials to build new from old. It means reducing the footprint of building across its lifecycle. And finally, circular construction means regenerating ecosystems to build for nature.

We recycled 34 million tons of materials across our business in 2022, making us one of the world's largest recyclers. Construction & demolition waste (CDW) accounted for 6.8 million tons of that, equal to more than 1,000 truck loads each day. We want to double down on this rate to reach at least 10 million tons of CDW by 2025 to build more new buildings from old ones.

As concrete is infinitely recyclable, we are building up the capacity to recycle 100 percent of concrete-based CDW with proprietary technologies and systems. Our innovations range from advanced crushing technologies to extract the highest quality materials and ensure a clean separation of resources, to smart recycling hubs to collect, sort and deploy materials, all the way to digital technologies to map and manage material flows efficiently.

Product engineers at the R&D center at Holcim Switzerland's site in Siggenthal

Aggneo

Malarkey Roofing Products®

A SUSTAINABLE SOLUTION GreenCircle CERTIFIED WASTE DIVERSION FROM LANDFILL

Circularity in practice

Driving the circular economy addresses the challenges of climate change and resource scarcity at the same time. We use innovative solutions to return waste to the material cycle, recycling CDW and then returning that material into new building, through products such as Susteno, our resource-saving cement (see box).

The Recycling Center Ostschweiz (RCO)

The Recycling Center Ostschweiz (RCO), a joint venture between Holcim Switzerland (AG) and Zürcher Kies & Transport AG, specializes in recycling building materials. Spread over an area of almost 18,000 m², this unique facility sorts, treats, crushes and reuses CDW, recycling 100 percent of the materials it receives.

The center receives a wide range of CDW and turns it into high-quality gravel or mixed granules. The recycled – and recyclable – building materials are used in a wide range of applications, such as in certified concrete for the construction sector as well as certified aggregates for road and civil engineering. To stay at the forefront of both innovation and sustainability, the RCO recently installed a new soil washing system that removes pollutants and foreign matter, using recycled rainwater in the process.

Recycling Center OstSchweiz (RCO) by St. Gallen, Switzerland

The innovative processes employed at the RCO ensure a significantly higher product quality and usefulness for new construction. Today the RCO can process around 200,000 tons of such material per year and supply it back to the construction sector – enough to supply construction of more than 500 single-family houses with recycled building materials.

The RCO's new company building is itself made with a high proportion of recycled material, with the concrete elements entirely made of EcoPact+, containing Susteno cement and 70 percent recycled concrete aggregates. It serves as a showroom of the many advantages of sustainable and circular economy in building.

Susteno, the circular cement

Susteno is the world's first resource-saving cement with 20 percent recycled construction & demolition waste(CDW) inside.

Susteno is made using high-quality material taken from demolition projects, resulting in a cement that closes the loop on CDW to build new from the old and preserve nature.

We introduced Susteno in Switzerland four years ago. Our experience shows that customers can enjoy the sustainability benefits that circular cement offers without compromising performance. We are well prepared to expand our circular range in 2023, first in Europe, taking advantage of upcoming changes in building norms.
Our goal is to make circular cement accessible to more customers as standards evolve, enabling circular construction at scale.

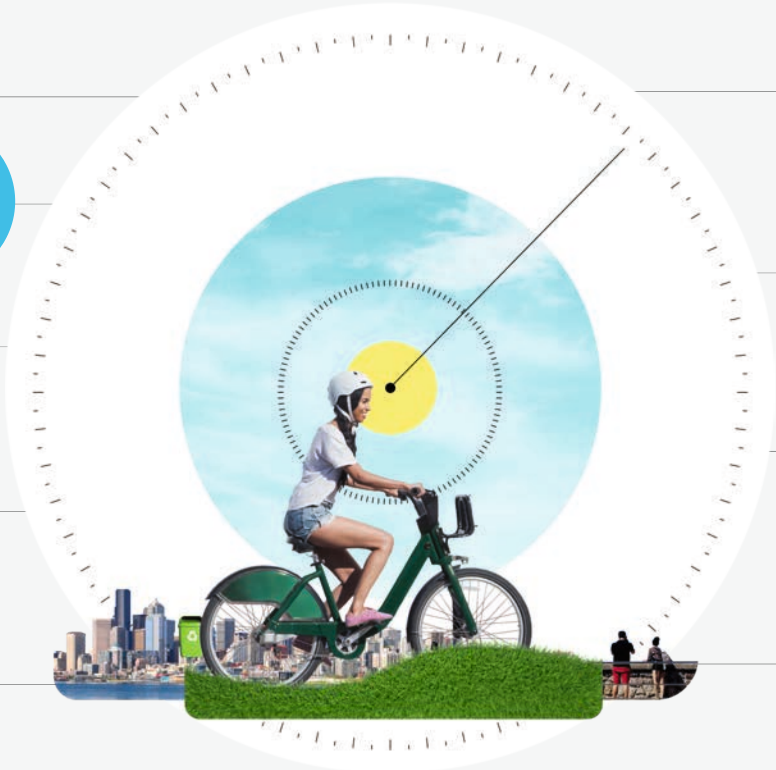
CIRCULAR LIVING

Partnering across our value chain and across public and private sectors to drive circularity.

HOLCIM GREEN BUILDING SOLUTIONS FOR CIRCULAR CITIES

WHAT MAKES A CITY CIRCULAR?

- SMART BUILDINGS
- GREEN MOBILITY
- RENEWABLE ENERGY
- NATURE INSIDE
- RECYCLING HUBS



APPLICATIONS

- Residential and Commercial Buildings
- Railways, Metros, Harbors, Bridges and Tunnels
- Wind mills, Solar roofs, Hydro dams, Geothermal
- Urban forests & green roofs, Maritime restoration

Low-carbon materials & smart design to build better with less	Global Leader in Recycling driving circular construction to build new from the old	Energy efficiency and green retrofitting systems for more sustainable buildings in use: Roofing, insulation, facades, tiles & adhesives	Nature-driven solutions to improve air quality, reduce urban heat and preserve biodiversity
ECOPlanet ECOPact TectorPrint	Susteno Aggneo	Malarkey Roofing Products PRB Produits de Revêtement du Bâtiment ELEVATE AIRIUM Insulation Redefined SES polyurethane systems	Hydromedia ELEVATE

At today's rate of economic growth, we are set to consume 2.3 planets by 2040. To stay within our planet's boundaries, we need to fundamentally change the way we build. That's why we are going beyond circular construction and engaging with partners to call for a broad-based shift to circular living.

Empowering circular cities

We expect 70 percent of the world population to be living in cities by 2050, adding 2.5 billion people. At Holcim we believe that cities will play a critical role in shifting from a linear "take-make-waste" economy to a circular "reduce-reuse-recycle" one. To show how cities around the world can make this transition, we launched the Circular Cities Barometer.

The Barometer gives us unique insights into what the most innovative circular cities around the world are doing to accelerate this shift. It evaluates the transition of 25 cities based on 12 indicators measuring the circularity of buildings, municipal systems, urban lifestyles and policies.

As the Barometer shows, circular cities are many things. Their residents live and work in smart buildings while commuting by green forms of mobility. Circular cities use renewable energy and offer recycling hubs to keep materials in use as long as possible. Circular cities offer significant green space for people and nature to thrive.

Through our materials such as ECOPact green concrete we enable smart, low-carbon buildings, as well as the infrastructure enabling green mobility – from metros and railways to bicycle and pedestrian alleys – even building roads that charge electric vehicles with Magment (see page 46). Solutions such as Elevate roofing and insulation systems help improve buildings' energy efficiency and achieve the most advanced sustainability certifications, such as LEED®, BREEAM® and WELL®.

We help drive the transition to renewable energy, for example with solar-enabling roofs. In partnership with GE we are 3D-printing higher, more powerful wind turbines and even recycling the blades at the end of their service life.

From green roofs to urban gardens enabled by Hydromedia water permeable concrete, we are bringing more nature into cities, improving air quality, cooling urban temperatures and enhancing well-being.

Holcim's GO CIRCULAR ready to set sail in The Ocean Race in Alicante, Spain

THE OCEAN RACE
ROUND THE WORLD SINCE 1973

GO CIRCULAR: Sailing the globe for circularity

Early in 2023 we joined The Ocean Race for its first round-the-world regatta as the only Swiss team to compete in this year's legendary sailing marathon, celebrating its 50th anniversary.

With GO CIRCULAR, we are circumnavigating the world to preserve our oceans with a call to action to accelerate the shift to circular living.

The Holcim-PRB crew is led by French skipper Kevin Escoffier, a crew member of The Ocean Race winning team in its last edition in 2018. The world-class team brings together highly accomplished sailors with a track record in iconic races, from the Olympics to the Vendée Globe, Route du Rhum and more.

Racing for progress, the GO CIRCULAR team will be collecting water samples to advance marine science throughout the race and raise awareness for more circular living and the importance of marine ecosystems.

> **"Together, we are racing with purpose to Go Circular to protect our oceans, the heartbeat of our planet."**
>
> **KEVIN ESCOFFIER**
> Holcim-PRB Team Skipper

Read more online here

PARTNERING FOR GREEN GROWTH

To bridge the gap between what we can offer and what our markets are asking for, we are engaging with the most influential partners across our value chain.

ARCHITECTS

"As an architect, I understand that our industry has a great responsibility when it comes to reducing the environmental impact we have. That's why we want to be the leaders in sustainable construction in Mexico. Holcim's range of low-carbon products is helping us on our journey."

DUBELSA RODRIGUEZ
Architect at GP Vivienda

REAL ESTATE DEVELOPERS

"Sustainability is mandatory for future-proofed buildings. We all are responsible for using resources efficiently, and we as developers must take responsibility for the standards we use."

DIDIER BALCAEN
CEO And Co-Founder, Speedwell

REAL ESTATE INVESTORS

"Collaborating with companies like Holcim that share our commitment to a net-zero world accelerates environmental change and supports our larger sustainability goals."

GURMEET SETHI
Head of AWS Data Center Procurement, Amazon

@NEW YORK CLIMATE WEEK

"Holcim has been a leader in innovative design and brings creativity and expertise to the 50L Home Coalition, and we look forward to working together to create the next generation of sustainable building solutions."

MAYOR KATE GALLEGO
Phoenix, AZ, USA, Public Sector Co-chair of the 50L Home Coalition

@THE WEF IN DAVOS

"Holcim is doing an outstanding job to lead the architectural industry to a greener, better and more responsive future – and at MAD Architects we feel honored to be part of this movement."

DIXON JUNLIANG LU
Head of US & Associate partner, MAD Architects

@BLOOMBERG NEW ECONOMY FORUM

"Whether it's tackling the economic effects of inflation or the pandemic, promoting cross-border collaboration, or identifying new solutions to fight climate change, now more than ever, we all need to work together to find answers to the world's most pressing challenges."

M. SCOTT HAVENS,
CEO of Bloomberg Media

HOLCIM PEOPLE

From our senior leaders to the next generation of changemakers, 2022 was a year of transformation.

We are committed to creating a high-performance culture of empowerment, lifelong learning and development. A diverse and inclusive culture where everyone can develop the skills they need to thrive. With 60,000 Holcim people working worldwide, we are driven to realize our full potential and at the same time make a positive difference to the world.

A people strategy for green growth
In 2022 we focused on ensuring that our employees are empowered to achieve the Group's green growth ambition. That included connecting our company purpose and brand to the needs and expectations of our people with a revamped Employee Value Proposition (EVP). We have now cascaded the EVP globally, and efforts are now underway to establish the common threads of the Holcim experience.

Holcim delegates to the 2022 One Young World Summit in Manchester, UK

Celebrating the new Holcim brand in Mexico

Next-generation leaders
We are especially focused on making sure our young talent is empowered to make a difference.

The Early Career Leaders Program is a comprehensive leadership development initiative that was designed to build next generation leaders with the necessary tools, knowledge, skills and experiences to become effective leaders. Spanning over a period of six months, the program offers participants a unique opportunity to receive coaching, engage in hands-on learning through project work focusing on sustainability, and increase their exposure to senior management.

Additionally, the program provides a platform for the early career leaders to build global networks, connect with like-minded colleagues and make real impact. By the end of the program, participants acquire valuable skills they need to take their development to the next level and grow as leaders. The program is fully online and is structured around insights from renowned international experts. It is essential in developing the next generation of leaders within Holcim. By the end of 2023, more than 550 early career leaders are expected to have completed the program.

Beginning in 2021, our top young talent have served as ambassadors to the One Young World Summit. Representing over 190 countries and more than 250 organizations, these young leaders come together to develop solutions to the biggest challenges facing humanity.

In 2022, a select group of Holcim delegates went to Manchester, UK, to raise the crucial topic of Circular Construction. Since construction accounts for almost 40 percent of global greenhouse emissions and a substantial share of material consumption, our ambassadors engaged their peers to accelerate the shift to circular living.

We also proudly sponsored One Young World's Lead2030 initiative, which funds and accelerates solutions to Sustainable Development Goals (SDGs). This year the initiative focused on SDG #11, sustainable cities. The winner received USD 50,000 to develop a low-cost, high-performance carbon capture technology to make cities greener.

Our One Young World ambassadors carried on the transformational spirit by creating a grassroots movement within our company: the I'M-Possible Movement. Today the movement already has hundreds of members from 36 countries taking ownership to build the company they want to work for. Focusing on Diversity & Inclusion, Innovation, People, Well-being and Sustainability, the program already has more than ten initiatives underway, including the Office Goes Green initiative, which is spreading sustainable work practices across our global footprint.

HOLCIM PEOPLE CONTINUED

Progress Accelerators

Latin America is at the forefront of engaging our next generation of talent. In each of the region's 19 cement plants, a talented colleague under the age of 30 serves as Head of Decarbonization. This way we align the creativity and passion of our younger colleagues toward meeting our ambitious sustainability goals. All Heads of Decarbonization complete a structured Decarbonization Academy development program to help them succeed and complete their technical development.

To keep up this momentum over 200 young talents from the region convened at our Progress Accelerators forum to discuss what we can do to attract even more young talent. These efforts come on top of the region's leading Diversity and Inclusion profile, where women represent as much as 40 percent of senior management in key markets.

Driving performance through engagement

In line with our ambition to build an outstanding employee experience, we conducted a worldwide engagement survey in 2022. It was an amazing opportunity to hear the voice of over 50,000 employees, equal to a 78 percent global participation rate. Our colleagues valued most highly that they have the opportunity to do their best every day at work, that they work in a respectful and safe environment, and working with colleagues who are committed to high quality. Empowering our people to voice their views and expectations gives us a solid foundation to drive meaningful action forward. Our priorities are to build strong and inclusive leadership and well connected teams, as well as to power the progress and growth of our people on a continuous basis. Another engagement survey is scheduled for 2023.

Developing our leadership

We brought our top 200 leaders to Zurich, Switzerland, for the first in-person Senior Leaders Meeting since 2020. Kicked off by Chairman Beat Hess and attended by the entire Group Executive Committee, the meeting was a critical opportunity to focus and accelerate our global team spirit to Accelerate Green Growth. From green building, to digitalization and decarbonizing building, the meeting underlined for all participants that we are making the future possible today, aiming to reach net-zero across our markets to improve living conditions for all.

Globally committed to diversity

One of our top priorities is to promote a diverse and innovative workforce, with the aim to have women occupying 25 percent of senior management roles. In recognition of our focus to progress with gender, generation and broader diversity and inclusion, Holcim was named one of Forbes' top Female-Friendly Companies, while FastCompany named Holcim one of the 2022 Best Workplaces for Innovators, in addition to various local recognitions in Canada, UK and Kenya. The share of women in senior management increased from 18 percent in 2021 to 20 percent in 2022.

Local country operations successfully progressed with the implementation of dedicated recruitment efforts for diverse and early career talent through internships, as well as establishing employee resource groups and programs such as Women on Wheels. In addition to local efforts made towards gender pay equity and compliance with applicable regulations, we started our first global assessment using a recognized methodology in 2022. We will monitor progress on a yearly basis with the aim to ensure equal pay for equal work and performance – not only between women and men, but also irrespective of ethnic origin, religion, ideology, sexual orientation or factors such as physical disability.

"I'm convinced that our carbon capture project is part of a trend, because decarbonization is not something that each industry can achieve by itself. We must work together."

ERIK JANTZEN
Senior Project Engineer, Germany

"I never dreamed that I would work in the field of sustainability, helping reduce carbon emissions on such a huge scale."

STEPHANIE VOYSEY
Senior Sustainability Manager, Canada

EMPOWERING OUR PEOPLE TO ACCELERATE GREEN GROWTH

HEALTH, SAFETY & ENVIRONMENT

In 2022 we reinforced the three pillars of our Health, Safety & Environment operating model: Critical Risk Management, Workforce Engagement and Continuous Improvement.

Health, Safety and Environment (HSE) are core values at Holcim. These values are top of mind across all operations as we work to achieve Ambition "0". In 2022, our Lost Time Injury Frequency Rate (LTIFR) reached 0.53, with 97.8 percent of our sites and 44.8 percent of our countries reporting no lost-time injuries (LTIs).

We deeply regret that during this same period four incidents led to one employee and seven contractors losing their lives. Each of these cases was thoroughly investigated, and remedial actions were implemented to prevent reoccurrence. In such circumstances, our first priority is to support the needs of the families and team members of the individuals involved. For us as a company, it is a renewed call to keep ensuring and improving a safe, healthy work environment for our people and partners to ensure that everyone who works for us makes it home safely every day. Since the launch of our Ambition "0" in 2016, we have divided such instances by four. We will not rest until we reach zero.

We improved our environmental performance, reducing NO_x by 5 percent and SO_2 by 21 percent. We reduced dust emissions per ton of clinker by 30 percent, or 71 mg/Nm^3, surpassing our 2030 target of 75 mg/Nm^3.

As part of our overall HSE governance, we have completed 71 comprehensive HSE audits.

The HSE Operating Model
Our HSE operating model has three pillars:

- *Critical Risk Management* – prioritizing the most important HSE risks
- *Workforce Engagement* – involving all employees in promoting HSE
- *Continuous Improvement* – clarifying how to improve HSE performance

We dedicated 2022 to reinforcing each pillar.

Critical Risk Management
In 2022, we engaged all country executive committees and plant managers in dedicated workshops, with over 4,300 hours of training for supervisors and managers and 130,000 shop-floor coaching sessions on critical risks. We also held workshops with all plant managers and all country executive committees to ensure full operational discipline.

Workforce Engagement

All of our operations have now implemented our workforce engagement program, Boots on the Ground. Our supervisors and managers have spent more than 3.3 million hours on HSE. This systematic approach led to 600,000 field interactions, which were recorded through our digital workforce engagement app. This "gamification" approach to workforce engagement – with leaderboards, team-based activities and real-time recognition – has proven effective and has been recognized by major clients and by external bodies as a leading concept in HSE. Our Boots on the Ground app is the most widely used app at Holcim, with 15,000 users.

Continuous Improvement

We are expanding the iCare integrated data platform to facilitate data-driven decision-making. An average of 30,000 actions are tracked on the platform monthly. These actions are generated by audit findings, critical control verifications, process safety and environmental assessments, incidents, identified hazards and HSE coaching sessions.

The POWER program mobilizes our teams to save energy. More than 5,000 employees participated in the Energy Treasure Hunt , with all site leadership teams performing a technical energy assessment. Together they identified 13,000 energy-saving opportunities, nearly half of which were adopted in 2022.

Skipper Kevin Escoffier leads Team Holcim-PRB, on a mission to accelerate the shift to circular living

Promoting mental health

In honor of World Mental Health Awareness Month, skipper Kevin Escoffier of Team Holcim-PRB hosted a webinar on staying resilient. As a veteran of many team and single-handed sailing regattas, Kevin is an experienced voice in managing the signs of strain in one's self and one's teammates. The webinar was seen by thousands of Holcim colleagues around the world.

> **"Sometimes we have to be careful to not only focus on the people that have a problem but also on the people around them. Sometimes it is even harder for those around the people who have the issue."**

KEVIN ESCOFFIER
Skipper Team Holcim-PRB

COMMUNITIES

We promote sustainable development through innovative building solutions and generate positive social impact in our communities.

40 volunteers from Holcim Mexico City give an Elementary School a fresh look0

22.5
Investment in social programs
CHF M

At Holcim, we are building progress for people and the planet by upholding the highest human rights standards and spearheading a wide range of social initiatives. In 2022 we completed the first full year of our 2030 people strategy, which aims to continue creating shared value and uplifting the well-being of communities worldwide. Focusing on three pillars – bridging the world's housing and infrastructure gap, improving livelihoods and upholding the highest standards of human rights – the strategy builds on our legacy of positive social impact, with more than CHF 189 million in social investment over the last five years.

In 2022, we invested CHF 22.5 million in social development programs, accelerating access to adequate housing and infrastructure and in continued support to communities, from health and education to skills development.

Houses of Tomorrow

As part of our focus on affordable housing and sustainability, we continued to collaborate with architects and engineers on our Houses of Tomorrow project, showing how we can rapidly reduce the embodied carbon emissions of the built environment.

The Kanya Kawayan Weaving Center in the Philippines was one showcase project from 2022. This multi-use building was built on a sugar cane farm using sustainable design techniques such as its cement-bamboo frame and employing low-carbon materials like ECOPlanet green cement. The Center will provide a space for the local community to come together and take the waste from the sugar cane farm and turn it into products that can be sold to supplement local incomes. The Center is one of five projects around the world in which we have worked with different architects, designers and homeowners to reduce the embodied carbon of projects using our most sustainable and innovative products.

Now entering its next phase, the Houses of Tomorrow program will continue working with our partners in design, architecture and project delivery to use our sustainable and innovative building solutions to reduce the carbon footprint of buildings today while building the houses of tomorrow.

Progress in partnership

In 2022 we became a founding partner of the Roof Over Our Heads campaign (ROOH) to make a difference to the lives of the one billion people living in informal settlements around the world. ROOH aims to deliver resilient, low carbon and affordable homes and improving public infrastructure to urban residents. ROOH's vision links itself to the UN High Level Champions Race to Resilience and Race to Zero Campaigns.

We have also expanded our work with Habitat for Humanity to promote innovation that enables people to have a decent place to live. Our first joint project has started in Mexico with the aim of enabling 600 families to access affordable homes in Bajío and Veracruz. The innovative approach relies on an online affordable housing platform that eases access to finance and suppliers for low-income families. Through the platform, families can apply for loans from microfinance institutions, reach building suppliers for quotes and services and order high-quality construction materials, including from Holcim's 25 Disensa retail stores around Veracruz.

Human rights

Holcim is committed to respecting and promoting human and labor rights in our operations, business activities and relationships, and in the communities where we work. Upholding human rights is at the core of our business model and success.

Human rights due diligence and global training are key to our efforts to improve performance. Human Rights Impact Assessments, which are part of our Human Rights Approach and due diligence work, have been carried out for the past decade, led either by Group-level experts or at a country level. Today every country where we operate has a human rights assessment process in place with defined action plans to address risks. Under our country and Group-level programs, we have trained more than 12,000 employees, contractors, community members and other stakeholders on human rights topics.

Maintaining our focus on road safety, drivers using in-Vehicle Monitoring Systems accounted for a record 83 percent of all kilometers driven with our own fleet, as well as contracted drivers. We also launched our global Women on Wheels program on International Women's Day, with eight countries deploying this award-winning initiative.

HOLCIM FOUNDATION FOR SUSTAINABLE CONSTRUCTION

Supporting the architects, engineers and urban planners who are pushing the boundaries of sustainable design.

HOLCIM FOUNDATION
SUSTAINABLE CONSTRUCTION

Next Generation Accelerator
In 2022, the Holcim Foundation reinforced its commitment to the next generation of professionals working to change the way the world designs and builds. From a Next Gen Accelerator workshop, to two Next Gen Awards Labs held in Switzerland and Argentina and a workshop in Spain focused on affordable housing in cities, around 50 young architects and urban planners from twenty countries were given the opportunity to discuss their work in person with recognized experts. Through these face-to-face accelerated learning opportunities, the Foundation helps professional networks to flourish and enables interdisciplinary collaboration that is focused on a holistic approach to sustainable design.

Research In Practice Grants
The Holcim Foundation recognizes the critical importance of encouraging young talents to develop the visionary design concepts and bold ideas required to meet the sustainability challenges faced by the construction industry. Through its Research in Practice Grants, the Foundation mentors and enables young practitioners to conduct research over a two-year period. Experts from the Foundation's partner universities met with current grant recipients in 2022 to carry out the mid-term review of their projects, which include: an artificial intelligence-based tool to optimize building component circularity in the USA; a housing project inspired by indigenous vernacular architecture in Brazil; and a vernacular river sanitation system upgrade in Indonesia.

▲ *Next Generation Accelerator workshop In Zweidlen, Switzerland*

"There is a before and an after since being awarded with a Holcim Awards Next Generation prize."

ANNICK KEOSEYAN
Architect and Project Manager at Taller de Arquitectura Mauricio Rocha (Mexico)

Alejandro Aravena addresses Holcim Awards winners at the University of Cordoba, Argentina

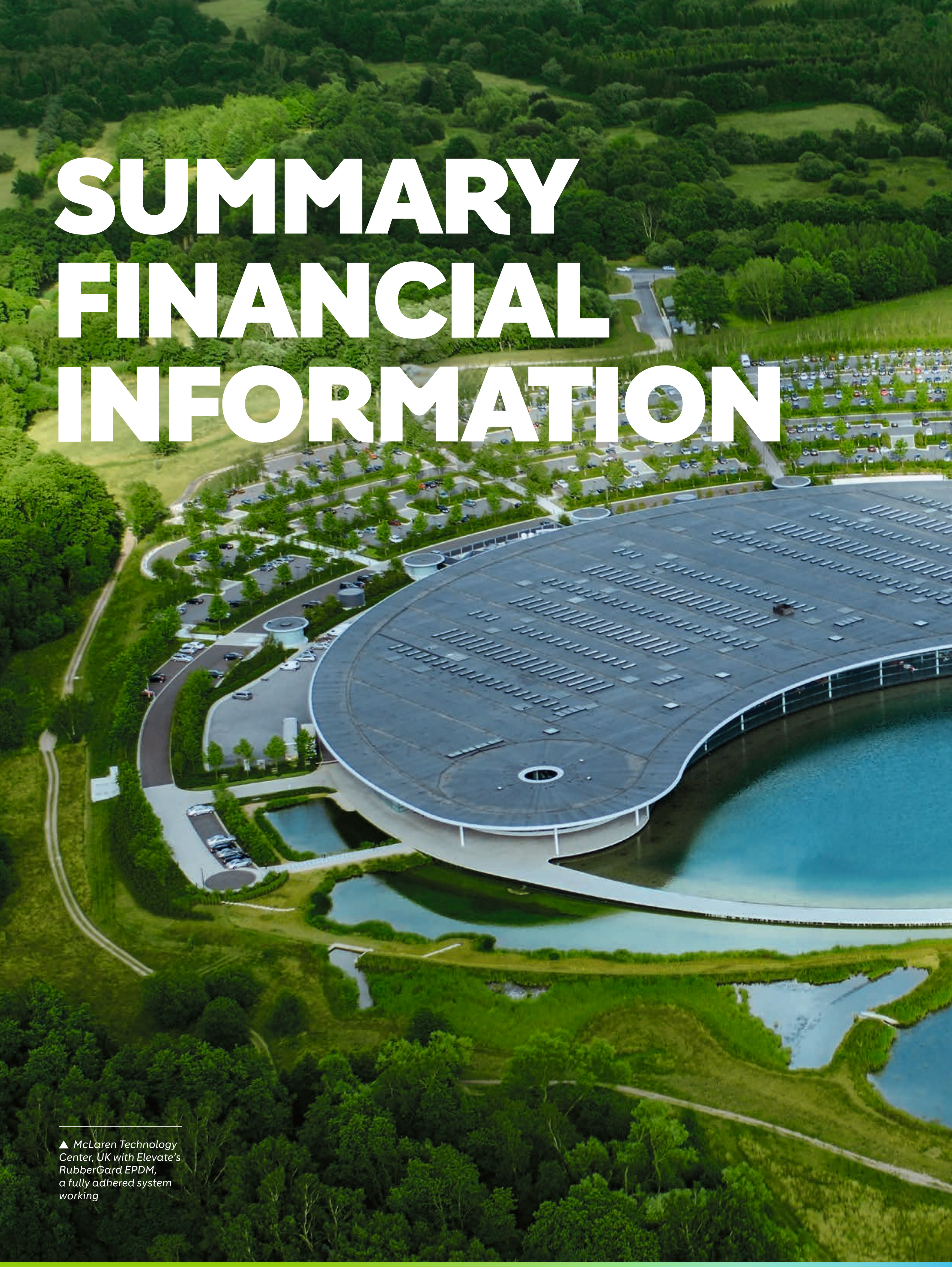
A Refreshed Knowledge Hub
The Foundation has promoted interdependent goals for sustainable construction for almost twenty years, primarily through the global Holcim Awards competition, but also through thought leadership events that bring together cutting-edge thinkers and practitioners. In 2022, these goals were reviewed and refreshed with the input of the Foundation's broad external stakeholder network, and a new website was launched to improve accessibility to the 2,000+ pages of knowledge acquired since the Foundation's inception. The site reflects the Foundation's three strategic objectives: to support the transfer of knowledge and ideas; to grow an intergenerational community of future-makers; and to promote best-practice solutions in sustainable design.

For more information:
holcimfoundation.org

"Professional knowledge is one type of expertise. Street wisdom is another. We need both types to tackle difficult questions."

ALEJANDRO ARAVENA
Partner Architect and Executive Director, Elemental (Chile); Laureate of the Pritzker Architecture Prize

SUMMARY FINANCIAL INFORMATION



▲ McLaren Technology Center, UK with Elevate's RubberGard EPDM, a fully adhered system working

IN THIS SECTION

CAPITAL MARKET INFORMATION

Holcim's transformation to innovative and sustainable building solutions leader is now well underway, with material changes to its portfolio pursued in 2022.

This repositioning has allowed Holcim to capitalize on the growing demand for sustainable building solutions, as stakeholders across the construction industry look to meet ambitious decarbonization targets. The transformation is bearing fruit; 2022 performance reached record levels. Today, Holcim's growth profile and sustainability credentials are stronger than ever, while higher exposure to repair & refurbishment has reduced the company's cyclicality. The ability to deliver superior returns to shareholders over the long term should make Holcim particularly attractive to investors.

The Holcim share price increased by 2.9 percent to CHF 47.9. In the same period, the Swiss Market Index (SMI) posted a loss of 16.7 percent. Holcim's share price increased by 9.1 percent on the Paris stock exchange, while in comparison, the CAC 40 decreased by 9.5 percent in the same period, ending 29 December 2022.

On 21 November 2022, Holcim has announced the delisting of its shares (ISIN: CH0012214059) from Euronext Paris to simplify its trading structure, effective 30 December 2022.

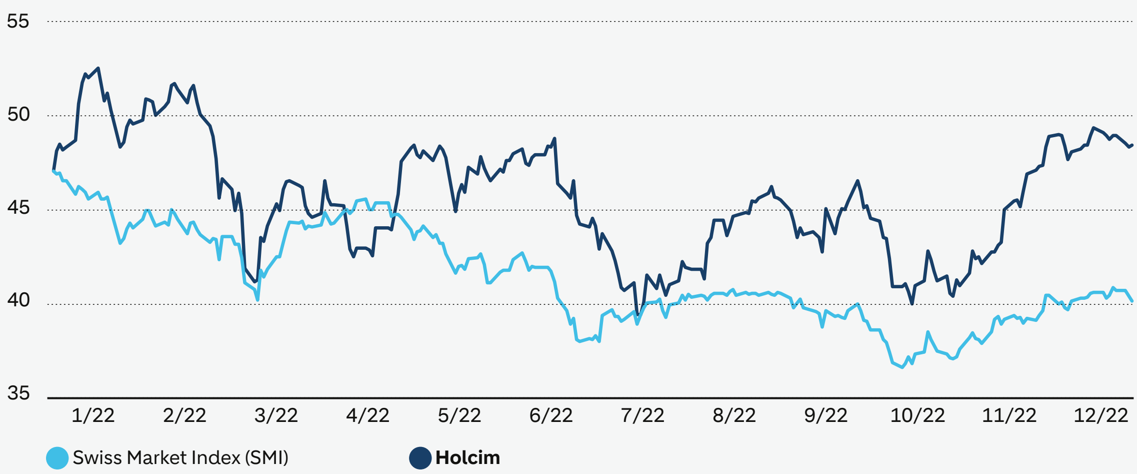
The average trading volume amounted to approximately 1.8 million shares per day on the SIX Swiss Exchange while trading volumes on the Euronext Paris were not significant.

WEIGHTING OF THE HOLCIM REGISTERED SHARE IN SELECTED INDICES

Index	Weighting in %
SMI, Swiss Market Index	2.53
SPI, Swiss Performance Index	1.84
SPI ESG, Swiss Performance Index ESG	1.88
SLI, Swiss Leader Index	4.06
STOXX Europe 600 Construction	9.18
STOXX Europe Large 200	0.36
STOXX Europe 600	0.29
STOXX Global 1800	0.06
FTSE4Good Europe Index	0.36

Sources: SIX, STOXX, FTSE as of year-end 2022

PERFORMANCE OF HOLCIM SHARES VERSUS THE SWISS MARKET INDEX (SMI) in 2022[1]



[1] SMI rebased to Holcim share price at 3 January 2022.

A DIVERSIFIED SHAREHOLDER BASE

(31 December 2022, in % of shares outstanding)

SHAREHOLDER BASE BY GEOGRAPHY

Anchor shareholders	8%
North America	24%
Switzerland	34%
UK and Ireland	9%
Continental Europe	9%
Rest of the world	4%
Others[3]	12%

[3] Includes employee shares, treasury shares and trading accounts.

SHAREHOLDER BASE BY INVESTOR CATEGORY

Anchor shareholders	8%
Institutional investors	59%
Retail investors	15%
Others[4]	18%

[4] Includes employee shares, pension fund and treasury shares.

CHF 47.9
+2.9%
Closing price
at 30 December 2022

CHF 29.5BN
Market capitalization
at 30 December 2022
2021: CHF 28.6 BN

CHF 2.50
+14%
Dividend per share[2]
CHF

[2] For the 2022 financial year, the Board of Directors proposes a cash dividend of CHF 2.50 per registered share, subject to approval by the shareholders at the Annual General Meeting on 4 May 2023. The dividend will be fully paid out of the foreign capital reserves from tax capital contributions, not subject to Swiss withholding tax.

STOCK EXCHANGE LISTINGS (AT 31 DECEMBER 2022)

	Security	ISIN Code	Security code number	Ticker symbol	Bloomberg code	Thomson Reuters code
SIX Swiss Exchange	Holcim Ltd, Zurich, share	CH0012214059	1221405	HOLN	HOLN SW	HOLN.S
SIX Swiss Exchange	Holcim Ltd, Zurich, Share buyback	CH1228896150	122889615	HOLNE	HOLNE SE	HOLNE.S.

CAPITAL MARKET INFORMATION CONTINUED

Listings

Holcim is listed on the SIX Swiss Exchange. The Group is a member of the main large indexes on the SIX Swiss Exchange (SMI, SLI and SPI). Holcim is also included in the ESG indexes 'SPI ESG' and 'SPI ESG Weighted' launched in February 2021 as sustainable benchmarks for the Swiss capital market. On 21 November 2022, Holcim has announced the delisting of its shares (ISIN: CH0012214059) from Euronext Paris to simplify its trading structure. The delisting has been effective on 30 December 2022. This decision will focus the trading of Holcim shares in its primary market, the SIX Swiss Exchange, reflecting the shift in volumes away from Euronext Paris over the years.

Share repurchase and cancellation

In 2022, Holcim initiated a share buyback program of up to CHF 2 billion. Under this program, Holcim plans to repurchase up to 40 million shares until May 2023, to be approved for cancellation at the Annual General Meeting on 4 May 2023. The volume of the monthly share buybacks will depend on market conditions. The program started on 14 November 2022 and 9,301,384 shares were purchased in 2022 for an average price of CHF 48.38.

Free float

Free float as defined by the SIX Swiss Exchange and the Euronext stood at 92 percent at year end.

Dividend policy

Dividends are distributed annually. For the 2022 financial year, the Board of Directors is proposing a dividend payout in the amount of CHF 2.50 per registered share, subject to approval by shareholders at the Annual General Meeting. The payout is scheduled for 12 May 2023, to be paid out of the foreign capital reserves from tax capital contributions, not subject to Swiss withholding tax.

Significant shareholders

Information on significant shareholders can be found on page 287 of our 2022 Integrated Annual Report.

Disclosure of shareholdings

Under the Federal Act on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading (Financial Market Infrastructure Act, FMIA), whosoever, directly, indirectly, or acting in concert with third parties, acquires or disposes of shares in a company incorporated in Switzerland whose equity securities are listed, in whole or in part, in Switzerland and thereby attains, falls below, or exceeds the threshold of 3, 5, 10, 15, 20, 25, 33⅓, 50, or 66⅔ percent of the voting rights, whether or not such rights may be exercised, shall notify the company and the stock exchanges on which the equity securities in question are listed. Consequently, significant shareholdings may have varied within the relevant threshold levels since they were reported.

Registration in the share register and restrictions on voting rights

The company maintains a share register for registered shares in which the names and addresses of owners and beneficiaries are entered. According to the applicable rules and regulations, only those included in the share register are deemed shareholders or beneficial owners of the registered shares of the company. Upon request, purchasers of registered shares shall be included in the share register as shareholders with voting rights if they expressly declare that they have acquired the shares in their own name and for their own account. Exceptions to this rule apply for nominees who have signed a nominee agreement with the company regarding this position and are subject to a recognized financial markets supervisory authority. The share register is closed approximately one week prior to the date of the Annual General Meeting of shareholders (the exact date is communicated in the invitation to the Annual General Meeting).

Each Holcim share carries one voting right.

Information on Holcim registered shares

Further information on Holcim registered shares can be found at:
holcim.com/investors

KEY DATA HOLCIM REGISTERED SHARES

Par value CHF 2.00	**2022**	2021	2020	2019	2018
Number of shares issued	615,929,059	615,929,059	615,929,059	615,929,059	606,909,080
Number of treasury shares	27,364,975	7,919,042	4,216,907	2,235,478	10,736,847

Stock market prices in CHF	**2022**	2021	2020	2019	2018
High	53	58	54	54	60
Low	39	43	28	40	39
Average	46	51	43	49	50
Market capitalization (billion CHF)	29.5	28.6	29.9	33.1	24.6
Trading volumes (million shares)	456.5	458.7	774.2	602.8	625.3
Earnings per share (EPS) in CHF	5.48	3.73	2.74	3.69	2.52
EPS before impairment and divestments in CHF	3.66	3.98	3.07	3.37	2.63
Cash earnings per share in CHF[1]	7.59	8.26	7.54	7.97	5.01
Dividend per share in CHF	2.50[2]	2.20	2.00	2.00	2.00

[1] Cash EPS calculated based on cash flow from operating activities divided by the weighted-average number of shares outstanding.
[2] Proposed by the Board of Directors to be paid out of the foreign capital reserves from tax capital contributions, not subject to Swiss withholding tax.

CURRENT RATING (24 FEBRUARY 2023)

Rating Agency	Long-term rating	Short-term rating
Standard & Poor's Ratings Services	BBB+, outlook stable	A-2
Moody's Investors Service	Baa1, outlook stable	P-2

FINANCIAL CALENDAR

First Quarter 2023 Trading Update
21 April 2023

Dividend payment date
12 May 2023 (ex-dividend date 9 May 2023)

Annual General Meeting
4 May 2023

Last trading day with entitlement to receive the dividend
8 May 2023

Half-Year Results 2023
27 July 2023

Third Quarter 2023 Trading Update
27 October 2023

CONSOLIDATED STATEMENT OF INCOME OF HOLCIM

Million CHF	Notes	2022	2021
Net sales	3.3	**29,189**	**26,834**
Production cost of goods sold	4.3	**(17,575)**	(15,298)
Gross profit		**11,614**	**11,536**
Distribution and selling expenses		**(6,611)**	(6,232)
Administration expenses[1]		**(2,089)**	(1,377)
Share of profit of joint ventures	6.4	**308**	474
Operating profit		**3,221**	**4,401**
Profit on disposals and other non-operating income	5.2	**2,199**	36
Loss on disposals and other non-operating expenses	5.3	**(424)**	(231)
Share of profit (loss) of associates	6.9	**17**	(7)
Financial income	7.2	**183**	96
Financial expenses	7.3	**(641)**	(652)
Net income before taxes		**4,555**	**3,644**
Income taxes	8.2	**(1,027)**	(963)
Net income		**3,528**	**2,681**
Net income attributable to:			
Shareholders of Holcim Ltd		**3,308**	2,298
Non-controlling interest		**220**	383
Earnings per share in CHF			
Earnings per share	9	**5.48**	3.73
Fully diluted earnings per share	9	**5.46**	3.72

[1] On 18 October 2022, Lafarge SA resolved a previously disclosed inquiry by the U.S. Department of Justice into legacy operations in Syria during the country's civil war. Under the terms of the resolution, Lafarge SA and its long-defunct subsidiary Lafarge Cement Syria paid a financial penalty of USD 778 million (CHF 767 million), which was recorded under Administration expenses (see note 16.3).

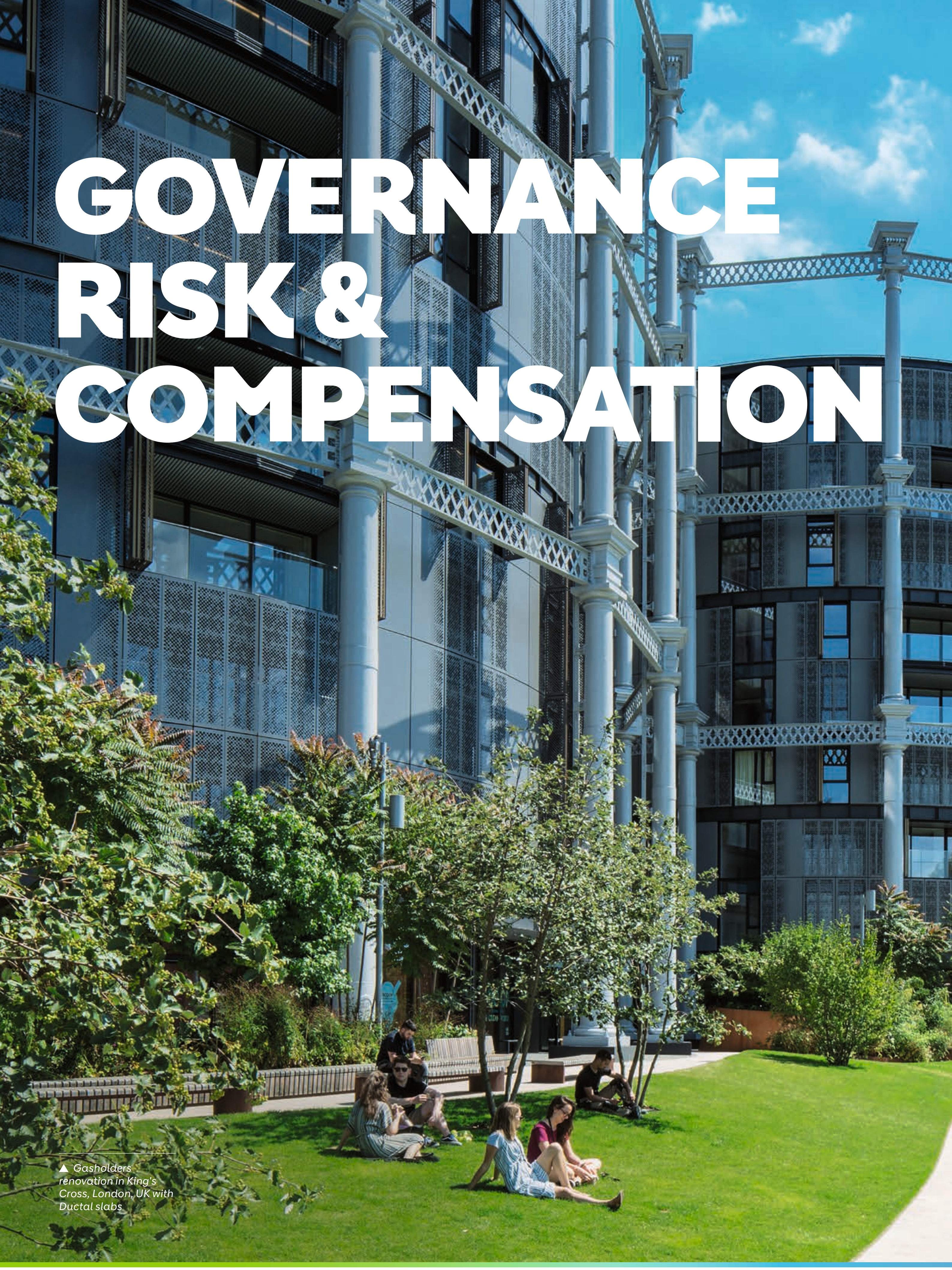
The Alternative Performance Measures used in this report are defined on page 293.

CONSOLIDATED STATEMENT OF COMPREHENSIVE EARNINGS OF HOLCIM

Million CHF	Notes	2022	2021
Net income		**3,528**	**2,681**
Items that will be reclassified to the statement of income in future periods			
Currency translation effects			
– Exchange differences on translation		**(1,250)**	(110)
– Realized through statement of income[1]		**1,140**	119
– Tax effect	8.4	**(23)**	(3)
Cash flow hedges			
– Change in fair value		**(277)**	85
– Realized through statement of income		**257**	109
– Tax effect	8.4	**14**	(47)
Net investment hedges in subsidiaries			
– Change in fair value		**3**	(2)
– Realized through statement of income		**0**	1
Subtotal		**(135)**	**152**
Items that will not be reclassified to the statement of income in future periods			
Defined benefit plans			
– Remeasurements	15.3	**(160)**	693
– Tax effect	8.4	**37**	(153)
Subtotal		**(123)**	**540**
Total other comprehensive earnings		**(258)**	**692**
Total comprehensive earnings		**3,270**	**3,373**
Total comprehensive earnings attributable to:			
Shareholders of Holcim Ltd		**3,173**	2,992
Non-controlling interest		**96**	381

[1] In 2022, the currency translation effects realized through statement of income mainly relates to the divestments of the Group's businesses in India and Brazil (see note 2.3).

GOVERNANCE RISK & COMPENSATION



▲ Gasholders renovation in King's Cross, London, UK with Ductal slabs

IN THIS SECTION

CORPORATE GOVERNANCE

Holcim applies high standards to Corporate Governance. The goal is to assure the long-term value and success of the company in the interests of various stakeholder groups: customers, shareholders, employees, creditors, suppliers and the communities where Holcim operates.

Preliminary remarks

The ultimate goal of effective Corporate Governance is long-term value creation and strengthening of the Group's reputation. This includes continuous improvement to decision-making processes and management systems through legal, organizational and ethical directives and terms of reference, as well as measures to enhance transparency.

Compliance with internal and external law and regulations, early recognition of business risks, social responsibility for stakeholder groups, and open communication on all relevant issues are among the principles of Holcim.

The Code of Business Conduct, binding for the entire Group, is part of our internal regulations.

The information published in this chapter conforms to the Directive on Information relating to Corporate Governance of the SIX Swiss Exchange (SIX) and the disclosure rules of the Swiss Code of Obligations. In the interest of clarity, reference is made to other parts of the Annual Report or, for example, to the Group's website: *holcim.com*

Except where otherwise indicated, this Annual Report reflects the legal situation as of 31 December 2022.

Group structure and shareholders

The holding company Holcim Ltd was established under the laws of Switzerland for an indefinite period. Its registered office is in Zug (Canton of Zug, Switzerland). It has direct and indirect interests in all companies listed on pages 191–195 of this Integrated Annual Report.

The Group is organized by geographical regions. The management structure as per 31 December 2022 is described in this chapter.

To the knowledge of Holcim, it has no mutual cross-holdings with any other company. To the knowledge of Holcim, there are neither shareholders' agreements nor other agreements regarding voting or the holding of Holcim shares.

More detailed information on the business review, Group structure and shareholders can be found on the following pages of the Annual Report:

TOPIC

- Business review of the Group regions p. 170–174
- Segment information p. 204
- Principal companies p. 197
- Information about Holcim Ltd & listed Group companies p. 201
- Information about Significant Shareholders p. 285

Capital structure

Holcim has one uniform type of registered share in order to comply with international capital market requirements in terms of an open, transparent, and modern capital structure and to enhance attractiveness, particularly for institutional investors.

Share capital

As of 31 December 2022, the nominal, fully paid-in share capital of Holcim amounted to CHF 1,231,858,118. The share capital is divided into 615,929,059 registered shares of CHF 2.00 nominal value each.

Conditional share capital

The share capital may be increased by a nominal amount of CHF 2,844,700 through the issuance of a maximum of 1,422,350 fully paid-in registered shares, each with a par value of CHF 2.00 (as per 31 December 2022). The conditional capital may be used for exercising conversion rights and/or warrants relating to bonds or similar debt instruments of the company or one of its Group companies. The subscription rights of the shareholders will be excluded. The current owners of conversion rights and/or warrants will be entitled to subscribe for the new shares. The acquisition of shares through the exercise of conversion rights and/or warrants and each subsequent transfer of the shares will be subject to the restrictions set out in the Articles of Incorporation. As per 31 December 2022, no bonds or similar debt instruments of the company or one of its Group companies were outstanding that would give rise to conversion rights or warrants related to the conditional capital; therefore, in the year under review, no conversion rights or warrants have been exercised.

Further information on conversion rights and/or warrants and applicable conditions may be found in the Articles of Incorporation of Holcim at: *holcim.com/articles-incorporation*

Authorized share capital/Certificates of participation

As per 31 December 2022, neither authorized share capital nor certificates of participation were outstanding.

More detailed information on the capital structure can be found as follows:

TOPIC

- Articles of incorporation of Holcim Ltd
  holcim.com/articles-incorporation
- Code of business conduct
  holcim.com/who-we-are/our-values
- Changes in equity of Holcim p. 182–183 (information for the year 2020 is included in the Annual Report 2021, p. 178–179)
- Detailed information on conditional capital
  holcim.com/articles-incorporation
  Articles of incorporation: Art. 3bis
- Key data per share p. 78–81, 251, 268
- Rights pertaining to the shares
  holcim.com/articles-incorporation
  Articles of incorporation: Art. 6, 9, 10
- Regulations on transferability of shares and nominee registration
  holcim.com/articles-incorporation
  Articles of incorporation: Art. 4, 5
- Warrants/options p. 259–262

CORPORATE GOVERNANCE CONTINUED

Board of Directors and Committees

The Board of Directors currently consists of 11 members, 10 of whom are independent, were not previously members of the Holcim management, and have no important business connections with Holcim.

Independence is defined in line with Swiss best Corporate Governance standards. A member of the Board of Directors shall be considered independent, if the member is not and has not been employed as a member of the Executive Committee at the company or any of its principal subsidiaries or as employee or affiliate of the auditors of Holcim for the past three years and does not maintain, in the sole determination of the Board of Directors, a material direct or indirect business relationship with the company or any of its subsidiaries. Members of the Board of Directors with immediate family members who would not qualify as independent shall not be considered independent, subject to a three-year cooling-off period.

Please see pages 100–105 for the biographical information of the members of the Board of Directors as per 31 December 2022.

Colin Hall, Adrian Loader and Dieter Spälti retired from the Board of Directors at the Shareholders General Meeting of 4 May 2022.

In 2022, the shareholders elected Leanne Geale and Ilias Läber as new members of the Board of Directors. The shareholders re-elected nine members of the Board of Directors.

Dr. Beat Hess was re-elected as Chairperson of the Board of Directors. Furthermore, the shareholders confirmed two members of the Nomination, Compensation & Governance Committee. Ilias Läber and Jürg Oleas were newly elected to the Nomination, Compensation & Governance Committee.

New independent members of the Board of Directors are required to participate in an induction program where they are introduced in detail to the company's areas of business and where they become familiar with the organizational structure, strategic plans and other important matters relating to the governance of the company.

The Board of Directors meets as often as business requires, but at least four times a year.

Due to the ongoing exceptional circumstances related to the COVID-19 pandemic, in 2022 Board of Directors and Committee meetings were organized as video conferences until end of June 2022.

In 2022, five regular meetings and six additional meetings were held. One meeting focused on strategy topics. As a rule, the members of the Executive Committee attended those parts of the regular meetings of the Board of Directors which dealt with operational issues of areas of their responsibility. In addition, selected members of the senior management have been invited by the respective Chairpersons to attend the meetings of the Board of Directors or its Committees. The average duration of the regular meetings of the Board of Directors was six hours.

Elections and terms of office

All members of the Board of Directors, the Chairperson of the Board of Directors, and all members of the Nomination, Compensation & Governance Committee are elected annually and individually as a matter of law by the shareholders at the Shareholders General Meeting. They may be proposed for re-election by the Board of Directors upon motion by the Nomination, Compensation & Governance Committee. The Nomination, Compensation & Governance Committee bases its motion on a review of the overall performance of each candidate.

A member of the Board of Directors shall not serve on the Board of Directors for more than twelve years. In addition, it is expected that members of the Board of Directors will offer their resignation at the ordinary General Meeting following their 72nd birthday. The Board of Directors may provide for exceptions to this rule in individual cases under special circumstances and if this is in the best interest of Holcim.

Composition of Board of Directors and succession planning

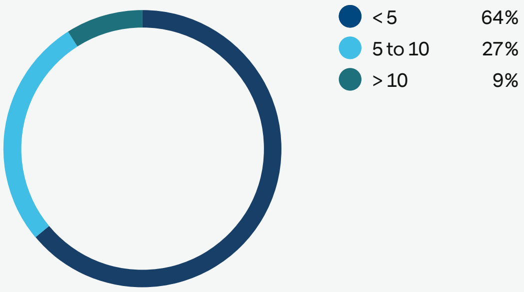
Succession planning is of high relevance to the Board of Directors. The Nomination, Compensation & Governance Committee regularly considers the composition of the Board of Directors as a whole and considering staffing for the Committees.

With regard to the composition of the Board of Directors, the Nomination, Compensation & Governance Committee considers diversity (including but not limited to: origin, domicile, gender, age and professional background) as well as such other factors necessary to address needs of the Board of Directors to fulfil its responsibilities. The Nomination, Compensation & Governance Committee also considers other activities and commitments of an individual in order to ensure that a proposed member of the Board of Directors will have sufficient time to dedicate to their role as member of the Board of Directors of Holcim.

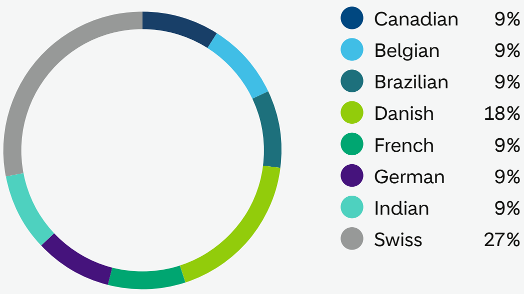
The Board of Directors initiates the evaluation of potential new Board members in a timely manner. A search for new Board members is launched – normally with the support of a professional executive search company – with precise selection criteria. Candidates are interviewed by the Chairperson of the Board of Directors, the Chairperson and members of the Nomination, Compensation & Governance Committee and other members of the Board of Directors. The Nomination, Compensation & Governance Committee makes a recommendation to the Board of Directors who then decides on the proposal to the Shareholders General Meeting for election.

The current composition of the Board of Directors is well balanced in gender diversity and consists of individuals with diverse geographic and cultural backgrounds.

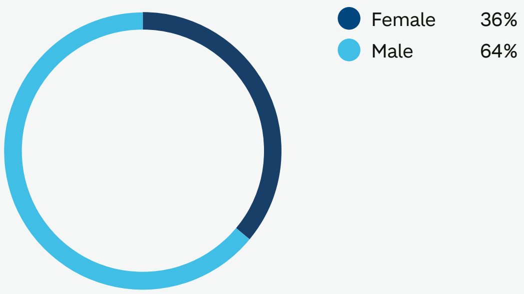
TENURE YEARS



NATIONALITY

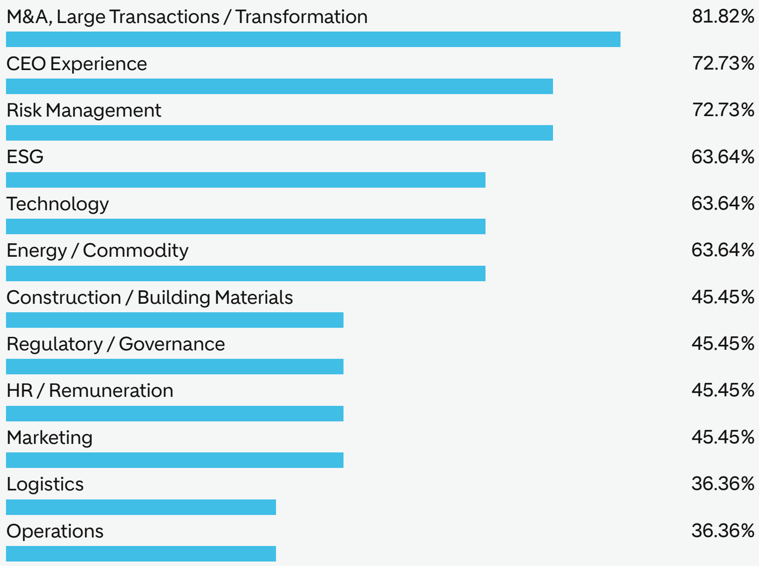


GENDER



The Board of Directors covers the following experience, skills and knowledge adding up to a well-balanced and diverse skill set of the company's Board of Directors.

EXPERTISE



Board of Directors and Committee performance and effectiveness evaluation

According to Paragraph 4 of the company's Organizational Rules, the Board of Directors annually conducts self-assessments to evaluate the performance and operational effectiveness of the Board of Directors and its Committees. This includes confidential feedback based on anonymous questionnaires and individual interviews with each member of the Board of Directors conducted by the Chairperson of the Board of Directors and the Chairperson of the Nomination, Compensation & Governance Committee. This assessment covers topics including size/composition of the Board of Directors, qualifications, meeting cycle, allocation of tasks between the Board of Directors and its Committees, processes, governance, meetings, pre-reading materials, effectiveness, leadership and culture. In addition, each Committee reviews the adequacy of its composition, organization and processes as well as the scope of its responsibilities and evaluates its own performance. The main issues identified are then presented and discussed to ensure the 0continued effectiveness of the Board of Directors and its Committees.

Honorary Chairman

After Mr. Thomas Schmidheiny retired from the Board of Directors at the Shareholders General Meeting of 8 May 2018, the Board of Directors decided to name Mr. Thomas Schmidheiny Honorary Chairman of the Group in recognition of his many years of service to Holcim. The Honorary Chairman can participate at the meetings of the Board of Directors as a guest.

CORPORATE GOVERNANCE CONTINUED

AS OF 31 DECEMBER 2022 THE MEMBERS OF HOLCIM'S BOARD OF DIRECTORS SERVED ON THE FOLLOWING EXPERT COMMITTEES:

AUDIT COMMITTEE (AC)

Patrick Kron (Chairperson)
Kim Fausing
Ilias Läber
Jürg Oleas

The Audit Committee assists and advises the Board of Directors in conducting its supervisory duties with respect to the internal control systems. It examines the reporting for the attention of the Board of Directors and evaluates the Group's external and internal audit procedures, reviews the risk management systems of the Group, and assesses financing issues.

All members are independent in order to ensure the necessary degree of objectivity required for an Audit Committee.

In 2022, four regular meetings of the Audit Committee were held. The average duration of the regular meetings was two hours and twenty-five minutes.

In 2022, the Audit Committee reviewed in particular the financial reporting of the Group, the releases of the quarterly results and the findings of the external auditors. The Audit Committee took note of the status of the Internal Control System (ICS), discussed the findings of Group Internal Audit, dealt with compliance and internal directives, and evaluated financing issues. The Audit Committee evaluated the performance of the external auditors and their fees.

The charter of the Audit Committee is available at: *holcim.com/articles-incorporation*

NOMINATION, COMPENSATION & GOVERNANCE COMMITTEE (NCGC)

Hanne B. Sørensen (Chairperson)
Ilias Läber
Jürg Oleas
Claudia S. Ramirez

The Nomination, Compensation & Governance Committee supports the Board of Directors in planning and preparing succession at the Board of Directors and senior management level. It monitors developments with regard to Corporate Governance and compensation for the Board of Directors and Executive Committee and briefs the Board of Directors accordingly. The Nomination, Compensation & Governance Committee advises the Board of Directors on the compensation policy for the Board of Directors and for the Executive Committee and on the motion by the Board of Directors to the Shareholders General Meeting for the total compensation of the Board of Directors and of the Executive Committee.

In 2022, the Nomination, Compensation & Governance Committee held four ordinary meetings according to the annual schedule and one additional meeting on succession planning. The average duration of the regular meetings was two hours and fifty minutes.

More details on the activities of the Nomination, Compensation & Governance Committee, in particular with regard to the process of determination of compensation, can be found in the Compensation Report, starting on page 132.

The charter of the Nomination, Compensation & Governance Committee is available at: *holcim.com/articles-incorporation*

HEALTH, SAFETY & SUSTAINABILITY COMMITTEE (HSSC)

Philippe Block (Chairperson)
Leanne Geale
Naina Lal Kidwai
Claudia S. Ramirez

The Health, Safety & Sustainability Committee supports and advises the Board of Directors on the development and promotion of a healthy and safe environment for employees and contractors as well as on sustainable development and social responsibility.

For information on the role of the Health, Safety & Sustainability Committee with regard to governing the risks and opportunities around climate change, please see the chart below.

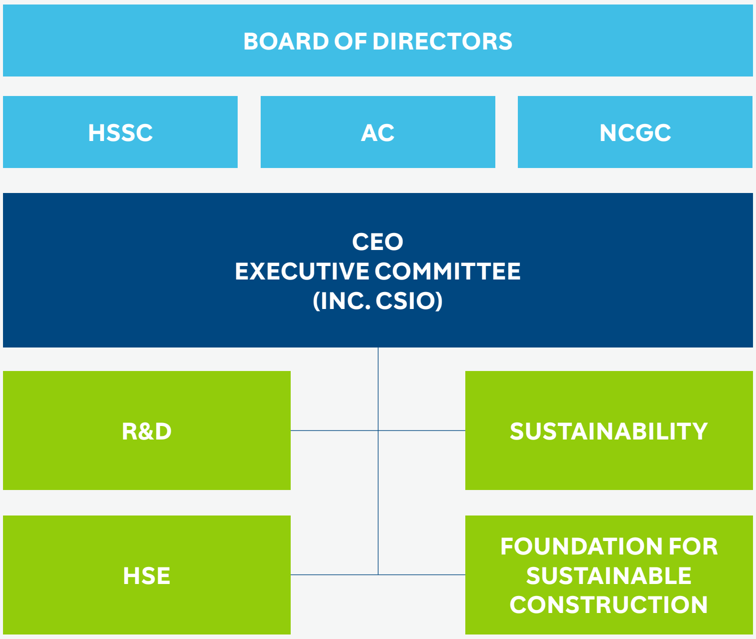
In 2022 the Health, Safety & Sustainability Committee held four regular meetings. The average duration of the meetings was two hours.

In 2022, the topics discussed by the Health, Safety & Sustainability Committee included:

- Health, Safety and Environment KPIs and focus areas in particular root causes for fatalities and strategic initiatives to reduce air emissions.
- Sustainability focus areas and ESG strategy including:
- The industry's first Climate Report, presented at the 2022 AGM receiving 90% approval by shareholders
- Holcim's updated, more aggressive, CO_2 targets aligned with 1.5 degrees including validation by the Science-Based Targets initiative (SBTi)
- Strategic Nature roadmaps for each country to reduce and replenish freshwater used as well as a science based measurable positive impact on biodiversity
- Strategic People roadmaps for each country to meet social initiatives pending targets, human rights impact assessments and affordable housing programs
- COVID-19 Crisis Management and updates across all countries and sites including vaccination programs
- Security and resilience program and outlining threat & risk forecast

The charter of the Health, Safety & Sustainability Committee is available at:
holcim.com/articles-incorporation

HOLCIM GOVERNANCE APPROACH FOR CLIMATE-RELATED RISKS AND OPPORTUNITIES



The Board of Directors has the ultimate responsibility for strategy and overall governance of the company.

The HSSC advises the Board of Directors on all matters related to sustainable development, including those related to climate and energy. The HSSC reviews and approves the company's climate-related plans and targets.

The Committee consists of four members of the Board of Directors. The Chairperson of the Board of Directors (unless a member of the HSSC), the Group CEO, Chief Sustainability & Innovation Officer (CSIO), Head of Legal and Compliance, Head of Security and the Head of Health, Safety and Environment participate as standing guests. The committee meets at least quarterly.

The Executive Committee is ultimately responsible for execution of the climate and energy strategy, and climate-related issues are managed on an operational level by the CSIO, an Executive Committee-level position. The CSIO is supported by a sustainability core team.

The sustainability core team is a cross-disciplined department which is responsible to develop and oversee the deployment of Holcim's sustainability strategy. The R&D team also plays a key role, with more than half of the time spent by our researchers at the Innovation Centers in Holderbank, Switzerland and Lyon, France, dedicated to low-carbon products and more than 45 percent of our patents currently in this area and a further 20 percent related to other sustainability topics.

CORPORATE GOVERNANCE CONTINUED

BOARD OF DIRECTORS AND COMMITTEE ATTENDANCE AT SCHEDULED ORDINARY MEETINGS[1]

Name	Position	Board of Directors	Audit Committee	Nomination, Compensation & Governance Committee	Health, Safety & Sustainability Committee
Beat Hess[2]	Chairperson	5/5	–	–	–
Hanne B. Sørensen [3]	Vice-Chairperson	5/5	2/2	5/5	–
Dieter Spälti[4]	Vice-Chairperson (former)	2/2	2/2	2/2	–
Philippe Block	Member	5/5	–	–	4/4
Kim Fausing	Member	5/5	4/4	–	–
Leanne Geale[5]	Member	3/3	–	–	2/2
Colin Hall[6]	Member	2/2	–	2/2	–
Jan Jenisch[7]	Member	5/5	–	–	–
Naina Lal Kidwai	Member	5/5	–	–	4/4
Patrick Kron[8]	Member	5/5	4/4	–	1/2
Ilias Läber[9]	Member	3/3	2/2	3/3	
Adrian Loader[10]	Member	2/2	–	2/2	2/2
Jürg Oleas[11]	Member	5/5	4/4	3/3	–
Claudia Sender Ramirez	Member	5/5	–	4/4	4/4

[1] The Board of Directors held one additional meeting focusing on strategy topics and six extraordinary meetings
[2] Although the Chairperson is not formally a member of the Committees he regularly attends as a guest
[3] Vice-Chairperson as of and Member of the Audit Committee until May 2022
[4] Member of the Board of Directors and member of the Audit and Nomination, Compensation & Governance Committees until Shareholders General Meeting 2022
[5] Member of the Board of Directors as of Shareholders General Meeting 2022 and Member of the Health, Safety & Sustainability Committee as of May 2022
[6] Member of the Board of Directors and Members of the Nomination, Compensation & Governance Committee until Shareholders General Meeting 2022
[7] Although the CEO is not formally a member of the Committees he regularly attends as a guest
[8] Member of the Health, Safety & Sustainability Committee until May 2022
[9] Member of the Board of Directors and of the Nomination, Compensation & Governance Committee as of Shareholders General Meeting 2022 and Member of the Audit Committee as of May 2022
[10] Member of the Board of Directors, Chairperson of the Health, Safety & Sustainability Committee and Member of the Nomination, Compensation & Governance Committee until Shareholders General Meeting 2022
[11] Member of the Nomination, Compensation & Governance Committee as of Shareholders General Meeting 2022

Corporate Governance framework

Organizational rules/areas of responsibility

The division of responsibilities between the Board of Directors, the CEO, and the Executive Committee is set out in detail in the company's Organizational Rules.

The Organizational Rules entered into force on 24 May 2002 and are reviewed at least every two years and amended as required. They were last reviewed and amended in July 2021 and may be found at: *holcim.com/articles-incorporation*

The Organizational Rules are issued by the Board of Directors in accordance with the terms of Art. 716b of the Swiss Code of Obligations and Art. 18 of the company's Articles of Incorporation. They stipulate the organizational structure of the Board of Directors and the Executive Committee and govern the tasks and powers conferred on the company's executive bodies. They regulate the convocation, execution, and number of to be held by the Board of Directors and the Executive Committee. If the Chairperson of the Board of Directors is not independent, the Organizational Rules provide for the election of a Lead Independent Director.

The Board of Directors also has the power to establish expert Committees and, if required, ad-hoc Committees for special tasks. The Board of Directors can delegate special tasks or tasks related to specific functions to a Vice-Chairperson meetings on a temporary or permanent basis.

As part of its non-transferable statutory responsibilities, the Board of Directors defines the corporate strategy, approves the consolidated Group mid-term plan, including the budget, and the Annual Report for submission to the Shareholders General Meeting.

The CEO is responsible for operational management, preparing a large part of the business of the Board of Directors – including corporate strategy proposals – and executing the latter's resolutions.

The CEO issues directives and recommendations with Group-wide significance in the CEO's own authority and is also responsible for electing and dismissing Function Heads and CEOs of Group companies, as well as for the nomination of the members of the Board of Directors of Group companies and supervisory bodies of the Group companies.

Within the framework of mid-term plan approval, the Board of Directors defines limits for investments and financing.

Within these limits, the Executive Committee decides on financing transactions and on one-off investments and divestments for amounts up to CHF 400 million. Amounts exceeding this are subject to approval by the Board of Directors. The Board of Directors is regularly informed about important transactions under the authority of the Executive Committee.

The Board of Directors determines the CEO's and the Executive Committee members' objectives upon motion by the Nomination, Compensation & Governance Committee, both after advice and assessment with the CEO.

The CEO assesses the performance of the members of the Executive Committee and, after advice and assessment by the Nomination, Compensation & Governance Committee, determines their respective individual objectives.

The Executive Committee oversees risk management following appraisal by the Audit Committee. The Board of Directors is informed annually about the risk exposure.

In case of a direct conflict of interest, the Organizational Rules require each member of the corporate body concerned to stand aside voluntarily prior to any discussion of the matter in question. Members of the corporate bodies are required to treat all information and documentation which they may obtain or view in the context of their activities in these bodies as confidential and not to make such information available to third parties.

All individuals vested with the powers to represent the company have joint signature power collectively by two.

Information and control instruments of the Board of Directors

The Board of Directors determines the way it is to be informed about the course of business. Any member of the Board of Directors may demand information on all issues relating to the Group and the company. All members of the Board of Directors may request information from the CEO. At meetings of the Board of Directors, any attending member of the Executive Committee has a duty to provide information. All members of the Board of Directors have a right to inspect books and files to the extent necessary for the performance of their tasks.

Financial reporting

The Board of Directors is informed on a monthly basis about the current course of business, adopts the quarterly reports and releases them for publication. The Board of Directors discusses the Annual Report, takes note of the Auditors' Reports, and submits the Annual Report to the Shareholders General Meeting for approval.

Regarding Group strategy development, a strategy plan, a mid-term plan covering four years and including the budget are submitted to the Board of Directors.

Risk management

Holcim benefits from many years of experience with a risk management process which is structured around several coordinated approaches and subject to continuous improvement. A detailed update and analysis of the Group Risk map was carried out in 2022 and submitted to and analyzed by the Audit Committee and Executive Committee.

Responsibilities concerning risks are clearly defined at country, region and corporate level. The underlying principle is that risk management is a line management responsibility. Line managers are supported by the Group Risk Management function.

Risks are identified and assessed according to significance and likelihood. The full risk spectrum from market, operations, finance, legal, environmental and sustainability, to external risk factors of the business environment is reviewed, including compliance and reputational risks. Key risks are analyzed more deeply regarding their causes, and risk mitigating actions are defined. Risk transfer through insurance solutions and the Internal Control system forms an integral part of the risk management process. Risks are monitored and their status reported to the Executive Committee and the Audit Committee regularly. Independent assessments of the effectiveness of mitigating actions and controls are performed by Group Internal Audit. Please see page 112 for more details about the Group's risk management.

CORPORATE GOVERNANCE CONTINUED

Internal control

Holcim aims to have an effective Internal Control system and culture supported by the commitment of the Board of Directors and the Executive Committee. Group Internal Control (GIC) primarily aims to provide the Board of Directors and the Executive Committee reasonable assurance on the reliability of the financial reporting and statements, compliance with laws and regulations and the protection of assets.

GIC has designed a set of minimum control standards and a continuous reporting system to receive country and function assessments of the controls and status of any action plans. Discussions regularly occur with local management to ensure controls are properly assessed and issues are swiftly addressed.

GIC designs and coordinates the annual certification process to review the main action plans in progress and to confirm management responsibility at each relevant level of the Group organization on the quality of both internal control and financial reporting. The outcome is presented to the Executive Committee and the Audit Committee.

Group Internal Audit

The core mission of Group Internal Audit (GIA) is to provide to the Board of Directors and the Executive Committee with an independent, risk-based, and objective assurance on the effectiveness and efficiency of the governance, risk management and internal control system of Holcim Group. The members of the Board of Directors have access to GIA. Each year, the Internal Audit plan, which defines the audit focal areas to be addressed by GIA, is reviewed and approved by the Audit Committee. Main observations and findings observed during the audit assignments are reported periodically to the Executive Committee and the Audit Committee.

The GIA activity is governed by adherence to the mandatory guidance issued by the Institute of Internal Auditors ("IIA") including the Definition of Internal Auditing, the Code of Ethics, and the International Professional Practices Framework (IPPF).

Executive Committee

Members of the Executive Committee (including the CEO) are appointed by the Board of Directors and are responsible for the management of the Group.

The tasks of the Executive Committee are divided into different areas of responsibility in terms of country and function, each of these areas being ultimately supervised and managed by a member of the Executive Committee.

During the year under review the following changes within the Executive Committee have occurred:

Effective 1 March 2022, Toufic Tabbara, previously Chief Executive Officer of US Cement has been appointed as new Region Head North America, succeeding René Thibault who has decided to pursue new opportunities outside of the company.

After largely reducing the Region Asia Pacific due to major divestments, a new Asia Middle East & Africa (AMEA) Region has been created. Martin Kriegner, formerly Head of Region Asia Pacific has taken over responsibility for the new Region AMEA as of 1 November 2022.

Also, effective 1 November 2022, Miljan Gutovic, former Head of Region Europe, Middle East & Africa has in addition to leading the Europe Region taken over responsibility of the Group's Operational Excellence organization, with a focus on decarbonization.

As of 31 December 2022, the Executive Committee of Holcim was comprised of the ten members reported in the table below.

Please refer to pages 106–110 for biographical information on the members of the Executive Committee. None of the members of the Executive Committees have important functions outside the Holcim Group or any other significant commitments of interest, with the exception of Jan Jenisch who is a non-executive Director of the privately held Glas Troesch Holding AG, Géraldine Picaud who is a non-executive Director of the stock-listed Danone, and Jamie M. Gentoso who is a non-executive Director of stock-listed Public Service Electric and Gas Company.

COMPOSITION OF THE EXECUTIVE COMMITTEE

Name	Responsibility
Jan Jenisch	CEO
Géraldine Picaud	CFO
Magali Anderson	Chief Sustainability and Innovation Officer
Mathias Gärtner	Head Legal and Compliance
Jamie M. Gentoso	Global Head, Solutions & Products Business Unit
Feliciano González Muñoz	Head Human Resources
Miljan Gutovic	Region Head Europe
Martin Kriegner	Region Head Asia, Middle East & Africa
Oliver Osswald	Region Head Latin America
Toufic Tabbara	Region Head North America

CORPORATE GOVERNANCE CONTINUED

Shareholder's participation

Voting rights and representation restrictions

All holders of registered shares who are registered as shareholders with voting rights in the share register on the closing date for the share registry are entitled to participate in, and vote at, Shareholders General Meetings. Shares held by trusts and shares for which no declaration has been made that the holder requesting registration is holding the shares in his own name and for his own account are entered in the share register as having no voting rights.

Shareholders not participating in person in the General Meeting may be represented by another shareholder or by the independent voting proxy. In line with regulatory requirement, an electronic voting option is provided for. Voting rights are not subject to any restrictions. Each share carries one vote.

Statutory quorums

The Shareholders General Meeting constitutes a quorum, regardless of the number of shares represented or shareholders present; resolutions are passed by an absolute majority of the votes allocated to the shares represented, unless Art. 704 para. 1 of the Swiss Code of Obligations or the Merger Act provides otherwise. In such cases, resolutions may only be passed with the respective qualified majority of the votes represented. According to Art. 10 para. 2 of the Articles of Incorporation and in addition to Art. 704 para. 1 of the Swiss Code of Obligations, the approval of at least two-thirds of the votes represented and the absolute majority of the par value of shares represented shall be required for resolutions of the Shareholders General Meeting with respect to the removal of restrictions set forth in Art. 5 of the Articles of Incorporation (entries in the share register), the removal of the mandatory bid rule (Art. 125 para 4 of the Financial Market Infrastructure Act), and the removal or amendment of para. 2 of Art. 10 of the Articles of Incorporation.

Convocation of the Shareholders General Meeting and agenda rules

The Shareholders General Meeting takes place each year, at the latest six months following the conclusion of the financial year. It is convened by the Board of Directors, whereby invitations are published at least 20 days prior to the meeting and in which details are given of the agenda and items submitted.

Shareholders representing shares with a par value of at least one million Swiss Francs may request the addition of a particular item for discussion and resolution. A corresponding application must be submitted in writing to the Board of Directors at least 40 days prior to the Shareholders General Meeting. Such application should indicate the items to be submitted. The invitations as well as the minutes of the Shareholders General Meetings are published on: *holcim.com/agm*

Shareholders General Meeting 2022 – COVID-19

As a result of the ongoing exceptional circumstances due to the COVID-19 pandemic, the 2022 Shareholders General Meeting of Holcim Ltd could again not take place in the usual format. In accordance with applicable Swiss COVID-19 legislation, the Board of Directors had resolved to hold the 2022 Shareholders General Meeting without shareholders being physically present. Shareholders could exercise their rights exclusively through the independent proxy. It was with great regret that the Board of Directors had again taken this decision, but it considered this step as the only feasible option to protect the health of shareholders and employees which continues to be Holcim's priority.

Entries in the share register

The company maintains a share register for registered shares in which the names and addresses of owners and beneficiaries are entered. According to the applicable rules and regulations, only those included in the share register are deemed shareholders or beneficial owners of the registered shares of the company. Upon request, purchasers of registered shares shall be included in the share register as shareholders with voting rights if they expressly declare that they have acquired the shares in their own name and for their own account.

Exceptions to this rule apply for nominees who have signed a nominee agreement with the company regarding this position and are subject to a recognized financial markets supervisory authority.

The share register is closed approximately one week prior to the date of the Shareholders General Meeting (the exact date is communicated in the invitation to the Shareholders General Meeting).

Shareholders' participation and rights of protection are furthermore governed by the Swiss Code of Obligations.

Auditors

As part of their auditing activity, the auditors inform the Audit Committee and the Executive Committee regularly about their findings and make suggestions for improvement. Considering the reporting and assessments by the Group companies, the Audit Committee evaluates the performance of the auditors and their remuneration in line with market conditions. The Audit Committee approves the audit focus area, provides recommendations to the auditors, makes suggestions for improvement and assesses their independence. In 2022, the auditors participated in all four regular meetings of the Audit Committee to discuss individual agenda items.

Ernst & Young AG, Zurich (EY), has been appointed at the Shareholders General Meeting 2022 as the auditors of Holcim Ltd. Jacques Pierres has been responsible for managing the audit mandate, supported by Daniel Zaugg. The rotation of the lead auditor will be carried out in accordance with Art. 730a of the Swiss Code of Obligations. The auditors are elected for a one-year term at the Shareholders' General Meeting.

The fees shown below were charged for professional services rendered to the Group by the auditors in 2022 and 2021:

Million CHF	**2022**	2021
Audit services related to Group auditors fees[1]	**8.9**	11.4
Audit services for joint ventures related to Group auditors fees	**0.3**	1.1
Total audit services fees related to Group auditors	**9.2**	12.5
Audit services related to other audit firms fees	**4.7**	2.5
Total audit services fees	**13.9**	15.0
Audit-related services fees related to Group auditors firm[2]	**0.2**	0.4
Tax services fees related to Group auditors firm	**0.3**	0.1
Other services fees related to Group auditors firm[3]	**2.4**	0.0
Total other fees related to Group auditors firm	**2.9**	**0.5**

[1] This amount includes the fees for the individual audits of Group companies carried out by EY (2021: Deloitte) as well as their fees for auditing the Group financial statements.
[2] Audit-related services comprise, among other things, amounts for comfort letters, accounting advice, information systems reviews and reviews on internal controls.
[3] Other services include, among other things, amounts for due diligence and translation services.

CORPORATE GOVERNANCE CONTINUED

Other governance information

Management agreements

Holcim has no management agreements in place with companies or private individuals outside the Group.

Mandates outside Holcim

Please refer to Art. 27 of the company's Articles of Incorporation for information about the number of permitted mandates outside of Holcim for the members of the Board of Directors and of the Executive Committee:
holcim.com/articles-incorporation

Compensation, shareholdings and loans

Details of Board of Directors and Executive Committee compensation, shareholdings, and loans are contained in the Compensation Report (starting on page 132) and in the Holding company results (note 11, page 286).

Changes of control and defense measures

The Articles of Incorporation contain no waiver of the duty to make a public offer under the terms of Art. 135 and 163 of the Financial Market Infrastructure Act ("opting out"). The result is that a shareholder who directly, indirectly, or acting in concert with third parties acquires shares in the company and, together with the shares he already possesses, thereby exceeds the 33 ⅓ percent threshold of voting rights in the company must make an offer for all listed shares of the company.

Members of the Board of Directors and of the Executive Committee do not receive any special benefits in the event of a change of control. However, in the event of a change of control (unless the unvested LTI awards are replaced by an equivalent award following the change of control) unvested LTI awards vest immediately on a pro-rata basis considering performance conditions are met.

Information policy

Holcim reports to shareholders, the capital market, employees, and the public at large in a transparent and timely manner concerning its corporate performance, including achievement of its sustainability targets. Open dialog is nurtured with the most important stakeholders, based on mutual respect and trust. This promotes knowledge of the company and understanding of objectives, strategy, and business activities of the company.

As a listed company, Holcim is under an obligation to disclose facts that may materially affect the share price (ad-hoc disclosure, Art. 53 and 54 of the SIX Listing Rules). Holcim is subject to the SIX rules on the disclosure of management transactions made by the members of the Board of Directors and senior management. These can be accessed on the SIX website: *ser-ag.com/management-transactions*

The most important information tools are the annual and half-year reports, the website *holcim.com*, media releases, press conferences, meetings for financial analysts and investors, and the Shareholders General Meeting.

Anyone interested may subscribe to the media releases mailing list available at *holcim.com/media* to receive ad hoc announcements and relevant corporate news via email. All published media releases of Holcim from recent years can be downloaded at *holcim.com/media*

Current information relating to sustainable development is available at:
holcim.com/sustainability

In keeping with our commitment to integrated reporting, we have published the main indicators of our non-financial performance in this report. We have stopped publishing the Sustainability Report as a separate publication.

However we will continue to disclose the full (i.e. unchanged) range of non-financial performance indicators in the Sustainability Performance Report document on: *holcim.com/sustainability*

The financial reporting calendar is shown on page 81 of this Annual Report.

Should there be any specific queries regarding Holcim, please contact:

Corporate Communications
Phone: +41 (0) 58 858 87 10
E-Mail: media@holcim.com

Investor Relations
Phone: +41 (0) 58 858 87 87
E-Mail: investor.relations@holcim.com

BLACKOUT PERIODS

2023	2022
4 January 2023 to 23 February 2023 (included)	5 January 2022 to 24 February 2022 (included)
5 April 2023 to 20 April 2023 (included)	23 March 2022 to 21 April 2022 (included)
5 July 2023 to 26 July 2023 (included)	27 June 2022 to 26 July 2022 (included)
4 October 2023 to 26 October 2023 (included)	28 September 2022 to 27 October 2022 (included)

Holcim deems financial results to be inside information. All persons who are involved in the preparation or could have access to financial results before their disclosure are included on the insider list. Persons considered having access to financial results are all members of the Board of Directors and of the Executive Committee and their staff as well as employees in Group Finance, Communications and Legal. Employees in other functions may further be designated to be listed on the insider list.

Blackout periods commence when the consolidation of local financial data is initiated and end on the last day before the company's financial results are disclosed to the public. Persons on the insider list will receive a notice prior to the commencement and at the end of the blackout periods. The notice will include the duties, responsibilities, including potential sanctions applicable in case of use of inside information as well the specific dates of the upcoming blackout periods.

BOARD OF DIRECTORS

BEAT HESS

Professional background

Swiss national born in 1949, Beat Hess was elected to the Board of Directors of Holcim in 2010. He holds a doctorate in law and is admitted to the bar in Switzerland. From 1977 to 2003, he was initially Legal Counsel and subsequently General Counsel for the ABB Group. From 2004 until the end of 2010, he was Legal Director and a Member of the Executive Committee of the Royal Dutch Shell Group, London and The Hague. From 2008 to 2020 he was a member of the Board of Directors, Member of the Chairman's and Corporate Governance Committee, and Chairperson of the Compensation Committee of Nestlé S.A., Vevey, Switzerland; and until 2021 he was Vice-Chairperson of the Board of Directors and Member of the Nomination and Compensation Committee of Sonova Holding AG, Stäfa, Switzerland.

Other activities and functions

- Member of the Curatorium of The Hague Academy of International Law

HANNE BIRGITTE BREINBJERG SØRENSEN

Professional background

Danish national born in 1965, Hanne Birgitte Breinbjerg Sørensen was elected to the Board of Directors of Holcim in 2013. Hanne Birgitte Breinbjerg Sørensen holds an MSc in Economics and Management from the University of Aarhus. Until the end of 2013, she was the Chief Executive Officer of Maersk Tankers, Copenhagen and has been Chief Executive Officer of Damco, The Hague, Netherlands, another company of the A.P. Møller-Maersk Group, Copenhagen, Denmark, from 2014 until 31 December 2016.

Other activities and functions

- Member of the Board of Directors and Member of the Nomination and Remuneration Committee of Ferrovial S.A., Madrid, Spain
- Member of the Board of Directors, Member of the Audit Committee, Member of the Nomination and Remuneration Committee, and Chairperson of the Safety, Health and Sustainability Committee and of the Risk Committee of Tata Motors Ltd, Mumbai, India
- Member of the Board of Directors, Member of the Remuneration and Nomination Committee and the Audit Committee of Tata Consultancy Services Ltd, Mumbai, India
- Member of the Board of Directors, Chairperson of the Nomination and Remuneration Committee and Member of the Audit and of the Technology Committees of Jaguar Land Rover Automotive PLC, Coventry, UK (including its subsidiary Jaguar Land Rover Ltd)
- Member of the Board of Directors, Chairperson of the Audit and of the Remuneration Committees and Member of the Nomination Committee of Sulzer Ltd, Winterthur, Switzerland (will not stand for re-election at the 2023 Shareholders General Meeting of Sulzer Ltd)

PHILIPPE BLOCK

Professional background

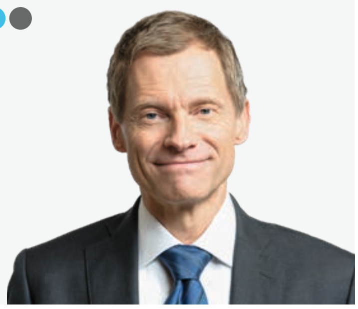
Belgian national born in 1980, Philippe Block was elected to the Board of Directors of Holcim in 2020.

Philippe Block holds a Master's Degree in Civil Engineering-Architecture from the Free University of Brussels, Belgium, and a Master's Degree in Architectural Studies in Design and Computation and a Ph.D. in Building Technologies from the Massachusetts Institute of Technology (MIT), Cambridge, USA. In 2009, he was appointed Assistant Professor of Architecture and Structure at the Swiss Federal Institute of Technology (ETH) Zurich, Switzerland. In 2017, he was promoted to Full Professor. He is the Founder and Co-Director of the Block Research Group at ETH where he focuses his research on the analysis of unreinforced masonry structures, structural design, computational form finding, and new construction techniques. In addition, he is the Director of the Swiss National Centre of Competence in Research (NCCR) for Digital Fabrication. Philippe Block is a renowned expert in the field of structural design, computational engineering and digital fabrication of concrete construction with numerous publications and awards.

Other activities and functions

- Founding Partner of Foreign Engineering GmbH, Zurich, Switzerland

KIM FAUSING



Professional background

Danish national born in 1964, Kim Fausing was elected to the Board of Directors of Holcim in 2020. Kim Fausing holds a Degree in Mechanical Engineering from Aarhus Teknikum, Denmark, and an MBA Degree from Henley Business School, London, UK. He has been president and Chief Executive Officer for the Danfoss Group (Denmark) since July 2017. Prior to this, he was Chief Operating Officer and Member of the Executive Committee since January 2008. Before this, from 1990 and until joining Danfoss, Kim Fausing held various international positions within the Hilti Group in Europe and Asia.

Other activities and functions

- Vice-Chairperson of the Board of Directors of SMA Solar Technology AG, Niestetal, Germany
- Chairperson of Climate Partnership between Government and Industry for the Manufacturing Industry, Denmark

KEY

- Member of the Board of Directors
- Member of the Nomination, Compensation & Governance Committee
- C Chairperson of the Nomination, Compensation & Governance Committee
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- C Chairperson of the Audit Committee
- C Chairperson of the Board of Directors
- V Vice-Chairperson of the Board of Directors

BOARD OF DIRECTORS CONTINUED

LEANNE GEALE

Professional background

Canadian national born in 1965, Leanne Geale was elected to the Board of Directors of Holcim in 2022. She holds a LLB from the Université de Montréal, Canada and a BA from the University of Alberta, Canada. Leanne Geale is currently Executive Vice President and General Counsel, Corporate Governance and Compliance for Nestlé SA. Before that Leanne was the Chief Ethics & Compliance Officer of Royal Dutch Shell plc from 2014 to 2019, having joined Shell Canada in 2003. At Shell, she held the positions of Associate General Counsel, Oil Products, Group Legal Services Coordinator, and Associate General Counsel, Heavy Oil and Head of Legal - Canada. Prior to joining Shell, Leanne Geale had been in-house counsel for international, publicly listed companies in the banking (Royal Bank of Canada), mining (Rio Algom Limited) and manufacturing (Alcan Aluminium Limited) sectors.

Other activities and functions

- Member of the Board of Directors of CEELI Institute o.p.s., Prague, Czech Republic
- Treasurer of the Swiss-American Chamber of Commerce

JAN JENISCH

Professional background

German national born in 1966, Jan Jenisch is Chief Executive Officer of Holcim. Since joining in 2017, Jan has led Holcim's record performance and successful transformation. Building on this track record, Jan is leading the company's next era of growth to become the global leader in innovative and sustainable building solutions.

Prior to Holcim, Jan served as Chief Executive Officer of Sika AG, where he achieved a new level of performance from profitability to sales.

Since joining Holcim, Jan has led the company to a new level of strength, with record profitability levels, revenues of over CHF 29.2 billion in 2022, 60,000 people worldwide and industry-leading ESG ratings. Building on his track record of driving superior performance, Jan is leading Holcim's next era of growth to become the global leader in innovative and sustainable building solutions. Diversifying Holcim's portfolio, he is expanding the company's Solutions & Products business to become a global leader in roofing systems. Driving circular construction, Holcim launched the world's first green cement with 20% recycled construction & demolition waste inside. Putting sustainability at the core of Holcim's strategy, Jan drove the launch of the industry's first global ranges of ECOPact green concrete and ECOPlanet green cement, making low-carbon construction possible worldwide. Taking a science-driven approach to climate action, Holcim became the first company in its sector with a full net-zero pathway endorsed by the Science Based Targets initiative (SBTi).

Other activities and functions

- President of the Global Cement and Concrete Association
- Member of the Executive Committee of the World Business Council for Sustainable Development (WBCSD)
- Active Member of the European Round Table for Industry (ERT)
- Member of the Board of Directors of the Swiss-Japanese Chamber of Commerce (SJCC)
- Non-executive Director of the privately held Glas Troesch Holding AG

NAINA LAL KIDWAI

Professional background

Indian national born in 1957, Naina Lal Kidwai was elected to the Board of Directors of Holcim in 2019. Naina Lal Kidwai holds an MBA from the Harvard Business School, Boston, USA. She has made regular appearances on listings by Fortune and others of international women in business and is the recipient of awards and honors in India including the Padma Shri for her contribution to Trade and Industry, from the Government of India. Naina Lal Kidwai started her career in 1982 and until 1994 was at ANZ Grindleys Bank Plc. From 1994 to 2002, she was Vice-Chairperson and Head of Investment Banking at Morgan Stanley India before moving to HSBC, where she was Chairperson of the HSBC Group of Companies in India and on the Board of HSBC Asia Pacific, until her retirement in December 2015. She was President of the Federation of Indian Chambers of Commerce & Industry (FICCI). She also served for 12 years until 2018 as Non- Executive Director of Nestlé S.A., Vevey, Switzerland. Her interests in water and the environment are reflected in her engagements with The Shakti Sustainable Energy Foundation, Global Commission on Economy & Climate, and Chair of the FICCI Sustainability, Energy and Water Council as well as Chair of the India Sanitation Coalition.

Other activities and functions

- Non-executive Member of the Board of Directors of Gland Pharma Ltd, Hyderabad, India
- Non-executive Member of the Board of Directors and Chairperson of the Sustainability Committee of UPL Ltd, Mumbai, India
- Non-executive Member of the Board of Directors and Chairperson of the Sustainability Committee of Biocon Ltd, Bangalore, India
- Non-executive Member of the Board of Directors and Chairperson of the CSR and Sustainability Committee of Nayara Energy Ltd, Mumbai, India
- Chairperson of the Board of Directors of the Rothschild & Co India Private Limited, Mumbai, India

PATRICK KRON

Professional background

French national born in 1953, Patrick Kron was elected to the Board of Directors of Holcim in 2017. Patrick Kron is a graduate of the Ecole Polytechnique and the Paris Ecole des Mines, France. He began his career at the French Industry Ministry in 1979 before joining the Pechiney group in 1984, where he held senior operational responsibilities in one of the group's largest factories in Greece before becoming manager of Pechiney's Greek subsidiary in 1988. Between 1988 and 1993, Patrick Kron held various operational and financial positions, first managing a group of activities in aluminium processing, before being appointed Chairperson and CEO of Pechiney Électrométallurgie. In 1993, he became member of the Executive Committee of the Pechiney group and was Chairperson and CEO of Carbone Lorraine from 1993 to 1997. From 1995 to 1997, he ran Pechiney's Food and Health Care Packaging Sector and held the position of COO of the American National Can Company in Chicago (United States). From 1998 to 2002, Patrick Kron was Chairperson of the Executive Board of Imerys SA. A director of Alstom since July 2001, he was appointed CEO of Alstom in January 2003, and then Chairperson and CEO in March 2003, a position he held until January 2016. Since then, he serves in the Board of Directors of several international industrial companies.

Other activities and functions

- Chairperson of PKC&I (Patrick Kron – Conseils & Investissements), Paris, France
- Chairperson of the Board of Directors of Imerys, Paris, France
- Chairperson of the Board of Directors of Truffle Capital, Paris, France
- Member of the Board of Directors of Sanofi S.A., Paris, France
- Permanent Representative of PKC&I on the Supervisory Board of Directors of Segula Technologies S.A., Nanterre, France
- Member of the Board of Directors of Viohalco S.A., Brussels, Belgium

KEY

- Member of the Board of Directors
- Member of the Nomination, Compensation & Governance Committee
- C Chairperson of the Nomination, Compensation & Governance Committee
- Member of the Health, Safety & Sustainability Committee
- C Chairperson of the Health, Safety & Sustainability Committee
- Member of the Audit Committee
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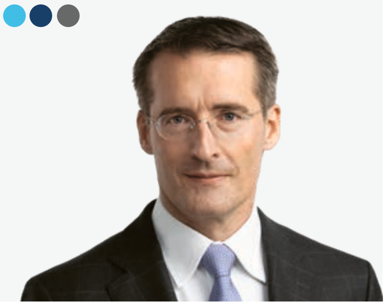
- C Chairperson of the Board of Directors
- V Vice-Chairperson of the Board of Directors

BOARD OF DIRECTORS CONTINUED

ILIAS LÄBER



Professional background

Swiss national born in 1974, Ilias Läber was elected to the Board of Directors of Holcim in 2022. He holds a MSc in Engineering from Swiss Federal Institute of Technology (ETH) in Zurich, Switzerland, and a MA in Economics from University of Zurich, where he obtained a doctorate in 2004.

Ilias Läber began his professional career at McKinsey & Company, where he served from 2001 to 2008, ultimately as Associate Principal. From 2008 to 2019 he was with Cevian Capital as a Partner and Managing Director of the Swiss office. From 2013 until 2019, he was on the Board of Directors of Panalpina Welttransport Holding AG, where he served as Chairperson of the Audit, Risk and Compliance Committee. In 2019 he joined Quercis Pharma AG as CEO and Chairperson of the Board of Directors.

In 2021, he joined Spectrum Value Management Ltd as CEO and Partner; the firm administers the industrial and private investments of the Thomas Schmidheiny family. In this capacity he serves as a Member of the Board of Directors of Spectrum Value Management Ltd.

Other activities and functions

- Member of the Board of Directors and Chairperson of the Audit Committee of Swiss Automotive Group Ltd., Cham, Switzerland
- Chairperson of the Board of Directors of Quercis Pharma AG, Zug, Switzerland

JÜRG OLEAS

Professional background

Swiss national born in 1957, Jürg Oleas was elected to the Board of Directors of Holcim in 2014, retired from the Holcim Board in the context of the LafargeHolcim merger closing effective 10 July 2015 and was re-elected at the AGM 2016. He holds an MSc for mechanical engineering from the Swiss Federal Institute of Technology (ETH) in Zurich, Switzerland. He was CEO of GEA Group Aktiengesellschaft, a Düsseldorf-based mechanical engineering company listed on Germany's MDAX stock index. Jürg Oleas has been a member of the GEA Group Executive Board since joining the company in May 2001. Initially responsible for the Group's chemical activities, he was appointed CEO of GEA Group on 1 January 2005. Before joining the GEA Group, he spent nearly 20 years with ABB and the Alstom Group, where he held several management positions.

Other activities and functions

- Vice-Chairperson of the Board of Directors and Member of Audit Committee of RUAG International Holding AG, Bern, Switzerland
- Chairperson of the Board of Directors of Hochdorf Swiss Nutrition AG, Hochdorf, Switzerland

CLAUDIA SENDER RAMIREZ

Professional background

Brazilian national born in 1974, Claudia Sender Ramirez was elected to the Board of Directors of Holcim in 2019. She holds a BS in Chemical Engineering from the Polytechnic School, University of Sao Paulo, Brazil and an MBA from the Harvard Business School, Boston, USA. Claudia Sender Ramirez was Senior Vice President for Clients at LATAM Airlines Group until May 2019. Before that, she was CEO for LATAM Airlines Brazil since 2013.

She joined TAM Airlines in 2011 as Commercial and Marketing Vice President and in 2012, once the association between LAN and TAM happened, she became responsible for the Brazil Domestic Business Unit. Claudia Sender Ramirez has also worked for several years in the Consumer Goods industry, focusing on Marketing and Strategic Planning. Prior to joining LATAM, she was Marketing Vice President at Whirlpool Latin America, where she worked for seven years. She has also worked as a consultant at Bain&Company, in projects ranging from telecommunications to airlines.

Other activities and functions

- Member of the Board of Directors of Telefonica S.A., Madrid, Spain
- Member of the Board of Directors of Gerdau S.A., São Paulo, Brazil
- Member of the Board of Directors of Gerdau Metalurgica, São Paulo, Brazil (will not stand for re-election at the 2023 Shareholders General Meeting of Gerdau Metalurgica S.A.)
- Member of the Board of Directors of Embraer S.A., São Paulo, Brazil

KEY

- Member of the Board of Directors
- Member of the Nomination, Compensation & Governance Committee
- C Chairperson of the Nomination, Compensation & Governance Committee
- Member of the Health, Safety & Sustainability Committee
- C Chairperson of the Health, Safety & Sustainability Committee
- Member of the Audit Committee
- C Chairperson of the Audit Committee
- C Chairperson of the Board of Directors
- V Vice-Chairperson of the Board of Directors

EXECUTIVE COMMITTEE

JAN JENISCH
CEO

Professional background

German national born in 1966, Jan Jenisch is Chief Executive Officer of Holcim. Since joining in 2017, Jan has led Holcim's record performance and successful transformation. Building on this track record, Jan is leading the company's next era of growth to become the global leader in innovative and sustainable building solutions.

Prior to Holcim, Jan served as Chief Executive Officer of Sika AG, where he achieved a new level of performance from profitability to sales.

Since joining Holcim, Jan has led the company to a new level of strength, with record profitability levels, revenues of over CHF 29.2 billion in 2022, 60,000 people worldwide and industry-leading ESG ratings. Building on his track record of driving superior performance, Jan is leading Holcim's next era of growth to become the global leader in innovative and sustainable building solutions. Diversifying Holcim's portfolio, he is expanding the company's Solutions & Products business to become a global leader in roofing systems. Driving circular construction, Holcim launched the world's first green cement with 20% recycled construction & demolition waste inside. Putting sustainability at the core of Holcim's strategy, Jan drove the launch of the industry's first global ranges of ECOPact green concrete and ECOPlanet green cement, making low-carbon construction possible worldwide. Taking a science-driven approach to climate action, Holcim became the first company in its sector with a full net-zero pathway endorsed by the Science Based Targets initiative (SBTi).

Other activities and functions

- President of the Global Cement and Concrete Association
- Member of the Executive Committee of the World Business Council for Sustainable Development (WBCSD)
- Active Member of the European Round Table for Industry (ERT)
- Member of the Board of Directors of the Swiss-Japanese Chamber of Commerce (SJCC)
- Non-Executive Director of the privately held Glas Troesch Holding AG

GÉRALDINE PICAUD
CFO

Professional background

French national born in 1970, Géraldine Picaud, was appointed as Chief Financial Officer of Holcim in January 2018. Géraldine Picaud began her career with audit firm Arthur Andersen, before joining international specialty chemicals group Safic-Alcan in 1994 as Head of Business Analysis, then CFO. She then joined ED&F Man in London in 2007 as Head of Corporate Finance in charge of mergers & acquisitions. Géraldine Picaud went on to become CFO of Volcafe Holdings in Switzerland, followed by Group CFO of Essilor International, France, before being appointed to her current role as CFO of Holcim. Géraldine Picaud graduated from the Superior School of Commerce of Reims and holds an MBA. From 2017 to 2022 she was on the Supervisory Board of Infineon Technologies AG.

Other activities and functions

- Member of the Board of Directors and Chairperson of the Audit Committee of Danone SA, France
- Member of the CFO Coalition for the Sustainable Development Goals (SDGs), United Nations Global Compact
- Member of the CFO Network – World Business Council for Sustainable Development (WBCSD)
- Member of the Committee Conseillers du Commerce Extérieur de la France (CCEF)

MAGALI ANDERSON
Chief Sustainability and Innovation Officer

Professional background
French national born in 1967, Magali Anderson was appointed as Chief Sustainability Officer and a member of the Group Executive Committee of Holcim in October 2019. In March 2021, the Group announced the expansion of Magali Anderson's role to Chief Sustainability and Innovation Officer, putting sustainability at the core of its innovation pipeline. She joined Holcim as Group Head of Health & Safety in October 2016. Magali Anderson started her career as a field engineer on offshore oil rigs in Nigeria. She spent 27 years in the Oil and Gas industry, mainly with Schlumberger, holding operational line management positions like CEO Angola and Region Head Europe. During her career she also held several functional roles, including Vice President Marketing & Sales, Vice President Shared Services Organization for the Europe and Africa region and Global Head of Maintenance. Magali Anderson graduated as a Mechanical Engineer from INSA Lyon, France.

Other activities and functions
- Member of the Board of the Holcim Foundation for Sustainable Construction
- Winner of the Edie Sustainability Leaders Awards 2022
- Honoured as International Road Federation (IRF) Personality of the Year 2022
- Winner of the Global Woman Supply Chain Sustainability Excellence Award 2020
- Named International Woman of the Year 2018 at L'Usine Nouvelle's Women in Industry Awards
- Member of the Advisory Board of several organizations: Business for Nature; World Green Building Council; MIT Climate & Sustainability Consortium
- Co-chair of the 2050 net-zero work for GCCA (Global Cement and Concrete Association)

MATHIAS GÄRTNER
Head Legal & Compliance

Professional background
German national born in 1973, Mathias Gärtner was appointed as Head Legal and Compliance and member of the Group Executive Committee of Holcim, effective September 2021. Mathias Gärtner joined Holcim from Honeywell, where he most recently served as General Counsel of Honeywell Building Technologies, playing an instrumental role in the business' growth. He is a proven senior legal leader in technology-driven building solutions with a solid track record in international mergers & acquisitions and compliance. Mathias Gärtner holds a PhD from University of Muenster and is admitted to the German bar.

EXECUTIVE COMMITTEE CONTINUED

JAMIE M. GENTOSO
Global Head,
Solutions & Products
Business Unit

Professional background

American national born in 1977, Jamie M. Gentoso was appointed Global Head Solutions & Products Business Unit and member of Holcim's Group Executive Committee in March 2021. Previously she served as CEO for Holcim's US Cement organization where she was responsible for all cement product lines. Before joining Holcim, Jamie M. Gentoso was Vice President of Sales and Marketing at Construction Specialties at Sika Corporation US.

Jamie M. Gentoso is now responsible globally for the Solutions & Products Business Unit at Holcim. This includes the recently acquired roofing business of Elevate (formerly Firestone Building Products) and Malarkey Roofing Products. Jamie M. Gentoso has also sat on the Board of Directors for several industry organizations, including the Ready Mix Concrete Foundation, Precast Concrete Educational Foundation and the Concrete Industry Management (CIM) program.

Jamie M. Gentoso received both her MBA and her Bachelor of Science in Civil Engineering from the University of Michigan.

Other activities and functions

- Member of the Board of Directors of PSEG, a public utility in the U.S.
- Member of the Leadership Advisory Board (LAB) for the University of Michigan, College of Engineering

FELICIANO GONZÁLEZ MUÑOZ
Human Resources

Professional background

Spanish national in 1963, Feliciano González Muñoz was appointed as Group Head of Human Resources in May 2018, and as member of the Group Executive Committee of Holcim as of January 2019. He has developed his career for more than thirteen years in senior Human Resources roles in the Group. Before his current role he was Human Resources Director for Europe, Group Head of Labor Relations, and also interim CEO of Spain from 2013 to 2015. Before joining Holcim he developed his career at Fujitsu Ltd, building materials company BPB Plc and the pharmaceutical company Almirall. Feliciano González Muñoz holds a PhD in Labor Law from Universidad Complutense de Madrid and an Executive MBA from IE, Madrid.

TOUFIC TABBARA
Region Head North America

Professional background

Canadian national born in 1972, Toufic Tabbara was appointed as Region Head North America and member of the Group Executive Committee of Holcim in March 2022. Since joining Holcim in 1998, Toufic Tabbara has held leadership roles of increasing responsibility across key business lines including ready-mix concrete, aggregates and cement. Having worked in the United States, Canada, Egypt, Jordan, Lebanon and Algeria, in 2021, Toufic was named CEO for the US Cement organization. Toufic Tabbara holds a Bachelor's degree in Business Administration from the American University of Beirut in Lebanon. He also received his MBA from the Thunderbird School of Global Management in Arizona.

MARTIN KRIEGNER
Region Head AMEA

Professional background

Austrian national born in 1961, Martin Kriegner was appointed as Head of Asia Pacific and member of the Group Executive Committee of Holcim in August 2016. Since November 2022 he is the Region Head for Asia, Middle East & Africa. Martin Kriegner joined the Group in 1990 and has held various senior leadership roles within Europe and Asia. He moved to India as CEO of the Lafarge operations in 2002 and later served as Regional President Cement for Asia, based in Kuala Lumpur. In 2012, he was appointed CEO of Lafarge India for Cement, RMX and Aggregates. In July 2015 he became the company's Area Manager Central Europe. Martin Kriegner is a graduate of Vienna University and holds a Doctorate in Law. He also obtained an MBA at the University of Economics in Vienna.

EXECUTIVE COMMITTEE CONTINUED

OLIVER OSSWALD
Region Head Latin America

Professional background

Swiss national born in 1971, Oliver Osswald was appointed as Head of Latin America and member of the Group Executive Committee of Holcim in August 2016. Oliver Osswald's career at Holcim began in 1995 at Holcim Apasco, Mexico. Between 1995 and 2005, he was responsible for various cement plants in Switzerland and Germany. From 2005, he moved into management and marketing positions at Holcim in Switzerland. He was appointed Commercial Director for Holcim Apasco in 2012, before being appointed Country Head for Argentina in 2014. In 2016, Oliver Osswald took on the role of Region Head, Latin America and has been Global Head of Trading since 2019. Oliver Osswald is a graduate of the Technische Hochschule in Ulm and holds an Executive Education Degree from Harvard Business School.

MILJAN GUTOVIC
Region Head Europe

Professional background

Australian national born in 1979, Miljan Gutovic was appointed as Head of Middle East Africa and member of the Group Executive Committee of Holcim in July 2018. His role was expanded to include Europe in March 2021. Since November 2022 he is the Region Head for Europe. In addition to leading the Europe region, he leads the Group's Operational Excellence organization, with a focus on decarbonization. In this capacity he is leading the company's renewable and green energy use; expanding green formulation with innovative low-emission raw materials, such as calcined clay and construction & demolition waste; accelerating green mobility to improve efficiencies and reduce the environmental impact of logistics; and deploying next-generation technologies, such as carbon capture utilization and storage as well as the digitalization of plants. Miljan Gutovic joined Holcim in 2018 as Head of Marketing & Innovation, taking responsibility for product development and commercial solutions. In 2018, he was appointed Head of Middle East and Africa. He previously worked for specialty chemical company Sika in various management roles in Australia and the Middle East. Miljan Gutovic holds a Bachelor's degree in Civil Engineering and a PhD in Engineering from the University of Technology in Sydney.

RISK AND CONTROL

Our risk management approach aims to support Holcim's "Strategy 2025 – Accelerating Green Growth" while protecting its assets and securing the achievement of its targets.

Holcim operates in an evolving environment which exposes the company to a variety of external, operational and financial risks. In full alignment with the Group's "Strategy 2025 – Accelerating Green Growth," we make continuous efforts to prevent and control the risks to which we are exposed. A comprehensive Enterprise Risk Management (ERM) and Internal Control process is deployed throughout the company, supported by appropriate governance and tools. Through this process we identify, assess, mitigate and monitor the company's overall risk exposure while incorporating risk thinking into all strategic decisions, reducing the likelihood and impact of potential adverse events and ensuring the deployment of our Internal Control system in every country where we operate.

Risk Management

The ERM process is structured around several coordinated approaches, including bottom-up and top-down risk assessments, complemented with thematic analysis addressing all value drivers of our Group. These assessments are consolidated and used as a basis for the Group risk map, which is updated every year and reviewed by the Executive Committee and the Audit Committee. The Risk Management process includes several stages:

- Risk identification & assessment
  Management at the country and at the Group levels assesses and evaluates the potential impacts and likelihood of the key risks which could have a material adverse effect on the current or future operations of the business in the mid-term, in alignment with Holcim's 2025 strategy. For the sustainability and climate-related risks, the horizon has been extended to a longer time frame in order to consider various threats that might impair the achievement of our 2030 sustainability targets and our net zero pledge.

- Risk mitigation
  Management defines actions and/or controls to mitigate the key risks including risk transfer through insurance solutions. This is complemented with Holcim's Minimum Control Standards which clarify and reinforce the responsibility of businesses in the countries. Additionally, Holcim has a robust fraud prevention program in place to prevent, deter, and detect fraud. It includes the Holcim Integrity Line, which enables employees anywhere in the world to anonymously exercise their whistleblowing rights and report any breach of the rules laid down in our Code of Business Conduct. Further information is provided in Legal & Compliance risks (pages 122 and 123) and Internal Control section (pages 130 and 131).

- Verification & Remediation
  Group Internal Audit performs independent assessments of the effectiveness of the Risk Management and Internal Control process ; it also assesses the effectiveness of mitigating actions and controls. The annual audit plan drawn up by Group Internal Audit and approved by the Audit Committee takes into account the various analyses described above. The implementation of this plan and the summary of conclusions presented to the Group Executive Committee and Audit Committee lead to more in-depth analyses in certain areas and contribute to the continuous risk identification process.

- Monitoring & Reporting
  Regular progress on the action plans are followed up by risk leads at the country level and reported to the Group through the Holcim Risk Management tool. Updates on mitigating actions, controls and overall risk exposure are reported to the Audit Committee and other executive committees. Additional reports on the effectiveness of the Minimum Control Standards are submitted to the Group on a regular basis. Further information is provided in the Internal Control section on pages 130 and 131.

Roles and responsibilities

Holcim has a clear organizational structure to ensure the implementation of the Risk Management and Internal Control process, following the governance, policies and framework defined by the Group. This organization is built on the "three lines" model.

Under the first line, operational management has ownership, responsibility and accountability for identifying, assessing, managing and mitigating risks. They are equally responsible and accountable for the deployment of the Minimum Control Standards defined by the Group. A risk lead is appointed in each entity we operate in order to facilitate and coordinate the whole ERM process. Risk leads receive a specific training and are the main points of contact for all questions in relation to the ERM process at country level.

The second line consists of Group Corporate functions such as Legal, Compliance, Internal Control, Risk Management, Security and Resilience, IT, Sustainability and Health, Safety & Environment. These functions monitor and facilitate the implementation of effective ERM process and appropriate internal controls by operational management in order to ensure the first line is operating as intended. They also assists in the development of policies and controls.

The third line is the Group Internal Audit (GIA). As an independent function, GIA provides assurance to the Board of Directors and Executive Committee on the effectiveness of the first and second lines and on governance, Risk Management process and internal controls.

Through the Audit Committee and the Health, Safety and Sustainability Committee (HSSC), the Board of Directors oversees the Holcim Risk Management and Internal Control process. The Audit Committee mandate includes the oversight of Compliance and Risk Management processes and the review of management and internal audit reports on the effectiveness of the Internal Control process and on the performance of the ERM process. The HSSC mandate is to support and advise the Board of Directors on promoting a healthy and safe environment for employees and contractors, as well as on sustainable development and social responsibility. The HSSC approves Holcim's sustainability and climate-related strategy and major initiatives, including Health and Safety performance and approach to Human Rights. All sustainability topics are overseen against key indicators. More details of the Audit Committee and HSSC are disclosed in the Corporate Governance section on pages 90 and 91.

Risk & Integrity Committees

The Risk Committee reports to the Audit Committee of the Board of Directors and meets quarterly. It is responsible for overseeing the ERM process and the activities performed by assurance functions such as Legal and Compliance, Internal Control, Risk Management, Internal Audit, Health, Safety & Environment, IT and Security and Resilience. It includes the Group CFO, the Group General Counsel and Chief Sustainability and Innovation Officer who report to the Group CEO and are members of the Executive Committee. It is chaired by the Group CFO and the Head of Internal Audit.

The Integrity Committee is responsible for the oversight of the effective investigation and remediation of Code of Business Conduct violations and the rigorous implementation of third-party due diligence and sanctions and export control programs that were launched in 2017. It is chaired by the Group General Counsel.

MATERIAL PRIORITIES

Holcim is transforming with "Strategy 2025 – Accelerating Green Growth" by expanding Solutions & Products and shifting our geographic footprint to focus on high growth mature markets.

With this transformation our stakeholder priorities are constantly evolving, with both new challenges and new opportunities.

In 2022, we fundamentally redesigned our materiality assessment to align closely with the risk assessment process and to significantly broaden the stakeholder groups with which we engaged to capture additional insights. These insights will help us to further adjust strategic and operational activities to address those areas where we can have the greatest impact for our stakeholders.

We are committed to regularly conducting materiality assessments, and to strengthening and adjusting our process with each exercise. We partnered with DNV Business Assurance to assist us with our materiality assessment by providing independent expertise and guidance on how to best align with relevant standards and best practices.

In expanding our assessment in 2022, we recognized there is high value in integrating both the Risk Management and Materiality Assessment processes to gain different perspectives and deepen our understanding of key risks and opportunities facing the business. We aligned the relevant ESG Material topics with the risk universe by considering the following:

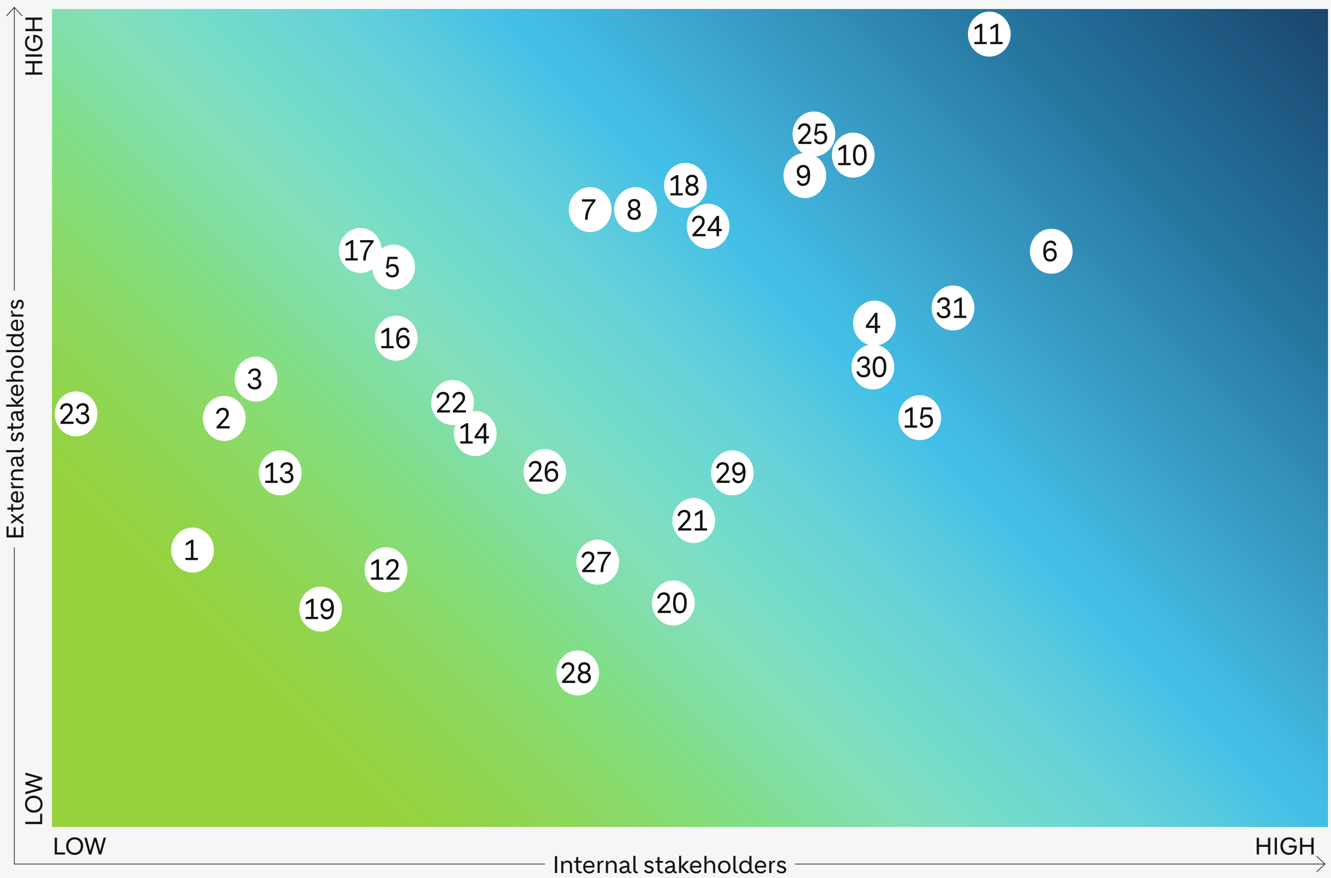
- Stakeholder perspective: How the issue would change the decision making and judgment of key stakeholders' groups.
- External impact: The impact of the issue on both people and the planet.
- Internal impact: The impact of the issue on Holcim's performance and business in terms of risks and opportunities that impact corporate value.

By combining these perspectives Holcim identified the most appropriate and impactful issues to focus the materiality assessment on and to align these with the Risk Management process. In future materiality assessments we will continue to refine the list of topics to ensure our focus is on those with greatest impact, and alignment with the perspective of our key stakeholders, both internal and external.

We collected quantitative inputs from almost 400 stakeholders, both internal and external. This quantitative analysis was complemented with interviews with a broad range of stakeholders, providing a deeper qualitative understanding of their views.

The results show that, three years after the launch of our net-zero pledge, our commitment to become a net-zero company and decarbonize building is fully aligned with our stakeholders' priorities and assessment of where our key risks and opportunities lie. The long-term business success of Holcim will be in part driven by maintaining this alignment and becoming the global leader in innovative and sustainable building solutions to build progress for people and the planet.

MATERIALITY MATRIX



ENVIRONMENTAL

1 Natural hazards
2 Internal waste management
3 Biodiversity management and quarry rehabilitation
4 Raw materials
5 Water management
6 Energy consumption
7 Air emissions (including dust from sites)
8 Waste derived resources and circular economy
9 Meeting customers' product quality and decarbonisation expectations
10 Scaling sustainable product innovation
11 Climate change and GHG

SOCIAL

12 Local community engagements
13 Employee diversity, inclusion, and non-discrimination
14 Responsible procurement
15 Talent attraction, development and retention
16 Labor relations
17 Human rights
18 Health & Safety

GOVERNANCE

19 Data Protection & Privacy
20 Political and economic uncertainties
21 Fair competition
22 Corporate communication and investor relations
23 Security and resilience of people, assets and reputation
24 Corporate governance
25 Business integrity

FINANCIAL

26 Asset integrity and business interruption
27 Major IT outage and cyber security
28 Transportation and logistics
29 Industry shifts (new entrants, price war, digital disruptors, substitution)
30 Sustainable financial returns
31 Portfolio Management, M&A operations, CAPEX projects

RISK AND CONTROL CONTINUED

Sustainability and climate change

Our Risk Management process aims to fully supports the Group's acceleration to be the global leader in Innovative and Sustainable building solutions that works for people and the planet. Based on the most advanced international standards, our Group Risk Management team has tailored its framework in order to address the climate challenge.

Task force on Climate-related Financial Disclosures (TCFD)

As a business leader, we must ensure transparency and action around climate-related risks and opportunities. Holcim therefore supports the voluntary recommendations of the Financial Stability Board (FSB) Task force on Climate-related Financial Disclosures (TCFD). The identification, assessment and effective management of climate-related risks and opportunities are fully embedded in our Risk Management process, which is subject to continuous improvement. In the table on the next page we map where the recommended TCFD disclosures can be found. Additional metrics and targets as well as the complete risk assessment are detailed in our submissions to the Carbon Disclosure Project (CDP) and Climate report. Documents are available on: *holcim.com/sustainability*

With the company being identified as a reference in providing effective climate-related financial disclosures, Holcim was invited to participate in the TCFD Preparer Forum for the Construction sector and contributed to the promotion of TCFD recommendations for better communication on climate change-related risks and opportunities. The report was launched by the World Business Council for Sustainable Development (WBCSD) and is available on: *wbcsd.org/TCFD*

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD) ALIGNMENT

Governance	Strategy	Risk management	Metrics and targets
Disclose the organization's governance around climate related risks and opportunities.	Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.	Disclose how the organization identifies, assesses, and manages climate-related risks.	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.
Board oversight Refer to "Holcim governance approach for climate-related risks and opportunities" "Risk and Control" section > "Roles and Responsibilities," pages 91 and 113 Refer to our 2022 Climate Report, pages 48-49 *holcim.com/sustainabilityreports*	**Risks and opportunities over the short, medium and long term** Refer to "Risk and Control" section, pages 119–120 CDP response on *holcim.com/esg* Refer to our 2022 Climate report, pages 50-60, and 62-65	**Climate change-related risks identification and assessment** Refer to "Risk and Control" section, pages 112–113, and pages 119–120 Refer to our 2022 Climate Report, pages 50-60	**Reporting CO_2 metrics** Refer to our Sustainability Performance Report (SPR) on *holcim.com/sustainability-reports*
Management's role Refer to "Risk and Control" section > "Roles and Responsibilities," page 113	**Impact on the organization's business, strategy and financial planning** Refer to "Risk and Control" section, pages 119–120 CDP response on *holcim.com/esg* Refer to our 2022 Climate Report, pages 4-7 and 10-21	**Climate change-related risks management** Refer to "Risk and Control" section pages 112–113 and "Information and control instruments of the Board of Directors," page 93	**Details Scope 1, 2 and 3** Refer to our Sustainability Performance Report (SPR) on *holcim.com/sustainability-reports*
	Scenario planning Refer to CDP response on *holcim.com/esg* Refer to our 2022 Climate Report, pages 62-65	**Integration into overall risk management** Refer to "Risk and Control" section and "Information and control instruments of the Board of Directors," page 93	**CO_2 targets** Refer to our Sustainability Performance Report (SPR) on *holcim.com/sustainability-reports*

STRATEGY DRIVERS

STRATEGIC PRIORITIES

Accelerating Growth

Expanding Solutions & Products

Leading in Sustainability & Innovation

Delivering Superior Performance

OUR SUSTAINABILITY PILLARS

Climate & Energy

Circular Economy

Nature

People

The risks on pages 118 to 129 are considered material to our strategy and our value creation. This list is not exhaustive and represents the principal risks and uncertainties faced by Holcim at the time of the preparation of the 2022 Integrated Annual Report.

Other risks may emerge in the future and/or the ones stated here may become less relevant. Further information is provided in the Corporate Governance section (pages 86 to 98), Management Discussion & Analysis (pages 158 to 175) and note 14.6 of the consolidated Financial Statements (page 241).

RISK AND CONTROL CONTINUED

KEY EXTERNAL RISKS

Risk	Potential Impact	Our Response
Market changes The risk that the economic environment in a given country can significantly change and have an influence on demand for construction and building materials. Strategic pillars impacted:	Demand for construction materials is fundamentally driven by economic growth (or contraction) in a given territory. These changes in underlying demand may impact sales volumes, prices and/or industry structure. The conflict in Ukraine has caused energy and food price increases, supply chain difficulties and general instability. In such conditions, economic activity may be negatively affected. In particular, inflation following the Covid-19 pandemic and the geopolitical tensions in Europe has increased significantly.	The progressive development of the Solutions & Products business segment contributes to reinforcing our diversification, with higher opportunities to profit from growing demand in the resilient repair and refurbishment segment along with the increasingly profitable green building and low-carbon solutions market. In the meantime, our growing development in the North America market also reduces our exposure to more volatile emerging markets and currencies.
Political risks Holcim operates in many countries across the world and is exposed, directly or indirectly, to the effects of economic, political and social instability such as trade protectionism, foreign exchange volatility, geopolitical tensions, terrorism, civil war and unrest. Strategic pillars impacted:	Economic, social and/or political instability can impact our people, environment, assets and business as well as our reputation. That impact may be direct (e.g. security consequences including kidnapping, assault against our people or attack against our assets) or indirect (e.g. economic uncertainty) and might also increase our exposure to a large range of threats, including some related to compliance, tax, access to raw materials and cash repatriation. In the longer term, our industry might be specifically targeted by activists who can perpetrate operations (e.g. protests, blockade, sabotage) in order to call out the public opinion on the environmental challenge. Those actions are likely to endanger the safety of our people on site, the integrity of our assets and the continuity of our operations. In the specific context of rising energy and food prices, we anticipate potential civil unrest and political instability in certain countries, especially in emerging markets but also in some mature markets where inflation affecting both low income households and the middle class has sparked socio-political tensions and demands for a strong response from the governments. Political and military developments in relation to the conflict in Ukraine might also have adverse consequences in neighboring countries where we operate.	Countries with the support of relevant Group functions actively monitor the political environment in order to identify and anticipate any adverse event, from activism to civil unrest and interstate conflicts. When necessary, mitigation measures are taken to adapt the Group's activities and to protect our people, environment, assets, reputation and legal exposure. Dedicated governance enforced across the Group as well as country-specific action plans have been implemented to enhance crisis management, security of people and assets and business resilience. The organization in place is fully embedded in our security and resilience program in order to enable swift and efficient response in case of a material risk to our people or assets. Learning from our response to Covid-19 and the ongoing conflict in Ukraine, the structure of the Corporate BRT (Business Resilience Team) has been used as a blueprint to establish the new Resilience and Governance program (RaG). RaG is a multifunctional and collaborative team of Subject Matter Experts from existing corporate functions breaking silos to work together with countries in order to identify, prepare and respond to a wide range of matters and adverse events that could impact Holcim people, environment, assets, reputation or legal exposure. As an example of the activity of the RaG team, the situation in Eastern Europe has been closely monitored from the early signals of the crisis in Ukraine and all the related risks to our company (interstate war, cyber attack, sanctions, energy security, radiation) have been subject to diligent and efficient actions in order to make our people safe and our business more resilient and responsive at all levels of our organization.
Pandemic and epidemic Pandemics, epidemics outbreaks of infectious diseases or any other serious public health concerns (such as COVID-19, Ebola, avian flu, H1N1, SARS, cholera) can affect the health of our people as well as the communities in which we operate. Strategic pillars impacted:	Public health concerns - in particular pandemics and epidemics - can affect the health of our people as well as the communities in which we operate. In addition, it may negatively affect our activity due to operational constraints and supply chain disruption. Lastly, the adverse macroeconomic effects of public health concerns can affect the value of assets and reduce demand for the Group's products. While the acute phase of the Covid-19 pandemic has passed, recent upticks in infections (e.g. China, Europe) associated with the inherent uncertainty regarding new variants require a continuous monitoring of the pandemic.	Security & Resilience and Health & Safety teams closely monitor disease outbreaks including the evolution of the Covid-19 pandemic (e.g. new variants, new waves) in all regions. Guidelines are shared with local teams, (taken into account national and international guidance) in order to assure the resilience of our people and operations.

KEY OPERATIONAL RISKS

Risk

Climate change

The cement industry is associated with high CO_2 intensity and Holcim is exposed to a variety of regulatory frameworks to reduce emissions, some of which may be under revision. These frameworks can affect the business activities of Holcim. In addition, a perception of the sector as a high emitter could impact our reputation, thus reducing our attractiveness to investors, employees and potential employees. With the diversification of our portfolio and the development of the Solutions and Products business segment, the climate change risk encompasses also the challenges posed by the transition of our company into a global leader in innovative and sustainable building solutions to build progress for people and the planet.

Strategic pillars impacted:

Potential Impact

Following the recommendations of the TCFD, the risks described below have been assessed in a time frame that is consistent with our strategy and our commitments.

Transition risks

Policy and regulatory

Following the agreement on climate at Paris COP21, signatory countries are required to commit on a reduction pathway. The likely effect of this is a growing number of CO_2 regulations which will increase the cost of emitting CO_2. In the longer term however, ineffective collective action against climate change creates a misalignment between our efforts to reach net-zero emissions and the applicable regulations, resulting in a competitive disadvantage that a zero-carbon strategy imposes on our company compared to other sectors. On the contrary, one of the possible side effects of more stringent CO_2 regulations and associated set of environmental measures, would be to reinforce the competitive advantage of our leading position as the most carbon effective player since our low-carbon footprint may be reflected in the final price of the product.

In 2022, as part of its Green Deal, the European Union has adopted the Carbon Border Adjustment Mechanism (CBAM) as a central engine of the low carbon transition. However, it will require a diligent and "watertight" implementation (effectively closing all circumvention routes) if it is to ensure the competitiveness of the European cement players and establish the needed effective, fair and reliable level playing field on carbon costs between domestic manufacturers and importers. This forms the central pillar of the low-carbon business case and is fundamental to our ability to invest on a large scale in the deployment of low-carbon technologies and products.

In the US, although there is no regulatory framework comparable to the European ETS, the political agenda is also moving towards green growth, with recent initiatives such as the Inflation Reduction Act in 2022 which create an overarching incentivising environment to deploy low carbon and resource efficient technologies at scale.

Market

In the long term, should regulatory frameworks fail to incentivize consumption of low-carbon products, customers may be unwilling to pay for additional costs and the cement and concrete industry's low-carbon roadmap might be compromised. Moreover, high CO_2 prices could also encourage the preference for alternative building materials with both a lower price and a lower environmental footprint.

The impacts include reduced demand for products with volume or price decreases leading to revenue losses. At the same time however, and as long as there is no viable substitute to cement on a global scale that is affordable and local, those new market conditions might support a growing demand for low-carbon products and solutions, thus potentially increasing our market share in the range of low carbon cement and sustainable solutions.

Our Response

Transition risks

Changes in regulatory frameworks worldwide are monitored centrally in order to assess our exposure to new CO_2 pricing schemes, but also to identify market incentives for low carbon products or any developments that require us to accelerate or adapt the deployment of our decarbonization roadmap.

Our CO_2 reduction roadmap follows a best-in-class approach with our 2050 net-zero pledge validated by SBTi. In 2022, we've reinforced our leadership with the validation by the SBTi of our near-term target (2030). In parallel, we transform the Group into a global leader in innovative and sustainable building materials and solutions, decarbonizing building and driving circular construction. In addition, in order to recognize the role of sustainable finance in supporting the transition to a low-carbon and more resource efficient economy, Holcim has put in place a Sustainability-Linked Financing Framework to link funding with its sustainability objectives and is committed to reaching more than 40% of sustainable financing by the end of 2025.

In line with our 2025 strategy and 2030 target, Holcim is maximizing existing technologies and processes, such as: reduced clinker content, increased use of waste-derived fuels and alternative raw materials, waste heat recovery, and renewable energy portfolio.

We are now scaling up innovations and proven solutions such as increasing the use of low carbon raw materials from construction & demolition waste to the replacement of slag or fly ash by novel binders such as calcined clay. As a result of our efforts, Holcim launched in February 2023 Europe's first calcined clay cement operation in France to deliver ECOPlanet low carbon cement. Holcim is also exploring promising opportunities in CCUS, kiln electrification and use of hydrogen (among others).

Beyond 2030, Holcim is piloting more than fifty CCUS projects in Europe and North America. Working with other multinationals as well as start-ups, our objective is to create a portfolio of diverse and cost-effective solutions that can be multiplied across the Group to advance our decarbonization journey and create new growth opportunities for the company. We aim to have the first net-zero plant operating in 2030, and as such we harness any opportunity to make it happen in Europe, North America and other geographies. As an example, in 2022, two Holcim plants, one in Germany (Lägerdorf) and one in Poland (Kujawy), have been granted an envelope from the European Innovation Fund (328 million euros) in order to support and assist the commissioning of carbon capture facilities by 2030.

Please refer to *holcim.com/climate-action* for more details on our net zero roadmap and key actions to reduce CO_2 emissions.

Our responses regarding the Market risk are presented in detail in the "Sustainable products, innovation and technology" risk and "Raw materials (including mineral components)" risk.

In parallel, Holcim proactively and transparently engages with external stakeholders and supports the following enhancements of the EU regulatory environment:

- Implementation of effective carbon pricing mechanisms
- Incentivization of market demand for low carbon products and solutions
- Larger-scale deployment of carbon capture technologies (CCUS)
- Access to competitive non-fossil energy
- Development of zero emission heavy duty vehicles which is one of the key levers for Holcim to reduce CO_2 from transportation activities.

RISK AND CONTROL CONTINUED

KEY OPERATIONAL RISKS CONTINUED

Risk

Climate change
Continued
Strategic pillars impacted:

Potential Impact

On the supply side, as the call for decarbonization impacts our whole supply chain beyond 2030, inflationary pressures in raw materials, energy and transportation are possible.

Increase in prices of mineral components (MIC) such as slag and fly ash challenges the CO_2 reduction roadmap as the integration of MIC in our production process is a key lever for the reduction of clinker factor and thus reduction of our CO_2 footprint. Concurrently, this risk might also reduce Holcim's profitability (refer to the risk Raw materials on page 124 or a more complete description of the risk).

Technology
The risk of the cost of technology or new investments being significantly higher than existing carbon pricing mechanisms could prevent Holcim from achieving its targets.

The pathway from 2030 to 2050 integrates new and advanced technologies including novel binders (calcined clay), zero-emission vehicles, low-clinker cements and scaling up Carbon Capture Utilization and Storage (CCUS). As of today, the development of those next-generation technologies, especially CCUS, relies on pilot projects which are still to be evaluated in terms of cost, technical feasibility, compatibility with CO_2 usage opportunities, and other aspects of viability and scalability.

Reputation
The risk of being perceived as a large carbon emitter could reduce our attractiveness to stakeholders such as customers, investors, and potential employees. The Group's inability to meet its commitments (net zero pledge), if materialized, compounds damages to the Group's reputation. In addition, litigation on the basis of climate action failure is emerging and could also damage our reputation. We may not have a sufficiently robust talent pipeline if we cannot attract and retain talent due to perceived weak environmental credentials.

Physical risks
The physical impact of climate change (such as flooding, changes in precipitation patterns or extreme variability in weather patterns) has the potential to disrupt our operations on both on-site operations and transportation activities leading to higher logistics and transportation costs and reduced production capacities (e.g. delayed planning approval, supply chain interruptions) and even reputational damages. Our business is particularly exposed to significant variations in river water levels affecting river-based supply chains and product delivery including when very low (Rhine in 2018) or very high (Mississippi in 2019). Water scarcity demonstrated also a potential for an increased likelihood of business disruptions in case of drought periods.

The change in the climate may imply more regular and intense climate events that can have a significant impact on our production with business interruption, accident or damages. This may increase our insurance costs due to the higher amounts at stake or more frequent insured cases.

Our Response

Physical risks
A risk-based Security and Resilience Management System (SRMS) is already in place, aiming to plan for, respond to and recover from all kinds of unwanted events through integrated emergency response, crisis management and business continuity activities. The SRMS is fully relevant to tackle the climate-related events that our operations already faced in the past. As an example, to be prepared to deal with variations in respective river water levels, especially flooding events, our logistics departments have developed well prepared response plans which involve a change in product sourcing from our network of plants, additional storage options for inventory and an adaptation of the modes of transport used as supply chain networks are considering road, rail and waterways as alternative options. This allows Holcim to better manage physical risks, and overcome the business interruptions in both cases and ensure the delivery of our services to our customers. With regard to water scarcity, a Water Stewardship Program has been launched aiming to reduce our specific freshwater withdrawal as well as to return the water we use.

In order to prepare further the Group for an increased frequency and severity of such kinds of adverse events exacerbated by climate change, a systematic approach to natural catastrophe risk management has been launched in 2022.

This multi-functional program (the so-called "NatCat program") assesses the Group's exposure to current and future natural catastrophes in light of different climate scenarios based on the trajectories considered by the Intergovernmental Panel on Climate Change (IPCC), and provides a framework for mitigation planning and response. It is a key mitigation to ensure the safeguarding of people and business and to meet the regulatory requirements for climate change adaptation (as presented in the EU Taxonomy section on pages 168-169).

The program addresses a large range of adverse hazards including, but not limited to, flood, drought, wildfire, storms/precipitation, lightning storms, landslide and extreme temperatures, as well as seismic natural catastrophe risks (tsunami, earthquake, volcano) which are not directly related to Climate change. It uses the latest climate science of Swiss Re to identify projected site-level risk over a range of climate pathways and time periods, in order to assess resilience and implement adaptation solutions, providing evidence for EU Taxonomy.

In August 2022, a pilot study of ten sites cutting across all business lines and geographies was successfully conducted as a proof of concept.

An order of magnitude rollout across Holcim's 50+ plants has now been launched. The intent is to implement this program, on a risk basis, across the whole Holcim portfolio.

Once fully implemented in all sites, the program will capture site level preparedness to current and future risks while enabling the development of mitigation programs complemented with strategic resilience plans for longer term and structural risks. At a Group level, the NatCat program will protect our people and the environments in which we operate, strengthen the decision-making process, mitigate financial losses due to asset damage and business interruption, and ensure adaptation to climate change based on scientific data.

In the long term, portfolio changes with the development of our Solutions & Products business line will contribute to a shift to a business model that offers integrated solutions and systems specifically designed to tackle climate change challenges, such as: energy efficiency, cooling effects, extending the longevity of building materials and enhanced options to generate renewable energy.

KEY OPERATIONAL RISKS CONTINUED

Risk

Sustainability

The risk that we do not effectively comply with regulatory, societal and investor expectations of sustainability such as climate change and social responsibility. The nature of our activities and geographic footprint poses inherent economic, environmental, social and human rights risks, which are also subject to an evolving regulatory framework and societal and investors expectations.

Sustainability-related risks include:

- Climate change
- Local community engagement, impact and value creation
- Human Rights
- Responsible sourcing
- Employee diversity and inclusion
- Waste-derived resources and circular economy
- Air emissions (including fugitive dust)
- Water Management
- Biodiversity management and quarry rehabilitation
- Internal waste management

Strategic pillars impacted:

Potential Impact

Failure to meet societal and regulatory expectations of environmental, social and governance (ESG) performance may expose us to fines, conflicts in the communities where we operate, potential business disruptions and even plant shutdown. It could also reduce our ability to access new resources and impact our social licence to operate. In addition, repetitive controversies can be escalated at a global level, damaging reputation and external assessments of our ESG performance, such as ratings agencies or NGOs. Our ESG performance is scrutinized by a large spectrum of stakeholders including investors and can influence investment decisions. **For more details on Climate change, please refer to Climate change risk.**

Our Response

Responsibility for managing these risks is vested with site and country management, regional management, the Executive Committee and the Board of Directors. Country CEOs are ultimately responsible and accountable for implementation and compliance with Group policies and directives. Adherence to those policies and directives are monitored and reported regularly. We provide more details in the Annual Report (refer to pages 40-75 and further information is published on our website).

A robust framework for mitigating those risks is in place as follows:

- Comprehensive set of mandatory policies and directives which clearly lay down expected practices, standards and responsibilities.
They are additionally supported by the Code of Business Conduct and Supplier Code Of Conduct, which both contain ESG provisions.
- Ongoing human rights due diligence, human rights impact assessments and stakeholder engagement are core elements of our human rights approach. 100% of our countries have a human rights assessment process in place, aiming to ensure systematic identification, prevention, mitigation, monitoring and remediation of potential risks and impact to people across our sites, the value chain and in communities where we operate. We address complaints and grievances received through our global Integrity Line, as well as a number of site- and community-level grievance mechanisms (for more details, refer to the Human Rights and Social Policy as well as the Human Rights Directive, available on our website).
- Robust air emissions monitoring (covering dust, NO_x, SO_2 in 2022) and reporting standards across the Group, enforced rules for incident disclosure and site action plans and follow-up activities in case of deviation from Group standard have been rolled out. Launched in 2021, our multi-year investment plan aiming to reach our 2030 emissions targets is underway (in 2022 the Group achieved the 2030 target for dust, while for NO_x and SO_2 the Group stands at 7% and 1% respectively from the targets).
- In June 2022, the Group issued its first nature policy, aiming at restating and reinforcing Holcim's commitments towards a nature-positive future and setting out the company's objective to protect and restore water and biodiversity. While we set industry-leading commitment to replenish freshwater in water-risk areas by 2030 and targets to achieve a measurable positive impact on biodiversity, we will leverage our products and solutions to bring nature into cities, tackling challenges such as Urban Heat Island Effect (UHI), biodiversity loss, water, soil and air quality.
- Our sustainability performance is subjected to external assurance. The assurance statement can be found in the Sustainability Performance Report published on our website.

Human Rights

We have identified salient human rights risks from our business activities which we may cause or contribute to, and which we seek proactively to identify, cease, prevent or mitigate. At the end of 2022, all of our countries have a human rights assessment process in place and have defined action plans to address risks based on our methodology. Through our sustainable procurement program, 95% of the procurement spend with high ESG risk suppliers was done with qualified suppliers in 2022.

As part of our increased focus on human rights, we reviewed our salient human rights risks in 2021, following a global survey, interviews with senior management, and input from human rights experts and community members. The risks and associated set of mitigating actions for each of them have been identified as:

- **Health and Safety**: refer to H&S risk in the Risk and Control section
- **Working conditions in our operations and particularly our supply chain**: our approach and key policies and directives are available on our website (Human Resources Policy, Supplier Code of Conduct, Sustainable Procurement Directive). We are a signatory of the WASH Pledge from the WBCSD and WASH4Work, which is a commitment to implementing access to safe water, sanitation and hygiene at the workplace at an appropriate level of standard.
- **Discrimination and harassment**: we promote an inclusive and fair workplace. Holcim is a signatory of the UN Women Empowerment Principles, elevating our efforts to promote gender equality and foster a fair workplace where all can be safe and thrive. Programs like Women on Wheels demonstrate our commitment to non-discrimination. Additional information is available on our ESG website.
- **Security-related abuses and violations**: we are committed to the protection of our people, assets and reputation, engaging security services on an "as needed" basis, following a strict risk-based approach and stringent rules of professionalism and integrity. When private security providers and public forces are engaged, Holcim's markets follow our own robust governance, mainly the International Code of Conduct for private security service providers and the Voluntary Principles on Security and Human Rights. Holcim has joined the International Code of Conduct Association (ICoCA) as an Observer on the 27 July 2021.
- **Child-labor in high risk supply chains**: we respect and promote the rights of people and children in our operations and supply chain. Child rights are fully integrated into Holcim's human rights approach and sustainable procurement systems. The implementation of the the 2021 End Child Labour Action Pledge builds on our existing commitment to respect human rights.
- **Dust and other emissions :**we require all our cement sites to measure and manage air and other emissions. In 2022, following significant investments and plant upgrades, dust emissions (g/ton of clinker) were reduced by 30%, NO_x by 5% and SO_2 by 21% (on a like for like basis). We continue to make improvements across all sites. In 2022, we continued our program to consistently reduce fugitive emissions in all our plants, to preserve the local environment and minimize the impacts on the neighboring communities.
- **Climate change and its impacts**: we clearly acknowledge the link between climate change and human rights, and seek to address the impact of global warming on people. This is manifest in four distinct areas of action:
  - Commitment to net zero roadmap and emission reduction path validated by SBTi;
  - Contributing to a just transition through our human rights due diligence and education and skills development;
  - Public advocacy for mandatory human rights and environmental due diligence.

RISK AND CONTROL CONTINUED

KEY OPERATIONAL RISKS CONTINUED

Risk	Potential Impact	Our Response
Legal and Compliance risks The risk that the company is found to have violated laws and regulations covering business conduct such as those that combat bribery, corruption, fraud, unfair competition, breach of trade sanctions or export controls, and unauthorized use of personal data. In the ordinary course of its business, the Group is involved in lawsuits, claims of various natures, investigations and proceedings, including product liability, commercial, environmental, health and safety matters, etc. Strategic pillars impacted:	Impacts include investigation costs, financial penalties, debarment, profit disgorgement and reputational damage. The impact is compounded by the fact that local violations can have an effect on the entire Group.	The Group maintains a comprehensive risk-based compliance program which aligns with the legal requirements expressed through national legislation such as the US FCPA (Foreign Corrupt Practices Act), UK Bribery Act and French Sapin II laws. The Compliance program has dedicated resources at local, regional and Group levels with central steering. The compliance program is structured over five elements that are aligned to an adequate procedures defense and approach to reduce compliance risk. The five elements of the compliance program include: • The risk assessment is the principal mechanism by which the Group identifies compliance risks in the business. It applies both at the global program level and country level and in the development and application of specific controls, communication, training and monitoring. A specific compliance risk assessment is performed on a yearly basis, with a granular assessment of risky situations that might arise in the course of the business and the associated mitigations in place. A detailed action plan is defined each time it is required to reinforce our response to the risk. The compliance risk assessment is fully embedded in the Group ERM (Enterprise Risk Management) process in order to facilitate the integration of the risks and controls reporting and follow up of action plans. • Controls are designed, built and implemented to mitigate specific risks. The Controls are embedded in Holcim's policies and procedures, including in particular the Holcim Group Minimum Control Standards, which comprise among others the topics of anti-corruption, fair competition, sanctions and data privacy, and are updated at least annually. Effective implementation is closely monitored as part of the Internal Control framework. • Communication and Training serve to instruct and provide continuous guidance to employees on what is acceptable conduct, set the tone at the top and, where necessary, communicate and train employees in risk identification, applicable controls and mitigation. Communication and Training aim at raising awareness by helping people to better understand the risks towards applying the correspondent existing controls and to generally provide them with practical guidance on how to act in compliance with the Code of Business Conduct and on when to seek for the support of the Legal and Compliance teams. Targeted, tailored and local communication and training plans are implemented throughout the Group. • Monitoring and Reporting, through which the Group proactively measures the performance of the Compliance program by tracking Compliance-related metrics such as training and communication delivery, timely closing of internal control and audit inadequacies and risk reduction controls such as the third party due diligence program. All Regions in the Group quarterly report on the implementation of the Compliance program in every operating country. In addition to proactive monitoring, the Compliance program includes internal controls, internal auditing as wells as a global whistleblowing system to facilitate reporting of breaches of the Code of Business Conduct. • Organization and Governance serve to ensure appropriate resources with roles and responsibilities in order to implement and oversee the effectiveness of the Compliance program, and the governance arrangements under which these resources perform.

KEY OPERATIONAL RISKS CONTINUED

Risk	Potential Impact	Our Response
Legal and Compliance risks Continued Strategic pillars impacted:		See below

Our Response

Several specific risk areas are within the scope of the compliance program:

- Business Integrity and Compliance: anti-corruption activities centered on training, management of third party risk through targeted due diligence and management of conflicts of interest.
- Pricing Integrity and Anti-Trust Compliance: the program focuses heavily on training of highly and medium risk exposed employees and on the performance of Fair Competition Reviews (in-depth assessments of risk, based on interviews, document and email reviews). In addition, specific actions (training, instructions) have been implemented to address five risk drivers: participation in trade associations, pricing decisions, market intelligence, contacts with competitors and merger control rules.
- Sanctions & Trade Restrictions: the Group trade sanctions Compliance program is designed to handle the increasing number of sanctioned parties and growing complexity of sanctions designations across the globe, including but not limited to those administered by the United States of America, the European Union and Switzerland. The Group trade sanctions compliance program is implemented through restricted third party sanctions screening, dedicated training and targeted communications. We regularly conduct in-country assessments on trade sanctions risks and potential touchpoints with sanctioned persons in the Group's exposed operations. The restricted third party sanctions screening is performed through state-of-the-art tools for the sanctions screening and continuous monitoring of suppliers and customers against worldwide sanctions lists.
- Data Protection and Privacy: The Group Data Privacy and Protection program is built around key components to ensure the protection of individuals' personal information. These include: clear and comprehensive privacy policies; strong security measures to protect personal information from unauthorized access, use, or disclosure; employee training on data privacy and protection; technical and organizational measures to protect personal data, such as encryption and access controls; clear procedures for handling data breaches and incident responses, defined rights for individuals to access, correct, or delete their personal information; as well as regular review and updates of the program to ensure that it continues to meet evolving data privacy and security requirements.

Group Compliance operates the global whistleblowing system. Group Legal manages all competition investigations, information requests and enforcement cases through a central team. Group Legal also tracks all Group-relevant commercial litigation cases and provides support to the relevant operating companies in defense and dispute resolution. In addition, root cause analysis of disputes and enforcement cases is taken into account in our continuous improvement cycle.

KEY OPERATIONAL RISKS CONTINUED

Risk	Potential Impact	Our Response
Energy prices (including alternative fuels) The risk that the increase in prices for fuels, electricity or the inability to accomplish planned savings from alternative fuels will impact our production costs. Strategic pillars impacted:	An increase in energy prices has the potential to adversely impact the Group's financial performance, as the increase in such costs may not be passed on (fully or partially) in the sales prices charged to customers. Strong economic recovery post the COVID-19 crisis, compounded by the outbreak of the Ukraine crisis in February 2022, led to unprecedented increases in energy prices. Other underlying factors such as escalation in geopolitical tension and temporary shocks in energy demand (resulting from weather conditions or changes in economic activity) could also contribute to increases in energy prices. Further, energy prices might increase if additional carbon taxes are levied in countries outside Europe where governments look to balance the decrease in fiscal resources while addressing climate change at the same time. In the longer term, Holcim's commitment to decarbonization as well as constant pressure on energy prices resulting from CO_2 pricing or taxes will require our operations to reduce dependency on highly CO_2 intensive sources of energy. In addition, depending on the local context, the reliability of power supply might be challenged by a large range of factors (shortages in refineries, obsolete public infrastructure, reduced subsidization, action of governments with strong interventionism profile) which will force us to emphasize the focus on energy security and self-sufficiency.	We are operating a truly global sourcing concept that enables us to access all potential supply sources and optimize sourcing decisions based on commercial, sustainability, governance and lead-time criteria. Optimizing the fuel mix and energy efficiency, as well as the use of alternative fuels, is a key area of focus at all our plants. At the country level, we use fixed price contracts for part of our exposure to avoid volatility. We also accelerate the development of long-term power purchase agreements/on-site power generation projects to reduce volatility and increase consumption of renewable energy at competitive prices.
Raw materials (including mineral components) The risk that raw materials cannot be supplied at economical cost or suitable quality. Strategic pillars impacted:	Much of our business depends on the reliable supply of mineral resources, e.g. sand and limestone, as well as mineral additives such as slag and fly ash. Failure to secure long-term reserves or license and permits as well as to obtain raw materials (including mineral components) from third parties at the expected cost and/or quality may adversely impact variable costs, financial performance and impair our long-term growth outlook. In addition, changing market conditions with long lasting increased cost of mineral components might limit our ability to reach our CO_2 reduction target in a cost effective manner. Moreover, significant increases in freight costs (difficulties to find available vessels and fuel prices) might lead to uncompetitive landed costs for MIC, clinker and cement and other raw materials. In the longer term, this might impact the ability to supply raw materials (including innovative binders like calcined clay) in an economically viable way. With the development of the Solutions and Products business segment, our need for certain raw materials, especially oil-derived components, will grow, leading to a higher dependence on raw material prices or availability.	In locations where the supply of raw materials is at risk (due to own reserves depletion, permitting issues, poor quality, lack of suppliers and scarcity of certain raw materials), we apply a range of measures including monitoring of the permitting process, strategic sourcing and diversification, changing input mixtures and maintaining minimum long-term reserve levels. When required, we manage international seaborne sourcing, which is an alternative to offset local risks. In addition, we are continuously developing (ourselves and in cooperation with external suppliers) chemical treatments to enable the use and production of alternative raw materials and new binders such as calcined clay, or construction & demolition waste (CDW) with high availability and proven binding capabilities. Encouraged by new regulations, the use of CDW in particular offers promising opportunities for our industry, especially in mature countries (Europe) where volumes are significant.

KEY OPERATIONAL RISKS CONTINUED

Risk	Potential Impact	Our Response
Sustainable products, innovation and technology The risk that insufficient innovation does not secure the competitive advantage of the company by delivering new products, solutions and technologies on a continuous basis. A growing focus on open innovation offers opportunities, especially in the pursuit of our goal of net zero emissions, as well as risks that collaboration with third parties does not provide the expected outcomes. Strategic pillars impacted:	Innovation is a key factor for long-term success of the company and crucial to maintain our competitive position and fulfill future customer needs, particularly when it comes to low carbon performance, energy efficiency and circular economy. Holcim entered the roofing market with major players focusing on technology ranges, innovation, solution offer and specifications selling to defend market share amid consolidated distribution channels. In that kind of industry, robust processes around investments in innovation are required in order to prevent any unwanted scenario such as competition creating disruptive differentiators; at the same time, a fast paced growth without properly integrating teams and processes as part of new acquisitions might also impair the successful development of innovative solutions and products. In addition, a significant event linked to product quality or performance is also a potential risk that ought to be avoided and closely monitored.	Our approach is to meet customer needs along the whole construction value chain by developing and delivering products, solutions and technologies that address today's major challenges of the construction business: achieving energy efficiency, lowering the cost of construction, reducing the environmental footprint and meeting high standards of aesthetics, health, comfort and well-being. Holcim already has an important range of products and brands which can be considered as sustainable low carbon products and solutions. From our sustainable cement Susteno to the ECOPact line of green concrete, Holcim offers global solutions with cutting-edge materials and innovation. The Group is continuously developing and introducing new products with lower CO_2 emissions, realizing opportunities of a circular economy and related sustainability performance of products and solutions. Leading the circular economy, Holcim will recycle 10 million tons of construction & demolition waste by 2025. In line with our 2025 strategy, Holcim will remain at the forefront of green building solutions, with 25% of ready-mix net sales coming from ECOPact, with at least a 30% lower CO_2 footprint. ECOPact green concrete already represents 13% of our ready-mix net sales within two years of launch while ECOPlanet green cement is available in 26 markets. Solutions & Products now account for 19% of net sales. In parallel, growing closer to our customers with our Solutions and Products business segment, we will expand our range of integrated solutions and systems from construction and energy efficiency to repair and refurbishment. Also, we will continue to deploy smart technologies, from 3D printing using green mineral components and we will further develop next-generation technologies. More than 80% of the time spent by our researchers in our Technology Center in Switzerland and in our Research and Development Center in Lyon, France is dedicated to low-carbon products and sustainable solutions, with more than 65% of our patents currently in this area. The risk that collaboration with third parties on open innovation does not provide the expected outcomes is mitigated through appropriate legal frameworks and comprehensive project management. Non-protected and protected Intellectual Property (IP) is secured by knowledge management, patents and trademarks. Regular market and IP intelligence is done to avoid infringement of third-party IP rights. In our newly integrated entities in the Solutions and Products business line, strong sets of policies and procedures as well as automated processes and controls are in place to ensure product quality and continuous improvement of the quality management system.
Health and Safety risk The risk that the company does not adequately protect employees, contractors and third parties from injury, illness or fatality, during both on-site and off-site company related activities. Strategic pillars impacted:	Impacts includes injury, illness or fatality, reputational damage and the possibility of business interruption, with consequences on our finance and business performance. The impact is compounded by the fact that local incidents can have an effect on the entire Group.	We conduct our business in a manner that creates a healthy and safe environment for all stakeholders – our employees, contractors, communities and customers – built on a sound health and safety culture. We believe in visible leadership and personal accountability at all levels and throughout our organization. We maintain a global Health and Safety Management System designed to continuously improve our performance and actively minimize risks in our business. In 2022, each pillar of our HSE (Health, Safety and Environment) operating model has been reinforced: critical risk management, workforce engagement and continuous improvement (please refer to pages 70 and 71 for more details). HSE experts are employed in each country where we operate to support the implementation of the Holcim HSE standards. The Group HSE team conducts regular audits to ensure the full deployment of our HSE policy and internal standards in all Holcim countries. Through the Health, Safety & Sustainability Committee, the Board of Directors supports the development of a health and safety culture and oversees the resources and processes to be employed to minimize or eliminate risks related to health and safety (please see page 91 for more details). In addition, our Group Security and Resilience teams provide support each time the situation requires a cross-functional response.

RISK AND CONTROL CONTINUED

KEY OPERATIONAL RISKS

Risk	Potential Impact	Our Response
Information technology and cyber threats risk The risk that arises from the unavailability of critical IT systems and the loss or manipulation of data resulting from cyber attacks, computer malware, infrastructure and network outages, natural disasters or human mistakes. Strategic pillars impacted:	An information technology failure or cyber security event could lead to financial losses, reputational damage, safety or environmental impacts. The risk has become a major concern because of the constant emergence of new threats and the dramatic increase in frequency and severity of reported cyber attacks in the past recent years. Accelerated by factors such as the COVID-19 crisis, modified business processes and the increase of remote work, IT related risks expose our company to a larger range of threats, including systems unavailability and data leak, originating from targeted cyber attacks and operational errors. Furthermore, the conflict in Ukraine and the surge in geopolitical tensions worldwide has increased cyber security concerns.	To prevent major risks related to critical IT infrastructure either operated by the Group or its service providers, Holcim has established policies and procedures for IT security and governance as well as Internal Control standards that are followed Group wide for all applicable systems. These include alternative/redundant data centers per region, resilient architecture of critical IT systems, backup recovery procedures and cybersecurity measures to detect unusual activities in our networks. As constant vigilance and awareness throughout the organization is required, our personnel are continually trained to detect and mitigate cyber risks. Due to the fact that the risk landscape is evolving, the Group's IT risk register is regularly assessed and updated. Additionally, the measures to prevent new risks from occurring are continuously improved and updated as well as regularly audited and controlled by different independent internal departments and external partners. The conflict in Ukraine is being monitored by the Resilience and Governance team (refer to Political risk) to identify potential risks in cooperation with the IT Security team and further increase the Group's preparedness to respond to unusual cyber activity potentially targeting Holcim Group.
Joint ventures and associates Since the Group does not control all joint ventures or associates in which it has invested, this may restrict the Group's ability to generate adequate returns and to implement the operating standards and compliance program. Strategic pillars impacted:	These limitations could impair the Group's ability to control joint ventures and influence associates effectively and/or realize the strategic goals for these businesses. In addition, this might hamper the ability of Holcim to implement organizational efficiencies and its controls framework, including its full compliance program. It can also impede the ability to transfer cash and assets between subsidiaries in order to allocate assets in the most effective way.	The Group Legal & Compliance function performs a comprehensive risk assessment covering all joint ventures and associates in order to identify any potential deviations from the Group's compliance program. Remediation plans are implemented in order to close residual gaps.
Talent management The risk that the company does not attract, select or retain skilled people in the right places and at the right time to reach its targets. Attraction and retention of talent has become a key issue that pervades across the entire cement and building materials industry which suffers from the competition of more appealing industries. Strategic pillars impacted:	In the wake of the COVID-19 pandemic, some countries are still facing a situation of labor shortage affecting a large range of positions, especially drivers, technical profiles and middle management (mainly in the US and Europe). In the longer term, it is likely that the shift in employee preferences will be more exacerbated, which will force companies to adapt to this new paradigm (revised balance between private and professional lives, development of home-office, etc.). In addition, in some regions (especially in Middle East, Africa, Eastern Europe) the risk is aggravated as qualified labour is increasingly searching for opportunities to expatriate themselves in developed markets.	All countries deploy talent reviews and succession planning processes to evaluate current and future talents across the year. The outcomes are taken into consideration in the Group talent and succession review. We invest significantly in developing both functional and management skills. Core human resources processes, like a broad learning portfolio with new programs for young professionals (e.g. Early Career Leaders Program, One Young World) and the online learning platform (Percipio), performance management, leadership development, reward & recognition and talent management are implemented in all Holcim countries and corporate functions. Under the Employer Branding initiative (a new campaign has been launched globally in September 2022) the Group promotes its attractiveness to new talents and the engagement of our current employees through a strong and clarified communication. A structured onboarding model has been made available through our online Learning platform to support the welcome to new employees in all countries. Digital solutions to support communication to employees (Leena AI) have been implemented in some countries, like in all our Latin American teams, and it is planned to extend them globally. The Career website and our presence as employers in social media has opened important advantages for our talent development strategy. Group HR oversees the quality of deployment of these processes to keep improving the robustness of our talent pipeline; early careers leaders have been identified and followed up at Group level in close association with the countries (for more information, see pages 66 to 69).
Acquisitions and divestments The risk that the company does not identify opportunities in the market at a profitable cost, or fails to successfully carry out acquisitions, mergers, divestments resulting in financial losses and inability to achieve strategic objectives. Strategic pillars impacted:	As our company aims to reach 30% of our net sales in Solutions & Products, there is a risk that material acquisitions do not meet the expected results. There is also an uncertainty over the achievement of the expected synergies and the integration of the new entities in our operating model, organizational structure and governance (including our Internal Control framework and compliance program). In connection with disposals made in the past years, the Group provided customary warranties. Holcim and its subsidiaries may receive claims arising from these warranties.	Our M&A process is structured around a robust due diligence process (including, but not limited to, strategic, compliance, financial, environmental, legal, tax, commercial, human resources and pension plans streams). Key internal stakeholders are typically involved with the support of external expertise. Our large geographical footprint combined with the strong cash position of our Group enables us to swiftly respond to identified targets as well as leveraging opportunities for synergies at local level. In the newly acquired entities, our Minimum Control Standards are fully applicable and are implemented following an integration plan where the particularities and the risks are analyzed and taken into account in order to design efficient internal control activities. Our due diligence process also applies to disposals which are closely analyzed by our teams at Group level before the divestment transaction takes place. While our company is liable for events which are not under our direct control anymore, the Group closely monitors our exposure and any indication of potential liability is assessed.

KEY FINANCIAL RISKS CONTINUED

Risk	Potential Impact	Our Response
Risk involving credit ratings As in the course of our business we use external sources to finance a portion of our capital requirements, our access to global sources of financing is important. The cost and availability of financing are generally dependent on our short-term and long-term credit ratings. Strategic pillars impacted:	Factors that are significant in the determination of our credit ratings or that otherwise could affect our ability to raise short-term and long-term financing include: our level and volatility of earnings, our relative positions in the markets in which we operate, our global and product diversification, our risk management policies and our financial ratios, such as net debt to recurring EBITDA and cash flow from operations to net debt. We expect credit rating agencies to focus, in particular, on our ability to generate sufficient operating cash flows to cover the repayment of our debt. Deterioration in any of the previously stated factors or a combination of these factors may lead rating agencies to downgrade our credit ratings, thereby increasing our cost of financing. Conversely, an improvement in these factors may prompt rating agencies to upgrade our credit ratings. With the development of green finance and growing expectations of the investors community regarding the sustainability of our business model, we anticipate in the near future an increasing influence of ESG performance on investors' decision making process.	Our Executive Committee establishes our overall funding policies. The aim of these policies is to safeguard our ability to meet our obligations by maintaining a strong balance sheet. This policy takes into consideration our expectations concerning the required level of leverage, the average maturity of debt, interest rate exposure and the level of committed credit lines. These targets are monitored on a regular basis. As a result, a significant portion of our debt has long-term maturity. We constantly maintain unused credit lines to cover at least the next 12 months of debt maturities.
Liquidity risk The risk that the company will not generate sufficient cash and/or will not have access to external funding to meet its obligations. Strategic pillars impacted:	Lack of liquidity could impact our ability to meet our operational and/or financial obligations.	Subsidiaries are responsible for their own cash balances and the raising of internal and external funding to cover the liquidity needs, subject to guidance by the Group. The Group monitors its liquidity risk by using a recurring liquidity planning tool and maintains cash, readily realizable marketable securities and unused committed credit lines to meet its liquidity requirements. The Group also adjusts liquidity levels to changing market conditions by organizing additional bank loans or issuing bonds. In addition, the strong credit worthiness of the Group allows it to access international financial markets. Please refer to Note 14.6 of the Consolidated Financial Statements page 241 for details on Holcim debt maturity profile.
Interest rate risk The risk that an investment's value will change due to a change in the absolute level of interest rates, in the shape of the yield curve or in any other interest rate relationship. Strategic pillars impacted:	Movements in interest rates could affect the Group's financial results and market values of its financial instruments. The Group is primarily exposed to fluctuations in interest rates on its financial liabilities and cash. The Group is also exposed to the evolution of interest rates and credit markets for its future refinancing, which may result in a lower or higher cost of financing.	The exposure is mainly addressed through the management of the fixed/floating ratio of financial liabilities. To manage this mix, the Group may enter into interest rate swap agreements in which it exchanges periodic payments based on notional amounts and agreed-upon fixed and floating interest rates. The Group constantly monitors credit markets. The aim of its financing strategy is to achieve a well-balanced debt maturity profile to reduce both the risk of refinancing and large fluctuations of its financing cost. Please refer to Note 14.6 of the Consolidated Financial Statements on page 241 for additional details.
Foreign exchange risk The Group's global footprint exposes it to foreign exchange risks. Strategic pillars impacted:	Movements in foreign exchange rates could have an influence on the Group's business, results of operations and financial condition. Such translation into the Group's reporting currency leads to currency translation effects, which the Group does not actively hedge in the financial markets. In addition, the statement of financial position is only partially hedged by debt in foreign currencies and therefore a significant change in the aggregate value of such local currencies against the reporting currency may have a material effect on the Group's shareholders' equity. Currency fluctuations can also result in the recognition of foreign exchange losses on transactions, which are reflected in the Group's consolidated statement of income and statement of cash flows. The COVID-19 pandemic as well as the conflict in Ukraine and the energy crisis related to it has increased political and economic uncertainty in several markets where the Group operates. The impact on the expected future economic growth and capital flows in some of these markets may lead to devaluations of the local currencies against the Group reporting currency.	With regard to transaction-based foreign currency exposures, the Group's policy is to hedge material foreign currency exposures through derivative instruments. The Group seeks to reduce the overall exposure by hedging such positions in the market with derivative instruments. These derivative instruments are generally limited to forward contracts or swaps and the Group does not enter into foreign currency exchange contracts other than for hedging purposes. Each subsidiary is responsible for managing the foreign exchange positions arising as a result of commercial and financial transactions performed in currencies other than its functional currency with the support of the treasury department. The Group's activities expose it to foreign exchange risk notably in countries with inflation indices reflecting a three-year cumulative inflation rate exceeding 100%. In these countries, qualified as hyperinflationary countries, the Group applies a financing strategy that reduces the Group's exposure to a minimum by having the country manage its funding needs in an autonomous way. As of 31 December 2022, Argentina and Lebanon are considered as hyperinflationary countries. The Group is also exposed to countries with limited availability of hard currency as Egypt and Nigeria where hedging and repatriation of cash is difficult or not possible.

RISK AND CONTROL CONTINUED

KEY FINANCIAL RISKS CONTINUED

Risk	Potential Impact	Our Response
Credit risk The risk that our customers default on payment, resulting in collection costs and write-offs. Strategic pillars impacted:	The failure of counterparties to comply with their commitments could adversely impact the Group's financial performance.	The Group periodically assesses the financial reliability of customers. Credit risks, or the risk of counterparty default, are constantly monitored. Counterparties to financial instruments consist of a large number of established financial institutions. The Group does not expect any counterparty to be unable to fulfill its obligations under its respective financing agreements. The maximum credit risk exposure is represented by the carrying amount of each financial asset, including derivative financial instruments, in the consolidated statement of financial position. Please refer to Note 14.6 of the Consolidated Financial Statements (Financial risks associated with operating activities, page 241) for additional details. In the current macroeconomic context and the risk of a slow down of activity in regions where the Group operates, the Group closely monitors the risk of increase in bad debts.
Insurance Our industry is subject to a wide range of risks, not all of which can be transferred or adequately insured.The Group purchases insurance cover for a broad range of operational risks to protect its assets and itself against third party liabilities, commensurate with the risk exposure. Strategic pillars impacted:	The Group could be impacted by losses where recovery from insurance is either unavailable or non sufficiently reflective of the incurred loss.	We transfer our insurable risks with international insurers or reinsurers of high repute, including our internal captive reinsurance companies. We continuously monitor the evolving risk environment to determine whether additional insurances will need to be considered.
Group's pension commitments The Group operates a number of defined benefit pension schemes and schemes with similar or contingent obligations in several of its countries. The assets and liabilities of those schemes may exhibit significant volatility. Strategic pillars impacted:	Cash contributions may be required to fund unrecoverable deficits. External factors might cause these contributions to vary materially from year-to-year and impact the Group's financial results.	Where possible, defined benefit pension schemes have been closed and frozen. Significant actions continue to take place to further reduce and eliminate those schemes and related risks. Specifically, actions focusing on deploying scheme-appropriate asset allocation in order to mitigate volatility and optimize investment returns, those intended to reduce and simplify plans' liabilities and exposure, and finally those intended to provide cash funding flexibility, are being implemented.
Multi-employer pension plans (MEPP) The Group participates in a number of union-sponsored multiemployer pension plans in the US. These plans are subject to substantial deficits due to market conditions and business actions, plan trustee decisions, plan failure, as well as actions and decisions of other contributing employers. The Group has essentially no control over how these plans are managed. Strategic pillars impacted:	There exists material risk that substantial cash contributions could be required in the future to satisfy any outstanding obligations under these plans. Satisfying the Group's obligations might have a material impact on the Group's reported financial results. The financial condition of these plans is not currently reported in the Group's financial reports.	The Group has undertaken a review of all these plans with the goal being to fully understand the plans' financial circumstances, as well as all the options available to mitigate risks and reduce the Group's actual and potential financial obligations. As the Group's participation in these plans is subject to negotiations with bargaining unions, the Group's ability to take action is limited.

KEY FINANCIAL RISKS CONTINUED

Risk	Potential Impact	Our Response
Goodwill and asset impairment Significant underperformance in any of the Group's major cash-generating units or the divestment of businesses in the future may give rise to a material write-down of goodwill or assets. Strategic pillars impacted:	A write-down of goodwill or assets could have a substantial impact on the Group's net income and equity.	Indicators of goodwill or asset impairment are monitored closely through our reporting process to ensure that potential impairment issues are addressed on a timely basis. Detailed impairment testing for each cash-generating unit within the Group is performed prior to year-end or at an earlier stage when a triggering event materializes. The Audit Committee regularly reviews the goodwill and asset impairment process. In the context of growing challenges posed by the transition to a low carbon economy, the Group makes estimates and assumptions on climate change and how it might impact our operations and cash-flow projections. We continuously reevaluate those assumptions in a way that is consistent with our assessment of climate-related risks, our commitments to investors and other stakeholders and the climate-related regulations in place. Our cash flow projections are aligned with the commitment to reach our 2030 sustainability targets and in accordance with the climate-related regulations currently in place notably in Europe.
Tax Our business operations are subject to numerous income taxes as well as duties and other taxes that are not based on income such as sales or value-added taxes, payroll taxes,etc. imposed by state and local governments. Significant judgment is often required in determining our annual tax charges and in evaluating our tax positions. Although we believe our tax estimates are reasonable, the final determination of tax audits and any related disputes could be materially different from our historical tax provisions and accruals. Strategic pillars impacted:	Due to the uncertainty associated with tax matters, it is possible that, at some future date, liabilities resulting from changes in legislation, interpretation of existing tax rules and regulations, and /or audits or litigations could have a material adverse impact on our financial results and cash flow. Governmental authorities in the countries where the Group operates may increase or impose new income taxes or indirect taxes, or revised interpretations of existing tax rules and regulations, including as a means of financing the response to economic shocks such as measures enacted because of the COVID-19 pandemic or the threats of recession. In addition, in the light of the OECD's work in addressing the Tax Challenges Arising from the Digitalisation of the Economy, new changes to the international tax system are likely, resulting in financial impacts for the Group.	Risks are reviewed and assessed on a regular basis in light of ongoing developments with respect to tax audits and tax cases, as well as ongoing changes in legislation and tax laws. The Holcim Tax Directives provide binding rules for all countries where we operate, and the Group Tax team continuously works with Group Internal Control on aligning, improving and implementing processes and controls within Group Tax and countries. It is also continuously developing and acquiring the right in-house skills.

RISK AND CONTROL CONTINUED

Internal Control
Holcim's Internal Control framework defines Minimum Control Standards to clarify and reinforce the responsibility of businesses in the countries. Every operating company and business in our organization must follow these standards, which are equally applicable at Group level. There is clear guidance and consequence management if they are not met completely. Minimum Control Standards are managed and checked independently by our Internal Control team along with business process owners and control owners in all our businesses across the globe. Our Internal Control process is in accordance with the Swiss Code of Obligations and Swiss Code of Best Practices for Corporate Governance. The Holcim Internal Control system aims at giving the Board of Directors and management reasonable assurance concerning the reliability of financial reporting, compliance with laws and internal regulations, and the effectiveness and efficiency of major company processes and controls. Each Holcim employee has an important role in running the Internal Control System to ensure the implementation and the effectiveness of internal controls.

Group Internal Control Environment
Holcim aims to have an effective Internal Control system at each level of responsibility and promotes a culture of robust internal control, supported by the commitment of the Board of Directors and management. Continuous training efforts are carried out throughout the company with a particular focus on exposed personals when necessary. The Minimum Control Standards are used as a baseline for mandatory compliance within the Group and the main reference for the Holcim Corporate Governance Framework. The following key documents are part of the Minimum Control Standards and support the internal control environment:

- The Group Delegated Authorities which define approving authorities and thresholds within the Group.
- The Code of Business Conduct which covers guidance and provides examples to help employees when confronted with challenging situations.
- The Supplier Code of Conduct

Risk identification and analysis
The approach implemented by the Group relating to identification and analysis of risks is described on pages 112–113.

Minimum Control Standards
The Minimum Control Standards cover the following core business processes, going beyond accounting and finance:

Governance & Compliance: Compliance with laws, regulations and Code of Business Conduct, BOD secretarial, Health & Safety, risk assessment and mitigation, segregation of duties, delegation of authorities, review of litigation, disputes, and personal data protection.

Accounting & Consolidation: Compliance with accounting principles including best practices from the reconciliation of accounts to consolidation of financial statements and submission of Group reporting requirements and statutory financial statements.

Tax: Tax risk assessment and reporting, tax filings & payments, deferred and income tax calculations, transfer pricing and non-income (indirect) taxes.

Treasury: Bank relations, secure handling of payments, financial instruments, borrowings & commitments and foreign exchange, interest rate, commodities risks monitoring and hedging.

Fixed Assets: Management of titles, licenses and permits, rehabilitation and restoration provisions, classification and depreciation of property plant & equipment and physical verification.

Inventory: Physical stock take (spare parts and materials) and inventory provisions and write-offs.

Revenue: Master data, price management, customer credit limits, accounts receivable.

Expenditure: Master data, supplier qualification, 3-way match and direct vendor invoices, supplier payments and accruals for expenditures.

HR: Employee management (onboarding, transfers, offboarding), payroll, compliance with local labor laws and employee pension & benefit plans.

IT: Information security management and IT service management.

Sustainability: Environmental impact and Social impact.

Internal Control monitoring throughout the Group
The Group is committed to maintaining high standards of internal control. It tests and documents adherence to Minimum Control Standards. These activities are implemented at country and at Group levels and encompasses:

- A description of key processes affecting the reliability of the Group's financial reporting, and that of the parent company
- A detailed description of mandatory controls defined in the Group's Minimum Control Standards
- Tests of controls to check the operational effectiveness. Group Internal Control provides each entity with clear guidance and testing methodology
- An internal certification process twice a year to review the main action plans in progress and to confirm management responsibility at country and Group levels for the quality of both internal control and financial reporting
- A formal reporting, analysis and control process for the information included in the Group's Integrated Report

The implementation of action plans identified through the activities described above, as well as through internal and external audits are followed up by relevant Senior Management. The outcome of such procedures is presented to the Audit Committee. Internal control is monitored at all levels of the Group. The roles of key stakeholders are described below:

Board of Directors and Board Committees

The Board of Directors through the Audit Committee reviews management's and the internal auditor's reports on the effectiveness of the systems for internal control. The Audit Committee shall form its own opinion on the Internal Control system, Risk Management and on the state of compliance within the Company.

Executive Committee

The Executive Committee steers the effective implementation of the Group's Internal Control system, through:

- The monitoring and follow-up of internal control procedures performed throughout the Group, and in particular the follow-up of identified action plans. Periodic presentations on internal control are submitted to the Executive Committee
- The review of the country's Minimum Control Standards ad certification on a quarterly basis.

Group functions

Group functions leaders, including in particular managers of the Group Finance function, have been designated at Group level as business process owners, with the responsibility of:

- Documenting their processes at Group level including product line specifics and verifying that the Internal Control Standards for such processes are effectively implemented
- Defining and updating the standards of internal control applicable to countries.

Countries

Internal Control is under the direct responsibility of the Executive Committee of each country.

Internal Control Managers are appointed in each country to support the identification of risks, the implementation of the Minimum Control Standards and to ensure procedures related to internal control over financial reporting are implemented. Their activities are coordinated by the Group Internal Control department. Countries report their Internal Control assessments to the Group twice a year through the Internal Control system and sign certification letters. Any exception to the Minimum Control Standards needs to be documented, mitigated and approved by the relevant Group Function and Group Internal Control.

Group Internal Control department

The Group Internal Control department is in charge of overseeing Internal Control and monitoring all procedures related to internal control over financial reporting. This department manages the Minimum Control Standards mentioned above and coordinates the network of Internal Control Managers within countries. It supports countries and the Group functions in the implementation of such standards as well as the documentation and tests of Minimum Control Standards. Group Internal Control designs and coordinates the annual certification process to confirm management responsibility at each relevant level of the Group organization on the quality of both internal control and financial reporting. The outcome of this certification process is presented to the Group Chief Financial Officer and Chief Executive Officer for validation prior to presenting it to the Executive Committee and Audit Committee.

Group Internal Audit

The Group Internal Audit department is responsible for performing an independent assessment of the quality of internal control at all levels of the organization following the annual audit plan approved by the Audit Committee. The main observations and findings observed during the audit assignments are reported periodically to the Audit Committee and the Executive Committee. For more information, please refer to Corporate Governance on page 86.

COMPENSATION REPORT

Executive compensation is designed to reinforce the Holcim strategy by supporting the company to attract, motivate and retain talent while aligning their interests with those of shareholders.

The executive compensation structure balances rewards for short-term performance and long-term success by combining absolute and relative as well as financial and non-financial performance objectives, and by delivering compensation through a mix of cash and equity. To provide further alignment with shareholders, executives are expected to build a minimum level of Holcim share ownership over time.

The Compensation Report provides detailed information on the compensation programs at Holcim, on the compensation awarded to the members of the Board of Directors and the Executive Committee for 2022 and on the governance framework around compensation. It is written in accordance with the Ordinance against Excessive Compensation in Listed Stock Corporations (OaEC), the Directive on information relating to Corporate Governance of the SIX Swiss Exchange and the principles of the Swiss Code of Best Practice for Corporate Governance of economiesuisse.

Dear shareholders,
I am pleased to share with you the Holcim Compensation Report for the financial year 2022, which was prepared in accordance with applicable laws, rules and regulations. As a leading global provider of innovative and sustainable building solutions, we aim to be an employer of choice. This is supported by a compensation framework that is designed to attract, motivate and retain the qualified talent needed to succeed globally and to provide excellent returns to you, our shareholders.

2022 was a record year for Holcim. Our record net sales and Recurring EBIT were driven by fast expansion in Solutions & Products and the most attractive North American market. We also continued to advance our leadership in sustainability, reducing CO_2 emissions per net sales by over 20 percent, with a target to reduce it by another 10 percent in 2023. We will explain in this report how our performance in 2022 impacted the compensation awarded to the members of the Executive Committee under the incentive plans.

The Nomination, Compensation and Governance Committee (NCGC) performed its regular activities throughout the reporting year such as the succession planning for the Board of Directors and the Executive Committee, the performance objective setting at the beginning of the year and the performance assessment at year end, the determination of compensation for members of the Board of Directors and the Executive Committee, as well as the preparation of the Compensation Report and of the say-on-pay votes at the Annual General Meeting.

On nomination matters, considering that Beat Hess has decided not to seek re-election to the Board of Directors at the Annual General Meeting in May 2023, the Board of Directors intends to propose Jan Jenisch as its new Chairperson. Subject to the vote at the Annual General Meeting, he will succeed as the Chairperson of the Board of Directors and continue as CEO of Holcim for a limited duration. The Board of Directors sees this double mandate as a transition period to safeguard Holcim's current transformation and the fast-paced execution of its Strategy 2025. This double mandate is for a limited duration and a CEO successor will be announced within the next twelve months. To continue strong independent checks and balances, I am honored that the Board has appointed me as Lead Independent Director.

Further, Steffen Kindler will be apointed as Chief Financial Officer (CFO) of Holcim and member of the Group Executive Committee, effective 1 May 2023. Steffen Kindler will take over from current CFO Géraldine Picaud, who has decided to pursue other opportunities outside the company.

On compensation matters, the NCGC reviewed the peer groups used for benchmarking, the performance indicators and target setting for the

HANNE BIRGITTE BREINBJERG SØRENSEN
Chairperson of the NCGC

purpose of the incentive plans (with a focus on ESG), the share usage for equity plans, the compensation levels and the overall design of the compensation programs. The NCGC concluded that the compensation system continues to be aligned with the overall business strategy and shareholder interests and is well balanced. Therefore, no changes were implemented in 2022. However, the target setting for the ESG performance conditions in the outstanding incentive plans had to be reviewed due to the divestment of our operations in India and Brazil, and the derecognition of Russia from our key performance indicators. Those adjustments are in line with the "Sustainability Framework Guidelines" of the Global Cement and Concrete Association (GCCA) for CO_2 reporting and are explained in further details in this report. Going forward, the NCGC is keen to maintain continuity and stability in the compensation system and does not intend to introduce fundamental amendments.

You will find further details about the NCGC's activities and the compensation decisions during the reporting year in this report. You will have the opportunity to express your opinion about this Compensation Report in a consultative shareholder vote at the Annual General Meeting 2023.

We are convinced that the compensation framework supports our commitment to creating both financial and non-financial value over the long term and is well-aligned with our shareholders' interests. In the future, we will continue to review and assess our compensation programs and to maintain an open dialogue with our shareholders and their representatives.

Thank you for sharing your perspectives on executive compensation with us. We trust that you will find this report informative.

HANNE BIRGITTE BREINBJERG SØRENSEN
Chairperson of the NCGC

COMPENSATION REPORT CONTINUED

Compensation at a glance

Summary of compensation of the Board of Directors in 2022

To ensure their independence in their supervisory function, members of the Board of Directors receive a fixed compensation only, delivered in the form of cash and shares blocked for five years. The compensation system for the Board of Directors does not contain any performance-related components.

Annual retainer (gross)	Cash (CHF)	Shares (CHF)	Expense allowance (CHF)	Committee fees (gross)	Chair-person (CHF)	Member (CHF)
Board Chairperson[1]	825,000	825,000	70,000[2]	AC	160,000	40,000
Board Vice-Chairperson[1]	200,000	200,000	10,000	NCGC	125,000	40,000
Board member	100,000	100,000	10,000	HSSC	125,000	40,000

[1] The Board Chairperson and Vice-Chairperson are not eligible for committee fees.
[2] Includes a secretarial allowance of CHF 60,000 p.a.

Summary of compensation of the Executive Committee in 2022

The executive compensation framework is designed to reinforce the Holcim strategy by supporting the company to attract, motivate and retain talent while aligning their interests with those of the shareholders and stakeholders. The compensation structure is well-balanced: it rewards short-term and long-term performance, it combines absolute and relative as well as financial and non-financial performance objectives and it delivers compensation through a mix of cash and equity.

The compensation of the Executive Committee consists of fixed and variable elements. Fixed compensation includes base salary and benefits based on prevalent market practice.

Variable compensation comprises short-term and long-term elements as described below. It is based on ambitious and stretched performance objectives and it rewards Group and regional results. Clawback and malus provisions apply to the annual and the long-term incentive (LTI) plans.

Executive Committee members are subject to a share ownership guideline: the CEO must hold at least 500 percent of his annual base salary in shares, other Executive Committee members 200 percent.

Summary of compensation of the Executive Committee in 2022

Compensation element	Purpose	CEO	Other Executive Committee members
Base salary	Reward for the role		
Pension and benefits	Protect against risks, attract and retain		
Annual incentive	Reward short-term performance • Group relative Sales growth (15%) • Group relative Recurring EBIT growth (15%) • Recurring EBIT (20%) • Free Cash Flow after leases (35%) • Health, Safety and Environment (15%)	**Target:** 125% of salary **Maximum payout:** 200% of target (250% of salary)	**Target:** 75% of salary **Maximum payout:** 200% of target (150% of salary)
Long-term incentive	Reward long-term performance (3–5 years) and align with shareholders' interests: • Performance shares: EPS before impairment and divestments, ROIC and sustainability • Performance options: relative TSR	**Performance shares:** Grant value: 125% of salary Maximum vesting: 200% of target **Performance options:** Grant value: 52.4% of salary Maximum vesting: 100% of target	**Performance shares:** Grant value: 70% of salary Maximum vesting: 200% of target **Performance options:** Grant value: 26.3% of salary Maximum vesting: 100% of target

Compensation of the Board of Directors for 2022

The compensation awarded to the Board of Directors in financial year 2022 is within the limits approved by the shareholders at the Annual General Meeting. Since the compensation period is not yet completed, a definitive assessment will be provided in the 2023 Annual Report.

Compensation period	Approved amount (CHF)	Effective amount (CHF)
AGM 2021 – AGM 2022	5,200,000	4,843,680
AGM 2022 – AGM 2023	5,000,000	To be determined[1]

[1] The compensation period is not yet completed; a definitive assessment will be provided in the Compensation Report 2023

Compensation of the Executive Committee for 2022

The compensation awarded to the Executive Committee for the financial year 2022 is within the limits approved by the shareholders at the Annual General Meeting 2021.

Compensation period	Approved amount (CHF)	Effective amount (CHF)
Financial year 2022	42,500,000	34,813,294

Summary of performance in 2022

2022 was a record year for Holcim. Net sales of CHF 29,189 million for 2022 were up +12.9 percent on a like-for-like basis compared to the prior year. The increase was driven by the fast expansion of Solutions & Products, which grew by 54 percent compared to 2021. Recurring EBIT reached a record CHF 4,752 million for 2022, up +7.2 percent on a like-for-like basis compared to the prior year period. This record result was driven by very strong margins in the roofing business as well as positive price over cost for cement, aggregates, and ready-mix combined. Holcim's net financial debt was CHF 6,032 million at the end of 2022 for a record-low leverage ratio of 0.9×.

We continued to advance our leadership in sustainability with the reduction of CO_2 per net sales of 21 percent in 2022, with a target to reduce it by another 10 percent in 2023. We continue to expand green building solutions with ECOPact low-carbon concrete reaching 13 percent of Ready-Mix Concrete net sales in 2022, on target to reach 25 percent by 2025.

- Annual incentive 2022: payout of 169.5 percent of target on average for Executive Committee.
- Long-term incentive 2020: vesting level of 190.6 percent for the performance shares granted in 2020.

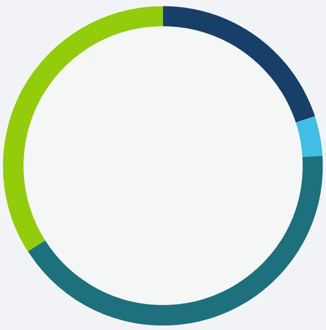
Compensation governance

- Authority for decisions related to compensation are governed by the Articles of Incorporation and the Organizational Regulations of Holcim Ltd as described in the Corporate Governance section.
- The prospective maximum aggregate amounts of compensation of the Board of Directors and of the Executive Committee are subject to binding shareholders' votes at the Annual General Meeting.
- The Compensation Report is subject to a consultative vote by the shareholders at the Annual General Meeting.

The Board of Directors is supported by the NCGC for all matters related to compensation and governance. The NCGC members are elected annually by the shareholders at the Annual General Meeting.

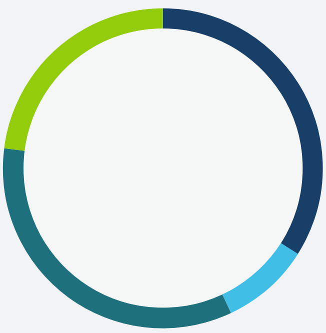
COMPENSATION AWARDED FOR 2022

CEO



Base salary	20%
Pension & benefits	4%
Annual incentive	42%
Long-term incentive	34%

EXECUTIVE COMMITTEE MEMBERS



Base salary	34%
Pension & benefits	9%
Annual incentive	34%
Long-term incentive	23%

COMPENSATION REPORT CONTINUED

Compensation system: Board of Directors

To guarantee their independence in exercising their supervisory duties, the members of the Board of Directors receive fixed compensation only and do not participate in Holcim's employee benefits plan. Part of the compensation is paid in blocked shares to strengthen the alignment with shareholders' interests.

Board compensation consists of an annual retainer for the Board Chairperson, Board Vice-Chairperson and Board members plus additional fees for assignments to the committees of the Board of Directors either as Chairperson or member. The Board Chairperson and Vice-Chairperson are not eligible for committee fees. The annual retainer is paid half in cash and half in shares subject to a five-year restriction period (prohibition of sale or pledging). Committee fees are paid in cash.

Additionally, a lump sum expense allowance is paid in cash and the Board Chairperson receives a secretarial allowance. The members of the Board of Directors receive no additional reimbursements of business expenses beyond travel costs from abroad.

Cash compensation is paid quarterly for the Board members and monthly for the Board Chairperson. The shares are transferred in March for the past reporting year.

In exceptional circumstances, additional fees are payable to Board members when an exceptional workload beyond the regular function of the Board of Directors is required. No such fees were paid in the reporting year.

The compensation of the Board of Directors is benchmarked regularly, last time in the reporting year, based on the Board compensation of other industrial SMI companies including ABB, Geberit, Givaudan, Lonza, Nestle, Novartis, Richemont, Roche, SGS and Sika (refer to section "Compensation Governance" for further details on the benchmarking peer group). The analysis showed that the compensation structure is aligned with prevalent market practice. In terms of compensation levels, the annual retainer and the committee fees for the Chairpersons are above market median, while they are below market for the other members. Considering the complexity of the work and the substantial additional requirements on the Board and committee Chairpersons, the NCGC decided not to make any change to the compensation levels.

Compensation in transition period

Considering that Beat Hess has decided not to seek re-election to the Board of Directors at the Annual General Meeting in May 2023, the Board of Directors intends to propose Jan Jenisch as its new Chairperson. Subject to the vote at the Annual General Meeting, he will succeed as the Chairperson of the Board of Directors and continue as CEO of Holcim for a limited duration. The Board of Directors sees this double mandate as a transition period to safeguard Holcim's current transformation and the fast-paced execution of its Strategy 2025.

While he holds a dual role, Jan Jenisch will continue to receive his regular compensation for the CEO position and will not receive any additional compensation for his function as Chairperson of the Board of Directors.

To continue strong independent checks and balances, the Board of Directors created a Lead Independent Director role, entrusting Hanne B. Sørensen, Vice-Chairperson of the Board of Director, with this responsibility. There will be no additional compensation for the role of Lead Independent Director.

The compensation model applicable to the Board of Directors for the period between the Annual General Meetings 2023 and 2024 remains unchanged.

Compensation model of the Board of Directors

Annual retainer (gross)	Cash compensation in CHF	Share-based compensation[2] in CHF	Expense allowance in CHF	Secretarial allowance in CHF
Board Chairperson[1]	825,000	825,000	10,000	60,000
Board Vice-Chairperson[1]	200,000	200,000	10,000	
Board member	100,000	100,000	10,000	

Committee fees (gross)[1]	Cash compensation in CHF
Audit Committee Chairperson	160,000
Other Committee Chairpersons (NCGC, HSSC)	125,000
Committee member	40,000

[1] The Board Chairperson and Vice-Chairperson are not eligible for committee fees.
[2] Converted into shares based on the average share price between 1 January 2023 and 15 February 2023.

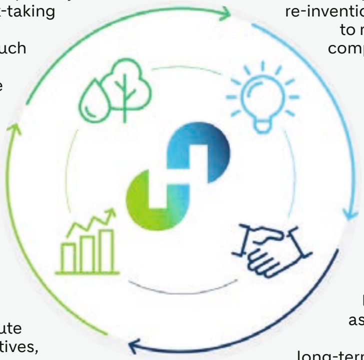
Compensation system: Executive Committee

Compensation principles

Executive compensation is designed to reinforce the Holcim strategy by supporting the company to attract, motivate and retain talent, while aligning their interests with those of shareholders. The compensation principles have been reformulated as follows, in line with our "Strategy 2025 – Accelerating Green Growth".

DRIVE SUSTAINABLE AND SOCIAL IMPACT
Our compensation programs are directly linked to our sustainability strategy, and especially to our climate goals. Extensive risk-taking and short-termism are strongly discouraged, especially when such behaviors could jeopardize our sustainable success. We believe in equal pay for equal work. Our compensation programs are straightforward and communicated transparently, both internally and externally.

ACCELERATE INNOVATION
With a strong focus on growth and sustainability, our compensation programs incentivize re-invention of our products and services to reach net-zero. Our competitive compensation also helps us attract, retain and motivate highly talented individuals who contribute to this goal as well as maintaining an agile and diverse workplace.



PAY FOR PERFORMANCE
Our incentive plans reward short-term performance and long-term success through a balanced combination of absolute and relative performance objectives, as well as using financial and non-financial metrics. Non-financial goals focus on climate, environment and our broader role in society.

CREATE SHAREHOLDER VALUE
Our share-based compensation plans foster long-term thinking and success as they strengthen the alignment of our management with the long-term interests of our shareholders. Our executives are expected to build a minimum level of share ownership over time so that they always have "skin in the game".

Compensation model of the Executive Committee

The compensation for members of the Executive Committee includes the following elements:

- Annual base salary
- Pensions and benefits
- Variable compensation: annual and long-term incentive

Base salaries

Annual base salaries are established on the basis of the following factors:

- Scope, size, and responsibilities of the role; skills required to perform the role
- External market value of the role
- Skills, experience and performance of the individual in the role

To ensure market competitiveness, base salaries of the Executive Committee are reviewed annually taking into consideration the company's affordability, benchmark information, internal consistency and individual performance. The objective is to provide salaries broadly in line with the competitive market practice of selected comparable SMI companies (refer to section "Compensation Governance" for further details on the benchmarking peer group).

Compensation model of the Executive Committee

Element	Purpose	Structure	Drivers	Performance objectives
Base salary	Attract and retain	Fixed amount paid monthly in cash	• Role & responsibilities • Market value • Experience	
Pensions and insurances	Protect against risks	Pension contributions and benefits, insurances	• Market practice • Role	
Benefits	Attract and retain	• Perquisites • Car or allowance • Relocation benefits	• Market practice • Role	
Annual incentive	Reward for short-term performance	Annual variable amount paid half in cash and half in shares blocked for three years	Annual financial and non-financial performance	• Group relative Sales growth • Group relative Recurring EBIT growth • Recurring EBIT • Free Cash Flow after leases • Health, Safety and Environment
Long-term incentive (LTI)	• Reward for long-term performance • Align with shareholders' interests • Retain	• Performance shares subject to a three-year vesting • Performance options subject to a five-year vesting	Long-term financial and non-financial performance	• EPS before impairment and divestments • ROIC • Sustainability • Relative TSR

COMPENSATION REPORT CONTINUED

Pension

Executive Committee members participate in the benefits plans available in the country of their employment. Benefits consist mainly of retirement, insurance and healthcare plans that are designed to provide a reasonable level of protection for the employees and their dependents with regards to health, retirement, death and disability. The members of the Executive Committee with a Swiss employment contract participate in Holcim's defined benefit pension scheme applicable to Swiss-based senior management, which is set up to achieve, for executives retiring from Holcim at age 62 and assuming ten years of service in senior management and 20 years of service with the Group, an amount of 40 percent of the average of the last three years' base salaries, inclusive of all other pension incomes participants may benefit from. Early or deferred retirement pensions are adjusted based on actuarial calculations. The members of the Executive Committee under foreign employment contracts are insured commensurately with market conditions and with their position. Each plan varies in line with the local competitive and legal environment and is, as a minimum, in accordance with the legal requirements of the respective country.

Benefits and perquisites

Members of the Executive Committee may receive certain executive perquisites such as a company car or allowances and other benefits in kind, in line with competitive market practice in their country of employment. Executives who are relocating may also be provided with expatriate benefits such as housing, schooling, travel benefits and tax advice, in line with the Holcim international mobility policy. These other compensation elements are included in the compensation table at fair value.

Annual incentive

The annual incentive rewards the financial results as well as the achievement of a Health, Safety and Environment (HSE) objective at Group and regional level (depending on the function) over a time horizon of one year.

The annual incentive target (i.e., incentive amount at 100 percent target achievement) is expressed as a percentage of base salary and amounts to 125 percent for the CEO and 75 percent for the other members of the Executive Committee. The payout is capped at 200 percent of target, i.e., 250 percent of base salary for the CEO and 150 percent of the base salary for the other Executive Committee members.

The financial performance is measured both in absolute terms (against own-set targets) and in relative terms compared to a peer group of companies that are exposed to similar market cycles.

- The absolute financial performance includes Recurring EBIT as a measure of Group and regional operational profitability, as well as Free Cash Flow after leases as a measure of the company's ability to generate cash. For those objectives, the NCGC determines a target level of expected performance (corresponding to a 100 percent payout), as well as a threshold level of performance below which there is no payout, and a maximum level of performance above which the payout is capped.
- The relative financial performance includes Group sales growth and Group Recurring EBIT growth compared to peer companies. The intention of measuring Group sales growth and Recurring EBIT growth against peer companies is to neutralize market factors outside of management control. The objective is to perform better than the peer companies (regardless of market circumstances) and to reach at least median performance within the peer group, which corresponds to a 100 percent payout factor. The peer group includes companies that were chosen for their comparable products, technologies, customers, suppliers or investors and are thus exposed to similar market cycles. The companies of the peer group are listed below. The measurement of the relative Group performance is provided by Obermatt, an independent Swiss financial research firm focused on indexing company performance.

Performance Peer Group

Cement producers	Building materials	Construction
Boral	Carlisle	Acciona
Buzzi Unicem	James Hardie	ACS
Cemex	RPM	Bouygues
CRH	Saint-Gobain	Vinci
Heidelberg Materials	Sika	
Vicat		

Performance Objectives and Weightings

Performance objective	Weighting
Relative Group sales growth	15%
Relative Group Recurring EBIT growth	15%
Recurring EBIT	20%
Free Cash Flow after leases	35%
Health, Safety and Environment	15%

The achievement of the HSE objective is measured as a scorecard including both leading and lagging performance objectives and based on four elements.

- HSE Improvement Plan (HSE-IP): the HSE-IP is determined at country level and includes strategic objectives such as key risk control and process safety management, health & well-being, industrial hygiene, road safety and incident elimination control. For the regions and the Group, an average of the HSE-IP scores of the countries, respectively the regions, is used to determine the achievement level.
- Critical Risk Elimination (CRE): CRE objectives include action closure based on the findings of HSE audit and of the safety management process for each country. For the regions and the Group, an average of the CRE scores of the countries, respectively the regions, is used to determine the achievement level.
- Lost-Time Injury Frequency Rate (LTIFR): LTIFR score reflecting improvements in the Lost-Time Injury Frequency Rate at country, regional and Group level.
- Management evaluation criteria: evaluation of the overall outcome during the year with regards to workplace safety.

The annual incentive is paid half in cash and half in shares subject to a three-year blocking period.

The annual incentive design applicable to the Executive Committee is summarized on page 135.

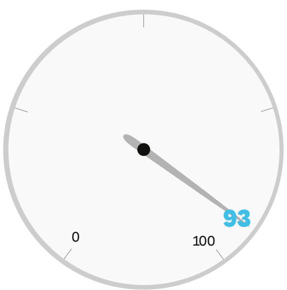
The annual incentive is subject to clawback and malus provisions. In case of financial restatement due to non-compliance to the accounting standards and/or fraud, or in case of violation of law and/or internal rules, the Board of Directors may deem all or part of the annual incentive to forfeit (malus) or may seek reimbursement of all or part of any paid annual incentive (clawback). Those provisions may be enforced within three years of any year subject to a financial restatement or during which the fraudulent behavior happened.

In case of termination of employment, any potential payment of the annual incentive is paid pro-rata and based on the effective performance (determined after year end) capped at the target amount (pro-rata).

2023 onwards
The design of the annual incentive remains unchanged for 2023.

Health, Safety and Environment scorecard

Overall HSE Continuous Improvement Score (CIS)



	Threshold	Target	Stretch
CIS	55	85	100
Payout	50%	100%	200%

Health, Safety and Environment Improvement Plan (HSE-IP)

At country level: strategic objectives in the areas of
- Leadership and competence
- Key risk control and process safety management
- Systems & processes
- Health, well-being and industrial hygiene
- Road safety: on-site and off-site traffic safety
- Incident elimination control

HSE-IP score based on percentage completion of strategic objectives (score of 85 if all objectives are achieved)

Critical Rist Elimination (CRE)

At country level: Group HSE audit and Process Safety Management (PSM) inspection

CRE score based on action closure (score of 100% if action closure of audit + PSM findings completed on time)

Lost-Time Injury Frequency Rate (LTIFR)

Number of on-the-job injuries that require a person to stay away from work for a day or more per one million hours worked, goal to improve versus previous year

LTIFR score based on specific target set at country, region or Group level

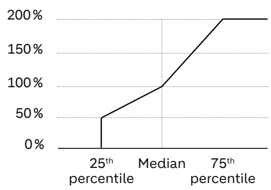
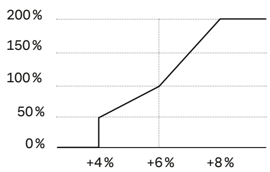
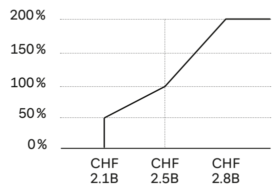
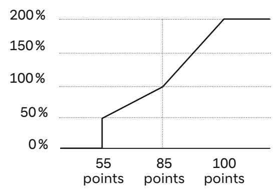
Management evaluation criteria

Evaluation of the overall outcome during the year with regards to workplace safety at country, region or Group level

COMPENSATION REPORT CONTINUED

Design of the annual incentive 2022

Role	CEO	Other Executive Committee members
Target opportunity	125% of salary	75% of salary
Maximum opportunity	250% of salary	150% of salary

Performance objectives	Relative Group performance	Recurring EBIT growth (Group or region)*	Free Cash Flow after leases (Group or region)*	Health, Safety and Environment (HSE) (Group or region)*
Purpose	Measures Group's performance compared to peer companies exposed to similar market cycles	Measures Group or regional operational profitability	Measures the company's ability to generate cash	Measures health, safety and environment indicators to ensure a safe workplace
Definition	Relative Group sales growth (50%) and relative Group Recurring EBIT growth (50%) expressed as percentile ranking in the peer group of companies and measured on a like-for-like basis	Growth versus prior year of the operating profit before impairment of operating assets and before restructuring, litigation and other non-recurring costs measured on like-for-like basis	Cash flow from operating activities, adjusted for net maintenance and expansion capital expenditures and repayment of long-term lease liabilities	Scorecard over 100 points based on four elements: Health, Safety and Environment Improvement Plan (HSE-IP), Critical Risk Elimination (CRE), Lost-Time Injury Frequency Rate (LTIFR) and management evaluation criteria
Weighting	30%	20%	35%	15%
Targets for 2022	Ranking at the median of the peer group. This is unchanged compared to the ranking target applicable in 2021 and is in line with our ambition to outperform our peers on top-line and bottom-line growth	Recurring EBIT growth of 6%. This is a decrease compared to the target of 8% growth in 2021, which is driven by the fact that the baseline in 2021 (for the 2022 target) was higher than the baseline in 2020 for 2021 and that higher energy prices and inflation were expected, slowing down the growth rate in 2022 compared to 2021	Free Cash Flow after leases of CHF 2.5 billion. This is an increase compared to the target of CHF 2.3 billion for 2021, which is driven by the "Strategy 2025 – Accelerating Green Growth"	85 points on the HSE scorecard. This is unchanged compared to the HSE targets applicable in 2021 and is in line with our ambition to improve health, safety and environment globally
Payout formula (threshold, target and cap for the Group)				

* Group level for corporate Executive Committee roles, regional level for regional Executive Committee roles

Long-term incentives

Our compensation philosophy is to align a significant portion of compensation of the Executive Committee with long-term company performance and to strengthen alignment with shareholders' interests. To support "Strategy 2025 – Accelerating Green Growth", the grant awarded under the long-term incentive consists of both performance shares and performance options.

Performance shares

Performance shares are subject to a three-year vesting period based on three equally weighted performance objectives: earnings per share (EPS) before impairment and divestments, return on invested capital (ROIC) adjusted for changes in scope and sustainability. These performance objectives have been chosen as they reflect the strategic priorities of the Group to increase profitability through strong operating leverage (EPS), to improve how the company generates profits relative to the capital it has invested in its business (ROIC) and to mitigate the company's impact on the environment (sustainability). The sustainability objective encompasses three pillars of the company's sustainability strategy in line with Holcim's commitment to build a net-zero future with science based targets (see also box on the right):

- Climate and energy: reduction of CO_2 emissions (scope 1) per ton of cementitious material produced (50 percent weight). Scope 1 includes all emissions released directly from the operations, which account for around 60 percent of the overall footprint and are at the core of the emission strategy of Holcim
- Circular economy: quantity of recycled waste derived resources (25 percent weight)
- Environment: reduction of freshwater withdrawal per ton of cementitious material produced (25 percent weight)

For all three objectives, the NCGC determines a threshold performance level (below which there is no vesting), a target level (vesting of 100 percent) and a stretch performance level (vesting of 200 percent). Between these levels, vesting is calculated on a straight-line basis.

Performance options

Performance options are subject to a five-year vesting period based on Holcim's relative total shareholder return (TSR) compared to a group of peer companies, and have a maturity of ten years. Threshold vesting (25 percent of maximum) will be achieved if the median of the peer group is reached, target vesting (50 percent of maximum) will be achieved if the 60th percentile is reached, and full vesting (100 percent) will be achieved if the 75th percentile is reached on average during the five-year vesting period. There will be no vesting for performance below the median of the peer group. The vesting level between threshold, target and full vesting is calculated on a straight-line basis. The companies of the peer group are the same as for the annual incentive and are listed on page 138.

Once vested, the LTI awards (performance shares and performance options) are not subject to a further holding period. The performance option can be exercised during a period of five years after the vesting.

The unvested LTI awards forfeit upon termination of employment, except in case of retirement, ill-health, disability, by reason of the employment being with a company/business which ceases to be a Group member, termination by the employer within 18 months from a relevant merger & acquisition transaction or any other cases at the discretion of the NCGC. In such circumstances, unvested LTI awards are subject to a pro-rata vesting (for the number of full months between grant date and termination date), without acceleration, i.e., the vesting of the pro-rated number of awards will occur at the regular vesting date, subject to performance measurement over the entire performance period. In the event of death and change of control (unless the unvested LTI awards are replaced by an equivalent award following the change of control) unvested LTI awards vest immediately on a pro-rata basis assuming that performance conditions are met. For the avoidance of doubt, LTI awards always lapse when termination is due to voluntary resignation or gross misconduct.

The LTI awards are subject to clawback and malus provisions for a period of three years after vesting in case of financial restatement, error or inaccurate or misleading information to assess the fulfillment of performance conditions or a termination for cause.

The long-term incentive design applicable to the Executive Committee is summarized on the next page.

Science based targets

Holcim's commitment to build progress for people and the planet includes ambitious targets related to climate, waste and freshwater withdrawal. Holcim was the first global building materials company to sign the "Business Ambition for 1.5°C" pledge with the Science Based Target initiative (SBTi) and in November 2022 upgraded its 2030 climate targets, validated by SBTi, in line with its sector's new 1.5°C science-based framework.

The CO_2 target included in the performance objectives of the long-term incentive are based on CO_2 targets validated by the SBTi.

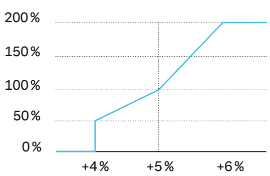
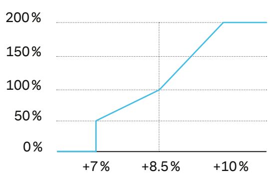
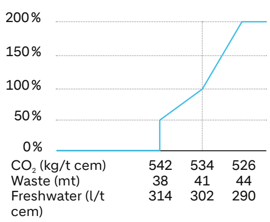
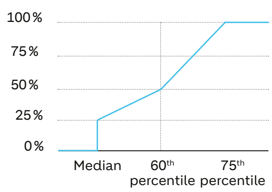
2023 onwards

The design of the LTI remains unchanged for 2023.

COMPENSATION REPORT CONTINUED

Design of the long-term incentive

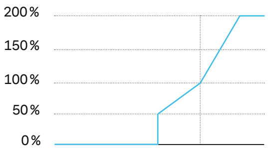
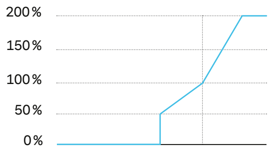
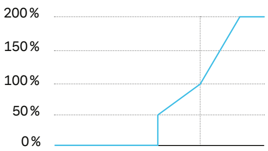
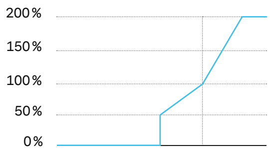
Role	CEO	Other Executive Committee members
Grant size in 2022	177.4% of salary (125% in performance shares, 52.4% in performance options)	96.3% of salary (70% in performance shares, 26.3% in performance options)

Performance objectives	EPS growth before impairment and divestments (performance shares)	ROIC (performance shares)	Sustainability (performance shares)	Relative TSR (performance options)
Purpose	Measures the company's profitability to investors	Measures the company's ability to generate returns from invested capital	Measures the company's improvement in mitigating the impact of its operations on the environment	Measures the company's ability to provide investors with strong returns
Definition	EPS adjusted for after tax gains and losses on disposals of Group companies and impairments of goodwill and long-term assets	ROIC at year end 2024, adjusted for changes in scope between 2022 and 2024	Climate and energy: CO_2 emission (scope 1) measured in kg CO_2/t cem (50% weight); circular economy: quantity of waste recycled in million tons (25% weight); environment: freshwater withdrawn in liters freshwater/t cem (25% weight)	Holcim's TSR over the five-year performance period, starting on 1 January 2022, and ending on 31 December 2026 expressed as a percentile ranking in a peer group of companies
Weighting	33⅓% of performance share grant	33⅓% of performance share grant	33⅓% of performance share grant	100% of performance option grant
Performance period	2022–2024	2024	2024	2022–2026
Targets for the 2022 grant	EPS growth of 5% p.a. This is a decrease compared to the EPS target applicable to the performance shares granted in 2021 to take into account the inflationary environment and the higher energy prices	ROIC of 8.5% in 2024. This is an increase by 0.5% compared to the ROIC target for 2023 applicable to the performance shares granted in 2021 and is in alignment with the "Strategy 2025 – Accelerating Green Growth"	CO_2 emissions of 534 kilograms per ton of cementitious material produced in 2024. Waste of 41 million tons recycled in 2024. Freshwater withdrawal of 302 liters per ton of cementitious material produced in 2024. Those targets do not include the divested operations in India and Brazil nor Russia which was derecognized from our key performance indicators and are substantial improvements compared to the targets applicable to the performance shares granted in 2021 and are in line with our long-term net-zero ambition	Ranking at the 60th percentile of the peer group. This is unchanged compared to the ranking target applicable to the performance options granted in 2021 and is in line with our ambition to outperform our peers in terms of shareholder return
Performance vesting				
Maximum vesting level	200%	200%	200%	100%
Vesting and holding periods	Three-year cliff vesting No further holding period	Three-year cliff vesting No further holding period	Three-year cliff vesting No further holding period	Five-year cliff vesting No further holding period 10-year maturity (in total)

Adjustment of sustainability targets for the outstanding performance shares granted in 2020 and 2021

Due to the divestment of the operating activities in India and Brazil, and the derecognition of Russia from our key performance indicators, the sustainability targets for the outstanding performance shares granted in 2020 and 2021 had to be adjusted in order to comply with the "Sustainability Framework Guidelines" of the Global Cement and Concrete Association (GCCA) for CO_2 reporting. Those require the deconsolidation of divestments for the full year and the restatement of historic emissions, which are the baseline to measure the emission reductions. Consequently, India, Brazil, and Russia are fully excluded from the 2022 reported figures and the baselines (historic data) and targets have been adjusted accordingly. The new baselines were externally validated by EY & Associés.

For consistency reasons, the same methodology was applied for waste recycling and water consumption figures. The table below shows the original and adjusted targets for the outstanding performance shares granted in 2020 (measured in 2022, payout in 2023) and in 2021 (measured in 2023, payout in 2024).

Performance objectives	Original targets	Adjusted targets	Comments
Performance shares granted in 2020	Sustainability:  CO_2 (kg/t cem) 558 550 542 Waste (mt) 55 60 65 Freshwater (l/t cem) 301 291 281	Sustainability:  CO_2 (kg/t cem) 577 569 561 Waste (mt) 31 34 37 Freshwater (l/t cem) 372 360 348	The baseline 2019 results were adjusted by excluding the scope of India, Brazil and Russia and the targets were reset accordingly. The proportionality of the threshold and stretch compared to the target remains unchanged.
Performance shares granted in 2021	Sustainability:  CO_2 (kg/t cem) 550 542 534 Waste (mt) 55 60 65 Freshwater (l/t cem) 253 243 233	Sustainability:  CO_2 (kg/t cem) 555 547 539 Waste (mt) 35 38 41 Freshwater (l/t cem) 323 311 299	The baseline 2020 results were adjusted by excluding the scope of India, Brazil and Russia and the targets were reset accordingly, with an increased ambition in terms of improvement compared to the baseline.

Executive share ownership guidelines

To reflect the importance the NCGC places on aligning their interests with shareholders, Executive Committee members are required to own at least a minimum multiple of their annual base salary in Holcim shares as set out below:

- CEO: 500 percent of annual base salary
- Other Executive Committee members: 200 percent of annual base salary

Members of the Executive Committee are expected to meet the minimum shareholding requirements within four years of their appointment to the Executive Committee (or within four years of the implementation of the new guideline). To calculate whether the minimum shareholding requirement is met, all shares purchased on the market and vested shares from incentive plans are considered.

However, unvested performance shares and options are excluded. In case of non-compliance to the minimum requirements at the required date, Executive Committee members are prohibited to sell any shares held.

Further, their annual incentive (net of statutory deductions) will be paid entirely in shares. The compliance to the share ownership guidelines is monitored on an annual basis. The current shareholdings of the members of the Executive Committee can be found on page 285.

Employment contracts for the Executive Committee

The contracts of employment of the Executive Committee members are concluded for an indefinite period and may be terminated with one year's notice. Contracts of employment do not include severance compensation or change of control clauses except the vesting provisions of the LTI awards as described above. They may include non-competition provisions that are limited in time to maximum of one year and which may allow a compensation up to a maximum of 50 percent of the last paid total annual compensation.

Compensation for the financial year 2022

The tables on page 144 and 145 were audited according to Article 17 of the Ordinance against Excessive Compensation in Listed Stock Corporations.

C: Commitee chair
M: Member

AC: Audit Committee
NCGC: Nomination, Compensation and Governance Committee
HSSC: Health, Safety & Sustainability Committee

Board of Directors (audited)

	Positions as per 31 December				Share-Based compensation						
Name	AC	NCGC	HSSC	Cash compensation CHF gross	Number	Value CHF gross	Other[6] CHF gross	Subtotal CHF gross	Social Security[7] CHF	**2022 Total CHF gross**	2021 Total CHF gross
Beat Hess				825,000	15,581	825,000	70,000	1,720,000	0	**1,720,000**	1,720,000
Hanne B. Sørensen		C		227,083	2,990	158,333	10,000	395,416	0	**395,416**	339,584
Oscar Fanjul[1]				0	0	0	0	0	0	**0**	170,833
Dieter Spälti[2]				83,333	1,574	83,333	4,167	170,833	4,560	**175,393**	364,562
Philippe Block[5]			C	189,583	1,889	100,000	10,000	299,583	4,560	**304,143**	263,935
Kim Fausing	M			140,000	1,889	100,000	10,000	250,000	0	**250,000**	250,000
Leanne Geale[3]			M	81,667	1,102	58,333	5,833	145,833	4,328	**150,161**	0
Colin Hall[2]				58,333	787	41,667	4,167	104,167	0	**104,167**	250,000
Jan Jenisch[4]				0	0	0	0	0	0	**0**	0
Patrick Kron	C			276,667	1,889	100,000	10,000	386,667	0	**386,667**	410,000
Naina Lal Kidwai			M	140,000	1,889	100,000	10,000	250,000	0	**250,000**	250,000
Adrian Loader[2]				110,417	787	41,667	4,167	156,251	0	**156,251**	375,000
Ilias Läber[3]	M	M		105,000	1,102	58,333	5,833	169,166	4,560	**173,726**	0
Jürg Oleas	M	M		163,333	1,889	100,000	10,000	273,333	4,560	**277,893**	254,560
Claudia Sender Ramirez		M	M	180,000	1,889	100,000	10,000	290,000	0	**290,000**	273,333
Total[9]				**2,580,416**	**35,257**	**1,866,666**	**164,167**	**4,611,249**	**22,568**	**4,633,817**	**4,921,807**

[1] Board member until 4 May 2021.
[2] Board member until 4 May 2022.
[3] Board member since 4 May 2022.
[4] Does not receive compensation for his function on the Board of Directors.
[5] Includes CHF 9,375 as compensation for participation in the Holcim Foundation for Sustainable Construction.
[6] Expense allowances and secretarial allowance for the Chairperson of the Board.
[7] This amount includes social security contributions to the extent that they result in a future benefit entitlement. Additional contributions that do not result in an increase of the benefit entitlement are excluded (additional contributions in the amount of CHF 143,184 are excluded).

Explanations

In 2022, 13 non-executive members of the Board of Directors received in total compensation of CHF 4.6 million (2021: CHF 4.9 million) of which CHF 2.6 million was paid in cash (2021: CHF 2.7 million), CHF 0.02 million in the form of social security contributions (2021: CHF 0.01 million), and CHF 1.9 million in shares (2021: CHF 2.0 million). Other compensation paid totaled CHF 0.2 million (2021: CHF 0.2 million).

The total compensation of the Board of Directors as well as the compensation structure and levels remained unchanged from the previous year.

At the Annual General Meeting 2021, shareholders approved a maximum aggregate amount of compensation of CHF 5,200,000 for the Board of Directors for the term until the Annual General Meeting 2022. The compensation paid to the Board of Directors for this term was CHF 4,843,680 and is therefore within the approved limits.

At the Annual General Meeting 2022, shareholders approved a maximum aggregate amount of compensation of CHF 5,000,000 for the Board of Directors for the term until the Annual General Meeting 2023. The compensation paid to the Board of Directors for this term is anticipated to be approximately CHF 4.5 million. The final amount will be disclosed in the 2023 Annual Report.

Executive Committee (audited)

				Performance shares[2]	Performance options[3]			
Executive	Base salary CHF gross	Other fixed pay[1] CHF gross	Annual incentive CHF gross	Fair value at grant CHF gross	Fair value at grant CHF gross	Social/pension contributions[4] CHF	**Total 2022 CHF gross**	Total 2021 CHF gross
Jan Jenisch 1 January until 31 December 2022	1,800,000	33,522	3,827,250	2,193,450	943,200	359,687	**9,157,109**	9,044,143
Other members 1 January until 31 December 2022	6,831,324	1,946,445	8,836,877	4,216,560	1,625,019	2,199,960	**25,656,185**	27,348,987
Total	**8,631,324**	**1,979,967**	**12,664,127**	**6,410,010**	**2,568,219**	**2,559,647**	**34,813,294**	**36,393,130**

1 Includes the value of benefits in kind: car allowance and benefits for internationally mobile members (expatriates) such as housing, schooling and tax consulting.
2 Performance shares granted under the long-term incentive plan, subject to a three-year performance-based vesting period. The disclosed amount corresponds to the fair value at grant.
3 Performance options granted under the long-term incentive plan, subject to a five-year performance-based vesting period. The disclosed amount corresponds to the fair value at grant.
4 Includes contribution to social security and occupational pension plans. Contributions to social security plans for members employed in Switzerland include social security contributions to the Swiss old age, survivors and disability insurance (OASI/AHV/IV/EO) to the extent that they result in a future benefit entitlement. Additional contributions that do not result in an increase of the benefit entitlement are excluded (additional contributions in the amount of CHF 1,659,094 are excluded). Contributions to social security plans for members employed outside of Switzerland include the contributions effectively paid in the reporting year.

COMPENSATION REPORT CONTINUED

Explanations

The total annual compensation for the eleven members of the Executive Committee for 2022 amounted to CHF 34.8 million (2021: CHF 36.4 million). This amount comprises base salaries, other fixed pay and annual incentive of CHF 23.3 million (2021: CHF 23.3 million), equity-based long-term incentive of CHF 9.0 million (2021: CHF 10.2 million), employer contributions to social security and pension plans of CHF 2.6 million (2021: CHF 2.9 million).

The compensation changes for 2022 compared to 2021 are mainly caused by the following factors:

- The composition of the Executive Committee has changed compared to previous year. One new member was appointed to the Executive Committee. One member left the Executive Committee, however his compensation is included on a full-year basis considering that he is still in the notice period. Therefore, the compensation table includes eleven Executive Committee members in 2022, of which ten on a full-year basis, compared to ten members on a full-year basis in 2021.
- The base salary of the CEO and one Executive Committee member was increased between 2021 and 2022. The base salaries of all other Executive Committee members have not been adjusted. Considering that the target STI and LTI are defined as a fixed percentage of the base salary, the target STI and LTI as monetary amounts increased for the said member who received a salary increase and remained unchanged for all other members.
- 2022 was a record year for Holcim. The overall annual incentive payout of 169.5 percent compares to an overall payout of 182 percent in previous year. Further details are provided on the next page.
- The other payments decreased substantially considering that no replacement award was paid out in the reporting year.

The compensation awarded to the Executive Committee members for 2022 in the amount of CHF 34,813,294 is within the total maximum amount of compensation for the Executive Committee for the financial year 2022 of CHF 42,500,000 approved at the Annual General Meeting 2021.

Performance in 2022

2022 was a record year for Holcim. Net sales of CHF 29,189 million for 2022 were up +12.9 percent on a like-for-like basis compared to the prior year. The increase was driven by the fast expansion of Solutions & Products, which grew by 54 percent compared to 2021. Recurring EBIT reached a record CHF 4,752 million for 2022, up +7.2 percent on a like-for-like basis compared to the prior-year period. This record result was driven by very strong margins in the roofing business as well as positive price over cost for cement, aggregates, and ready-mix combined. Holcim’s net financial debt was CHF 6,032 million at the end of 2022 for a record-low leverage ratio of 0.9×.

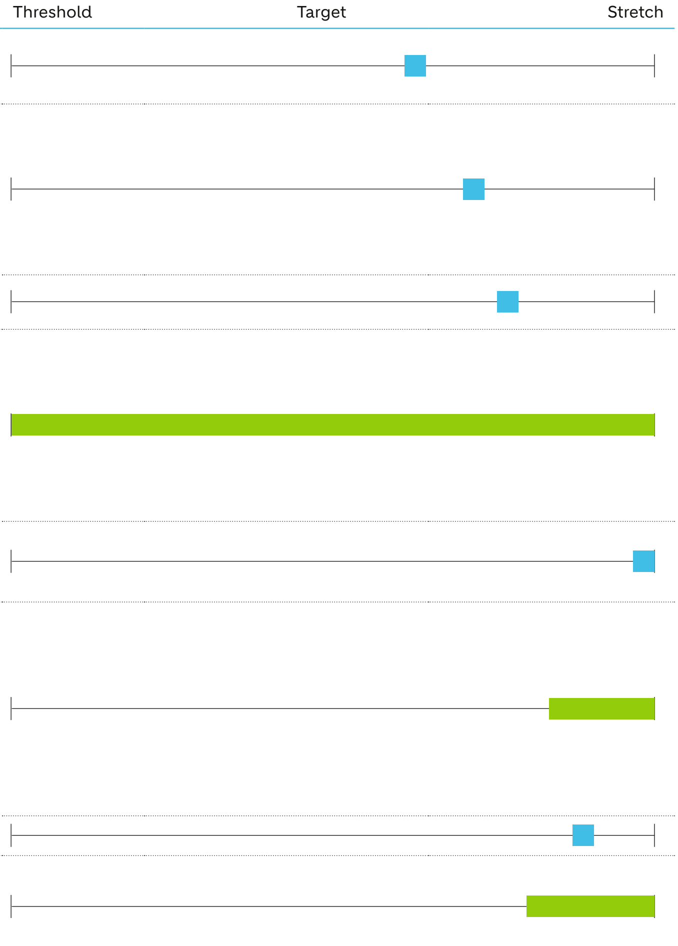
We continued to advance our leadership in sustainability with the reduction of CO_2 per net sales of 21 percent in 2022, with a target to reduce it by another 10 percent in 2023. We continue to expand green building solutions with ECOPact low-carbon concrete reaching 13 percent of Ready-Mix Concrete net sales in 2022, on target to reach 25 percent by 2025.

With those results, the Group outperformed the peer companies in terms of relative performance and exceeded its Recurring EBIT growth and Free Cash Flow after leases targets. Three regions reached the stretch level of performance on both Recurring EBIT growth and Free Cash Flow after leases. With regards to HSE, the safety of the workplace was again substantially improved year on year and the performance targets were exceeded as well.

Overall, the annual incentive amounted to 170.1 percent of target for the CEO (212.6 percent of salary) and 169.4 percent on average for the other members of the Executive Committee (127.1 percent of salary). The ratio of variable versus total compensation amounted to 76.0 percent for the CEO and to 57.2 percent on average for the other members of the Executive Committee.

Payout of the annual incentive in 2022

Performance objectives	Results		Payout Percentage (Threshold – Target – Stretch)
Relative Group performance (30%)[1]	With a Group net sales growth of 11.5% (adjusted basis), Holcim achieved the 57th percentile in the peer group. With a Recurring EBIT growth of 1.2% (adjusted basis), Holcim achieved the 63th percentile in the peer group. On a combined basis Holcim achieved the 60th percentile (140% payout factor).	Net Sales growth	
		Recurring EBIT growth	
Recurring EBIT (20%) (Group or regional)	The 2022 Group Recurring EBIT growth like-for-like was 7.2% compared to a target of 6%, which corresponds to a payout factor of 162%. The regional EBIT performance was mixed with one region below the threshold (0% payout factor) and all other regions exceeding the stretch (200% payout factor).	Group Recurring EBIT	
		Regional Recurring EBIT	
Free Cash Flow after leases (35%) (Group or regional)	The Group Free Cash Flow (FCF) after leases and before the DOJ resolution was CHF 3,544 million compared to a target of CHF 2,500 million, which corresponds to a payout factor of 200%. The regional FCF after leases performance was mixed with one region below stretch (171% payout factor) and all other regions exceeding the stretch (200% payout factor).	Group FCF after leases	
		Regional FCF after leases	
Health, Safety and Environment (HSE) (15%) (Group or regional)	At Group level, the HSE score reached 95.7 points, resulting in a payout factor of 171% and all regional HSE scores were above target once again.	Group HSE score	
		Regional HSE score	
Total		**Overall payout of 170.1% for the CEO and of 169.4% on average for the other Executive Committee members**	



[1] The relative Group performance assessment is based on a best estimate at time of publication (i.e., includes an estimate for companies that did not yet publish their annual results). The final achievement level will be calculated by Obermatt before the payout date in March 2023 based on the annual report publications of the peer companies.

COMPENSATION REPORT CONTINUED

Performance shares granted in 2019 vested in March 2022 conditional upon EPS before impairment and divestments and ROIC, both measured over the year 2021. The vesting of this grant applies to all current ten Executive Committee members and is disclosed in the first table below.

Performance shares granted in 2020 will vest in March 2023 conditional upon EPS before impairment and divestments, ROIC, and sustainability objectives all measured in 2022.

The performance period applying to this grant is therefore already completed and the payout of the plan can already be assessed. The vesting of this grant applies to all current ten Executive Committee members and is disclosed in the second table below.

Performance options granted in 2018 are subject to a five-year vesting period based on total shareholder return (TSR) and will vest in March 2023. The vesting level is not final at time of publication of this report but is expected to be below threshold (0 percent payout). There are no performance options vesting before March 2023.

Vesting of the long-term incentive in 2022: performance shares granted under the long-term incentive in 2019

Grant	Performance objectives	Definition	Target	Result and payout	Payout calculation
2019 Performance shares	**EPS growth (60%)**	Earnings per share before impairment and divestments in 2021: adjusted for after tax gains and losses on disposals of Group companies and impairments of goodwill and long-term assets in 2021	EPS growth of 8%	EPS of CHF 3.98 leads to a 200% payout	60% * 200%
	ROIC (40%)	Return on invested capital at year end 2021, adjusted for changes in scope between 2019 and 2021	ROIC of 8%	ROIC of 9.2% leads to a 200% payout	40% * 200%
	Total				**= overall vesting of 200%**

Vesting of the long-term incentive in 2023: performance shares granted under the long-term incentive in 2020

Grant	Performance objectives	Definition	Target	Result and payout	Payout calculation
2020 Performance shares	**EPS growth (33 1/3%)**	Earnings per share before impairment and divestments in 2022: adjusted for after tax gains and losses on disposals of Group companies, and impairments of goodwill and long-term assets, and the DOJ resolution in 2022	EPS growth of 7%	EPS of CHF 4.96 leads to a 200% payout	33 1/3% * 200%
	ROIC (33 1/3%)	Return on invested capital at year end 2022, adjusted for changes in scope between 2020 and 2022	ROIC of 8%	ROIC of 9.5% leads to a 200% payout	33 1/3% * 200%
	Sustainability (33 1/3%)	Climate and energy in 2022: CO_2 emission measured in kg CO_2/t cem (50% weight); circular economy in 2022: quantity of waste re-used in million tons (25% weight); environment in 2022 freshwater withdrawn in liters freshwater/t cem (25% weight)	CO_2 (kg/t cem): 569 Waste (mt): 34 Freshwater (l/t cem): 360	CO_2 of 561.5 (kg/t cem), Waste of 34 (mt) and Freshwater of 303.7 (l/t cem) leads to a 171.9% payout	33 1/3% * 171.9%
	Total				**= overall vesting of 190.6%**

Loans or credit facilites granted to members of governing bodies

There were no loans or credit facilities granted to members of the Executive Committee, members of the Board of Directors or to parties closely related to members or former members of governing bodies in 2022. There were no loans or credit facilites to any of those parties outstanding on 31 December 2022.

Compensation for former members of governing bodies

During 2022 and 2021, no payments were made to former members of the Executive Committee and members of the Board of Directors.

During 2022 and 2021, no payments were made to parties closely related to members or former members of the governing bodies.

Share ownership information

Board of Directors

On 31 December 2022, members of the Board of Directors held a total of 712,437 registered shares in Holcim Ltd. This number comprises privately acquired shares and those allotted under participation and compensation schemes. Until the announcement of market-relevant information or projects to the public, the Board of Directors, the Executive Committee and any employees possessing such market-relevant information are prohibited from effecting transactions with equity securities or other financial instruments of Holcim Ltd, exchange-listed Group companies or potential target companies (trade restriction period).

Ownership of shares and options: Executive Committee

As of 31 December 2022, members of the Executive Committee held a total of 924,815 registered shares in Holcim Ltd. This figure includes both privately acquired shares and those allocated under participation and the Group's compensation schemes.

Shares held by the Board of Directors

Name	Position	**Shares held as of 31 December 2022**	Shares held as of 31 December 2021
Beat Hess	Chairperson	**116,928**	100,510
Hanne B. Sørensen	Vice-Chairperson (since 4 May 2022)	**17,114**	15,124
Dieter Spälti	Vice-Chairperson (until 4 May 2022)	**n/a**	58,653
Philippe Block	Member	**3,150**	1,159
Kim Fausing	Member	**3,150**	1,159
Leanne Geale	Member (since 4 May 2022)	**0**	0
Colin Hall	Member (until 4 May 2022)	**n/a**	3,126
Jan Jenisch	Member	**531,000**	400,000
Patrick Kron	Member	**9,276**	7,285
Naina Lal Kidwai	Member	**5,117**	3,126
Adrian Loader	Member (until 4 May 2022)	**n/a**	25,527
Ilias Läber	Member (since 4 May 2022)	**8,000**	0
Jürg Oleas	Member	**13,585**	11,594
Claudia Sender Ramirez	Member	**5,117**	3,126
Total		**712,437**	**630,389**

Number of shares and options held by Executive Committee members as of 31 December 2022

Name	Position	Total number of shares owned	Total number of performance options held (at target)	Total number of performance options held (at maximum)	Total number of performance shares held (at target)	Total number of performance shares held (at maximum)
Jan Jenisch	CEO	531,000	948,902	1,897,804	136,956	273,912
Magali Anderson	Member	32,502	128,632	257,264	28,746	57,492
Mathias Gärtner	Member	9,266	31,944	63,887	12,230	24,460
Jamie Gentoso	Member	11,834	56,763	113,526	18,452	36,904
Feliciano González Muñoz	Member	48,111	170,532	341,064	28,746	57,492
Miljan Gutovic	Member	58,793	177,086	354,172	30,343	60,686
Martin Kriegner	Member	73,296	197,822	395,643	30,537	61,074
Oliver Osswald	Member	43,011	194,656	389,311	30,956	61,912
Géraldine Picaud	Member	114,281	270,061	540,121	44,224	88,448
Toufic Tabbara	Member	2,721	32,215	64,429	12,780	25,560
Total		**924,815**	**2,208,613**	**4,417,221**	**373,970**	**747,940**

Number of shares and options held by Executive Committee members as of 31 December 2021

Name	Position	Total number of shares owned	Total number of performance options held (at target)	Total number of performance options held (at maximum)	Total number of performance shares held (at target)	Total number of performance shares held (at maximum)
Jan Jenisch	CEO	400,000	757,971	1,515,941	130,760	261,520
Magali Anderson	Member	20,444	94,027	188,053	20,084	40,168
Mathias Gärtner	Member	0	0	0	4,502	9,004
Jamie Gentoso	Member	1,500	24,549	49,097	11,072	22,144
Feliciano González Muñoz	Member	25,050	135,927	271,853	27,999	55,998
Miljan Gutovic	Member	30,334	139,819	279,637	28,978	57,956
Martin Kriegner	Member	52,821	165,377	318,153	30,454	60,908
Oliver Osswald	Member	26,284	157,388	314,776	30,152	60,304
Géraldine Picaud	Member	88,710	216,822	433,643	41,673	83,346
René Thibault	Member	39,370	145,531	278,461	26,645	53,290
Total		**684,513**	**1,837,411**	**3,649,614**	**352,319**	**704,638**

Furthermore, at the end of 2022, the Executive Committee held a total of 2,208,613 registered options and 373,970 performance shares (at target); these arose as a result of the participation and compensation schemes of various years. Options are issued solely on registered shares in Holcim Ltd. One option entitles the holder to buy one registered share in Holcim Ltd.

The share options outstanding held by the Executive Committee (including former members) at year end 2022 have the following expiry dates and exercise prices:

Option grant date	Expiry date		Exercise price[1]	**Number[1] 2022**	Number[1] 2021
2010 [1]	2022	CHF	70.30	**0**	33,550
2014 [1]	2022	CHF	64.40	**0**	99,532
2015 [1]	2023	CHF	66.85	**144,970**	144,970
2015 [1]	2023	CHF	63.55	**47,333**	47,333
2015	2025	CHF	50.19	**18,900**	18,900
2018	2028	CHF	55.65	**232,150**	232,150
2019	2029	CHF	49.92	**1,095,619**	1,095,619
2020	2030	CHF	45.62	**1,785,497**	1,785,497
2021	2031	CHF	51.07	**822,574**	822,574
2022	2032	CHF	46.14	**1,039,768**	0
Total				**5,186,811**	**4,280,125**

[1] Options granted before the merger of Lafarge and Holcim in July 2015.

Equity overhang and dilution as of 31 December 2022

As of 31 December 2022, the equity overhang, defined as the total number of unvested share units and options divided by the total number of shares issued amounts to 0.95%.

The company's gross burn rate defined as the total number of equities (shares, share units and options) granted in 2022 divided by the total number of shares issued amounts to 0.26%.

COMPENSATION REPORT CONTINUED

Compensation governance

Rules relating to compensation in the Holcim Articles of Incorporation

The Articles of Incorporation contain provisions regarding the approval of compensation of the Board of Directors and the Executive Management (Art. 23), the supplementary amount for new members of the Executive Committee (Art. 24), the general compensation principles (Art. 25) as well as provisions regarding the agreements with members of the Board of Directors and the Executive Committee (Art. 26). Moreover, the Articles of Incorporation contain provisions regarding the roles of the Board of Directors and the NCGC (Art. 16 to 21). The Articles of Incorporation are approved by the shareholders and are available at *holcim.com/articles-incorporation*

Annual General Meeting – shareholder involvement

According to Art. 23 of the Articles of Incorporation, the Annual General Meeting approves annually the maximum aggregate compensation of the Board of Directors for the period from the Annual General Meeting to the next Annual General Meeting as well as the maximum aggregate compensation of the Executive Committee for the following financial year. In addition, the Compensation Report is submitted to the Annual General Meeting for an advisory vote on a yearly basis.

Art. 24 of the Articles of Incorporation provides for a supplementary amount for Executive Committee members who become members of, or who are promoted to the Executive Committee during a compensation period for which the Annual General Meeting has already approved the aggregate compensation of the Executive Committee and if the compensation amount approved is not sufficient to cover the compensation of the new members.

The supplementary amount per compensation period shall not exceed 40 percent of the aggregate amount of compensation last approved by the Annual General Meeting and does not require further shareholders' approval.

Nomination, Compensation & Governance Committee

In accordance with Article 21 of the Articles of Incorporation, the NCGC supports the Board of Directors in establishing and reviewing Holcim's nomination, compensation and governance strategy and guidelines as well as in preparing the motions to the Annual General Meeting regarding the nomination and compensation of the members of the Board of Directors and of the Executive Committee. In particular, the NCGC performs the following duties:

- Nomination: Review of the composition and size of the Board of Directors to ensure appropriate expertise, diversity and independence; succession planning for the Board of Directors and its committees; preparation of the motions to the Annual General Meeting for (re-) election of candidates for positions on the Board of Directors and in the NCGC; succession planning and nominations for positions on the Executive Committee.

- Compensation: Planning and preparation of the compensation of the Board of Directors and the Executive Committee; preparation of the motions to the Annual General Meeting regarding compensation of the Board of Directors and of the Executive Committee; determination of compensation strategy and design of compensation programs including incentive plans; planning and preparation of the targets and performance assessment of the CEO and other members of the Executive Committee; preparation of the Compensation Report.

- Governance: Dealing with all corporate governance related matters; review of the proposals to be made to the Board of Directors for the amendment of the Articles of Incorporation, the organizational rules, the committees charter, the code of conduct, the overall policy landscape and the policies and directives approved by the Board of Directors; review of the criteria for the determination of the independence of members of the Board of Directors; approval of external mandates for the CEO and other Executive Committee members; review of the annual assessment of the functioning and effectiveness of the Board of Directors; review of the corporate governance section of the Annual Report.

The following table summarizes the decision authorities between the NCGC, the Board of Directors and the Annual General Meeting on compensation matters.

Decision authorities

	NCGC	Board of Directors	Annual General Meeting
Compensation strategy and design	Proposes	Approves	
Compensation Report	Proposes	Approves	Advisory vote
Maximum aggregate compensation amount of the Board of Directors	Proposes	Reviews	Approves (binding vote)
Individual compensation of members of the Board of Directors	Proposes	Approves (within the budget approved by the AGM)	
Maximum aggregate compensation amount of the Executive Committee	Proposes	Reviews	Approves (binding vote)
Individual compensation of members of the Executive Committee	Proposes	Approves (within the budget approved by the AGM)	
Performance objectives setting for the purpose of the incentive plans	Proposes	Approves	

The NCGC is composed of four members of the Board of Directors that are elected individually by the Annual General Meeting for a period of one year. At the Annual General Meeting 2022, Hanne Birgitte Breinbjerg Sørensen (Chairperson) and Claudia Sender Ramirez were re-elected to the NCGC. Two new members, Ilias Läber and Jürg Oleas, were elected to the NCGC.

The NCGC holds ordinary meetings at least four times a year. In 2022, the NCGC held four ordinary meetings according to the annual schedule below and one additional meeting on succession planning of the Board of Directors and the Executive Committee.

Annual NCGC meeting schedule

	February	July	October	December
Nomination	• Proposal of elections to the Board of Directors • Proposal of the Board of Directors composition for coming term (committees)	• Selection criteria and succession planning of the Board of Directors • Selection criteria and succession planning of the Executive Committee and senior management	• Diversity & inclusion • Talent development and engagement • Learning strategy review • Social dialogue update	• Update on succession planning of the Board of Directors and the Executive Committee
Compensation	• Proposal of AGM motions (amounts to be submitted to shareholder vote) • Performance assessment and incentive payouts for the Executive Committee (previous period) • LTI grant of the Executive Committee and senior management (current year) • Review of compliance of the Executive Committee with shareholding requirements • Review of the compensation benchmarking peer groups	• Review of the compensation strategy and system (design) • Review of the disclosure approach (feedback from shareholders) • Validation of the performance peer group	• Benchmarking of the Board compensation (every 2-3 years) and Executive Committee compensation (annually) • Review of the incentive plan design for the coming year • Forecast on expected incentive payouts (current year)	• Proposal on Board compensation for the coming term • Determination of target compensation of the Executive Committee for the coming year • Determination of performance targets of the Executive Committee for the coming year (annual incentive, LTI) • Forecast on expected incentive payouts (current year)
Governance	• Board and committee assessments • Governance Report • Compensation Report (final) • Proposal of AGM motions (other than compensation) • Governance update	• AGM retrospective: review of shareholders' feedback • Review of independence of Board and committee members • Governance update	• Governance update	• Review of governance documents: Articles of Incorporation, organizational rules, committee charters, code of conduct • Compensation Report (draft) • Validation of NCGC schedule for coming year • Governance update

In 2022, all NCGC members attended all meetings. Further information on meeting attendance is provided in the Corporate Governance Report on page [X].

The NCGC Chairperson may invite members of the Executive Committee, other officers of the Group or third parties to attend the meetings. They will however not be present when their own performance or compensation is discussed or determined. After each NCGC meeting, the Board of Directors is informed of the topics discussed, decisions taken and recommendations made. The NCGC minutes are available to all members of the Board of Directors.

External advisors

The NCGC may decide to consult an external advisor from time to time for specific compensation matters. In 2022, Agnès Blust Consulting, acquired on 1 April 2022 by PricewaterhouseCoopers (PwC), continued to act as independent compensation advisor to the NCGC. PwC provides other services to Holcim and there are clear rules in place to ensure the independence of PwC consultants. Obermatt continued to provide the measurement of the relative performance of Holcim for the purpose of the incentive plans. This company does not have other mandates with Holcim. In addition, support and expertise are provided by internal experts such as the Head of Human Resources and the Head of Compensation & Benefits.

Method for determining compensation: Benchmarking

In order to benchmark the compensation structure and levels of the Board of Directors and the Executive Committee, the NCGC determines relevant peer companies. In 2022, the NCGC conducted a thorough review of the existing peer groups to assess whether they are still relevant and appropriate.

The Swiss peer group includes Swiss listed multinational companies of the SMI: ABB, Geberit, Givaudan, Lonza, Nestle, Novartis, Richemont, Roche, SGS and Sika. Swatch Group, previously part of the peer group, is no longer part of the SMI since September 2021. As a result of the peer group review conducted in spring 2022, Swatch Group was replaced by Geberit in the peer group. Holcim is positioned slightly above the peer group median on revenue, at median on headcount and below median on market capitalization.

The challenge resides in the limited number of Swiss listed companies of a similar size and complexity as Holcim. The NCGC concluded that the companies of the existing peer group represent the most relevant peer universe for Holcim.

The international peer group consists of cement producers, building material and construction companies: Acciona, ACS, Boral, Bouygues, Buzzi Unicem, Carlisle, Cemex, CRH, Heidelberg Materials, James Hardie, RPM, Saint Gobain, Sika, Vicat, and Vinci. These companies operate in similar and related sectors and are exposed to similar market cycles as Holcim. This peer group is annually reviewed and validated by the NCGC, with the support of Obermatt as independent third-party advisor.

The compensation of the Board of Directors is regularly reviewed against prevalent market practice. The last benchmarking analysis was conducted in 2022 by PwC on the basis of the Swiss peer group as described above.

The compensation of the Executive Committee is annually benchmarked against market practice. In 2022, a benchmarking analysis of the compensation levels was conducted again with the support of PwC and Willis Towers Watson. For this purpose, Executive Committee members who are on a Swiss employment contract were benchmarked against the Swiss peer group described above (analysis performed by PwC). For Executive Committee members who are on a foreign employment contract, an industrial cut was made to the general industry data included in the database of Willis Towers Watson of the respective country of employment. The benchmarking analyses serve as basis for the NCGC to monitor the compensation of the CEO and the Executive Committee and to set their target compensation levels. The policy of Holcim is to target market median compensation for on-target performance, with significant upside for above target performance.

Overview and purpose of the peer groups

	Swiss listed peers	International peers
Board of Directors compensation	Compensation structure and levels	
Executive compensation	Compensation structure and levels	Compensation structure Relative performance (STI and LTI)

Pay equality

Pay equality is strongly embedded in Holcim's compensation principles. We conduct internal analyses to ensure that employees are paid fairly and to address any potential pay gap. In 2021, we completed the equal pay analysis in Switzerland as required by the Swiss Federal Act on Gender Equality introduced in 2020.

The results of the analysis confirm that Holcim is fully compliant with Swiss equal pay standards, with a statistical wage difference significantly below the 5 percent regulatory requirement. Deloitte audited the results of the analysis and confirmed Holcim's compliance with the legal requirements. This achievement reflects our ongoing commitment to pay equality and fairness.

TO THE GENERAL MEETING OF HOLCIM LTD

Ernst & Young Ltd
Maagplatz 1
P.O. Box
CH-8010 Zurich

Phone: +41 58 286 31 11
Fax: +41 58 286 30 04
www.ey.com/ch

To the General Meeting of Holcim Ltd

Zurich, 23 February 2023

Report of the statutory auditor on the audit of the compensation report

Opinion
We have audited the compensation report of Holcim Ltd (the Company) for the year ended 31 December 2022. The audit was limited to the information on remuneration, loans and advances pursuant to Art. 14-16 of the Ordinance against Excessive Remuneration in Listed Companies Limited by Shares (Verordnung gegen übermässige Vergütungen bei börsenkotierten Aktiengesellschaften, VegüV) in the tables marked “audited” on pages 144 and 145 of the compensation report.

In our opinion, the information on remuneration, loans and advances in the compensation report (pages 132 to 155) complies with Swiss law and Art. 14-16 VegüV.

Basis for opinion
We conducted our audit in accordance with Swiss law and Swiss Standards on Auditing (SA-CH). Our responsibilities under those provisions and standards are further described in the “Auditor’s responsibilities for the audit of the compensation report” section of our report. We are independent of the Company in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other information
The Board of Directors is responsible for the other information. The other information comprises the information included in the annual report, but does not include the tables marked ”audited” in the compensation report, the consolidated financial statements, the stand-alone financial statements and our auditor’s reports thereon.

Our opinion on the compensation report does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the compensation report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the audited financial information in the compensation report or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Board of Directors' responsibilities for the compensation report
The Board of Directors is responsible for the preparation of a compensation report in accordance with the provisions of Swiss law and the Company's articles of incorporation, and for such internal control as the Board of Directors determines is necessary to enable the preparation of a compensation report that is free from material misstatement, whether due to fraud or error. The Board of Directors is also responsible for designing the remuneration system and defining individual remuneration packages.

Auditor's responsibilities for the audit of the compensation report
Our objectives are to obtain reasonable assurance about whether the information on remuneration, loans and advances pursuant to Art. 14-16 VegüV is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law and SA-CH will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this compensation report.

As part of an audit in accordance with Swiss law and SA-CH, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement in the compensation report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made.

We communicate with the Board of Directors or its relevant committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Board of Directors or its relevant committee with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

Ernst & Young Ltd

Jacques Pierres	Daniel Zaugg
Licensed audit expert (Auditor in charge)	Licensed audit expert

MANAGEMENT DISCUSSION & ANALYSIS

▲ *Miro, the BREEAM – excellence certified class A office building in Bucharest built with DYNAMax, the Ultimate Performance Concrete*

IN THIS SECTION

GROUP PERFORMANCE

This management discussion and analysis should be read in conjunction with the shareholders' letter and the individual reports for the Group regions.

GROUP

		2022	2021	±%	±% like-for-like
Net sales	million CHF	**29,189**	26,834	+8.8%	+12.9%
Recurring Operating costs	million CHF	**(22,942)**	(20,747)	+10.6%	+14.8%
Recurring EBITDA after leases	million CHF	**6,554**	6,562	−0.1%	+3.6%
Recurring EBIT	million CHF	**4,752**	4,612	+3.0%	+7.2%
Recurring EBIT margin	%	**16.3**	17.2	−0.9pp	
Operating profit (EBIT)	million CHF	**3,221**	4,401	−26.8%	
Net income Group share	million CHF	**3,308**	2,298	+44.0%	
Net income before impairment and divestments Group share	million CHF	**2,218**	2,448	−9.4%	
Earnings per share before impairment and divestments	CHF	**3.66**	3.98	−8.0%	
Cash flow from operating activities	million CHF	**4,562**	5,045	−9.6%	
Capex	million CHF	**1,435**	1,420	+1.1%	
Free cash flow after leases	million CHF	**2,765**	3,264	−15.3%	
Return on Invested Capital (ROIC)	%	**9.5**	8.9	+0.6pp	
Net financial debt	million CHF	**6,032**	9,977	−39.5%	
Debt leverage	times	**0.9**	1.4		

FINANCIAL HIGHLIGHTS CHF

29,189M
+12.9%
Net sales[1]
2021: 26,834m

4,752M
+7.2%
Recurring EBIT[1]
2021: 4,612m

2,765M
Free Cash Flow after leases
2021: 3,264m

6,032M
-39.5%
Net financial debt
2021: 9,977m

42%
Cash conversion

[1] Percentage change figures compare 2022 and 2021 on a like-for-like basis.

Records results:
Net sales reached a record CHF 29,189 million for the full year of 2022, up by 12.9 percent on a like-for-like basis compared to the prior year. The record net sales were driven by strong pricing across all segments and a strong momentum in Solutions & Products led by the roofing business.

Net sales growth was limited by a negative scope impact of 1.4 percent, mostly driven by the divestment of India. The appreciation of the Swiss franc against several currencies also negatively affected the Net sales by 1.8 percent.

Recurring EBIT achieved a new record CHF 4,752 million for the full year 2022, up by 7.2 percent on a like-for-like basis compared to 2021. This strong result was driven by significant margin improvement in the roofing business and considerable price increases implemented across all segments, delivering a positive price over cost for cement, aggregates and ready-mix businesses combined.

Recurring EBIT growth was impacted by 2.5 percent of negative scope impact, mostly driven by the divestment of India. The appreciation of the Swiss Franc against several currencies negatively affected Recurring EBIT by 1.3 percent.

Earnings per share before impairment and divestments and before resolution with the DOJ increased by 25 percent to reach the record level of CHF 4.96 for the full year 2022 compared to CHF 3.98 in 2021. After resolution with the DOJ, Earnings per share before impairment and divestments was CHF 3.66 for the full year 2022.

Holcim delivered another record Free Cash Flow after leases, before resolution with the DOJ, of CHF 3,544 million with a cash conversion of 54 percent. After resolution with the DOJ, Free Cash Flow after leases amounted to CHF 2,765 million.

In 2022, Holcim increased its financial strength with an improving ratio of Net financial debt to Recurring EBITDA at 0.9 times, while closing the acquisition of Malarkey. The Net financial debt amounted to CHF 6,032 million as at the end of 2022.

Return on Invested Capital (ROIC) was 9.5 percent in 2022, over-achieving Holcim's Strategy 2022 target of above 8 percent.

Expansion of Solutions & Products; accelerating transformation & growth
In 2022, the segment Solutions & Products accounted for 19 percent of Group Net sales, up from 8 percent in 2020. With a strong momentum in Elevate (formerly Firestone Building Products) and acquisition of Malarkey officially closed as of 28 February 2022, the Net sales to external customers in the segment Solutions & Products reached CHF 5,518 million, higher by 54 percent in 2022 compared to the prior year. The share of Solutions & Products of the Group Net sales is targeted to reach 30 percent by 2025 under "Strategy 2025 – Accelerating Green Growth".

Continuing the expansion of the product portfolio in Solution & Products, 6 acquisitions were closed in 2022. The milestone acquisition of Malarkey was followed by the acquisitions of PRB, Cantillana and Izolbet in Europe and SES Foam and Polymer Sealants in North America (PSNA). PRB Group was the biggest independent specialty building solutions business in France. Its products and solutions are highly complementary to Holcim's and will expand the Group's reach in the high growth repair & refurbishment market. Cantillana and Izolbet offer a broad range of facade construction and external thermal insulation systems. Acquisition of these further strengthened Holcim's position in building renovation and energy efficiency solutions in the highly attractive market for renovation, thermal insulation and finishing in Europe. PSNA is a leader in coating, adhesive and sealant solutions and SES Foam LLC is the biggest independent spray foam insulation company in the US. With advanced energy-efficiency and bio-based solutions for new and green retrofitting projects, these acquisitions are highly complementary to Holcim's roofing and insulation business in North America. All these businesses are part of the segment Solutions & Products.

Holcim continued to expand its aggregates and ready-mix concrete portfolio in mature markets with 13 bolt-on acquisitions in 2022.

Further pursuing its ongoing portfolio optimization in 2022, Holcim divested its businesses in India and Brazil, which delivered a combined cash proceeds of USD 7.3 billion.

GROUP PERFORMANCE CONTINUED

Health & Safety
Health, Safety and Environment (HSE) are core values at Holcim. These values are top of mind across all operations as Holcim works to achieve Ambition "0". In 2022, Holcim's Lost Time Injury Frequency Rate (LTIFR) reached 0.53, with 97.8 percent of its sites and 44.8 percent of its countries reporting no lost-time injuries (LTIs).

Since the launch of Holcim's Ambition "0" in 2016, Holcim has divided such instances by four and will not rest until Holcim reach zero.

Holcim improved the environmental performance, reducing NO_x by 5 percent and SO_2 by 21 percent. The Group reduced dust emissions per ton of clinker by 30 percent, or 71 mg/Nm^3, surpassing its 2030 target of 75 mg/Nm^3.

Sustainability at the core of Holcim's strategy
Holcim's strong sustainability focus is embedded within all operations and is oriented around four key pillars: climate & energy, nature, people and circular economy.

In keeping with the purpose to build progress for people and the planet, Holcim was the first global building materials and solutions company to have its 2030 and 2050 net-zero targets validated by the Science Based Targets initiative (SBTi) for all scopes.

In 2022, Holcim took that leadership further by revising the 2030 targets to be aligned with a 1.5°C scenario. The SBTi approved these revised near-term targets as consistent with their 1.5°C science-based framework.

Holcim is committed to create a high-performance culture of empowerment, lifelong learning and development. A diverse and inclusive culture where everyone can develop the skills they need to thrive. With over 60,000 employees worldwide, Holcim is driven to realize full potential and make a positive difference to the world.

At Holcim, circularity is seen as the business opportunity of the time, with recycled 34 million tons of materials across the Group's business in 2022, making the Group one of the world's largest recyclers.

Construction & demolition waste (CDW) accounted for 6.8 million tons, equal to more than 1,000 truck loads each day. The plan is to double down on this rate to reach at least 10 million tons of CDW by 2025 to build more new buildings from old ones.

Holcim is committed to replenishing freshwater and increase biodiversity based on transformative rehabilitation plans. These goals were set out by the Nature strategy established in 2021 and are supported by the Nature Policy which are launched in 2022, also a first for the sector.

Sustainability-linked financing framework
Recognizing the role of sustainable finance in supporting the transition to a low-carbon and more resource efficient economy, Holcim has put in place a sustainability-linked financing framework to link funding activities with its sustainability objectives. It started with CO_2 reduction, in line with the company's 2030 climate targets and updated with the full 2050 net-zero pathway endorsed by the Science Based Targets initiative (SBTi). Following Holcim's nature-positive strategy launch, it also added "specific freshwater withdrawal" in its cement operations. A third party opinion was provided by ISS ESG and confirmed the alignment of the framework with the sustainability-linked bond principles, which are published by the International Capital Markets Association (ICMA). The framework is also aligned with the United Nations Sustainable Development Goals 6 "Clean Water and Sanitation", 9 "Industry, Innovation and Infrastructure", 11 "Sustainable Cities and Communities" and 13 "Climate Action".

Holcim intends to pursue its journey with sustainability-linked finance instruments in the capital, money and loan markets and the company is committed to reaching more than 40 percent of sustainable financing by the end of 2025.

In 2022, Holcim completed further sustainability-linked financing transactions which include (i) new 4.75 year CHF 325 million and 10 year CHF 100 million sustainability-linked bonds, issued in January 2022 based on its 2025 and 2030 climate goals, (ii) a new 4 year EUR 150 million sustainability-linked private placement, issued in April and based on its 2025 CO_2 scope 1 as well as 2025 Freshwater Withdrawal reduction targets and (iii) EUR 514.5 million and USD 147.5 million sustainability-linked Schuldschein with maturities between 3 and 10 years based on our climate and water goals.

At the end of 2022, the sustainable financing ratio stood at 38.3 percent.

Financing activity
In the year under review, capital market issuances of CHF 1.7 billion were undertaken. The main capital market transactions were as follows.

SUSTAINABILITY KPIS

CLIMATE & ENERGY

562KG

Net CO_2 emitted per ton of cementitious material scope 1

CIRCULAR ECONOMY

34M

Tons of waste recycled in operations

NATURE

304L

Freshwater withdrawn per ton of cementitious material

PEOPLE

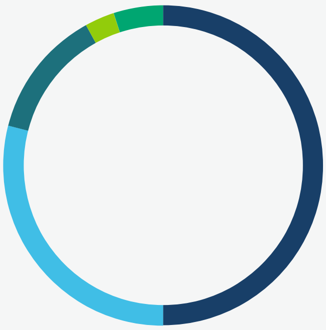
22.5M

Contribution in social initiatives CHF

Nominal Value	Description	Issued	Coupon	Maturity
CHF 325 million	Sustainability-linked Bond	Jan 2022	0.38%	2026
CHF 100 million	Sustainability-linked Bond	Jan 2022	1.00%	2032
EUR 150 million	Sustainability-linked Private placement	Apr 2022	1.63%	2026
EUR 500 million	Bond	Apr 2022	1.50%	2025
EUR 55 million	Sustainability-linked Schuldschein with floating interest rates	May 2022	2.89%	2025
EUR 250 million	Sustainability-linked Schuldschein with floating interest rates	May 2022	3.04%	2027
EUR 42 million	Sustainability-linked Schuldschein	May 2022	2.11%	2027
EUR 59 million	Sustainability-linked Schuldschein	May 2022	2.53%	2029
EUR 86 million	Sustainability-linked Schuldschein with floating interest rates	May 2022	3.29%	2029
EUR 24 million	Sustainability-linked Schuldschein	May 2022	2.99%	2032
USD 65 million	Sustainability-linked Schuldschein with floating interest rates	May 2022	5.30%	2025
USD 58 million	Sustainability-linked Schuldschein with floating interest rates	May 2022	5.45%	2027
USD 25 million	Sustainability-linked Schuldschein with floating interest rates	May 2022	5.70%	2029

For more information, please refer to note 14.4 from the notes to the consolidated financial statements.

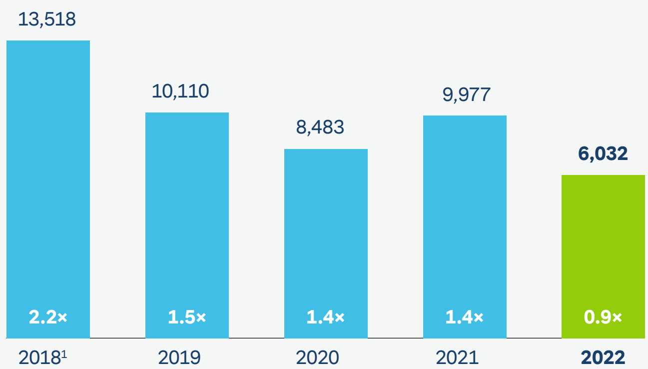
CAPITAL MARKET FINANCING AS PER 31 DECEMBER 2022
CHF 12,972M



EUR Bonds	50%
USD Bonds	29%
CHF Bonds	13%
GBP Bonds	3%
Others[1]	5%

[1] USD and EUR private placements

LEVERAGE RATIO × **NET FINANCIAL DEBT** CHF M



[1] The comparative periods are not restated for IFRS 16 "Leases".

LEVERAGE RATIO
×

0.9×

Financing profile

Holcim has a strong financing profile with 80 percent of financial liabilities financed through various capital markets and 20 percent through banks and other lenders. There are no major positions with individual lenders. The average maturity of financial liabilities was 6.8 years as of 31 December 2022. The Group's maturity profile is well balanced with a large share of mid- to long-term financing.

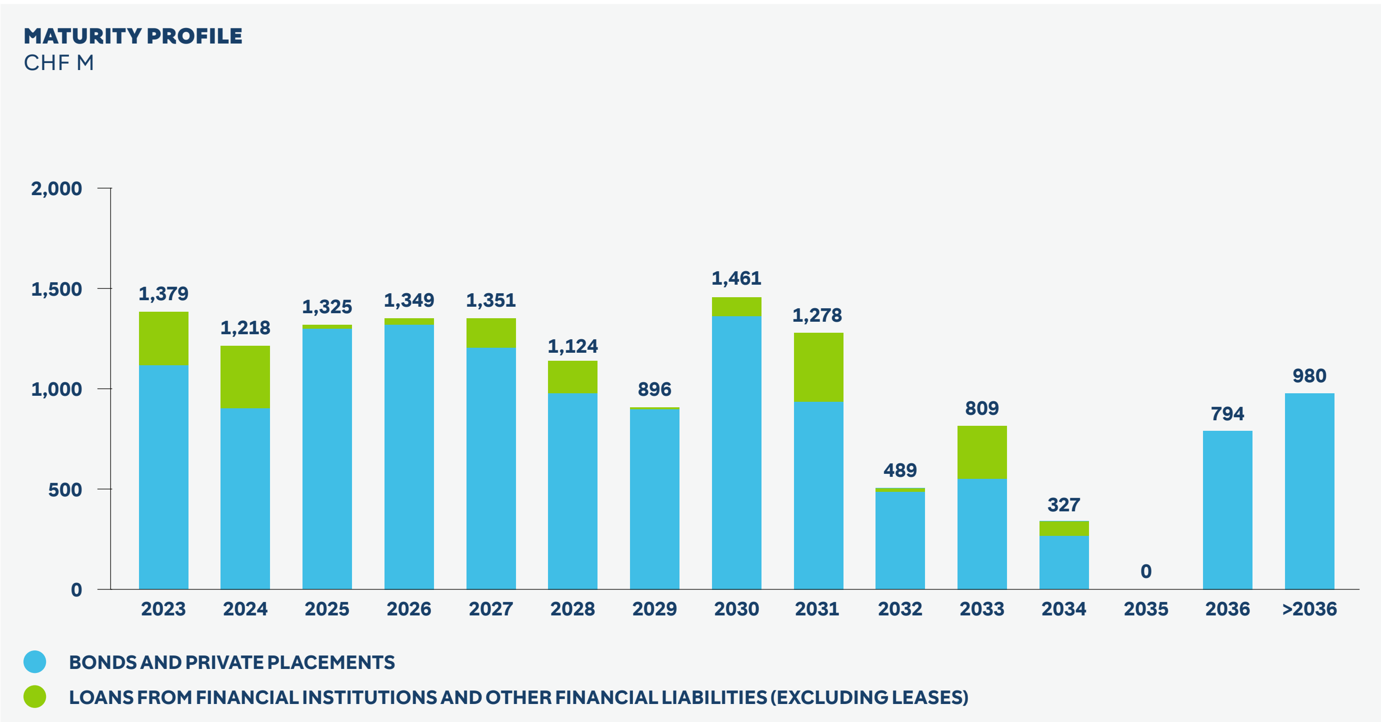
Maintaining a favorable credit rating is one of the Group's objectives and Holcim therefore gives priority to achieving its financial targets whilst retaining a solid investment grade rating (current rating information is included on pag 81). The average nominal interest rate on financial liabilities increased from 2.1 percent on 31 December 2021 to 2.8 percent on 31 December 2022.

Note 14 contains detailed information on financial liabilities.

Liquidity

To secure liquidity, the Group held cash and cash equivalents of CHF 9,824 million on 31 December 2022. This cash is mainly invested in term deposits held with a large number of banks on a broadly diversified basis and in short-term money market funds. The counterparty risk is continually monitored on the basis of clearly defined principles as part of the risk management process. As of 31 December 2022, Holcim had unused committed credit lines of CHF 5,404 million.

Current financial liabilities as at 31 December 2022 of CHF 1,655 million are comfortably covered by existing cash, cash equivalents and unused committed credit lines.



Foreign exchange sensitivity

The Group has a global footprint, generating the majority of its results in currencies other than the Swiss franc. Only about 2 percent of net sales are generated in Swiss francs.

Foreign currency volatility has little effect on the Group's operating profitability. As the Group produces a very high proportion of its products locally, most sales and costs are incurred in the respective local currencies. The effects of foreign exchange movements are therefore largely restricted to the translation of local financial statements for the consolidated statement of income. As a large part of the foreign capital is financed with matching transactions in local currency, the effects of foreign currency translation on local balance sheets for the consolidated statement of financial position have not, in general, resulted in significant distortions in the consolidated statement of financial position.

The following sensitivity analysis presents the effect of the main currencies on selected key figures of the consolidated financial statements. The sensitivity analysis only factors in effects that result from the conversion of local financial statements into Swiss Francs (translation effect). Currency effects from transactions conducted locally in foreign currencies are not included in the analysis.

The following table shows the effects of a hypothetical 5 percent depreciation of the respective foreign currencies against the Swiss franc.

Sensitivity analysis

Million CHF	2022	EUR	GBP	USD	CAD	Latin American basket (MXN, BRL, ARS, COP)	INR	Asian basket (AUD, CNY, PHP)	Middle East African basket (NGN, DZD, EGP)
		Assuming a 5% strengthening of the Swiss Franc the impact would be as follows:							
Net sales	**29,189**	(221)	(90)	(437)	(128)	(104)	(126)	(98)	(60)
Recurring EBIT	**4,752**	(19)	(11)	(90)	(19)	(31)	(13)	(23)	(14)
Cash flow from operating activities	**4,562**	37	(13)	(80)	(22)	(23)	3	(26)	(15)
Net financial debt	**6,032**	(239)	(23)	(122)	4	4	1	6	9

MEASURING OUR VALUE

Holcim is one of the pioneers in the growing discipline of impact valuation. The Group's journey started in 2014 when it published its first Global Integrated Profit & Loss statement.

Since then the Group assesses annually its Economic, Social and Environmental impacts (Triple Bottom Line) in monetized terms and discloses it through its Integrated Profit & Loss statement (IP&L). The IP&L complements the traditional financial and sustainability metrics. It enhances the understanding of long-term value creation for shareholders, society, and the environment, allowing Holcim to understand and share with its stakeholders the extent of its impacts.

THE GROWING DISCIPLINE OF IMPACT VALUATION

Economic, social, and environmental forces transform the operating landscape of business and have a growing influence on a company's cash flow and risk profile. So to protect shareholders and society, it is essential to identify and quantify these impacts in a transparent and comparable way. In June 2019, together with a diverse group of multinational companies, Holcim founded the Value Balancing Alliance to collectively develop a global impact measurement and valuation (IMV) standard for monetizing and disclosing the impacts companies have on society. This new sustainability measurement methodology will support the comparability of the long-term value contributions of each company.

TRIPLE BOTTOM LINE

The triple bottom line calculation is designed to show the cumulative effect of positive or negative monetized environmental, and social impacts. It starts with the gross value added (GVA) derived from the total procurement spend with suppliers and calculates the impacts related to upstream supply chain and to the own operations to value total triple bottom line of the company.

SUPPLY CHAIN – UPSTREAM

As an organization that purchases goods and services on a global scale, Holcim is committed to determining the impact it is generating throughout its supply chain.

Gross value added

The most positive impact occurs due to the economic value added to society through the procurement activities.

Socio-economic dimension

The monetized impact of health and safety incidents in the supply chain.

Environmental dimension

This includes the monetized impact in the supply chain from:

- CO_2 emissions (Scope 3)
- air emissions of potentially noxious substances such as NO_x, SO_2 and dust
- freshwater consumption and pollution
- net biodiversity impact of land disturbed
- waste created.

OWN OPERATIONS

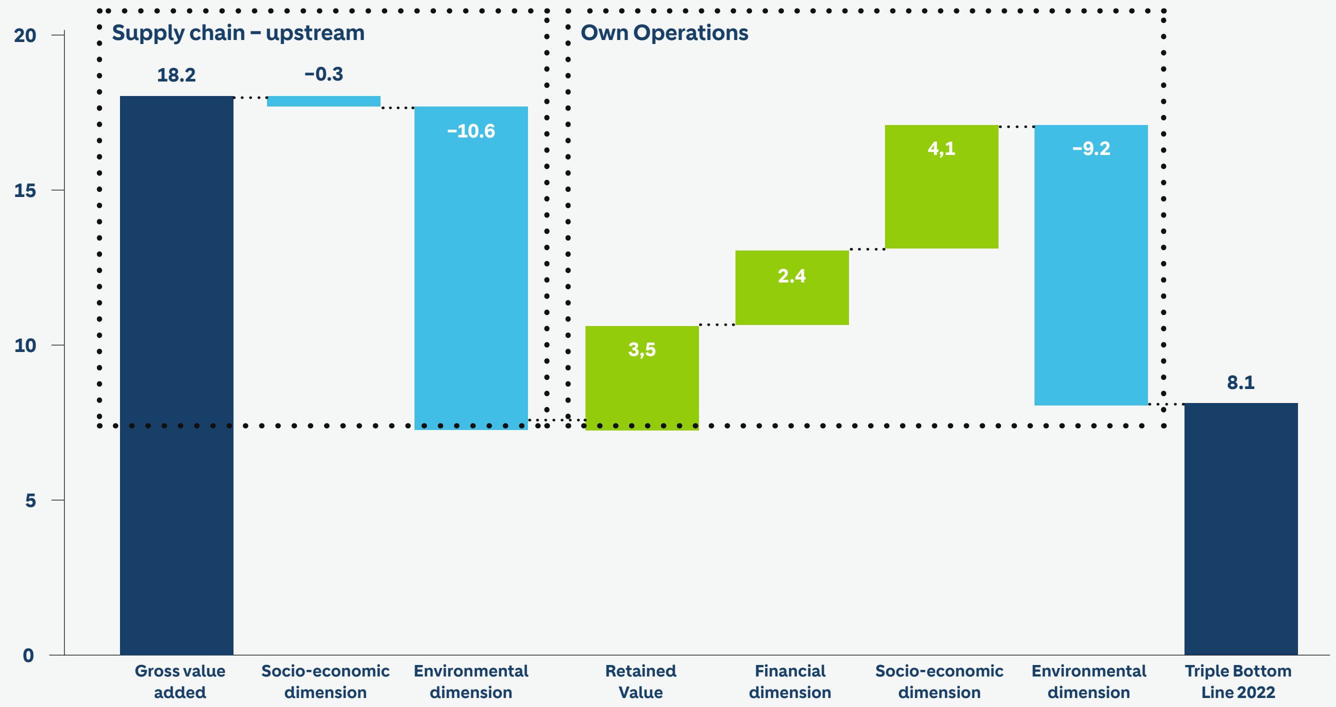
Retained value

The sum of capital retained in the business calculated by taking Recurring EBITDA after leases and subtracting taxes, interest and dividends.

Financial dimension

Payments to Governments for income taxes, payments to creditors for financing and payments to shareholders in the form of dividends.

THE TRIPLE BOTTOM LINE TBL
INTEGRATED PROFIT & LOSS BRIDGE CHF BN



Socio-economic dimension
This includes the monetized impact from

- Payment to Holcim employees through salaries
- Corporate social responsibility (CSR) spending on community related projects and donations
- The monetized impact of health and safety incidents in the operations
- Spending on talent development and education.

Environmental dimension
This includes the monetized impact in the operations from:

- CO_2 emissions (Scope 1 and 2)
- air emissions of potentially noxious substances such as NO_x, SO_2 and dust
- freshwater consumption, net biodiversity impact of land, disturbed and rehabilitated land
- net impact of waste recycled in the products and processes and the waste created.

In 2022, the environmental dimension in Holcim's own operations and supply chain increased significantly due to a higher societal cost of CO_2 used as recommended by the Value Balance Alliance methodology. In addition the environmental dimension in Holcim's supply chain shows the impact of inflation on environmental indicators as Holcim follows a spend based input-output model to determine the environmental impact of all amounts spent in the Group's supply chain, conservatively we have not adjusted for this inflationary impact on our environmental indicators.

EU TAXONOMY

The EU Taxonomy regulation established a classification system for economic activities based on their contribution to sustainability which is intended to create transparency and certainty for investors, and direct sustainable investment.

Under the EU Taxonomy regulation, an economic activity is deemed to be environmentally sustainable, namely 'Taxonomy-aligned', if:

- It brings a Substantial Contribution to at least one of the six environmental objectives:
  - Climate change mitigation
  - Climate change adaptation
  - Protection of water and marine resources
  - Transition to a circular economy
  - Pollution prevention and control
  - Protection and restoration of biodiversity and ecosystems

- It Does No Significant Harm (DNSH) to any of the other five objectives

- It is carried out in compliance with 'Minimum Safeguards': respect of human rights, and business conduct in the areas of anti-corruption, fair competition and taxation.

Holcim has identified the following activities that are eligible for EU Taxonomy classification for the objective of Climate change mitigation: cement manufacturing, manufacture of energy efficient equipment for buildings, materials recovery from non-hazardous waste, and electricity generation using solar photovoltaic technology.

Holcim takes a transparent, science driven and rigorous approach to its climate and environmental reporting and welcomes the European Commission's work and the establishment of the EU Taxonomy regulation, which brings the same aim of rigor and transparency. Holcim voluntarily disclosed its eligibility to the EU Taxonomy framework in 2021 and have continued to evolve its interpretation and processes to report on the alignment with EU Taxonomy. Holcim is actively following the development of further pillars of EU Taxonomy regulations, namely protection of water resources, transition to a circular economy, pollution prevention and control, biodiversity protection will report key financial metrics as required, in line with the deadlines set out by the Corporate Sustainability Reporting Directive (CSRD).

ACCELERATING GREEN GROWTH IN LINE WITH EU TAXONOMY

The six environmental objectives of the EU are embedded in Holcim sustainable growth strategy and the on-going actions are described below.

CLIMATE CHANGE MITIGATION

Holcim is a global leader in innovative and sustainable building materials. Holcim is at the forefront of decarbonizing building throughout its lifecycle to ensure a net-zero future, building progress for people and the planet.

Development of low carbon cement

In 2021, Holcim launched ECOPlanet, its global range of green cement delivering at least 30% lower emissions with equal to superior performance compared to ordinary cement, with the objective of enabling low-carbon construction at scale. In 2022, ECOPlanet was available in 27 markets.

Holcim continued to decrease the CO_2 emissions of its cement products by reducing the amount of clinker in cement, and increasing the use of biomass, low emission fuels, and alternative raw materials. Holcim's innovation begins with its researchers working in the Switzerland Technology Center as well as its industry-leading Holcim Innovation Center in Lyon, France. Sustainability accounts for two-thirds of the patent portfolio – 45 percent directly relating to low-carbon solutions such as carbon capture and innovative low-emission raw materials, while another 20 percent are related to other sustainability drivers.

Clinker is the most CO_2 intensive component of cement with roughly two-thirds of CO_2 emitted as a result of the chemical reaction in the manufacturing process. One most meaningful way to reduce CO_2 emissions of cement is by replacing clinker with other materials. This includes calcined clay used in the ECOPlant cement produced by Holcim's plant in Saint-Pierre-la-Cour, France with 50 percent lower CO_2 and "Susteno", the first resource-saving cement in Europe that uses up to 20 percent fine mixed granulate from Construction and Demolition Waste to replace clinker.

Products and services enabling transition to climate-neutrality

Holcim's businesses support the transition to a climate-neutral economy:

- Holcim Building Envelope, encompassing its roofing business, supplies a wide range of insulating, cool and green roofing systems from the US and Europe with a lambda value lower or equal to 0.06 W/mK;

- The Asphalt business contributes actively to the circular economy by providing a large range of Asphalt products which contain recycled asphalt. In Canada Holcim recycled used asphalt from the resurfacing of roads and consume it in the production process of new asphalt.

Acceleration of clean energy utilization

Alongside its manufacturing activities, Holcim promotes the use of clean energy which contributes to climate change mitigation:

- Electricity generation based on solar photovoltaic technology and wind power
- Utilization of excess heat from cement kilns to generate electricity: currently seven waste heat recovery units are operating in five countries, with a plan to triple this number by 2030.

CLIMATE CHANGE ADAPTATION

Holcim has launched its program for Natural Catastrophes ("NatCat"), to ensure the safeguarding of people and business and to meet the regulatory requirements for climate change adaptation. The program uses the latest externally provided climate science to identify projected site-level risk over a range of climate pathways and time periods, in order to assess resilience of Holcim's businesses and assess adaptation solutions where relevant.

PROTECTION OF WATER AND MARINE RESOURCES

Holcim preserves water across its businesses. By 2030, Holcim targets to replenish freshwater in water-risk areas while lowering water intensity across all its product lines.

TRANSITION TO A CIRCULAR ECONOMY

Holcim's economic activities contribute to the circular economy through the processing of waste fuel and materials in the manufacturing of cement, concrete and asphalt. In June 2022, Holcim produced the 12,000 tons of the world's first clinker made entirely of recycled minerals at its plant in Altkirch, France. Clinker is the primary component of cement leading to 100 percent recycled cement and concrete in the future.

POLLUTION PREVENTION AND CONTROL

Holcim puts a strong focus on improving its level of emissions year over year and reducing the impact caused by operations. Through the optimization of production processes and investing in efficient abatement systems, compared to 2021, the average emissions of dust have been reduced by 30 percent, nitrogen oxides (NO_X) by 5 percent, and sulfur dioxide (SO_2) by 21 percent.

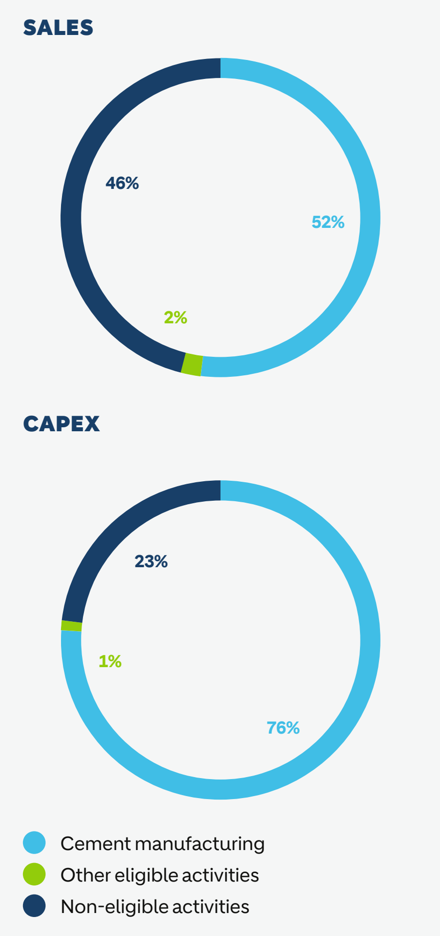
PROTECTION AND RESTORATION OF BIODIVERSITY AND ECOSYSTEMS

In 2021, Holcim launched its Nature strategy to become nature-positive by restoring and preserving biodiversity and water while bringing more nature into cities. Holcim's positive impact on biodiversity is based on transformative rehabilitation plans and measured by a science-based methodology developed in partnership with the International Union for Conservation of Nature (IUCN).

TAXONOMY CRITERIA USED FOR THE SELECTION OF CAPITAL PROJECTS

Environmental impacts are a fundamental consideration in the selection of Holcim's capital projects. Key indicators such as emissions of CO_2, NO_X, Dust, SO_2 as well as water, biodiversity, people and community are thus analyzed in each business case. The selection process has been enhanced to ensure physical risks, due to climate change, and mitigation solutions are considered.

TAXONOMY ELIGIBLE ACTIVITIES



EUROPE

		2022
Net sales to external customers	million CHF	**8,393**
Like-for-like growth	%	**+11.2%**
Recurring EBITDA after leases	million CHF	**1,612**
Like-for-like growth	%	**+5.0%**
Recurring EBIT	million CHF	**1,091**
Like-for-like growth	%	**+9.9%**

Top priority in 2022 was building an engaging environment to drive green growth. Double-digit net sales growth of 11.2 percent on a like-for-like basis was driven by a high degree of commercial focus which delivered strong pricing momentum in all the business segments.

The region delivered positive price over cost throughout 2022 as price increases fully offset cost inflation. Improved industrial performance, focus on ECOPact and ECOPlanet products and plant network optimization resulted in lower clinker production with a positive impact on emissions and related costs.

Robust commercial and industrial performance and strong cost actions resulted in Recurring EBITDA after leases grew 5.0 percent on a like-for-like basis and Recurring EBIT up by 9.9 percent on a like-for-like basis.

The European region is at the forefront of Holcim's Net-zero journey. The region gained momentum in the execution of the decarbonization roadmap on several fronts. Innovative offerings of ECOPact green concrete (to 17 percent of share in total ready-mix Net sales) and ECOPlanet green cement (launched in 12 markets) products made a major shift towards being mass products notably in the UK where ECOPact counts for more than 50 percent of the concrete sales and a key driver in the decarbonization of the construction industry.

Solid pipeline of carbon capture projects with five projects making fast progress. Two of the Group's projects were selected by the European Union Innovation Fund for breakthrough Carbon Capture Utilization and Storage facilities, in Lägerdorf, Germany and Kujawy, Poland with total grants of EUR 328 million.

The region executed a record-high number of bolt-on acquisitions aggregates and ready-mix concrete with seven deals closed in 2022. Building on the successful acquisition of Compaktuna in 2021, the strategic acquisitions in Specialty Building Solutions continued in order to build the strong footprint in the segment Solutions & Products segment with the acquisitions of PRB in France, Cantillana in Belgium and Izolbet in Poland.

In addition, the region expanded in recycling construction & demolition waste with the acquisition of Wiltshire Heavy Building Materials in the UK. This strong momentum continues with two deals closed in January 2023: Nicem, a leader in grounded calcium carbonate in Northern Italy to advance Holcim's green formulations, and Chrono Chape, a leader in mobile self-levelling screeds with a complementary fit across France. In January 2023, the acquisition of FDT Flachdach Technologie GmbH a leading manufacturer of thermoplastic roofs has been announced. These acquisitions perfectly fit Holcim's aim to create a diversified platform to decarbonize construction.

In December 2022, the Group announced the signing of the agreement to sell the Group's business in Russia. Closing of the transaction is subject to regulatory approvals.

NORTH AMERICA

		2022
Net sales to external customers	million CHF	**10,002**
Like-for-like growth	%	**+17.5%**
Recurring EBITDA after leases	million CHF	**2,568**
Like-for-like growth	%	**+18.1%**
Recurring EBIT	million CHF	**1,902**
Like-for-like growth	%	**+27.7%**

North America has delivered a solid performance due to price discipline, continued operational improvements and continued favourable market conditions. Following the unusual weather events of 2021, a more traditional pattern of weather was experienced throughout the year, albeit with some extreme events in the later part of the fourth quarter due to very low water levels within the Mississippi River system and intense cold in the later part of December affecting most of the operations.

Net sales to external customers grew by 17.5 percent on a like-for-like basis compared to 2021, driven by volume growth and strong pricing performance.

The expansion strategy was further supported by six bolt-on acquisitions completed in 2022 in aggregates and ready-mix concrete, including one closed in early January of 2023. Acquisitions are focused on attractive assets with significant synergy potential. The region is accelerating its decarbonization strategy with continued expansion of low-carbon products such as ECOPlanet cement and ECOPact concrete, investments in green products such as the ponded ash beneficiation project in Canada and increasing technical concrete offerings for high-profile projects.

The year was outstanding for Solutions & Products in North America. Holcim transitioned from the Firestone Building Products name to Holcim Building Envelope and its new brand commercial line of roofing & lining became known as Elevate.

The Building Envelope Division experienced record performance in 2022 with double digit growth net sales. Following the acquisition of Malarkey Roofing Products, a market leader in residential roofing in the US, Holcim have further broadened its offerings in insulation, waterproofing and coatings through acquisition of SES Foam and Polymers Sealants North America. In addition to continued acquisitions to fuel growth, several investments are underway to expand its footprint across the region, including a new Polyiso insulation plant in Salt Lake City.

Recurring EBIT for the region increased by 27.7 percent on a like-for-like basis, driven by effective price management and a strong focus on keeping costs under control.

ASIA PACIFIC

		2022
Net sales to external customers	million CHF	**4,842**
Like-for-like growth	%	**+3.7%**
Recurring EBITDA after leases	million CHF	**1,036**
Like-for-like growth	%	**–27.8%**
Recurring EBIT	million CHF	**789**
Like-for-like growth	%	**–32.7%**

The Health and Safety of employees and contractors remained the key priority in the region especially in China in view of ongoing pandemic.

In 2022, the strong order book in Australia and growing demand in Bangladesh helped to partially offset the impact of softer demand in China and the Philippines. The construction industry was impacted in China due to severe lockdowns in response to the pandemic. Net sales for the region grew by 3.7 percent on a like-for-like basis, supported by favourable pricing in all markets except China. The net sales of Aggregates expanded by 7.6 percent and Ready-mix grew by 4.6 percent on a like-for-like basis.

Strong commercial actions and acceleration in alternative fuel usage helped to contain the impact of high inflation on costs mainly due to increase in energy prices. Increased investment in green capital expenditure and accelerated expansion of alternative fuel usage in China, Bangladesh and the Philippines, significantly improved the clinker factor and thermal substitution rate in the region. The region focused heavily on mitigating the impact of cost inflation by strict cost management discipline and continued expansion of the green product range.

Recurring EBITDA after leases ended the year 27.8 percent lower compared to prior year on a like-for-like basis and Recurring EBIT was lower 32.7 percent on a like-for-like basis mainly due to high energy inflation in major markets and lockdowns in China. Holcim Australia continued to deliver a strong performance with margin expansion supported by positive price over cost in all segments. The Group's share of the Huaxin joint-venture profits in China was recognized in the region's results and the total contribution to Recurring EBITDA after leases from China (including the wholly owned operations) was CHF 261 million and the total contribution to Recurring EBIT was CHF 237 million.

In September 2022, the divestment of the Group's Indian operations was successfully completed.

LATIN AMERICA

		2022
Net sales to external customers	million CHF	**2,926**
Like-for-like growth	%	**+19.5%**
Recurring EBITDA after leases	million CHF	**1,102**
Like-for-like growth	%	**+13.3%**
Recurring EBIT	million CHF	**956**
Like-for-like growth	%	**+13.6%**

Robust performance in 2022 was the result of the effective pricing policies that secured solid profitability and cash generation despite high inflation. Although margins declined for the full year, in the last quarter, the region reversed the trend and recorded a strong increase (quarter over quarter) fuelled by Aggregates and ready-mix sales and positive price over cost. Cement demand was mixed, with good growth in Argentina and Colombia, offsetting market softness in Mexico where sales of bagged cement decreased due to high inflation but were partially offset by major infrastructure projects.

The region's superior technical capabilities in ready-mix, particularly in Mexico, drove growth through the participation in iconic infrastructure projects like the Dos Bocas Refinery on the Atlantic coast, La Libertad dam in Monterrey and several sections of the Maya Train in the Yucatan peninsula. In the Aggregates segment, Holcim expanded the footprint with the commissioning of new operations in El Salvador, Ecuador, Colombia and Mexico.

In the Solution & Products segment, the region strongly expanded its portfolio with the introduction of GacoFlex in key markets from Mexico to Argentina, Ecuador and Colombia and the launch of the Tector line of mortars in Argentina and Colombia. A new integrated plant for chemical construction products was commissioned in Colombia to further strengthen the product offering and profitability in waterproofing, mortars and admixtures for concrete. The Disensa retail network continued focusing on expanding formats and solidifying the value proposition through the development of a wider portfolio of solutions and products.

In addition, the ECOPact and ECOPlanet lines of sustainable products advanced well across the region enabling construction of hundreds of green buildings and were used on key infrastructure projects like the Aña Cuá Dam in Argentina. Significant investments were made in materials recycling, supporting further increase in the usage of alternative fuels with positive impact on profitability and sustainability goals.

For the year, consolidated net sales to external customers increased 19.5 percent on a like-for-like basis driven by strong pricing. Recurring EBITDA after leases increased 13.3 percent on a like-for-like basis while Recurring EBIT reached record levels with a robust growth of 13.6 percent on a like-like-basis. The region achieved a positive price over costs led by strong pricing.

In September 2022, Holcim closed the sale of its business in Brazil to CSN (Companhia Siderúrgica Nacional).

MIDDLE EAST AFRICA

		2022
Net sales to external customers	million CHF	**2,400**
Like-for-like growth	%	**+14.1%**
Recurring EBITDA after leases	million CHF	**565**
Like-for-like growth	%	**+11.1%**
Recurring EBIT	million CHF	**381**
Like-for-like growth	%	**+20.1%**

The Middle East Africa region continued to deliver a strong performance with double-digit growth in Recurring EBIT on a like-for-like basis compared to 2021.

Strong domestic cement demand in Egypt, Iraq and Nigeria and higher exports mainly from Algeria and United Arab Emirates supported the net sales growth offsetting lower demand in Kenya. Net sales in the region grew by 14.1 percent on a like-for-like basis.

The region continued to execute its sustainability and decarbonisation roadmap by investing in green capital expenditure and expansion of alternative fuel facilities to reduce carbon emissions. Increased usage of alternative fuels contributed to significant improvement of the sustainability performance. Continuing the footprint expansion of the green product range in the region, ECOPact green concrete was launched in Egypt, Morocco, the United Arab Emirates and South Africa and ECOPlanet green cement was rolled out in Morocco and Algeria. Addition of mortar plants further helped expansion of the Solutions & Products segment in the region.

The 14Trees joint-venture successfully completed the largest 3D-printed affordable housing. The 3D printing of the 10 housing units in Kenya's Mvule Gardens project was made possible with TectorPrint, Holcim's proprietary, innovative and versatile 3D printing ink.

The region delivered a strong positive price over cost displaying resilience to inflation, especially with high energy costs. Recurring EBITDA after leases grew by 11.1 percent and Recurring EBIT by 20.1 percent on a like-for-like basis supported by strong commercial actions, expansion of premium products and cost containment across the countries.

The divestment of the business in Zimbabwe was completed in December 2022.

Responsibility statement

We certify that, to the best of our knowledge and having made reasonable inquiries to that end, the financial statements have been prepared in accordance with applicable accounting standards and give a true and fair view of the assets and liabilities, and of the financial position and results of the Company and of its consolidated subsidiaries, and that this Annual Report provides a true and fair view of the evolution of the business, results and financial condition of the Company and of its consolidated subsidiaries, and a description of the main risks and uncertainties the Company and its consolidated subsidiaries are subject to.

Zug, 23 February 2023

BEAT HESS
Chairman

JAN JENISCH
Chief Executive Officer

GÉRALDINE PICAUD
Chief Financial Officer

FINANCIAL INFORMATION

▲ *Seven Gardens Oak House quarter in Wiesbaden, Germany built with Dynamax the ultimate performance concrete*

IN THIS SECTION

FINANCIAL INFORMATION

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED STATEMENT OF INCOME OF HOLCIM

Million CHF	Notes	2022	2021
Net sales	3.3	**29,189**	**26,834**
Production cost of goods sold	4.3	**(17,575)**	(15,298)
Gross profit		**11,614**	**11,536**
Distribution and selling expenses		**(6,611)**	(6,232)
Administration expenses[1]		**(2,089)**	(1,377)
Share of profit of joint ventures	6.4	**308**	474
Operating profit		**3,221**	**4,401**
Profit on disposals and other non-operating income	5.2	**2,199**	36
Loss on disposals and other non-operating expenses	5.3	**(424)**	(231)
Share of profit (loss) of associates	6.9	**17**	(7)
Financial income	7.2	**183**	96
Financial expenses	7.3	**(641)**	(652)
Net income before taxes		**4,555**	**3,644**
Income taxes	8.2	**(1,027)**	(963)
Net income		**3,528**	**2,681**
Net income attributable to:			
Shareholders of Holcim Ltd		**3,308**	2,298
Non-controlling interest		**220**	383
Earnings per share in CHF			
Earnings per share	9	**5.48**	3.73
Fully diluted earnings per share	9	**5.46**	3.72

[1] On 18 October 2022, Lafarge SA resolved a previously disclosed inquiry by the U.S. Department of Justice into legacy operations in Syria during the country's civil war. Under the terms of the resolution, Lafarge SA and its long-defunct subsidiary Lafarge Cement Syria paid a financial penalty of USD 778 million (CHF 767 million), which was recorded under Administration expenses (see note 16.3).

The Alternative Performance Measures used in this report are defined on page 293.

CONSOLIDATED STATEMENT OF COMPREHENSIVE EARNINGS OF HOLCIM

Million CHF	Notes	2022	2021
Net income		**3,528**	**2,681**
Items that will be reclassified to the statement of income in future periods			
Currency translation effects			
– Exchange differences on translation		**(1,250)**	(110)
– Realized through statement of income[1]		**1,140**	119
– Tax effect	8.4	**(23)**	(3)
Cash flow hedges			
– Change in fair value		**(277)**	85
– Realized through statement of income		**257**	109
– Tax effect	8.4	**14**	(47)
Net investment hedges in subsidiaries			
– Change in fair value		**3**	(2)
– Realized through statement of income		**0**	1
Subtotal		**(135)**	**152**
Items that will not be reclassified to the statement of income in future periods			
Defined benefit plans			
– Remeasurements	15.3	**(160)**	693
– Tax effect	8.4	**37**	(153)
Subtotal		**(123)**	**540**
Total other comprehensive earnings		**(258)**	**692**
Total comprehensive earnings		**3,270**	**3,373**
Total comprehensive earnings attributable to:			
Shareholders of Holcim Ltd		**3,173**	2,992
Non-controlling interest		**96**	381

[1] In 2022, the currency translation effects realized through statement of income mainly relates to the divestments of the Group's businesses in India and Brazil (see note 2.3).

CONSOLIDATED STATEMENT OF FINANCIAL POSITION OF HOLCIM

Million CHF	Notes	**31.12.2022**	31.12.2021
Cash and cash equivalents	14.3	**9,824**	6,682
Short-term derivative assets	14.5	**118**	186
Current financial receivables	12.3	**128**	261
Trade accounts receivable	10.2	**2,674**	2,677
Inventories	10.3	**2,860**	2,608
Prepaid expenses and other current assets	10.4	**997**	1,178
Assets classified as held for sale	13.2	**183**	104
Total current assets		**16,784**	**13,696**
Long-term financial investments and other long-term assets	12.2	**459**	968
Investments in associates and joint ventures	6.4, 6.9	**3,323**	3,714
Property, plant and equipment	11.2	**20,356**	24,441
Goodwill	11.3	**13,675**	13,954
Intangible assets	11.3	**1,769**	1,446
Deferred tax assets	8.4	**610**	783
Pension assets	15.3	**469**	823
Long-term derivative assets	14.5	**157**	59
Total non-current assets		**40,819**	**46,188**
Total assets		**57,603**	**59,885**

Million CHF	Notes	**31.12.2022**	31.12.2021
Trade accounts payable	10.5	**4,269**	4,059
Current financial liabilities	14.4	**1,655**	2,391
Current income tax liabilities		**461**	484
Other current liabilities		**1,977**	2,398
Short-term provisions	16.2	**399**	413
Liabilities directly associated with assets classified as held for sale	13.2	**96**	0
Total current liabilities		**8,857**	**9,745**
Long-term financial liabilities	14.4	**14,475**	14,514
Provision for pensions and other post-employment benefit plans	15.3	**554**	735
Long-term income tax liabilities	8.6	**199**	389
Deferred tax liabilities	8.4	**2,187**	2,320
Long-term provisions	16.2	**1,718**	1,707
Total non-current liabilities		**19,132**	**19,666**
Total liabilities		**27,989**	**29,411**
Share capital	17.2	**1,232**	1,232
Capital surplus		**18,840**	20,386
Treasury shares	17.2	**(1,297)**	(381)
Reserves		**9,899**	6,449
Total equity attributable to shareholders of Holcim Ltd		**28,674**	**27,685**
Non-controlling interest	2.5	**940**	2,788
Total shareholders' equity		**29,614**	**30,473**
Total liabilities and shareholders' equity		**57,603**	**59,885**

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY OF HOLCIM

Million CHF	Share capital	Capital surplus	Treasury shares
Equity as at 1 January 2022	**1,232**	**20,386**	**(381)**
Net income			
Other comprehensive earnings			
Total comprehensive earnings			
Payout		**(1,330)**	
Subordinated fixed rate resettable notes[1]			
Hyperinflation[2]			
Change in treasury shares[3]		**(216)**	**(916)**
Share-based remuneration			
Acquisition / (Disposal) of participation in Group companies[4]			
Change in participation in existing Group companies			
Equity as at 31 December 2022	**1,232**	**18,840**	**(1,297)**
Equity as at 1 January 2021	**1,232**	**21,597**	**(197)**
Net income			
Other comprehensive earnings			
Total comprehensive earnings			
Payout		**(1,222)**	
Subordinated fixed rate resettable notes[1]			
Hyperinflation[2]			
Change in treasury shares			**(185)**
Share-based remuneration		**10**	
Net capital paid in by non-controlling interest			
Acquisition / (Disposal) of participation in Group companies			
Change in participation in existing Group companies			
Equity as at 31 December 2021	**1,232**	**20,386**	**(381)**

[1] See more information in note 17.1.
[2] See more information in note 2.2.
[3] The amount of CHF -916 million includes the impact of the share buyback program of CHF -450 million (see note 17.2)
[4] Related to the divestment of the Group's businesses in India (see note 2.3)
[5] Equity as at 31 December 2022 includes CHF -131 million of currency translation adjustment relating to assets and directly associated liabilities classified as held for sale

Currency translation adjustments	Other Reserves and Re-tained earnings	Total equity attributable to shareholders of Holcim Ltd	Non-controlling interest	Total shareholders' equity
(17,435)	23,884	27,685	2,788	30,473
	3,308	3,308	220	3,528
(5)	(129)	(135)	(123)	(258)
(5)	3,179	3,173	96	3,270
		(1,330)	(237)	(1,567)
	(22)	(22)		(22)
	84	84	15	99
	214	(918)		(918)
	3	3		3
			(1,723)	(1,723)
	(2)	(2)	1	(1)
(17,440)	27,339	28,674	940	29,614[5]
(17,452)	20,891	26,071	2,553	28,625
	2,298	2,298	383	2,681
19	675	694	(2)	692
19	2,973	2,992	381	3,373
		(1,222)	(143)	(1,365)
	(23)	(23)		(23)
	47	47	8	55
	5	(180)		(180)
		10		10
			1	1
			(22)	(22)
(2)	(8)	(10)	9	(1)
(17,435)	23,884	27,685	2,788	30,473

CONSOLIDATED STATEMENT OF CASH FLOWS OF HOLCIM

Million CHF	Notes	2022	2021
Net income		**3,528**	**2,681**
Income taxes	8.2	**1,027**	963
(Profit)/loss on disposals and other non operating items		**(1,769)**	183
Share of profit of associates and joint ventures	6.4, 6.9	**(325)**	(467)
Financial expenses net	7.2, 7.3	**458**	556
Depreciation, amortization and impairment of operating assets	4.5	**2,845**	2,337
Employee benefits and other operating items		**(60)**	(187)
Change in inventories		**(825)**	(468)
Change in trade accounts receivables		**(127)**	(112)
Change in trade accounts payable		**672**	650
Change in other receivables and liabilities		**(45)**	(109)
Cash generated from operations		**5,380**	**6,026**
Dividends received		**354**	266
Interest received		**111**	84
Interest paid		**(481)**	(503)
Income taxes paid	8.3	**(802)**	(828)
Cash flow from operating activities (A)		**4,562**	**5,045**
Purchase of property, plant and equipment		**(1,549)**	(1,532)
Disposal of property, plant and equipment		**114**	112
Acquisition of participation in Group companies	2.3	**(2,559)**	(3,409)
Disposal of participation in Group companies	2.3	**6,093**	209
Purchase of financial assets, intangible and other assets		**(255)**	(264)
Disposal of financial assets, intangible and other assets		**236**	173
Cash flow from investing activities (B)	**19**	**2,081**	**(4,710)**
Payout on ordinary shares	9	**(1,330)**	(1,222)
Dividends paid to non-controlling interest		**(234)**	(139)
Capital repaid to non-controlling interest		**0**	(1)
Net movement of treasury shares[1]		**(895)**	(211)
Coupon paid on subordinated fixed rate resettable notes		**(22)**	(23)
Net movement in current financial liabilities		**(472)**	104
Proceeds from long-term financial liabilities		**1,747**	4,220
Repayment of long-term financial liabilities		**(1,685)**	(1,249)
Repayment of long-term lease liabilities		**(362)**	(362)
Increase in participation in existing Group companies		**0**	(2)
Cash flow from financing activities (C)		**(3,252)**	**1,114**
Increase in cash and cash equivalents (A + B + C)		**3,390**	**1,450**
Cash and cash equivalents as at the beginning of the period (net)		**6,615**	**5,101**
Increase in cash and cash equivalents		**3,390**	1,450
Currency translation effects		**(248)**	65
Cash and cash equivalents as at the end of the period (net)	**14.3**	**9,757**	**6,615**

[1] The net movement of treasury shares includes the cash out of CHF 391 million related to the share buyback program (see note 17.2)

PRINCIPAL EXCHANGE RATES

The following table summarizes the principal exchange rates that have been used for translation purposes.

		Statement of income Average exchange rates in CHF		**Statement of financial position Closing exchange rates in CHF**	
		2022	2021	**31.12.2022**	31.12.2021
100 Argentinian Peso	ARS	**0.26**	0.45	**0.26**	0.45
1 Australian Dollar	AUD	**0.66**	0.69	**0.63**	0.66
1 Brazilian Real	BRL	**0.19**	0.17	**0.17**	0.16
1 Canadian Dollar	CAD	**0.73**	0.73	**0.68**	0.72
1 Chinese Renminbi	CNY	**0.14**	0.14	**0.13**	0.14
100 Algerian Dinar	DZD	**0.67**	0.68	**0.67**	0.66
1 Euro	EUR	**1.01**	1.08	**0.98**	1.03
1 British Pound	GBP	**1.18**	1.26	**1.11**	1.23
100 Indian Rupee	INR	**1.22**	1.24	**1.11**	1.23
100 Mexican Peso	MXN	**4.75**	4.51	**4.72**	4.47
100 Nigerian Naira	NGN	**0.15**	0.17	**0.12**	0.16
100 Philippine Peso	PHP	**1.75**	1.86	**1.65**	1.79
1 Poland Zloty	PLN	**0.21**	0.24	**0.21**	0.23
1 Romanian Leu	RON	**0.20**	0.22	**0.20**	0.21
100 Russian Ruble	RUB	**1.42**	1.24	**1.27**	1.22
1 US Dollar	USD	**0.95**	0.91	**0.92**	0.91

For more information see note 2.2.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

As used herein, the terms “Holcim” or “Group” refer to Holcim Ltd (Switzerland) together with the companies included in the scope of consolidation.

1. Accounting policies

1.1 Basis of preparation

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board.

Due to rounding, numbers presented throughout this report may not add up precisely to the totals provided. All ratios and variances are calculated using the underlying amount rather than the presented rounded amount.

Critical estimates and assumptions

The preparation of financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the reported amounts of revenues, expenses, assets, liabilities and related disclosures at the date of the financial statements.

Estimates and judgments are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

As the Group makes estimates and assumptions concerning the future, the resulting accounting estimates could differ from the related actual results.

Management also uses judgment in applying the Group’s accounting policies.

The following details the judgments, apart from those involving estimations, that management has made in the process of applying the Group’s accounting policies and that have the most significant effect on the amounts recognized in the financial statements:

- The classification of a subsidiary or a disposal group as held for sale, especially as to whether the sale is expected to be completed within one year from the date of classification as held for sale, and whether the proceeds expected to be received will exceed the carrying amount (note 13).
- Certain lease contracts entered into by the Group include extension options which require an assessment of whether such options will be exercised. If it is reasonably certain that an extension option will be exercised, the period covered by the extension option is included in the lease liability. As part of its judgment, the Group considers all relevant facts and circumstances that create an economic incentive for it to exercise an extension option, including any expected changes in facts and circumstances from the commencement date until the exercise date of the option. Note 14.7 includes additional information about future payments covered by an extension option not included in the lease term.

The following details the assumptions the Group makes about the future, and other major sources of estimation uncertainty at year end, that could have a significant risk of resulting in a material adjustment to the carrying amounts of assets and liabilities within the next financial year:

- Assumptions underlying the estimation of value in use in respect of cash-generating units for impairment testing purposes require the use of estimates such as long-term discount rates and growth rates, price, costs and sustainability related key assumptions (note 11.3).
- For all acquisitions of subsidiaries the fair value of the consideration transferred (including any contingent consideration) and the fair value of the assets acquired and liabilities assumed involves a high degree of estimation and judgment (note 2.3).

- Liabilities and costs for defined benefit pension plans and other post-employment benefits are determined using actuarial valuations. The actuarial valuations involve making assumptions about discount rates, expected future salary increases and mortality rates which are subject to significant uncertainty due to the long-term nature of such plans (note 15.3).
- The measurement of site restoration and other environmental provisions requires long-term assumptions regarding the completion of raw material extraction, the costs of restoration and the phasing of the restoration work to be carried out (note 16.1).
- The recognition and measurement of provisions such as litigation provisions or indemnification provisions requires an estimate of the expenditure and timing of the settlement. The litigations and claims to which the Group is exposed are assessed by management with the assistance of the legal department and in certain cases with the support of external specialized lawyers (note 16.2). Disclosures related to such provisions, as well as contingent liabilities, also require significant judgment (note 16.3).
- The recognition of deferred tax assets from tax losses carried forward requires an assessment of whether it is probable that sufficient future taxable profit will be available against which the unused tax losses can be utilized (note 8).
- The Group is subject to income taxes in numerous jurisdictions and the calculation of the Group's tax charge involves a degree of estimation and judgment in respect of certain items. There are many transactions and calculations where the ultimate tax determination is uncertain during the ordinary course of business. The Group recognizes liabilities for potential tax audit issues and uncertain tax positions based on management's estimate of whether additional taxes will be due and on the requirements of IFRIC 23 Uncertainty over Income Tax Treatments (note 8).

The critical estimates and assumptions related to climate change-related impacts are presented in note 1.4.

1.2 Adoption of new and amended International Financial Reporting Standards

The following amendments became effective as at 1 January 2022:

- Reference to the Conceptual Framework – Amendments to IFRS 3
- Property, Plant and Equipment: Proceeds before Intended Use – Amendments to IAS 16
- Onerous Contracts – Costs of Fulfilling a Contract – Amendments to IAS 37
- IFRS 1 First-time Adoption of International Financial Reporting Standards – Subsidiary as a first-time adopter
- IFRS 9 Financial Instruments – Fees in the '10 per cent' test for derecognition of financial liabilities

None of those amendments had a significant impact on the Group's consolidated financial statements for the 12 months period ended December 31, 2022.

The following amendments will become effective after 1 January 2023:

- IFRS 17 Insurance Contracts (including Amendments to IFRS 17 issued in June 2020 and Amendment to IFRS 17 – Initial Application of IFRS 17 and IFRS 9 – Comparative Information issued in December 2021) (1 January 2023)
- Amendments to IAS 8 – Definition of Accounting Estimates (1 January 2023)
- Amendments to IAS 1 and IFRS Practice Statement 2 – Disclosure of Accounting Policies (1 January 2023)
- Amendments to IAS 12 – Deferred Tax related to Assets and Liabilities arising from a Single Transaction (1 January 2023)
- Amendments to IAS 1 – Classification of Liabilities as Current or Non-current (including Amendment to IAS 1 – Classification of Liabilities as Current or Non-current – Deferral of Effective Date issued in July 2020) (1 January 2024)
- Amendments to IFRS 16, Leases – Lease Liability in a Sale and Leaseback (1 January 2024)

The Group has not early adopted any new standards, interpretations or amendments that have been issued but are not yet effective in these consolidated financial statements.

The Group is currently assessing the impact of those amendments on the Group's consolidated financial statements. Those impacts are not expected to be material.

1.3 Climate change-related impacts

The Group makes estimates and assumptions concerning the future, including climate-related matters. There is considerable uncertainty over these assumptions and how they will impact the Group's business operations and the cash flow projections. Holcim constantly assesses its assumptions to be consistent with the risk management and commitments made by the company to investors and other stakeholders. The estimates and assumptions, notably those relating to assets and goodwill impairments, useful lives of assets, CAPEX and Research & Development, inventory valuation, financial expenses, recoverability of deferred tax assets, provisions and contingent liabilities and insurance costs have been based on the available information and regulations in place as of 31 December 2022.

Risk Management

The cement industry is associated with high CO_2 intensity and Holcim is exposed to a variety of regulatory frameworks to reduce emissions, some of which may be under revision. These frameworks can affect the business activities of Holcim. With the diversification of its portfolio and the development of the Solutions and Products business segment, the climate change risk encompasses also the challenges posed by the transition of the Group into a global leader in innovative and sustainable building solutions enabling greener cities, smarter infrastructure and improving living standards around the world. Based on Taskforce for Climate-related Financial Disclosures (TCFD) recommendations, Holcim assesses in a systematic way all potential impacts of climate-related risks: transition risks and physical risks.

The transition risks include the growing number of climate policy frameworks which will lead to increased cost of emitting CO_2 and associated costs of fuels coupled with more stringent obligations relating to the products brought to market (carbon footprint of final products over their lifecycle) but also to identification of market incentives for low carbon products or any developments that require an acceleration or an adaptation to the decarbonization roadmap. The physical risks due to the impact of climate change such as flooding, changes in precipitation patterns or extreme variability in weather patterns has the potential to disrupt the operations of Holcim on both on-site operations and transportation activities leading to higher logistics and transportation costs and reduced production capacities. The change in the climate may imply more regular and intense climate events that can have a significant impact on the Group's production with business interruption, accident or damages. This may increase the Group's insurance costs due to the higher amounts at stake or more frequent insured cases.

Holcim's CO_2 reduction roadmap follows a best-in-class approach with its 2050 net-zero pledge validated by SBTi. In 2022, the Group reinforced its leadership with the validation by the SBTi of its near-term target (2030) in line with the 1.5C science-based target. In parallel, the Group has initiated its transformation into a global leader in innovative and sustainable building materials and solutions, decarbonizing building and driving circular construction. In addition, in order to recognize the role of sustainable finance in supporting the transition to a low-carbon and more resource efficient economy, Holcim has put in place a Sustainability-Linked Financing Framework to link funding with its sustainability objectives and is committed to reaching more than 40 percent of sustainable financing by the end of 2025.

In line with its 2025 strategy and 2030 target, Holcim is maximizing existing technologies and processes, reduced clinker content, increased use of waste-derived fuels and alternative raw materials, waste heat recovery, and renewable energy portfolio. The Group is scaling up innovations and proven solutions such as increasing the use of low carbon raw materials from construction and demolition waste to the replacement of slag or fly ash by novel binders such as calcined clay. The Group's 2025 and 2030 target do not depend on CCUS.

Beyond 2030, Holcim is piloting more than 50 CCUS projects in Europe and North America. Working with other multinationals as well as start-ups, its objective is to create a portfolio of diverse and cost-effective solutions that can be multiplied across the Group to advance its decarbonization journey and create new growth opportunities for the Group. The Group aims to have the first net-zero plant operating in 2030, and as such harnesses any opportunity to make it happen in Europe, North America and other geographies. As an example, in 2022, two Holcim plants, one in Germany (Lägerdorf) and one in Poland (Kujawy), have been granted an envelope from the EU Innovation fund (EUR 328 million) in order to support and assist the commissioning of carbon capture facilities by 2030.

In parallel, Holcim proactively and transparently engages with external stakeholders and supports the following enhancements of the EU regulatory environment:

- Implementation of effective carbon pricing mechanisms
- Incentivization of market demand for low carbon products and solutions
- Larger-scale deployment of carbon capture technologies (CCUS)
- Access to competitive non-fossil energy
- Development of zero emission heavy duty vehicles is one of the key levers for Holcim to reduce CO_2 from transportation activities.

Impairment testing

The cash flow projections used in the impairment process are generally based upon a four-year financial planning period using business plans approved by Management. Cash flows beyond the planning period are extrapolated based on increasing sustainable cash flows. The business plans include among others, management's current view on market growth, pricing and costs. In any event, the growth rate used to extrapolate cash flow projections beyond the planning period does not exceed the long-term average growth rate for the relevant market for the products and country in which the cash-generating unit operates. The long-term average growth rate is based on the long-term inflation rate and Gross Domestic Product for the relevant market concerned as published by the International Monetary Fund (IMF).

Useful lives of assets

Useful lives of assets may be affected by the climate-related matters because of transitional risks such as obsolescence and legal restrictions or physical risks as there is the potential for operations to be adversely impacted by extreme variability in weather patterns. The change in useful lives has a direct impact on the amount of depreciation or amortization recognized each year. Management's review of useful lives has taken into consideration the impacts of the Group's 2030 targets. For the calculation of useful lives, the various input factors and the residual values are reviewed annually.

CAPEX and Research & Development

The transition to lower emission technologies will impact the allocation of the future CAPEX. The Group's Research & Development expenditures will be aligned with the Group's Research & Development strategy focusing on new and alternative technologies as a result of diverse research initiatives that will either impact CAPEX or Research & Development costs in the statement of income depending on the success of the initiatives.

2. Fully consolidated companies and non-controlling interests

2.1 Scope of consolidation

The consolidated financial statements comprise those of Holcim Ltd and of its subsidiaries. The list of principal consolidated companies is presented in note 2.4.

2.2 Accounting principles

Principles of consolidation

The Group consolidates a subsidiary if it has an interest of more than one half of the voting rights or otherwise it considers that it has power over the subsidiary when the voting rights are sufficient to give it the practical ability to direct the relevant activities of the subsidiary unilaterally. Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured at the fair value of the consideration given at the date of exchange.

For each business combination, the Group measures the non-controlling interest in the acquiree either at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition costs incurred are expensed in the statement of income. Identifiable assets acquired and liabilities assumed in a business combination are measured initially at fair value at the date of acquisition.

When the Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as of the acquisition date.

If the business combination is achieved in stages, the carrying amount of the Group's previously held equity interest in the acquiree is remeasured to fair value as at the acquisition date with any resulting gain or loss recognized in the statement of income.

Any contingent consideration to be transferred by the Group is recognized at fair value at the acquisition date. Subsequent changes to the fair value of the contingent consideration are recognized in the statement of income.

Contingent liabilities assumed in a business combination are recognized at fair value and subsequently measured at the higher of the amount that would be recognized as a provision and the amount initially recognized.

Subsidiaries are consolidated from the date on which control is transferred to the Group and are no longer consolidated from the date that control ceases.

All intercompany transactions and balances between Group companies are fully eliminated.

Changes in the ownership interest of a subsidiary that does not result in loss of control are accounted for as an equity transaction. Consequently, if Holcim acquires or partially disposes of a non-controlling interest in a subsidiary, without losing control, any difference between the amount by which the non-controlling interest is adjusted and the fair value of the consideration paid or received is recognized directly in retained earnings. However, if the Group loses control of a subsidiary, it derecognizes all the assets (plus goodwill) and liabilities of the subsidiary including the carrying amount of any non-controlling interests.

Additionally, it reclassifies the currency translation adjustments relating to that subsidiary recognized in equity and records the resulting difference as a gain or loss on disposal in the statement of income.

It is common practice for the Group to write put options and acquire call options in connection with the remaining shares held by the non-controlling shareholders, mainly as part of a business combination. If the Group has acquired a present ownership interest as part of a business combination, the present value of the redemption amount of the put option is recognized as a financial liability with any excess over the carrying amount of the non-controlling interest recognized as goodwill. In such a case, the non-controlling interest is deemed to have been acquired at the acquisition date and therefore any excess arising should follow the accounting treatment as in a business combination. All subsequent fair value changes of the financial liability are recognized in the statement of income and no earnings are attributed to the non-controlling interest. However, where the Group has not acquired a present ownership interest as part of a business combination, the non-controlling interest continues to receive an allocation of profit or loss and is reclassified as a financial liability at each reporting date as if the acquisition took place at that date. Any excess over the reclassified carrying amount of the non-controlling interest and all subsequent fair value changes of the financial liability are recognized directly in retained earnings.

Foreign currency translation

The assets and liabilities of each of the Group's companies are measured using the currency of the primary economic environment in which the entity operates ("the functional currency"). Statements of income of foreign entities are translated into the Group's reporting currency at average exchange rates for the year and statements of financial position are translated at the exchange rates prevailing on 31 December.

Goodwill arising from the acquisition of a foreign operation is expressed in the functional currency of the foreign operation and is translated at the closing rate of the reporting period (for more information see note 11.3).

Foreign currency transactions translated into the functional currency are accounted for at the exchange rate prevailing at the date of the transactions; gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies are recognized in the statement of income, except when deferred outside the statement of income as qualifying cash flow hedges or net investment hedges.

Exchange differences arising on monetary items that form part of a company's net investment in a foreign operation are recognized in other comprehensive earnings (currency translation adjustment) and are fully reclassified to the statement of income should the Group lose control of a subsidiary, lose joint control over an interest in a joint arrangement or lose significant influence over an associate. When a foreign operation is partially disposed of or sold, exchange differences that were recorded in equity are recognized in the statement of income as part of the net gain or loss on sale, except for a partial disposal of a subsidiary without loss of control, where a proportionate share of the cumulative currency translation adjustments are re-attributed to non-controlling interest and not recognized in the statement of income.

In countries with limited foreign currency availability and where several exchange rates are available the Group has applied the rate at which the future cash flows represented by the transaction or balance could have been settled if those cash flows had occurred at the measurement date. If exchangeability between two currencies is temporarily lacking, the rate used is the first subsequent rate at which exchanges could be made.

Hyperinflation

Since 31 December 2018, the Group applied IAS 29 Financial Reporting in Hyperinflationary Economies for Argentina. In accordance with IAS 29, the financial statements of Argentina are expressed in terms of the measuring unit current as of 31 December 2022 and 2021. Monetary assets and liabilities are not restated as they are already expressed in the measuring unit current at the end of the reporting period, whereas all non-monetary items such as inventory, property, plant and equipment and equity recorded at historical rates are restated in terms of the measuring unit current at the end of December 2022 and 2021.

The resulting gain of CHF 9 million (2021: CHF 9 million) on the net liability monetary position was recorded as part of production cost of goods sold in the consolidated statement of income.

The restatement of equity by CHF 99 million (2021: CHF 55 million) was reflected as an increase in retained earnings, of which CHF 15 million (2021: CHF 8 million) was attributable to the non-controlling interest. The restated financial statements of Argentina are translated into Swiss francs at the exchange rate applicable as of 31 December 2022 and 2021.

Inflation in Lebanon has increased significantly, and the three-year cumulative inflation exceeded 100 percent in July 2020. No hyperinflation accounting was applied for the consolidated financial statements as of 31 December 2022 and 2021, as the impact is considered immaterial.

In Zimbabwe, inflation has increased significantly since the return to a national currency in February 2019 and cumulative inflation has exceeded 100 percent. No hyperinflation accounting was applied for the consolidated financial statements as of 31 December 2021, as the impact is considered immaterial. In 2022, Holcim divested its business in Zimbabwe (see note 2.3).

2.3 Change in the scope of consolidation

As part of its strategy, Holcim has completed several acquisitions and disposals during the past two years.

Acquisition of businesses

Million CHF	Malarkey Roofing Products	Others [2]	Total 2022	Elevate [1]	Others [2]	Total 2021
Assets acquired and liabilities assumed at acquisition date:						
Cash and cash equivalents	77	34	111	22	43	65
Other current assets	89	271	360	530	75	605
Property, plant and equipment	128	461	589	267	234	501
Intangible assets	193	363	557	999	56	1,055
Other long-term assets	4	(42)	(39)	109	53	162
Bank overdrafts	0	(20)	(20)	0	(1)	(1)
Other current liabilities	(46)	(190)	(236)	(247)	(143)	(390)
Long-term provisions	(31)	(10)	(42)	(330)	(15)	(345)
Other long-term liabilities	(59)	(43)	(102)	(121)	(53)	(174)
Fair value of net assets	**355**	**823**	**1,179**	**1,229**	**249**	**1,476**
Goodwill acquired:						
Fair value of net assets	(355)	(823)	(1,179)	(1,229)	(249)	(1,476)
Non-controlling interest	0	0	0	0	5	5
Fair value of net assets acquired	**(355)**	**(823)**	**(1,179)**	**(1,229)**	**(244)**	**(1,471)**
Total purchase consideration	1,315	1,433	2,748	3,205	270	3,475
Fair value of previously held equity interest	0	2	2	0	(8)	(8)
Goodwill acquired	**960**	**612**	**1,571**	**1,976**	**18**	**1,995**
Cash outflow on acquisitions:						
Total purchase consideration	1,315	1,433	2,748	3,205	270	3,475
Acquired cash and cash equivalents net of bank overdrafts	(77)	(14)	(91)	(22)	(42)	(65)
Deferred and advance considerations	0	(98)	(98)	0	(2)	(2)
Cash outflow from acquisitions	**1,238**	**1,321**	**2,559**	**3,183**	**226**	**3,409**

1 Formerly Firestone Building Products
2 Including purchase price allocation refinements from prior year acquistions

Acquisition of Malarkey Roofing Products in 2022

In December 2021, Holcim signed an agreement to acquire Malarkey Roofing Products (Malarkey), a leading company in the US residential roofing market. The acquisition was completed on 28 February 2022 when Holcim acquired 100% of the voting equity shares for a consideration of CHF 1,315 million (USD 1,425 million) in cash.

The identifiable assets and liabilities of Malarkey are recognized at fair value as at the effective date of the acquisition. The excess of the consideration over the fair value is recorded as goodwill. As at 31 December 2022, the purchase price allocation (PPA) was completed.

The goodwill arising from the acquisition amounts to CHF 960 million. The goodwill is attributable to the favourable presence of synergies, industrial know-how, assembled workforce and economies of scale expected from the acquisition. The goodwill recognized is not deductible for income tax purposes.

The value of the intangible assets acquired amounts to CHF 193 million and mainly reflects the recognition of technology, customer relationships and trademark.

Malarkey contributed CHF 395 million to the Group net sales for the period from 28 February 2022 to 31 December 2022. If the acquisition had occurred on 1 January 2022, Malarkey's contribution to Group net sales would have been CHF 472 million.

The contribution of Malarkey to the Group net income after deducting the related acquisition costs is not material. The contribution to the Earnings Per Share is accretive from the first year.

The fair value of the acquired receivables substantially equals the gross contractual amount to be collected. The results of Malarkey are reported in the product line of Solutions & Products and within the operating segment of North America.

Acquisition Elevate (formerly Firestone Building Products) in 2021

In January 2021, Holcim signed an agreement to acquire Firestone Building Products (Elevate) a leader in commercial roofing and building envelope solutions based in the United States. The acquisition was completed on 31 March 2021 when Holcim acquired 100% of the voting equity shares for a final consideration of CHF 3,200 million (USD 3,396 million) in cash.

As at 31 March 2022, the purchase price allocation (PPA) was completed with no material refinements. The final fair value of the net assets acquired was CHF 1,232 million.

Other acquisitions in the current reporting period

In 2022, Holcim acquired mainly the following businesses:

- Concrecar, a ready-mix concrete supplier in Quintana Roo, Mexico (March 2022)
- FAMY Group, an aggregates supplier in France (April 2022)
- PRB Group, the biggest independent manufacturer of specialty building solutions in France (May 2022)
- The remaining 70% of Transport Stroy, a ready-mix concrete supplier based in Bulgaria resulting in the Group obtaining the control of its associate (May 2022)
- Cajun Ready Mix Concrete, a ready-mix concrete supplier in the Baton Rouge metropolitan area, Louisiana, USA (May 2022)
- General Beton, a ready-mix concrete and aggregates supplier in Romania (June 2022)
- The aggregate and asphalt business segments of Mathers Group in Montreal, Quebec, Canada (June 2022)
- Teko Mining Serbia, an aggregates and asphalt supplier in Serbia (July 2022)
- SES Foam LLC, a spray foam insulation company, USA (July 2022)
- Basic Construction Company, a sand and gravel operation, USA (August 2022)
- Cantillana, a specialty building solutions market leader in Belgium (September 2022)
- Wiltshire Heavy Building Materials, one of the leading building solutions and material circularity companies, United Kingdom (September 2022)
- Polymers Sealants North America division of Illinois Tool Works, a leader in coating, adhesive and sealant solutions, USA (October 2022)
- Izolbet, one of the leading players in the specialty building solutions market, Poland (October 2022)

All acquisitions aggregated, excluding Malarkey, contributed CHF 408 million to the Group net sales in 2022. If the acquisitions had occurred on 1 January 2022, the contribution to Group net sales would have been CHF 934 million.

Other acquisitions in the previous comparative period

In 2021, Holcim acquired mainly the following businesses:

- Edile Commerciale (S.P.A.), a ready-mix concrete supplier in Milan, Italy (February 2021)
- Eugène Bühler & Fils SA, an aggregates supplier in Switzerland (February 2021)
- Cemex Rhone Alpes, a ready-mix concrete and aggregates supplier in Lyon, France (March 2021)
- Beton Mobile du Quebec, a ready-mix business in Quebec, Canada (April 2021)
- Heinrich Teufel GmbH & Co. KG, a producer of aggregates and ready-mix concrete in Southern Germany (July 2021)
- Polcalc Nawozy Wapniowe Sp. z o.o, a granulated calcium carbonate producer in Poland (August 2021)
- Utelite Corporation, a lightweight aggregates producer in Coalville, Utah (September 2021)
- Patriot Ready Mixed Concrete, LLC, a producer of ready-mix concrete in Alexandria, Virginia (November 2021)
- Marshall Concrete Products, a supplier of concrete products and services in Minneapolis/St. Paul and the surrounding metropolitan area (December 2021)
- Cowden Inc., a ready-mix concrete and aggregates producer in Bellingham, Washington (December 2021)
- The aggregate and concrete businesses segments of HALYPS Building Materials S.A., comprising of the aggregates business and two ready-mix concrete plants in Athens, Greece (December 2021)
- Compaktuna (formerly PTB-Compaktuna), a leading specialty building solutions producer based in Belgium and operating across the Benelux region and Northern France (December 2021)
- In addition, in April 2021, the Group acquired the remaining 50% of Lafarge Emirates Cement LLC resulting in the Group obtaining the control of its subsidiary.

Disposals of Businesses

Million CHF	India	Brazil	Others	Total 2022	2021
Cash and cash equivalents	876	102	3	981	29
Assets classified as held for sale	0	0	0	0	20
Other current assets	904	104	24	1,032	75
Property, plant and equipment	2,545	711	28	3,284	127
Intangible assets	50	18	0	69	0
Other long-term assets	392	201	(0)	592	8
Bank overdrafts	0	0	0	0	(15)
Other current liabilities	(1,130)	(136)	(23)	(1,288)	(62)
Long-term provisions	(82)	(68)	(1)	(152)	(13)
Other long-term liabilities	(230)	(62)	(3)	(295)	(27)
Net assets	**3,325**	**869**	**28**	**4,222**	**142**
Non-controlling interest	(1,723)	(0)	(0)	(1,723)	(27)
Net assets disposed of	**1,602**	**869**	**28**	**2,499**	**114**
Goodwill disposed	1,382	67	32	1,481	120
Cumulative other comprehensive income	961	169	23	1,154	119
Net gain (loss) on disposals before taxes	2,052	(188)	(22)	1,843	(136)
Tax and other expenses	139	18	17	174	10
Total disposal consideration	**6,138**	**935**	**78**	**7,151**	**227**
Disposed cash and cash equivlaents net of bank overdrafts	(876)	(102)	(3)	(981)	(14)
Tax and disposal costs paid	(53)	(38)	0	(91)	(4)
Deferred consideration	0	0	15	15	0
Cash inflow from disposals	**5,208**	**794**	**90**	**6,093**	**209**

Disposal of its business in India
On 15 September 2022, Holcim divested 63.11% stake in Ambuja Cement at a share price of INR 385 (which includes 50.05% of ACC Limited) and the 4.48% direct stake in ACC Limited at a share price of INR 2,300 to the Adani Group, for a total consideration of CHF 6,138 million which resulted in a net gain before taxes of CHF 2,052 million.

Disposal of its business in Brazil
On 6 September 2022, Holcim divested 100% stake in Brazil (LafargeHolcim Brazil S.A.) for USD 961 million (CHF 935 million) to CSN (Companhia Siderúrgica Nacional) which resulted in a net loss before taxes of CHF 188 million.

Other divestments in the current reporting period
In 2022, Holcim completed:

- The sale of its Northern Ireland cement business to Cookstown Cement Ltd (January 2022)
- The sale of its cement business in Zimbabwe, representing a 76.45% stake in the company, to Fossil Mines Pvt. Ltd. (December 2022)

Divestments in the previous comparative period
- The sale of its Indian Ocean cluster, to Taylor Smith Investment (October 2021)
- The sale of its business in Zambia, representing a 75% stake in the company, to its joint venture company Huaxin Cement Co. Ltd. (November 2021)
- The sale of its business in Malawi, representing a 100% stake in the company, to its joint venture company Huaxin Cement Co. Ltd. (December 2021)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

Significant pending transactions

In 2022, Holcim initiated the following transactions:

- Holcim has signed an agreement to sell its business in Russia to the local management team. Closing of the transaction is subject to regulatory approvals (see more information in note 13).

2.4 Principal consolidated companies of the Group

The following table lists the principal subsidiaries controlled by Holcim Ltd, Grafenauweg 10, CH-6300 Zug. It includes all legal entities representing at least 30% of the net sales of the country in which it operates.

Region / Company	Country	Municipality	Share Capital as at 31 December 2022	Cement	Aggre-gates	Ready-Mix Concrete	Solutions and Products	Percentage of interest
Asia Pacific								
Holcim (Australia) Pty Ltd	Australia	Sydney	AUD 1,120 million		◆	●	▲	100.0%
LafargeHolcim Bangladesh Limited	Bangladesh	Dhaka	BDT 11,614 million	■	◆			29.4%
Jiangyou LafargeHolcim Shuangma Cement Co., Ltd	China	Jiangyou City	CNY 200 million	■				100.0%
Lafarge Dujiangyan Cement Co., Ltd.	China	Dujiangyan City	CNY 857 million	■	◆			75.0%
Holcim (New Zealand) Ltd	New Zealand	Christchurch	NZD 34 million	■	◆			100.0%
Holcim Philippines Inc.	Philippines	Taguig City	PHP 6,452 million	■	◆		▲	85.7%
Latin America								
Holcim (Argentina) S.A.	Argentina	Cordoba	ARS 366 million	■	◆	●	▲	82.5%
Holcim (Colombia) S.A.	Colombia	Bogotà	COP 217,343 million	■	◆	●	▲	100.0%
Holcim (Costa Rica) S.A.	Costa Rica	San José	CRC 8,577 million	■	◆	●	▲	65.3%
Holcim (Ecuador) S.A.	Ecuador	Guayaquil	USD 61 million	■	◆	●	▲	92.2%
Cemento Holcim de El Salvador S.A. de C.V.	El Salvador	Antiguo Cuscatlán	USD 10 million	■			▲	95.4%
Holcim Concretos El Salvador, S.A. de C.V.	El Salvador	Colón	USD n.m.[1]			●		94.0%
Société des Ciments Antillais	French West Indies	Baie-Mahault	EUR 3 million	■				69.7%
Holcim México Operaciones S.A. de C.V.	Mexico	Mexico City	MXN 5,877 million	■	◆	●		100.0%
Holcim (Nicaragua) S.A.	Nicaragua	Managua	NIO 19 million	■		●	▲	52.3%

[1] n.m.: not material

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

Region / Company	Country	Municipality	Share Capital as at 31 December 2022		Cement	Aggre-gates	Ready-Mix Concrete	Solutions and Products	Percentage of interest
Europe									
Lafarge Zementwerke GmbH	Austria	Vienna	EUR	3 million	■				70.0%
Holcim (Azerbaijan) O.J.S.C.	Azerbaijan	Baku	AZN	32 million	■				90.3%
Holcim (Belgique) S.A.	Belgium	Nivelles	EUR	110 million	■	◆	●		100.0%
Cantillana NV	Belgium	Sint-Martens-Latem	EUR	1 million				▲	100.0%
Holcim Solutions and Products EMEA BV	Belgium	Zaventem	EUR	9 million				▲	100.0%
Compaktuna BV	Belgium	Zwijnaarde	EUR	1 million				▲	100.0%
Holcim (Bulgaria) AD	Bulgaria	Beli Izvor	BGN	1 million	■		●		100.0%
Holcim (Hrvatska) d.o.o.	Croatia	Koromacno	HRK	285 million	■	◆	●		100.0%
Lafarge Cement a.s.	Czech Republic	Cizkovice	CZK	1,143 million	■				68.0%
Lafarge Bétons	France	Issy les Moulineaux	EUR	38 million			●		100.0%
Lafarge Ciments	France	Issy les Moulineaux	EUR	113 million	■				100.0%
Lafarge Ciments Distribution	France	Issy les Moulineaux	EUR	17 million	■				100.0%
Lafarge Granulats	France	Issy les Moulineaux	EUR	19 million		◆			100.0%
PRB Produits de revêtement du Batiment	France	Les Achards	EUR	2 million				▲	100.0%
Holcim (Deutschland) GmbH	Germany	Hamburg	EUR	47 million	■				100.0%
Holcim (Süddeutschland) GmbH	Germany	Dotternhausen	EUR	6 million	■				100.0%
Holcim Kies und Splitt GmbH	Germany	Hamburg	EUR	4 million		◆			100.0%
Holcim Beton und Betonwaren GmbH	Germany	Hamburg	EUR	n.m.[1]			●		100.0%
Heracles General Cement Company S.A.	Greece	Lykovryski	EUR	121 million	■			▲	100.0%
Lafarge Beton Industrial Commercial SA	Greece	Lykovrysi	EUR	14 million		◆	●		100.0%
Lafarge Cement Hungary Ltd	Hungary	Szentlőrinc	HUF	1,000 million	■				70.0%
Holcim (Italia) S.p.a.	Italy	Milano	EUR	26 million	■				100.0%
Holcim Aggregati Calcestruzzi s.r.l.	Italy	Milano	EUR	11 million		◆	●		100.0%
Lafarge Ciment (Moldova) S.A.	Moldova	Rezina	MDL	223 million	■				95.3%
Lafarge Cement S.A.	Poland	Małogoszcz	PLN	811 million	■	◆	●		100.0%
Lafarge Kruszywa SP z.o.o.	Poland	Warsaw	PLN	370 million		◆			100.0%
Izolbet SP z.o.o.	Poland	Gostynin	PLN	12 million				▲	100.0%
Holcim (Romania) S.A.	Romania	Bucharest	RON	205 million	■	◆	●		99.7%
Somaco Grup Prefabricate SRL	Romania	Bucharest	RON	50 million				▲	99.7%
LLC Holcim (Rus) Construction Materials[2]	Russia	Moscow	RUB	9 million	■			▲	100.0%
LLC Lafarge Aggregates and Concrete[2]	Russia	Karelia	RUB	11 million		◆			100.0%
Lafarge Beocinska Fabrika Cementa	Serbia	Beocin	RSD	5,124 million	■		●		100.0%
Lafarge Cement d.o.o	Slovenia	Trbovlje	EUR	6 million	■				70.0%
LafargeHolcim España S.A.U.	Spain	Madrid	EUR	221 million	■		●	▲	100.0%
Holcim (Schweiz) AG	Switzerland	Zurich	CHF	71 million	■	◆			100.0%
Holcim Kies und Beton AG	Switzerland	Zurich	CHF	30 million		◆	●		100.0%
Holcim Trading Ltd	Switzerland	Zurich	USD	4 million					100.0%
Aggregate Industries UK Ltd.	United Kingdom	Leicester	GBP	n.m.[1]		◆	●	▲	100.0%
Lafarge Cauldon Limited	United Kingdom	Leicester	GBP	n.m.[1]	■				100.0%

[1] n.m.: not material

[2] In December 2022, the Group signed an agreement to sell its business in Russia to the local management team. Closing of the transaction is subject to regulatory approvals (see note 13).

Region / Company	Country	Municipality	Share Capital as at 31 December 2022	Cement	Aggre-gates	Ready-Mix Concrete	Solutions and Products	Percentage of interest
North America								
Lafarge Canada Inc.	Canada	Toronto	CAD n.a.[2]	■	◆	●	▲	100.0%
Holcim (US) Inc.	USA	Chicago	USD n.m.[1]	■			▲	100.0%
Holcim – ACM Management, Inc.[4]	USA	Chicago	USD n.m.[1]		◆	●		100.0%
Holcim Solutions and Products US, LLC[5]	USA	Nashville	USD n.a.[2]				▲	100.0%
Herbert Malarkey Roofing Company	USA	Portland	USD n.a.[2]				▲	100.0%
Middle East Africa								
Lafarge Ciment de M'sila "LCM"	Algeria	Algiers	DZD 7,257 million	■				100.0%
Lafarge Ciment d'Oggaz "LCO"	Algeria	Algiers	DZD 3,848 million	■				100.0%
Cilas Spa	Algeria	Algiers	DZD 138 million	■				49.0%
Lafarge Cement Egypt S.A.E.	Egypt	Cairo	EGP 826 million	■				95.7%
Lafarge Ready Mix S.A.E.	Egypt	Cairo	EGP 30 million			●		100.0%
Bazian Cement Company Limited	Iraq	Sulaimaniyah	IQD 2 million	■			▲	70.0%
Karbala Cement Manufacturing Ltd	Iraq	Karbala	IQD 49,735 million	■				51.0%
Jordan Cement Factories Company P.S.C.[3]	Jordan	Amman	JOD 60 million	■		●		50.3%
Bamburi Cement Limited	Kenya	Nairobi	KES 1,815 million	■				58.6%
Holcim (Liban) S.A.L.	Lebanon	Beirut	LBP 97,580 million	■				52.1%
Ashakacem Plc.	Nigeria	Gombe	NGN 1,120 million	■				83.8%
Lafarge Africa Plc.	Nigeria	Ikoyi	NGN 8,054 million	■				83.8%
Lafarge Industries South Africa (Pty) Ltd	South Africa	Edenvale	ZAR 2,713 million	■		●		100.0%
Lafarge Mining South Africa (Pty) Ltd	South Africa	Edenvale	ZAR 400 million		◆			100.0%
Mbeya Cement Company Limited	Tanzania	Mbeya	TZS 5,636 million	■				65.0%
Lafarge Emirates Cement LLC	United Arab Emirates	Dubai	AED 323 million	■				100.0%
Readymix Gulf Co Limited L.L.C.	United Arab Emirates	Dubai	AED 8 million			●		69.4%
Hima Cement Ltd.	Uganda	Kampala	UGX 19,080 million	■				71.0%

1 n.m.: not material
2 n.a.: not applicable
3 In 2020, Jordan Cement Factories (JCF) filed for insolvency. In 2022, the Creditors Committee approved a restructuring plan for JCF which was subsequently also approved by the competent Jordanian court. JCF is now implementing the approved restructuring plan which has been reflected into the accounts.
4 Former Aggregate Industries Management Inc.
5 Former Firestone Building Products Company, LLC

Holcim Innovation Centers

Company	Country	Municipality	Share Capital as at 31 December 2022	Percentage of interest
Holcim Innovation Center	France	Saint Quentin Fallavier	EUR 23 million	100.0%
Holcim Technology Ltd	Switzerland	Zug	CHF 10 million	100.0%

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Principal finance and holding companies

The following table lists the principal finance and holding companies controlled by Holcim. It includes all entities with more than CHF 500 million of assets and direct participation in operational companies or with external financing over CHF 100 million over the last two years.

Principal finance and holding companies

Company	Country	Municipality	Share Capital as at 31 December 2022			Percentage of interest
Holcim Finance (Australia) Pty Ltd	Australia	Sydney	AUD	n.m.[1]		100.0%
Holcim (Australia) Holdings Pty Ltd	Australia	Sydney	AUD	1,444	million	100.0%
Holcibel S.A.	Belgium	Mons	EUR	691	million	100.0%
LNA Holdings ULC	Canada	Edmonton	CAD	n.a.[2]		100.0%
Holcim Investments (France) S.A.S.	France	Issy les Moulineaux	EUR	136	million	100.0%
Lafarge S.A.	France	Issy les Moulineaux	EUR	1,161	million	100.0%
Financière Lafarge S.A.S.	France	Issy les Moulineaux	EUR	4,069	million	100.0%
Société financière immobilière et mobilière "SOFIMO" S.A.S.	France	Issy les Moulineaux	EUR	1,055	million	100.0%
Holcim Auslandbeteiligungs GmbH	Germany	Hamburg	EUR	3	million	100.0%
Holcim Beteiligungs GmbH	Germany	Hamburg	EUR	102	million	100.0%
LH Global Hub Services Private Limited	India	Navi Mumbai	INR	300	million	100.0%
Holcim Gruppo (Italia) S.p.a.	Italia	Milano	EUR	9	million	100.0%
Holcim Finance (Luxembourg) S.A.	Luxembourg	Luxembourg	EUR	2	million	100.0%
Holcim US Finance (Luxembourg) S.A.[3]	Luxembourg	Luxembourg	USD	n.m.[1]		100.0%
Holcim Sterling Finance (Netherlands) B.V.	Netherlands	Amsterdam	GBP	n.m.[1]		100.0%
Holchin B.V.	Netherlands	Amsterdam	EUR	n.m.[1]		100.0%
Holderfin B.V.	Netherlands	Amsterdam	EUR	4	million	100.0%
Caricement B.V.	Netherlands	Amsterdam	EUR	n.m.[1]		100.0%
Holcim Investments (Spain), S.L.	Spain	Madrid	EUR	174	million	100.0%
Holcim Continental Finance Ltd	Switzerland	Zug	CHF	50	million	100.0%
Holcim Helvetia Finance Ltd	Switzerland	Zug	CHF	10	million	100.0%
Holcim International Finance Ltd	Switzerland	Zug	CHF	50	million	100.0%
Holcim Group Services Ltd	Switzerland	Zug	CHF	1	million	100.0%
Holdertrade Ltd	Switzerland	Zug	CHF	2	million	100.0%
Marine Cement AG	Switzerland	Zug	CHF	15	million	100.0%
Aggregate Industries Holdings Limited	United Kingdom	Leicester	GBP	n.m.[1]		100.0%
Holcim Finance US LLC	USA	Wilmington	USD	n.a.[2]		100.0%
Holcim Participations (US) Inc.	USA	Chicago	USD	n.m.[1]		100.0%

[1] n.m.: not material
[2] n.a.: not applicable
[3] Former Holcim US Finance S. à r.l. & Cie S.C.S

Listed Group companies

Region	Company	Country	Municipality	Place of listing	Market capitalization at 31 December 2022 in local currency			Security code number
Asia Pacific	LafargeHolcim Bangladesh Limited	Bangladesh	Dhaka	Chittagong, Dhaka	BDT	75,257	million	BD0643LSCL09
	Holcim Philippines Inc.	Philippines	Taguig City	Manila	PHP	25,163	million	PHY3232G1014
Latin America	Holcim (Argentina) S.A.	Argentina	Cordoba	Buenos Aires	ARS	103,688	million	ARP6806N1051
	Holcim (Costa Rica) S.A.	Costa Rica	San José	San José	CRC	132,949	million	CRINC00A0010
	Holcim (Ecuador) S.A.	Ecuador	Guayaquil	Quito, Guayaquil	USD	1,106	million	ECP516721068
Middle East Africa	Bamburi Cement Limited	Kenya	Nairobi	Nairobi	KES	11,433	million	KE0000000059
	Holcim (Liban) S.A.L.	Lebanon	Beirut	Beirut	USD	605	million	LB0000012833
	Lafarge Africa Plc.	Nigeria	Ikoyi	Lagos	NGN	386,587	million	NGWAPCO00002

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

2.5 Non-controlling interests

Holcim had two Group companies with material non-controlling interests until 15 September 2022. Information regarding these subsidiaries is as follows:

Material non-controlling interest

Company	Country	Non-controlling interest[1]		Net income[2]		Total equity[2]		Dividends paid to non-controlling interest	
Million CHF		**2022**	2021	**2022**	2021	**2022**	2021	**2022**	2021
ACC Limited	India	**n.a.**[3]	63.9%	**43**	141	**n.a.**[3]	1,223	**86**	21
Ambuja Cements Ltd.	India	**n.a.**[3]	36.9%	**72**	92	**n.a.**[3]	774	**32**	3

[1] The non-controlling interest of these companies represents the percentage interest (direct and indirect).
[2] Attributable to non-controlling interest. In 2022, Holcim divested ACC Limited and Ambuja Cement (see note 2.3). 2022 Net income comprises their contribution until disposal.
[3] n.a.: not applicable

Set out below is the summarized financial information relating to ACC Limited and Ambuja Cements Ltd. before intercompany eliminations. In 2022, Holcim divested 63.11% stake in Ambuja Cement (which includes 50.05% of ACC Limited) and the 4.48% direct stake in ACC Limited (see note 2.3). Therefore, 2022 Statement of income and Statement of cash flows comprises their contribution until disposal.

Statement of income

	ACC Limited		Ambuja Cements Ltd.	
Million CHF	**2022**[1]	2021	**2022**[1]	2021
Net sales	**1,406**	**1,975**	**1,255**	**1,705**
Net income	**67**	**221**	**196**	**249**

Statement of cash flows

Million CHF	**2022**[1]	2021	**2022**[1]	2021
Cash flow from operating activities	**(125)**	**380**	**126**	**319**
Increase (decrease) in cash and cash equivalents	**(419)**	**188**	**(92)**	**157**

[1] 2022 Statement of income and Statement of cash flows comprises their contribution until disposal.

As of 31 December 2022, Holcim has no material non-controlling interests following the divestment of India (see note 2.3).

3. Segment reporting

3.1 Accounting principles

For purposes of internal presentation, each region (Asia Pacific, Europe, Latin America, Middle East Africa and North America) is reviewed separately by the Chief Operating Decision Maker (i.e. the Group CEO), corresponding to the aggregation of countries or regional clusters:

Asia Pacific
Europe
Latin America
Middle East Africa
North America

Each of the above operating segments derives its revenues largely from the sale of Cement, Aggregates, Ready-Mix Concrete and Solutions & Products.

The four product lines are as follows:

Cement, which comprises clinker, cement and other cementitious materials
Aggregates
Ready-Mix Concrete
Solutions & Products, which comprises precast, concrete products, asphalts, mortars, roofing systems and contracting and services

Group financing (including financing costs and financing income) and income taxes are managed on a Group basis and are not allocated to any operating segments. Transfer prices between segments are set at arm's-length basis in a manner similar to transactions with third parties. Segment revenues and segment results include transfers between segments. Those transfers are eliminated on consolidation.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

3.2 Operating segments

Information by operating segment

	Asia Pacific[3]		Europe[4]	
	2022	2021	**2022**	2021
Statement of income (Million CHF)				
Net sales to external customers	**4,842**	5,947	**8,393**	8,032
Net sales to other segments			**114**	87
TOTAL NET SALES	**4,842**	**5,947**	**8,507**	**8,119**
Recurring EBITDA after leases	**1,036**	**1,660**	**1,612**	**1,697**
Recurring EBITDA after leases margin in %	**21.4**	27.9	**18.9**	20.9
Recurring EBIT	**789**	**1,330**	**1,091**	**1,114**
Recurring EBIT margin in %	**16.3**	22.4	**12.8**	13.7
OPERATING PROFIT (LOSS)	**801**	**1,320**	**486**	**1,077**
Operating profit (loss) margin in %	**16.5**	22.2	**5.7**	13.3
Statement of financial position (Million CHF)				
Invested capital	**3,897**	7,604	**10,141**	10,690
Investments in associates and joint ventures	**1,904**	2,078	**207**	215
Total assets	**4,164**	10,755	**15,844**	16,179
Total liabilities	**2,238**	3,798	**8,342**	7,321
Statement of cash flows (Million CHF)				
Capex[1]	**338**	389	**441**	446
Income taxes paid	**113**	116	**90**	132
Personnel (unaudited)				
Number of personnel	**4,969**	15,972	**22,794**	20,895
Reconciliation of measures of profit and loss to the consolidated statement of income				
Recurring EBITDA after leases	**1,036**	**1,660**	**1,612**	**1,697**
Depreciation and amortization of property, plant and equipment, intangible and long-term assets	**(247)**	(329)	**(521)**	(583)
Recurring EBIT	**789**	**1,330**	**1,091**	**1,114**
Restructuring, litigation and other non-recurring costs	**12**	(10)	**(16)**	(34)
Impairment of operating assets			**(589)**	(4)
Reversal of impairment of operating assets				
OPERATING PROFIT (LOSS)	**801**	**1,320**	**486**	**1,077**
Profit on disposals and other non-operating income				
Loss on disposals and other non-operating expenses				
Share of profit (loss) of associates				
Financial income				
Financial expenses				
NET INCOME BEFORE TAXES				

[1] The capex consists of the purchase and disposal of property, plant and equipment.
[2] The results of Malarkey and Elevate are reported in the product line Solutions & Products and the majority of the results are reported within the reportable segment North America (for more information see note 2.3).
[3] In 2022, Holcim divested 63.11% stake in Ambuja Cement (which includes 50.05% of ACC Limited) and the 4.48% direct stake in ACC Limited (see note 2.3). Therefore, 2022 Statement of income and Statement of cash flows comprises their contribution until disposal.
[4] Russia is excluded from the key performance indicators since 1 March 2022 (see note 13)
[5] On 18 October 2022, Lafarge SA resolved a previously disclosed inquiry by the U.S. Department of Justice into legacy operations in Syria during the country's civil war. Under the terms of the resolution, Lafarge SA and its long-defunct subsidiary Lafarge Cement Syria paid a financial penalty of USD 778 million (CHF 767 million), which was recorded under Administration expenses and is reflected in the line "Operating profit (loss)" Corporate / Eliminations (see note 16.3).

Latin America		Middle East Africa		North America[2]		Corporate/ Eliminations[5]		Total Group	
2022	2021	**2022**	2021	**2022**	2021	**2022**	2021	**2022**	2021
2,926	2,611	**2,400**	2,430	**10,002**	7,316	**626**	497	**29,189**	26,834
42	32	**209**	126	**90**	60	**(455)**	(305)		
2,968	**2,643**	**2,609**	**2,557**	**10,092**	**7,376**	**171**	**192**	**29,189**	**26,834**
1,102	**1,007**	**565**	**595**	**2,568**	**1,940**	**(328)**	**(337)**	**6,554**	**6,562**
37.1	38.1	**21.7**	23.3	**25.4**	26.3			**22.5**	24.5
956	**865**	**381**	**388**	**1,902**	**1,333**	**(365)**	**(418)**	**4,752**	**4,612**
32.2	32.7	**14.6**	15.2	**18.8**	18.1			**16.3**	17.2
956	**1,165**	**353**	**82**	**1,804**	**1,277**	**(1,178)**	**(519)**	**3,221**	**4,401**
32.2	44.1	**13.5**	3.2	**17.9**	17.3			**11.0**	16.4
1,977	2,471	**3,866**	4,377	**14,812**	13,150	**278**	826	**34,971**	39,118
3	42	**1,157**	1,323	**52**	56			**3,323**	3,714
3,124	4,017	**4,359**	4,899	**19,186**	17,264	**10,924**	6,771	**57,603**	59,885
1,403	1,676	**2,043**	2,189	**11,618**	7,293	**2,345**	7,134	**27,989**	29,411
132	145	**95**	109	**426**	331	**3**	(1)	**1,435**	1,420
244	204	**50**	56	**161**	201	**143**	118	**802**	828
8,947	9,437	**8,141**	9,001	**14,230**	12,759	**1,341**	1,608	**60,422**	69,672
1,102	**1,007**	**565**	**595**	**2,568**	**1,940**	**(328)**	**(337)**	**6,554**	**6,562**
(147)	(142)	**(184)**	(207)	**(666)**	(607)	**(37)**	(81)	**(1,802)**	(1,949)
956	**865**	**381**	**388**	**1,902**	**1,333**	**(365)**	**(418)**	**4,752**	**4,612**
(0)	1	**14**	(4)	**(43)**	(56)	**(813)**	(91)	**(846)**	(194)
	(2)	**(42)**	(302)	**(54)**			(10)	**(685)**	(318)
	301								301
956	**1,165**	**353**	**82**	**1,804**	**1,277**	**(1,178)**	**(519)**	**3,221**	**4,401**
								2,199	36
								(424)	(231)
								17	(7)
								183	96
								(641)	(652)
								4,555	**3,644**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

Information by product line

	Cement[1]		Aggregates	
Million CHF	2022	2021	2022	2021
Statement of income and statement of cash flows				
Net sales to external customers	**14,859**	15,155	**3,102**	2,973
Net sales to other segments	**1,482**	1,244	**1,093**	1,064
Total net sales	**16,340**	**16,399**	**4,195**	**4,037**
– of which Asia Pacific[4]	**3,424**	4,501	**602**	597
– of which Europe[5]	**4,060**	3,983	**1,877**	1,934
– of which Latin America	**2,516**	2,292	**48**	36
– of which Middle East Africa	**2,371**	2,314	**48**	45
– of which North America	**3,638**	2,998	**1,620**	1,424
– of which Corporate/Eliminations	**331**	310		
Recurring EBITDA after leases	**4,488**	**4,954**	**932**	**921**
– of which Asia Pacific[4]	**803**	1,383	**172**	190
– of which Europe[5]	**1,004**	1,105	**376**	386
– of which Latin America	**1,054**	977	**8**	4
– of which Middle East Africa	**562**	572	**1**	5
– of which North America	**1,349**	1,208	**401**	363
– of which Corporate	**(285)**	(292)	**(26)**	(27)
Recurring EBITDA after leases margin in %	**27.5**	**30.2**	**22.2**	**22.8**
Recurring EBIT	**3,301**	**3,587**	**646**	**618**
– of which Asia Pacific[4]	**617**	1,127	**129**	142
– of which Europe[5]	**705**	730	**239**	244
– of which Latin America	**923**	848	**4**	2
– of which Middle East Africa	**386**	376	**(0)**	2
– of which North America	**953**	828	**296**	256
– of which Corporate	**(284)**	(321)	**(22)**	(28)
Recurring EBIT margin in %	**20.2**	**21.9**	**15.4**	**15.3**
Capex[3]	**1,052**	1,084	**226**	209
Personnel (unaudited)				
Number of personnel	**27,209**	38,217	**9,223**	8,971

[1] Cement, clinker and other cementitious materials.
[2] Precast, concrete products, asphalt, mortars, roofing systems and contracting and services. The results of Malarkey and Elevate are reported in the product line Solutions & Products and the majority of the results are reported within the reportable segment North America (for more information see note 3.2).
[3] The capex consists of the purchase and disposal of property, plant and equipment.
[4] In 2022, Holcim divested 63.11% stake in Ambuja Cement (which includes 50.05% of ACC Limited) and the 4.48% direct stake in ACC Limited (see note 2.3). Therefore, 2022 Statement of income comprises their contribution until disposal.
[5] Russia is excluded from the key performance indicators since 1 March 2022 (see note 13)

	Ready-mix concrete		Solutions & Products[2]		Corporate/ Eliminations		Total Group	
	2022	2021	**2022**	2021	**2022**	2021	**2022**	2021
	5,711	5,128	**5,518**	3,578			**29,189**	26,834
	37	39	**32**	33	**(2,644)**	(2,380)		
	5,748	**5,167**	**5,550**	**3,612**	**(2,644)**	**(2,380)**	**29,189**	**26,834**
	836	877	**228**	234	**(249)**	(262)	**4,842**	5,947
	2,220	2,123	**1,539**	1,202	**(1,190)**	(1,123)	**8,507**	8,119
	535	396	**75**	68	**(205)**	(149)	**2,968**	2,643
	228	225	**40**	52	**(79)**	(80)	**2,609**	2,557
	1,928	1,546	**3,758**	2,116	**(852)**	(709)	**10,092**	7,376
			(90)	(60)	**(70)**	(58)	**171**	192
	267	**295**	**868**	**392**			**6,554**	**6,562**
	34	57	**27**	30			**1,036**	1,660
	83	100	**149**	106			**1,612**	1,697
	39	19	**2**	7			**1,102**	1,007
	(7)	5	**8**	12			**565**	595
	137	132	**681**	237			**2,568**	1,940
	(18)	(19)	**0**	(0)			**(328)**	(337)
	4.7	**5.7**	**15.6**	**10.8**			**22.5**	**24.5**
	137	**155**	**668**	**252**			**4,752**	**4,612**
	23	41	**18**	20			**789**	1,330
	37	57	**110**	84			**1,091**	1,114
	28	10	**(0)**	6			**956**	865
	(12)	(1)	**7**	11			**381**	388
	104	98	**549**	151			**1,902**	1,333
	(43)	(49)	**(16)**	(20)			**(365)**	(418)
	2.4	**3.0**	**12.0**	**7.0**			**16.3**	**17.2**
	31	60	**117**	63	**9**	4	**1,435**	1,420
	11,464	11,675	**12,125**	10,159	**401**	650	**60,422**	69,672

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

3.3 Information by country

Million CHF	Net sales to external customers 2022	Net sales to external customers 2021	Property, plant and equipment and intangible assets 2022	Property, plant and equipment and intangible assets 2021
USA	**7,715**	5,276	**6,188**	5,752
India[1]	**2,521**	3,551	**0**	2,532
Canada	**2,565**	2,230	**2,279**	2,322
France	**2,020**	1,988	**2,297**	2,210
United Kingdom	**1,800**	1,745	**1,215**	1,351
Australia	**1,188**	1,190	**879**	954
Mexico	**1,352**	1,115	**572**	510
Germany	**883**	860	**654**	674
Switzerland	**787**	759	**728**	720
Others	**8,358**	8,120	**7,312**	8,862
Total	**29,189**	**26,834**	**22,125**	**25,886**

[1] In 2022, Holcim divested ACC Limited and Ambuja Cement (see note 2.3). 2022 Net sales to external customers comprise their contribution until disposal.

Net sales to external customers are based primarily on the location of assets (origin of sales). There is no single external customer where net sales amount to 10 % or more of the Group net sales.

4. Operating profit

4.1 Accounting principles

Operating profit excludes items that are not directly related to the Group's operating activities. These primarily relate to gains or losses on the disposal of material property, plant and equipment, gains or losses on the sale of Group companies, associates and joint ventures, revaluation gains or losses on previously held equity interests, indemnification provisions, disputes with minority shareholders, share of profit (loss) of associates and financial income and expenses.

4.2 Revenue recognition

Revenue from the sale of the Group's core products is recognized when delivery has taken place and control of the goods has been transferred to the customer. The customer obtains control of the goods when the significant risks and rewards of products sold are transferred according to the specific delivery terms that have been formally agreed with the customer, generally upon delivery when the bill of lading is signed by the customer as evidence that they have obtained physical possession and accepted the products delivered to them.

The core products are often sold with volume discounts. Revenue from these sales is recognized based on the price specified on the invoice, net of estimated discounts. Accumulated experience is used to estimate and provide for the discounts, using the most likely amount. A liability is recognized for expected volume discounts in relation to sales made until the end of the reporting period. No element of financing is deemed present as the sales are made with credit terms largely ranging between 30 days and 60 days depending on the specific terms agreed to with the Group company concerned, which is consistent with market practice. Generally, cement, aggregates and ready-mix concrete are not returned as a customer will only accept these products once they have passed a stringent quality check at delivery point.

The Group offers separately priced extended warranties covering roofing systems, generally ranging from 5 to 30 years. Revenues from such activities are deferred and recognized in income over the life of the warranty on a straight line basis.

Contract liabilities, which is a Group company's obligation to transfer goods or services to a customer for which the entity has already received consideration, relate mainly to advance payments from customers which are disclosed in note 10.5 and to volume incentive programs and warranty programs. As of 31 December 2022, contract liabilities amounted to CHF 395 million (2021: CHF 574 million).

A trade receivable is recognized when the products are delivered to a customer as this is the point in time that the consideration becomes unconditional because only a passage of time is required before the payment is due.

Contract assets, which is a Group company's right to consideration that is conditional on something other than the passage of time, relate mainly to construction and paving activities and are immaterial on a Group level.

The Group is also involved in providing services in conjunction with the sale of its core products and is developing retail activities in certain markets. However, both these activities remain immaterial on Group level at this stage.

4.3 Production cost of goods sold

Million CHF	**2022**	2021
Material expenses	**(6,941)**	(5,808)
Fuel expenses	**(1,835)**	(1,508)
Electricity expenses	**(1,381)**	(1,249)
Personnel expenses	**(2,061)**	(1,960)
Maintenance expenses	**(1,480)**	(1,397)
Depreciation, amortization and impairment	**(2,375)**	(1,924)
Other production expenses	**(1,363)**	(1,347)
Changes in inventory	**(139)**	(106)
Total	**(17,575)**	**(15,298)**

4.4 Research and development

Innovation through research and development projects plays a key part in the Group's activities. Holcim's innovation centers in France, Switzerland and a worldwide network of laboratories are delivering locally tailored solutions backed by global expertise.

Through this research network, research and development projects are carried out with a view to generate added value for customers through end user oriented products and services focusing on:

- breakthrough technologies aiming at production systems improvements,
- development of low carbon products and solutions aiming at environmental protection and lowering the Group's environmental footprint, and
- innovation through digital technology into all areas of Holcim's business, fundamentally changing how the Group operates and delivers value to customers.

Included in the Group's Operating profit are the research and development costs of CHF 229 million (2021: CHF 237 million).

4.5 Summary of depreciation, amortization and impairment

Million CHF	2022	2021
Production facilities	**(2,375)**	(1,924)
Distribution and sales facilities	**(369)**	(298)
Administration facilities	**(101)**	(115)
Total depreciation, amortization and impairment of operating assets (a)	**(2,845)**	**(2,337)**
Of which net impairment (charge) / reversal relating to property, plant and equipment and assets classified as held for sale (note 11.2)	**(676)**	218
Of which impairment (charge) relating to goodwill (note 11.3)	**0**	(192)
Of which impairment (charge) relating to intangible assets (note 11.3)	**(9)**	(4)
Of which impairment (charge) relating to investments in joint ventures (note 6.4)	**0**	(39)
Depreciation, amortization and impairment of non-operating assets (note 5.3)	**(34)**	0
Total depreciation, amortization and impairment of non-operating assets (b)	**(34)**	**0**
Total depreciation, amortization and impairment (a + b)	**(2,878)**	**(2,336)**
Of which depreciation of property, plant and equipment (note 11.2)	**(1,648)**	(1,792)
Of which depreciation of right-of-use assets (note 11.2)	**(358)**	(370)
Of which amortization of intangible assets (note 11.3)	**(153)**	(156)
Of which total impairment (charge)	**(719)**	(17)

5. Profit and loss on disposals and other non-operating items

5.1 Accounting principles

Profit and loss on disposals and other non-operating items comprise gains or losses on the sale of Group companies and material property, plant and equipment and other non-operating items that are not directly related to the Group’s operating activities such as revaluation gains or losses on previously held equity interests, indemnification provisions, disputes with minority shareholders.

5.2 Profit on disposals and other non-operating income

Million CHF	2022	2021
Dividends earned	**8**	4
Gain on disposals before taxes	**2,084**	30
Other	**107**	2
Total	**2,199**	**36**

In 2022, the position “Gain on disposals before taxes” mainly includes:

- India gain on disposal of CHF 2,052 million, further information is disclosed in note 2.3
- several gains on disposal of property, plant and equipment.

In 2022, the position "Other" mainly includes the operating profit generated by the Russian operations since 1 March 2022 (see note 13).

5.3 Loss on disposals and other non-operating expenses

Million CHF	2022	2021
Depreciation, amortization and impairment of non-operating assets	**(34)**	0
Loss on disposals before taxes	**(311)**	(161)
Other	**(79)**	(70)
Total	**(424)**	**(231)**

The "Loss on disposals before taxes" mainly resulted from the realization of currency translation differences following the divestment of the Group's business in Brazil in 2022 and in Middle East Africa in 2021 (see note 2.3).

In 2022 and 2021, the position "Other" includes notably the expenses relating to the Group's activities that are not part of its operating cycle or abandoned such as indemnification provisions.

6. Investments in associates and joint ventures

6.1 Accounting principles

The Group, in the course of its business, may enter into arrangements where it will exercise joint control over entities resulting in classifying these operations as joint ventures or joint operations depending on the rights and obligations arising from the contractual arrangement. Alternatively, it may enter into arrangements where it holds 20 to 50 percent of the voting rights and exercises significant influence resulting in these companies being classified as associate companies.

Investments in associates and joint ventures are accounted for using the equity method of accounting.

The Group's share of profit of joint ventures is classified within Operating profit as these operations form an integral part of the Group's financial performance, reflecting its core business activities. The Group's share of profit (loss) of associates is classified below Operating profit.

Goodwill arising from an acquisition is included in the carrying amount of the investments in joint ventures and associated companies.

Equity accounting is discontinued when the carrying amount of the investment together with any long-term interest in a joint venture or in an associate reaches zero, unless the Group has either incurred or guaranteed additional obligations in respect of the joint venture or associate.

The Group tests joint ventures or associates for impairment only when there is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the net investment. Objective evidence of impairment includes events such as significant financial difficulties of the joint venture or associate or information about significant changes with an adverse effect that have taken place in the economic environment in which the joint venture or associate operates, and indicates that the carrying amount of the joint venture or associate may not be recovered.

An impairment loss is only recognized when the carrying amount of the joint venture or associate exceeds its recoverable amount, being the higher of value in use and fair value less costs of disposal.

The recoverable amount of an investment in a joint venture or associate is assessed for each joint venture or associate, unless the joint venture or associate does not generate cash inflows from continuing use that are largely independent of those from other assets of the Group.

6.2 Main changes during the current reporting period

During 2022, Holcim sold its investment in a joint venture in Cuba and 0.38% of its stake in Huaxin Cement in China.

6.3 Main changes during the previous comparative period

During 2021, Holcim acquired a participation of 21% in XtreeE and 17% in CCB (Carbon Capture Buildings Greentech), in France.

Investments in associates and joint ventures

Million CHF	2022	2021
Investments in associates	**216**	259
Investments in joint ventures	**3,107**	3,455
Total	**3,323**	**3,714**

6.4 Movements in investments in joint ventures

Million CHF	2022	2021
1 January	**3,455**	**3,217**
Share of profit of joint ventures	**308**	474
Dividends earned	**(333)**	(255)
Net disposals	**(64)**	(18)
Reclassifications	**17**	(13)
Impairments	**0**	(39)
Currency translation effects	**(276)**	88
31 December	**3,107**	**3,455**

In 2022, the position "Net disposals" mainly relates to the divestment of its joint venture in Cuba and 0.38% of its stake in Huaxin Cement in China.

In 2021, the position "Net disposals" mainly relates to the Group's stake in a joint venture in Middle East Africa where the Group has obtained control over it, leading to its subsequent full consolidation. The position "Impairments" mainly relates to the impairment of the Group's interest in certain joint ventures in Middle East Africa.

6.5 List of principal joint ventures

Principal joint ventures

Region	Company	Country of incorporation or residence	Effective participation (percentage of interest)
Asia Pacific	Cement Australia Holdings Pty Ltd	Australia	50.0%
	Huaxin Cement Co. Ltd.	China	41.5%
Middle East Africa	Lafarge Maroc S.A.S.	Morocco	50.0%
	Readymix Qatar L.L.C	Qatar	49.0%

Listed joint ventures companies

Region	Company	Country	Municipality	Place of listing	Market capitalization at 31 December 2022 in local currency			Security code number
Asia Pacific	Huaxin Cement Co. Ltd. – A shares	China	Wuhan	Shanghai	CNY	20,183	million	CNE000000DC6
	Huaxin Cement Co. Ltd. – H shares	China	Wuhan	Hong Kong	HKD	6,392	million	CNE1000057N3
Middle East Africa	LafargeHolcim Maroc S.A.	Morocco	Casablanca	Casablanca	MAD	31,632	million	MA0000012320

In 2022, Huaxin Cement Co. Ltd – B shares listed in Shanghai were converted to H shares listed in Hong Kong. To respect Hong Kong regulations, Holcim sold 8 million Huaxin H shares (representing 0.38% of Holcim's stake) for a consideration of CHF 14 million.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

6.6 Huaxin Cement Co. Ltd. (China)

As of 31 December 2022, the Group holds 41.5 percent (2021: 41.8 percent) of the voting rights in the joint venture company Huaxin Cement Co. Ltd.

The fair value of the investment in Huaxin Cement Co. Ltd. based on a quoted market price on 31 December 2022 amounted to CHF 1,321 million (2021: CHF 1,966 million).

Set out below is the summarized financial information for the material joint venture company Huaxin Cement Co. Ltd., which is accounted for using the equity method.

Since Huaxin Cement Co. Ltd. is a publicly listed company in China and has not yet published its financial statements for the year 2022, the disclosed amounts for the investments in the joint venture Huaxin Cement Co. Ltd. are as of 30 September 2022.

The summarized financial information presented below are the amounts included in the IFRS financial statements of Huaxin Cement Co. Ltd. as at 30 September 2022 and as at 31 December 2021. As of 30 September 2022, dividends of CHF 124 million (31 December 2021: CHF 132 million) were received from Huaxin Cement Co. Ltd.

Huaxin Cement Co. Ltd. – Statement of financial position

Million CHF	**30.09.2022**	31.12.2021
Cash and cash equivalents	**1,021**	1,269
Other current assets	**1,148**	1,135
Non-current assets	**6,331**	5,429
Total assets	**8,500**	**7,832**
Current financial liabilities	**434**	272
Other current liabilities	**1,594**	1,554
Long-term financial liabilities	**1,553**	1,208
Other non-current liabilities	**450**	294
Total liabilities	**4,032**	**3,328**
Net assets	**4,469**	**4,505**
Shareholders' equity (excluding non-controlling interest)	**3,990**	**4,124**

Huaxin Cement Co. Ltd. – Statement of comprehensive earnings

Million CHF	**Jan-Sep 2022**	Jan-Dec 2021
Net sales	**3,145**	**4,600**
Operating profit[1]	**508**	**1,030**
Loss on disposals and other non-operating expenses	**(4)**	(8)
Financial income	**9**	22
Financial expenses	**(55)**	(46)
Income taxes	**(97)**	(222)
Net income	**361**	**776**
Net income (excluding non-controlling interest)	**336**	713
Other comprehensive earnings	**57**	(4)
Total comprehensive earnings (excluding non-controlling interest)	**393**	**709**

[1] Of which CHF 258 million (2021: CHF 353 million) relate to depreciation and amortization

In 2021, Holcim sold its business in Zambia and Malawi to its joint venture company Huaxin Cement Co. Ltd. (see note 2.3).

6.7 Lafarge Maroc S.A.S. (Morocco)

As of 31 December 2022, the Group holds 50 percent (2021: 50 percent) of the voting rights in the joint venture company Lafarge Maroc S.A.S.

Set out below is the summarized financial information for the material joint venture Lafarge Maroc S.A.S., which is accounted for using the equity method.

Since Lafarge Maroc S.A.S. is the parent company of LafargeHolcim Maroc S.A, a publicly listed company in Morocco which has not yet published its financial statements for the year 2022, the disclosed amounts for the investment in the joint venture Lafarge Maroc S.A.S. are as of 30 June 2022.

The summarized financial information presented below are the amounts included in the IFRS financial statements of Lafarge Maroc S.A.S. as at 30 June 2022 and as at 31 December 2021. As of 30 June 2022, dividends of CHF 36 million (31 December 2021: CHF 25 million) were received from Lafarge Maroc S.A.S.

Lafarge Maroc S.A.S. – Statement of financial position

Million CHF	**30.06.2022**	31.12.2021
Cash and cash equivalents	**27**	89
Other current assets	**339**	299
Non-current assets	**2,200**	2,306
Total assets	**2,566**	**2,694**
Current financial liabilities	**124**	78
Other current liabilities	**360**	349
Long-term financial liabilities	**592**	627
Other non-current liabilities	**244**	245
Total liabilities	**1,320**	**1,299**
Net assets	**1,247**	**1,395**
Shareholders' equity (excluding non-controlling interest)	**821**	**919**

Lafarge Maroc S.A.S. – Statement of comprehensive earnings

Million CHF	**Jan-Jun 2022**	Jan-Dec 2021
Net sales	**569**	**1,154**
Operating profit[1]	**151**	**325**
Loss on disposals and other non-operating expenses	**(5)**	(10)
Financial expenses	**(16)**	(28)
Income taxes	**(61)**	(114)
Net income	**68**	**172**
Net income (excluding non-controlling interest)	**44**	100
Other comprehensive earnings	**4**	(4)
Total comprehensive earnings (excluding non-controlling interest)	**48**	**96**

[1] Of which CHF 51 million (2021: CHF 131 million) relate to depreciation and amortization

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

6.8 Other joint ventures

In 2022 and 2021, there are no unrecognized share of losses relating to other joint ventures.

6.9 Movements in investments in associates

Million CHF	2022	2021
1 January	**259**	**256**
Share of profit of associates	**17**	20
Impairments	**0**	(27)
Subtotal	**17**	**(7)**
Dividends earned	**(12)**	(9)
Net disposals	**(22)**	(6)
Reclassifications	**(17)**	33
Currency translation effects	**(10)**	(7)
31 December	**216**	**259**

As of 31 December 2022, the Group has no interests in associates that are considered as individually material.

There are no unrecognized share of losses relating to the above associates.

7. Financing items

7.1 Accounting principles

Financial income and expenses primarily relate to interest earned on cash and cash equivalents, interest expenses on borrowings, unwinding of discount on long-term provisions, net interest expense on retirement benefit plans, foreign exchange gains and losses and interest expenses on lease liabilities.

7.2 Financial income

Million CHF	2022	2021
Interest earned on cash and cash equivalents	**108**	64
Other financial income	**75**	32
Total	**183**	**96**

7.3 Financial expenses

Million CHF	2022	2021
Interest expenses	**(400)**	(344)
Interest expenses on lease liabilities	**(50)**	(59)
Fair value changes on financial instruments	**(2)**	4
Unwinding of discount on long-term provisions	**(7)**	(8)
Net interest expense on retirement benefit plans	**(8)**	(23)
Impairment and write off of long term financial assets	**(2)**	(68)
Other financial expenses	**(142)**	(141)
Foreign exchange loss net	**(30)**	(13)
Total	**(641)**	**(652)**

Interest expenses relate primarily to financial liabilities measured at amortized cost. Their increase in 2022 is a consequence of higher interest rates (see note 14.4).

Interest expenses include CHF 5 million (2021: CHF 11 million) amortization of bonds and private placements, which were fair valued in previous years following a purchase price allocation exercise. At the end of December 2022, the remaining balance to amortize amounts to CHF 57 million (2021: CHF 61 million).

Interest expenses on lease liabilities include interest expenses related to ongoing lease contracts (see note 14.7).

Other financial expenses include costs for early bond redemptions, commitment fees on credit facilities, bank charges and accruals for interest related to ongoing legal and tax cases.

Foreign exchange losses are mainly due to unhedged receivables and payables denominated in currencies other than functional currencies.

8. Income taxes

8.1 Accounting principles

Income taxes

Holcim's business operations are subject to numerous income taxes imposed by state and local governments. Taxes recognized in the Group Consolidated Financial Statements reflect the Group's best estimate of the outcome based on the facts known at the balance sheet date in each individual country, including changes in tax laws or revised interpretations of existing tax rules and regulations, or on-going tax audits.

Significant judgment is often required in determining the Group's annual tax charges and in evaluating the Group tax positions. Although the Group believes the tax estimates are reasonable, the final determination of tax audits and any related disputes could be materially different from the Group's historical tax provisions and accruals, even if, in each jurisdiction where the Group operates, the Group assesses the tax positions in line with local tax laws and international guidelines, such as the ones issued by the Organisation for Economic Cooperation and Development (OECD).

Deferred taxes

Deferred tax is provided, using the balance sheet liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. Tax rates enacted or substantively enacted by the end of the reporting period are used to determine the deferred tax expense.

Deferred tax assets are recognized to the extent that it is probable that future taxable profit will be available against which deductible temporary differences or unused tax losses can be utilized. Deferred tax liabilities are recognized for taxable temporary differences arising from investments in subsidiaries, associates and interests in joint arrangements except where the Group is able to control the distribution of earnings from these respective entities and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax is charged or credited in the statement of income, except when it relates to items credited or charged outside the statement of income, in which case the deferred tax is treated accordingly.

OECD Pillar 2

To address concerns about uneven profit distribution and tax contributions of large multinational corporations, various agreements have been reached at the global level, including an agreement by over 135 jurisdictions to introduce a global minimum tax rate of 15%. In December 2021, the OECD released a draft legislative framework, followed by detailed guidance released in March 2022, that is expected to be used by individual jurisdictions that signed the agreement to amend their local tax laws.

We anticipate that the Group shall be impacted by the new global minimum tax rate, however at the date the financial statements were authorised for issue, none of the jurisdictions in which the Group operates had enacted or substantively enacted the tax legislation related to Pillar 2.

8.2 Tax expenses

Million CHF	2022	2021
Current taxes	**(860)**	**(902)**
Deferred taxes	**(167)**	**(61)**
Relating to origination and reversal of temporary differences, tax losses and credits	**(177)**	(4)
Relating to changes in tax rates and legislation	**10**	(57)
Total	**(1,027)**	**(963)**

8.3 Reconciliation of tax rate

The expected tax expense at the applicable tax rate is the result of applying the domestic statutory tax rates to net income (loss) before taxes and non-recoverable withholding tax on income of each entity in the country it operates. For the Group, the applicable tax rate varies from one year to the other depending on the relative weight of net income (loss) of each individual entity in the Group's profit as well as the changes in statutory and withholding tax rates.

Million CHF	2022		2021	
Net income before taxes	**4,555**		3,644	
Impairment and net (gain)/loss on disposals of Group companies	**(1,042)**		151	
Net income before impairment, divestments and taxes	**3,513**		3,795	
Group's expected tax charge / rate	**(825)**	**23%**	**(885)**	**23%**
Tax effects of:				
- Lafarge SA DOJ resolution[1]	**(199)**		0	
- Non-recoverable withholding taxes	**(91)**		(137)	
- Incentives for investment and development	**68**		78	
- Non-deductible items	**6**		(116)	
- Income not subject to tax	**61**		91	
- Recognition / (derecognition) of deferred tax assets	**(99)**		60	
- Changes in tax rates	**10**		(57)	
Tax effect of impairment and net (gain)/loss on disposals of Group companies	**41**		3	
Group's effective tax charge / rate	**(1,027)**	**23%**	**(963)**	**26%**

[1] On 18 October 2022, Lafarge SA resolved a previously disclosed inquiry by the U.S. Department of Justice into legacy operations in Syria during the country's civil war. Under the terms of the resolution, Lafarge SA and its long-defunct subsidiary Lafarge Cement Syria paid a financial penalty of USD 778 million (CHF 767 million), which was a non-tax deductible expense (see note 16.3). The Group's effective tax rate excluding the DOJ resolution and before impairment and divestments is 25 percent (2021: 25 percent).

In 2022, total income taxes paid amounts to CHF 802 million (2021: CHF 828 million).

8.4 Deferred taxes

Deferred tax in the consolidated statement of financial position as follows:

Million CHF	2022	2021
Deferred tax assets	**(610)**	(783)
Deferred tax liabilities	**2,187**	2,320
Deferred tax liabilities net	**1,577**	**1,537**

The Group's recognition of deferred tax assets amounting to CHF 610 million (2021: CHF 783 million) reflects that the Group believes that sufficient taxable income will be generated to recover these assets in future periods, although uncertainties regarding the future realisation of recorded tax benefits on temporary differences and tax loss carryforwards from operations in various jurisdictions could result in material adjustments to the deferred tax assets recognized in future periods.

Change in deferred tax assets and liabilities

Million CHF	Property, plant and equipment	Intangible and other long-term assets	Provisions and defined benefit obligations	Other	Tax losses carryforward	Total
2022						
Deferred tax liabilities net as at 1 January 2022	**2,538**	**(78)**	**(100)**	**(142)**	**(680)**	**1,537**
Charged (credited)						
– to the statement of income	**35**	**96**	**16**	**30**	**(9)**	**167**
– to other comprehensive income[1]	**0**	**0**	**(37)**	**9**	**0**	**(28)**
Change in scope[2]	**(218)**	**94**	**18**	**(21)**	**115**	**(12)**
Hyperinflation	**17**	**0**	**0**	**1**	**0**	**18**
Currency translation effects	**(152)**	**(13)**	**(46)**	**(20)**	**124**	**(106)**
Deferred tax liabilities net as at 31 December 2022	**2,221**	**98**	**(149)**	**(143)**	**(450)**	**1,577**
2021						
Deferred tax liabilities net as at 1 January 2021	**2,572**	**(6)**	**(296)**	**(265)**	**(636)**	**1,372**
Charged (credited)						
– to the statement of income	**(9)**	**34**	**43**	**45**	**(52)**	**61**
– to other comprehensive income[1]	**0**	**0**	**153**	**50**	**0**	**203**
Change in scope[2]	**(1)**	**(107)**	**(3)**	**(0)**	**(0)**	**(111)**
Hyperinflation	**29**	**0**	**0**	**1**	**0**	**30**
Currency translation effects	**(53)**	**(0)**	**3**	**27**	**8**	**(17)**
Deferred tax liabilities net as at 31 December 2021	**2,538**	**(78)**	**(100)**	**(142)**	**(680)**	**1,537**

[1] The tax effects upon other comprehensive earnings are included within the consolidated statement of comprehensive earnings on page 179.
[2] Change in scope predominantly relates to divestments of India and Brazil (see note 2.3).

8.5 Tax losses carryforward

Million CHF	Tax losses carry-forward 2022	Tax effect 2022	Tax losses carry-forward 2021	Tax effect 2021
Total tax losses carryforward	**7,733**	**1,715**	**9,072**	**2,141**
Of which reflected in deferred taxes	**(2,421)**	**(450)**	(3,230)	(680)
Total tax losses carryforward not recognized	**5,312**	**1,265**	**5,841**	**1,461**
Expiring as follows:				
Within 1 year	**67**	**13**	33	5
Between 2 and 5 years	**231**	**46**	310	59
Thereafter	**5,014**	**1,206**	5,499	1,396

In 2022, CHF 1,265 million (2021: CHF 1,461 million) of deferred tax assets on tax losses were not recognized as the Group considers it will not generate sufficient taxable income within the carryforward period to realize these deferred tax benefits in all jurisdictions where the Group operates.

8.6 Long-term income tax liabilities

The Group continually monitors its global tax position, and whenever uncertainties arise, the Group assesses the potential consequences and either accrues the liability or discloses a contingent liability in its financial statements, depending on the strength of the Group's position and the resulting risk of loss.

For the purpose of classifying an income tax liability as current or non-current, the Group analyses whether or not the extinguishment of such liability may occur within 12 months from the end of the reporting period and in particular whether or not the Group has the right to defer settlement beyond 12 months in each respective jurisdiction.

The long-term income tax liabilities of CHF 199 million (2021: CHF 389 million) includes the repatriation tax arising from the US tax reform amounting to CHF 39 million (2021: CHF 50 million).

9. Earnings per share

	2022	2021
Basic earnings per share in CHF	**5.48**	**3.73**
Adjusted net income attributable to shareholders of Holcim Ltd (in million CHF)	**3,291**	2,280
Weighted average number of shares outstanding	**600,878,329**	610,503,848
Diluted earnings per share	**5.46**	**3.72**
Adjusted net income used to determine diluted earnings per share (in million CHF)	**3,291**	2,280
Weighted average number of shares for diluted earnings per share	**602,227,449**	612,006,168
Reconciliation of weighted average number of shares outstanding		
Weighted average number of shares outstanding	**600,878,329**	610,503,848
Adjustment for assumed exercise of share options and performance shares	**1,349,119**	1,502,320
Weighted average number of shares for diluted earnings per share	**602,227,449**	612,006,168
Reconciliation of net income attributable to shareholders of Holcim Ltd		
Net income attributable to shareholders of Holcim Ltd – as per statement of income (in million CHF)	**3,308**	2,298
Adjustment for net interest of hybrid bonds (in million CHF)[1]	**(17)**	(18)
Adjusted net income attributable to shareholders of Holcim Ltd (in million CHF)	**3,291**	2,280

[1] Holcim issued two perpetual subordinated notes: EUR 500 million at an initial fixed coupon of 3 percent in April 2019 and CHF 200 million at an initial fixed coupon of 3.5 percent in November 2018. (see note 17.1).

In conformity with the decision taken at the Annual General Meeting of shareholders on 4 May 2022, a dividend of CHF 2.20 per registered share for the financial year 2021 was paid out of the foreign capital reserves from tax capital contributions on 12 May 2022. This resulted in a total payment of CHF 1,330 million.

10. Working capital

10.1 Accounting principles

Trade accounts receivable

Trade accounts receivable are initially recognized at their invoiced amounts less any deductions such as trade discounts.

For trade accounts receivable, the Group applies the simplified approach with expected lifetime credit losses recognized from initial recognition of the receivables in the statement of income. The provision for doubtful debts is established using an expected credit loss model (ECL). The provision is based on a forward-looking ECL, which includes possible default events on the trade accounts receivable over the entire holding period of the receivable. This provision represents the difference between the trade accounts receivable's carrying amount in the consolidated statement of financial position and the estimated collectible amount.

The carrying amount of trade accounts receivable is reduced through use of an allowance account. Impaired trade accounts receivables are derecognized when they are assessed as uncollectable.

The impairment methodology applied for long-term loans and receivables considers whether there has been a significant increase in credit risk (see note 14.6).

Inventories

Inventories are stated at the lower of cost and net realizable value. Cost is determined by using the weighted average cost method. The cost of finished goods and work in progress comprises raw materials and additives, direct labor, other direct costs and related production overheads. Cost of inventories includes transfers from equity of gains or losses on qualifying cash flow hedges relating to inventory purchases.

10.2 Trade accounts receivable

Million CHF	2022	2021
Trade accounts receivable – associates and joint ventures	**66**	47
Trade accounts receivable – third parties	**2,608**	2,630
Net carrying amount	**2,674**	**2,677**

Overdue accounts receivable

	2022			2021		
Million CHF	Gross carrying amount	Lifetime expected credit loss allowance	Net carrying amount	Gross carrying amount	Lifetime expected credit loss allowance	Net carrying amount
Not overdue	**1,959**	**(27)**	**1,931**	2,024	(33)	1,991
Overdue 1 to 89 days	**642**	**(4)**	**638**	601	(11)	590
Overdue 90 to 180 days	**67**	**(10)**	**57**	52	(4)	48
Overdue more than 180 days	**205**	**(157)**	**48**	221	(173)	48
Total	**2,873**	**(199)**	**2,674**	**2,898**	**(221)**	**2,677**

Due to the local nature of the business, specific terms and conditions for trade accounts receivable exist for local Group companies.

In some cases, trade accounts receivable are factored to third parties but the total amount is not considered material for the Group.

Allowance for doubtful accounts

Million CHF	2022	2021
1 January	**(221)**	**(218)**
Disposal of Group Companies	**11**	14
Allowance recognized	**(41)**	(87)
Amounts used	**2**	11
Unused amounts reversed	**44**	55
Currency translation effects	**6**	4
31 December	**(199)**	**(221)**

Loss allowances for expected credit loss for financial assets measured at amortized cost are presented as a deduction from the gross carrying amount of the assets in the statement of financial position. The allowance in the table above relates to accounts receivable for which a lifetime expected credit loss is recognized. See note 14.6 for further details.

10.3 Inventories

Million CHF	2022	2021
Raw materials and additives	**539**	459
Semi-finished and finished products	**1,597**	1,347
Fuels	**226**	297
Parts and supplies	**499**	505
Total	**2,860**	**2,608**

In 2022, the Group recognized inventory write-downs to net realizable value of CHF 15 million (2021: CHF 13 million) relating mainly to parts and supplies.

10.4 Prepaid expenses and other current assets

Million CHF	2022	2021
Prepaid expenses and accruals	**222**	239
Other current assets	**198**	226
Other receivables – associates and joint ventures	**7**	7
Other receivables – third parties	**570**	706
Total	**997**	**1,178**

10.5 Trade accounts payable

Million CHF	2022	2021
Trade accounts payable – associates and joint ventures	**116**	98
Trade accounts payable – third parties	**3,877**	3,647
Advance payments from customers – third parties	**276**	314
Total	**4,269**	**4,059**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

11. Property, plant and equipment, goodwill and intangible assets

11.1 Accounting principles

Property, plant and equipment

Property, plant and equipment is valued at acquisition or construction cost less depreciation and impairment losses.

Cost includes transfers from equity of any gains or losses on qualifying cash flow hedges. Depreciation is charged to amortize the cost of property, plant and equipment over their estimated useful lives, using the straight-line method, on the following bases:

Land and mineral reserves	No depreciation except on land with raw material reserves (unit-of-production method)
Buildings and installations	20 to 40 years
Machinery and equipment	3 to 30 years

Useful lives of assets may be affected by climate-related matters because of transitional risks such as obsolescence and legal restrictions or physical risks as there is the potential for operations to be adversely impacted by extreme variability in weather patterns. The change in useful lives has a direct impact on the amount of depreciation or amortisation recognised each year. Management's review of useful lives has taken into consideration the impact of the Group's 2030 targets. For the calculation of useful lives, the various input factors and the residual values are reviewed annually.

Costs are only included in the asset's carrying amount when it is probable that economic benefits associated with the item will flow to the Group in future periods and the cost of the item can be measured reliably. Costs include the initial estimate of the costs for dismantling and removing the item and for restoring the site on which it is located. All other repairs and maintenance expenses are charged to the statement of income during the period in which they are incurred.

Mineral reserves are valued at cost and are depreciated based on the unit-of-production method over their estimated commercial lives.

Costs incurred to gain access to mineral reserves (typically stripping costs) are capitalized and depreciated over the life of the quarry, which is based on the estimated tons of raw material to be extracted from the reserves.

Interest costs on borrowings to finance construction projects, which necessarily take a substantial period of time to get ready for their intended use, are capitalized during the period of time that is required to complete and prepare the asset for its intended use. All other borrowing costs are expensed in the period in which they are incurred.

Government grants received are deducted from property, plant and equipment and reduce the depreciation charge accordingly.

Goodwill and impairment testing

Goodwill arises in a business combination and is the excess of the consideration transferred to acquire a business over the underlying fair value of the net identified assets acquired. Such goodwill is tested annually for impairment or whenever there are impairment indicators, and is carried at cost less accumulated impairment losses.

Following a business combination, goodwill is allocated to a cash-generating unit or to a group of cash-generating units that are expected to benefit, among others, from the synergies of the business combination. The Group's cash-generating units (CGU) are defined on the basis of the geographical market normally country- or region-related. For the purpose of impairment testing, the Group's cash-generating units are aggregated into an operating segment, which is the level reviewed by the Group CEO (i.e. chief operating decision maker). The discount rate is determined on country or regional cluster level, and therefore disclosed as a range on the operating segment level. The aggregated carrying amount of goodwill that is being monitored at the operating segment level is detailed in note 11.3.

For the goodwill impairment test, the recoverable amount of a cash-generating unit is determined at the higher of its value in use and its fair value less costs of disposal. Management has used the value in use approach to calculate the recoverable amount of the cash-generating unit. The aggregated recoverable amount of the operating segment is then compared to its aggregated carrying amount. An impairment loss is recognized if the aggregated carrying amount of the operating segment exceeds its aggregated recoverable amount. The value in use is determined based on future discounted cash flows using the weighted average cost of capital (WACC). The discount rate reflects the current assessment of the time value of money and the risks specific to the CGU (essentially country risk).

The WACC used for the impairment test is a post-tax discount rate and is applied to post-tax cash flows. There is no material difference in the outcome of the impairment test using the discount rate applied when compared to using a pre-tax discount rate for pre-tax cash flows.

The cash flow projections are generally based on a four-year financial planning period using business plans approved by management. Cash flows beyond the planning period are extrapolated based on increasing sustainable cash flows. The business plans include among others, management's current view on market growth, pricing and costs. In any event, the growth rate used to extrapolate cash flow projections beyond the planning period does not exceed the long-term average growth rate for the relevant market for the products and country in which the cash-generating unit operates. The long-term average growth rate is based on the long-term inflation rate and Gross Domestic Product for the relevant market concerned as published by the International Monetary Fund (IMF).

On disposal of a subsidiary or joint operation, the portion of the goodwill from the related operating segment is allocated to the subsidiary or joint operation disposed of and is included in the determination of profit or loss on disposal.

Impairment losses relating to goodwill cannot be reversed in future periods.

Goodwill arising from an acquisition of joint ventures and associated companies is included in the carrying amount of the net investment in an associate or a joint venture and is not separately recognized. Refer to note 6 for further details.

Sustainability and goodwill impairment testing

Sustainability is a key factor considered by the Group in any investment decision. To reach its 2030 targets, the Group continues to invest in process decarbonization, carbon efficient construction, circular economy, clean energy, biodiversity, air and water. In line with the financial reporting requirements, the business plans include the future investment projects which have been approved as of 31 December 2022.

To reach its 2050 targets, the Group continues to monitor and explore breakthrough technologies such as carbon capture, usage and storage (CCUS), which will be factored in the model when current pilots have been successfully scaled-up.

Carbon pricing is applicable in several markets where the Group operates, notably in Europe. It is reflected in the production cost assumptions in the business plans. The Group continues to monitor the emergence of new CO_2 regulatory pronouncements, which will be factored into the business plans once enacted. For example, the EU Commission announced the establishment of a Carbon Border Adjustment Mechanism (CBAM). This will form an essential policy tool to build the "low-carbon business case" in the long run and secure continued investments in low carbon technologies across European assets. Holcim anticipated the developments of the existing and future European regulatory framework and a specific European roadmap has been developed and aligned with our Strategy 2025 and 2030 decarbonization target.

Sensitivity analysis and goodwill impairment testing (see note 11.3)

Discount rates

A sensitivity analysis was performed on the discount rates at the cash-generating units' level, which accordingly is either at country or regional cluster level, which is then aggregated into an operating segment for goodwill impairment purposes.

Recurring EBITDA margin

In addition, price and costs are also considered as key assumptions impacting the Recurring EBITDA margin. Therefore, the sensitivity on those key assumptions is tested through the Long-term Recurring EBITDA margin variability.

Long-term growth rate

No sensitivity analysis is run on long-term growth rate, as it is offset by the inflation rates included in the discount rates.

Intangible assets

Expenditure on acquired customer relationships, trademarks, mining rights, software, patented and unpatented technology and other intangible assets are capitalized and amortized using the straight-line method over their estimated useful lives, but not exceeding 25 years, except for mining rights which are depleted on a volume basis. Customer lists were mainly acquired as part of the acquisition of Elevate (formerly Firestone Building Products) in 2021 and Malarkey in 2022.

Impairment of non-financial assets

At each reporting date, the Group assesses whether there is any indication that a non-financial asset may be impaired. If any such indication exists, the recoverable amount of the non-financial asset is estimated in order to determine the extent of the impairment loss, if any. Where it is not possible to estimate the recoverable amount of an individual non-financial asset, the Group estimates the recoverable amount of the smallest cash generating unit to which the non-financial asset belongs. The recoverable amount is the higher of an asset's or cash generating unit's fair value less costs of disposal and its value in use. If the recoverable amount of a non-financial asset or cash generating unit is estimated to be less than its carrying amount, the carrying amount of the non-financial asset or cash generating unit is reduced to its recoverable amount. Impairment losses are recognized immediately in the statement of income.

The Group assesses whether there is an indication that an impairment loss recognized in prior periods for an asset or cash generating unit other than goodwill may no longer exist or may have decreased. Where an impairment loss subsequently reverses, the carrying amount of the non-financial asset or cash generating unit is increased to the revised estimate of its recoverable amount. However, this increased amount cannot exceed the carrying amount that would have been determined if no impairment loss had been recognized for that non-financial asset or cash generating unit in prior periods. A reversal of an impairment loss is recognized immediately in the statement of income.

The Group assesses whether there is an indication that an impairment loss recognized in prior periods for an asset or cash generating unit other than goodwill may no longer exist or may have decreased.

11.2 Property, plant and equipment

Million CHF	Land and mineral reserves	Buildings and installations	Machinery and equipment	Construction in progress	Total
2022					
At cost of acquisition	7,739	10,322	28,260	1,453	47,774
Accumulated depreciation/impairment	(2,387)	(5,063)	(15,822)	(61)	(23,333)
Net book value as at 1 January	**5,352**	**5,259**	**12,438**	**1,392**	**24,441**
Acquisitions [1]	162	156	255	15	589
Divestments [1]	(361)	(821)	(1,691)	(410)	(3,284)
Additions	28	12	21	1,544	1,605
Lease additions	73	77	247	0	397
Disposals	(19)	(1)	(26)	(3)	(49)
Modifications and reassessments of leases	(5)	(3)	(11)	0	(20)
Reclassifications	120	164	1,073	(1,368)	(11)
Depreciation	(193)	(383)	(1,430)	0	(2,006)
Hyperinflation [2]	25	22	60	5	112
Impairment charge	(37)	(292)	(305)	(42)	(676)
Currency translation effects	(201)	(87)	(408)	(47)	(743)
Net book value as at 31 December	**4,945**	**4,103**	**10,223**	**1,086**	**20,356**
At cost of acquisition	7,291	8,826	24,447	1,134	41,698
Accumulated depreciation/impairment	(2,346)	(4,724)	(14,224)	(48)	(21,342)
Net book value as at 31 December	**4,945**	**4,103**	**10,223**	**1,086**	**20,356**
2021					
At cost of acquisition	7,612	10,022	27,612	1,304	46,549
Accumulated depreciation/impairment	(2,236)	(4,858)	(15,161)	(75)	(22,329)
Net book value as at 1 January	**5,376**	**5,164**	**12,451**	**1,229**	**24,220**
Acquisitions [1]	84	181	211	25	501
Divestments [1]	(6)	(18)	(94)	(10)	(127)
Additions	6	11	214	1,402	1,633
Lease additions	59	53	229	0	342
Disposals	(19)	(7)	(16)	(4)	(47)
Modifications and reassessments of leases	14	(6)	(3)	0	5
Reclassifications	68	248	835	(1,170)	(19)
Depreciation	(231)	(427)	(1,501)	(3)	(2,162)
Hyperinflation [2]	15	15	45	(10)	65
Impairment charge	(12)	(8)	(63)	0	(83)
Reversal of impairment	0	76	225	0	301
Currency translation effects	(3)	(23)	(94)	(66)	(187)
Net book value as at 31 December	**5,352**	**5,259**	**12,438**	**1,392**	**24,441**
At cost of acquisition	7,739	10,322	28,260	1,453	47,774
Accumulated depreciation/impairment	(2,387)	(5,063)	(15,822)	(61)	(23,333)
Net book value as at 31 December	**5,352**	**5,259**	**12,438**	**1,392**	**24,441**

[1] See more information in note 2.3

[2] See more information in note 2.2.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

In 2022, the Group signed an agreement to sell its business in Russia to the local management team. Closing of the transaction is expected in 2023 and is subject to regulatory approvals (see note 13). The assets to be divested comprised largely of three integrated cement plants and one grinding station. An impairment of CHF 580 million was recorded as of 31 December 2022 in the line "production cost of goods sold" in the reportable segment Europe.

In 2021, the Group signed an agreement with CSN (Companhia Siderúrgica Nacional) for the divestment of its business in Brazil, which has been closed in 2022. The divested assets comprised largely of five integrated cement plants, four grinding stations, six aggregates sites and 19 ready-mix concrete facilities in the reportable segment Latin America. As fair value less costs of disposal was higher than the aggregated carrying amount, a reversal of impairment of CHF 280 million was recorded as of 31 December 2021 in the line "production cost of goods sold".

In 2021, a carrying amount of CHF 17 million was pledged in property, plant and equipment in connection with an ongoing legal case (see note 16.3). As of 31 December 2022, there is no pledged carrying amount in property, plant and equipment.

The position “Property, plant and equipment” includes owned property, plant and equipment and right-of-use assets for lease contracts, as described below:

- Land: Land is leased for production sites and distribution facilities;
- Buildings and installations: Buildings and installations include buildings and installations for production purposes as well as office rent;
- Machinery, equipment and vehicles: Machinery and equipment are used in the manufacturing and distribution processes. Heavy mobile equipment, trucks and vehicles are leased for production and transportation purposes.

Right-of-use assets

Million CHF	Land	Buildings and installations	Machinery, equipment and vehicles	Total right-of-use assets
2022				
Net book value as of 1 January	**420**	**254**	**646**	**1,319**
Acquisitions	**0**	**24**	**13**	**37**
Divestments	**(11)**	**(1)**	**(25)**	**(36)**
Lease additions	**73**	**77**	**247**	**397**
Depreciation	**(58)**	**(63)**	**(237)**	**(358)**
Modifications and reassessments of leases and others	**(5)**	**(7)**	**(11)**	**(22)**
Currency translation effects	**(20)**	**(10)**	**(15)**	**(45)**
Net book value as of 31 December	**400**	**274**	**618**	**1,293**
2021				
Net book value as of 1 January	400	204	665	1,269
Acquisitions	4	67	7	78
Divestments	0	(3)	(3)	(6)
Lease additions	59	53	229	342
Depreciation	(58)	(59)	(252)	(370)
Modifications and reassessments of leases and others	14	(6)	(3)	5
Currency translation effects	0	(3)	3	0
Net book value as of 31 December	**420**	**254**	**646**	**1,319**

11.3 Goodwill and intangible assets

Million CHF	Goodwill	Intangible assets
2022		
At cost of acquisition	15,985	3,040
Accumulated amortization/impairment	(2,030)	(1,594)
Net book value as at 1 January	**13,954**	**1,446**
Acquisitions[1]	1,571	557
Divestments[1]	(1,481)	(69)
Reclassification	0	(15)
Additions	0	33
Amortization	0	(153)
Impairment charge	0	(9)
Hyperinflation[2]	13	0
Currency translation effects	(383)	(21)
Net book value as at 31 December	**13,675**	**1,769**
At cost of acquisition	15,289	3,154
Accumulated amortization/impairment	(1,615)	(1,385)
Net book value as at 31 December	**13,675**	**1,769**

2021		
At cost of acquisition	14,422	1,992
Accumulated amortization/impairment	(2,009)	(1,459)
Net book value as at 1 January	**12,413**	**533**
Change in scope[1]	1,875	1,055
Reclassification	0	22
Additions	0	54
Disposals	0	(25)
Amortization	0	(156)
Impairment charge	(192)	(4)
Hyperinflation[2]	8	0
Currency translation effects	(149)	(34)
Net book value as at 31 December	**13,954**	**1,446**
At cost of acquisition	15,985	3,040
Accumulated amortization/impairment	(2,030)	(1,594)
Net book value as at 31 December	**13,954**	**1,446**

[1] See more information in note 2.3
[2] See more information in note 2.2.

Emission rights

The initial allocation of emission rights granted is recognized at nominal amount (nil value). Where a Group company has emissions in excess of the emission rights granted, it will recognize a provision for the shortfall based on the market price at that date. The emission rights are held for compliance purposes only and therefore the Group does not intend to speculate with these in the open market.

Impairment testing of goodwill

Key assumptions used for value-in-use calculations in respect of goodwill 2022

Operating segments (Million CHF)	Carrying amount of goodwill	Currency	Post-tax discount rates[1]	Long-term growth rates[1]	Rec. EBITDA margins Terminal value
North America[2]	7,648	USD/CAD	+7.2%	+2.0%	+28.7%
Europe	3,966	Various	6.5%–15.2%	1.0%–5.0%	+20.9%
Asia Pacific	382	Various	7.1%–13.4%	2.0%–5.5%	+25.3%
Middle East Africa	767	Various	8.1%–32.7%	1.5%–20.0%	+22.2%
Latin America	888	Various	8.6%–45.0%	1.0%–40.1%	+36.0%
Others	23	Various	6.5%–7.1%	1.0%–2.0%	n.a.
Total	**13,675**				

[1] The discount rates, long-term growth rates and Recurring EBITDA margin are determined on country and regional cluster level, and therefore disclosed as a range at the operating segment level
[2] Including goodwill of CHF 1,976 million resulting from the acquisition of Elevate (formerly Firestone Building Products) in 2021 and goodwill of CHF 960 million resulting from the acquisition of Malarkey in 2022

Key assumptions used for value-in-use calculations in respect of goodwill 2021

Operating segments (Million CHF)	Carrying amount of goodwill	Currency	Post-tax discount rates[1]	Long-term growth rates[1]	Rec. EBITDA margins Terminal value
North America[2]	6,459	USD/CAD	+6.7%	+2.2%	+30.2%
Europe	3,900	Various	5.8%–12.8%	1.0%–5.0%	+22.9%
Asia Pacific	1,801	Various	6.7%–12.8%	2.2%–5.5%	+30.4%
Middle East Africa	836	Various	8.1%–31.9%	1.8%–20.0%	+25.1%
Latin America	935	Various	8.0%–44.1%	1.0%–40.0%	+42.9%
Others	23	Various	5.8%–7.6%	1.0%–2.0%	–
Total	**13,954**				

[1] The discount rates, long-term growth rates and Recurring EBITDA margin are determined on country and regional cluster level, and therefore disclosed as a range at the operating segment level
[2] Including goodwill resulting from the acquisition of Elevate (formerly Firestone Building Products) in 2021, which was determined provisionally pending the finalization of the valuation for those assets and liabilities.

In 2022, no goodwill impairment charge was recognized.

As of end of December 2021, the Group conducted its annual goodwill impairment test review and identified that the aggregated carrying amount of the operating segment Middle East Africa exceeded its aggregated recoverable amount (based on the value in use approach and post-tax discount rate ranges in the 2021 table above) resulting in an impairment loss recognized for CHF 192 million reflected in the line "production cost of goods sold". The impairment charge resulted from a weaker outlook of the macro-economic environment and higher WACC due to economic and/or political uncertainty in countries where some Group companies operate.

Sensitivity analysis

With regard to the assessment of value in use of an operating segment, management concluded that except for the operating segment listed below, a reasonably possible change in the post-tax discount rate or in the long-term Recurring EBITDA margin, would not cause its carrying amount to exceed its recoverable amount. For the operating segment listed below, a change of 1.7 percentage points in the post-tax discount rate or a change of 4.2 percentage points in the long-term Recurring EBITDA margin would cause its recoverable amount to be equal to its carrying amount:

Sensitivity to changes in assumptions 2022

Operating segments	Used post-tax discount rates	Used Long-term Recurring EBITDA margin	Excess of recoverable amount over carrying amount (Million CHF)	Break-even post-tax discount rates using the used Long-term Recurring EBITDA margin	Break-even Long-term Recurring EBITDA margin using the used post-tax discount rates
Middle East Africa	8.1%–32.7%	22.2%	533	9.8%–34.6%	18.0%

12. Financial investments and other financial assets

12.1 Accounting principles

Financial investments and other financial assets consist of:

a) «Financial investments – third parties» are strategic equity investments which are classified at fair value through other comprehensive earnings.

b) «Long-term receivables – associates and joint ventures» are classified as receivables at amortized cost as the Group intends to hold the assets to maturity to collect contractual cash flows.

c) «Long-term receivables – third parties» are classified as receivables at amortized cost as the Group intends to hold the assets to maturity to collect contractual cash flows.

d) «Other long-term assets» are classified as receivables at amortized cost and comprise notably of various deposits in connection with on-going legal and tax cases.

Financial assets at amortized cost are measured using the effective interest method.

All purchases and sales of long-term financial assets are recognized on trade date, which is the date that the Group commits to purchase or sell the asset. The purchase cost includes transaction costs, except for derivative instruments.

Strategic equity investments are investments where the Group generally owns less than 20 percent of the shares and where the Group does not exercise control, joint control or significant influence and which it intends to hold for long-term strategic purposes. Gains and losses arising from changes in the fair value of strategic equity investments at fair value through other comprehensive earnings are included in other reserves until the asset is disposed of, at which time the cumulative gain or loss previously recognized in other reserves is transferred to retained earnings.

Financial assets measurement

At initial recognition, in the case of a financial asset not at fair value through profit or loss, the Group measures a financial asset at its fair value plus transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at fair value through profit or loss are expensed in profit or loss.

Financial assets with embedded derivatives are considered in their entirety when determining whether their cash flows are solely payment of principal and interest.

a) Debt instruments
Subsequent measurement of debt instruments depends on the Group’s business model for managing the asset and the cash flow characteristics of the asset. There are two measurement categories into which the Group classifies its debt instruments:

- Loans and receivables at amortized cost: Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortized cost. A gain or loss on a debt investment that is subsequently measured at amortized cost and is not part of a hedging relationship is recognized in profit or loss when the asset is derecognized or impaired. Interest income from these financial assets is included in finance income using the effective interest rate method.

- Financial assets at fair value through profit and loss: Assets that do not meet the criteria for amortized cost and are held for trading are measured at fair value through profit or loss. Gains and losses on debt investments that are subsequently measured at fair value through profit or loss and are not part of a hedging relationship are recognized in profit or loss and presented net in the profit or loss statement in the period in which they arise. Interest income from these financial assets is included in financial income.

The Group reclassifies debt investments when and only when its business model for managing those assets changes.

b) Equity instruments at fair value
The Group subsequently measures all equity investments at fair value. Where the Group’s management has elected to present fair value gains and losses on strategic equity investments at fair value through other comprehensive income, there is no subsequent reclassification of fair value gains and losses to profit or loss. Dividends from such investments continue to be recognized in profit or loss when the Group’s right to receive payments is established.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

12.2 Long-term financial investments and other long-term assets

Million CHF	2022	2021
Financial investments – third parties	**137**	136
Financial investments – unconsolidated group companies	**0**	114
Long-term receivables – associates and joint ventures	**88**	91
Long-term receivables – third parties	**79**	99
Deferred charges	**49**	56
Other long-term assets	**105**	472
Total	**459**	**968**

Long-term receivables and other long-term assets are primarily denominated in AUD, USD and EUR. The repayment dates vary between one and 27 years (2021: one and 28 years).

In 2022, other long-term assets decreased following the divestment of the Group's business in India (see note 2.3).

In 2021, Financial investments – unconsolidated group companies related to the acquisition in December 2021 of two subsidiaries in Europe (Compaktuna (formerly PTB-Compaktuna) and the aggregate and concrete businesses segments of HALYPS) that was subject to the provisional purchase price allocation exercise which was completed in the first quarter of 2022 (see note 2.3).

In 2022 and 2021, there are no long-term financial investments and other long-term assets which are pledged/restricted.

12.3 Current financial receivables

Million CHF	2022	2021
Marketable securities	**6**	6
Current financial receivables – associates and joint ventures	**14**	18
Current financial receivables – third parties	**108**	237
Total	**128**	**261**
Of which pledged/restricted	**29**	123

13. Assets and related liabilities classified as held for sale

13.1 Accounting principles

Non-current assets (or disposal groups) are classified as held for sale and stated at the lower of carrying amount and fair value less costs to sell if their carrying amount is to be recovered principally through a sale transaction rather than through continuing use.

13.2 Assets and related liabilities classified as held for sale

The assets and related liabilities classified as held for sale as of 31 December 2022, includes the assets and liabilities of Russia and a cement plant in China.

Million CHF	2022	2021
Inventories	46	0
Other current assets	50	0
Property, plant and equipment	62	71
Intangible assets	25	33
Assets classified as held for sale	**183**	**104**
Current liabilities	68	0
Long-term liabilities	27	0
Liabilites directly associated with assets classified as held for sale	**96**	**0**
Net assets classified as held for sale	**87**	**104**

Russia

On 29 March 2022, the Holcim Board of Directors decided to initiate the process to exit the Russian market in line with the company's values to operate in the most responsible manner.

On 13 December 2022, the Group signed an agreement to sell its business in Russia to the local management team and consequently classified the assets and the related liabilities as held for sale. Closing of the transaction is subject to regulatory approvals.

The assets to be divested comprised largely of three integrated cement plants and one grinding station in the reportable segment Europe. An impairment of CHF 623 million of which CHF 580 million in property, plant and equipment, CHF 9 million in intangible assets and CHF 34 million in current assets has been charged.

Effective from 1 March 2022, Russia is excluded from Holcim key performance indicators (notably net sales, Recurring EBIT and Free Cash Flow after leases). The operating profit generated by the Russian operations since 1 March 2022 is therefore included in the line "Profit on disposals and other non-operating income" (see note 5), cash in Russia is shown as restricted cash in current financial receivables before the classification as held for sale as of 31 December 2022.

14. Net financial debt

14.1 Accounting principles

Cash and cash equivalents

Cash and cash equivalents are financial assets. Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash with maturities of three months or less from the date of acquisition and are subject to an insignificant risk of changes in value. For the purpose of the statement of cash flows, cash and cash equivalents is presented net of bank overdrafts.

Derivative instruments and hedging

The Group mainly uses derivative financial instruments in order to reduce its exposure to changes in interest rates, foreign currency exchange rates and commodity prices. The Group enters into foreign exchange contracts and interest rate swaps to hedge certain exposures relating to debt, foreign exchange contracts to hedge firm commitments for the acquisition of certain property, plant and equipment and into swaps and options in order to manage its exposure to commodity risks.

Derivatives are regarded as hedging instruments under hedge accounting relationships unless they are not designated as hedges in which case they will be classified as held for trading. Financial derivatives expected to be settled within twelve months after the end of the reporting period are classified as current liabilities or current assets. For cash flow hedges, gains and losses are recorded in the cash flow hedging reserve, a separate component of equity, and recycled to profit or loss or as a basis adjustment to inventory or property, plant and equipment as the hedged transaction occurs.

Derivatives are initially recognized at fair value on the date a derivative contract is entered into and are subsequently remeasured at their fair value. The method of recognizing the resulting gain or loss is dependent on the nature of the item being hedged. On the date a derivative contract is entered into, the Group designates certain derivatives as either (a) a hedge of the fair value of a recognized asset or liability (fair value hedge) or (b) a hedge of a particular risk associated with a recognized asset or liability, such as future interest payments on floating rate debt (cash flow hedge) or (c) a hedge of a foreign currency risk of a firm commitment or highly probable forecast transaction (cash flow hedge) or (d) a hedge of a net investment in a foreign entity (accounted for similarly to a cash flow hedge).

Changes in the fair value of derivatives that are designated and qualify as fair value hedges and that are highly effective are recorded in the statement of income, along with any changes in the fair value of the hedged asset or liability that is attributable to the hedged risk.

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in the cash flow hedging reserve within equity, limited to the cumulative change in fair value of the hedged item on a present value basis from the inception of the hedge. The gain or loss relating to the ineffective portion is recognized immediately in profit or loss.

Where the firm commitment results in the recognition of an asset, for example, property, plant and equipment, or a liability, the gains or losses previously deferred in the cash flow hedging reserve are transferred from equity and included in the initial measurement of the non-financial asset or liability. Otherwise, amounts deferred in equity are transferred to the statement of income and classified as income or expense in the same periods during which the cash flows, such as hedged firm commitments or interest payments, affect the statement of income.

The Group documents at the inception of hedging transactions the economic relationship between hedging instruments and hedged items, including whether the hedging instrument is expected to offset changes in cash flows of hedged items, and its risk management objective and strategy.

Long-term financial liabilities

Bank loans acquired and bonds issued are recognized initially at fair value (i.e. the proceeds received), net of transaction costs incurred. Subsequently, bank loans and bonds are stated at amortized cost, using the effective interest method, with any difference between proceeds (net of transaction costs) and the redemption value being recognized in the statement of income over the term of the borrowings.

Financial liabilities that are due within twelve months after the end of the reporting period are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability until more than twelve months after the reporting period. The repayment of the current portion of such liabilities is shown in the statement of cash flows in the line “Repayment of long-term financial liabilities”.

14.2 Net financial debt

Million CHF	31.12.2021	Cash flows	Non cash flows	31.12.2022
Current financial liabilities[1]	2,391	(492)	(243)	**1,655**
Long-term financial liabilities	14,514	(300)	260	**14,475**
Gross financial debt	**16,905**	**(792)**	**17**	**16,130**
Derivative assets	(246)	0	(29)	**(275)**
Cash and cash equivalents	(6,682)	(3,370)	228	**(9,824)**
Net Financial Debt	**9,977**	**(4,162)**	**216**	**6,032**

[1] Including bank overdraft cash flow movement for CHF -20 million

Million CHF	2022	2021
Net Financial Debt as at the beginning of the period	**9,977**	**8,483**
Cash flow from operating activities	**(4,562)**	(5,045)
Cash flow from investing activities	**(2,081)**	4,710
Payout on ordinary shares	**1,330**	1,222
Dividends paid to non-controlling interest	**234**	139
Coupon paid on subordinated fixed rate resettable notes	**22**	23
Capital repaid to non-controlling interest	**0**	1
Net movement of treasury shares[1]	**895**	211
Increase in participation in existing Group companies	**0**	2
Total cash effective movements as per statement of cash flows	**(4,162)**	**1,262**
Change in scope[2]	**(124)**	222
Currency translation effects	**(183)**	(289)
Increase in long-term lease liabilities	**400**	341
Others	**123**	(42)
Total non cash effective movements	**216**	**232**
Net Financial Debt as at the end of the period	**6,032**	**9,977**

[1] The net movement of treasury shares includes the cash out of CHF 391 million related to the share buyback program (see note 17.2)
[2] Change in scope predominantly relates to the divestment of India and partially offset by other acquisitions (see note 2.3).

14.3 Cash and cash equivalents

Million CHF	2022	2021
Cash at banks and on hand	**3,181**	2,214
Short-term deposits[1]	**6,643**	4,468
Total	**9,824**	**6,682**
Bank overdrafts	**(66)**	(66)
Cash and cash equivalents for the purpose of the consolidated statement of cash flows	**9,757**	**6,615**

[1] Of which CHF 827 million (2021: CHF 197 million) are investments in monetary mutual funds.

14.4 Financial liabilities

Million CHF	2022	2021
Current financial liabilities – associates and joint ventures	**11**	13
Current financial liabilities – third parties	**190**	761
Current portion of long-term financial liabilities	**1,421**	1,586
Derivative liabilities (note 14.5)	**33**	31
Total current financial liabilities	**1,655**	**2,391**
Long-term financial liabilities – associates and joint ventures	**0**	1
Long-term financial liabilities – third parties	**13,288**	14,251
Derivative liabilities (note 14.5)	**1,187**	262
Total long-term financial liabilities	**14,475**	**14,514**
Total	**16,130**	**16,905**
Of which secured	**79**	78

Details of total financial liabilities

Million CHF	2022	2021
Loans from financial institutions	**586**	856
Bonds and private placements	**12,972**	14,026
Commercial paper notes	**0**	340
Total loans and bonds	**13,558**	**15,222**
Lease liabilities (note 14.7)	**1,351**	1,390
Derivative liabilities (note 14.5)	**1,220**	293
Total	**16,130**	**16,905**

"Loans from financial institutions" include amounts due to banks and other financial institutions. Repayment dates vary between one and twelve years (2021: one and ten years). As per the loan agreements, the Group is required to comply with certain provisions or covenants. As of 31 December 2022, the Group complied with its debt covenants in all material respects.

As of 31 December 2022, the unused committed credit lines totalled CHF 5,404 million (2021: CHF 5,299 million).

Financial liabilities by currency

Currency	2022 Million CHF	2022 In %	2022 Interest rate[1]	2021 Million CHF	2021 In %	2021 Interest rate[1]
EUR	**8,416**	**52.2**	**+1.8%**	7,482	44.3	+1.2%
USD	**4,633**	**28.7**	**+5.2%**	5,336	31.6	+3.3%
CHF	**1,853**	**11.5**	**+0.9%**	2,450	14.5	+1.1%
GBP	**673**	**4.2**	**+2.5%**	653	3.9	+2.8%
CAD	**220**	**1.4**	**+3.7%**	208	1.2	+3.4%
AUD	**68**	**0.4**	**+4.4%**	296	1.8	+3.7%
NGN	**48**	**0.3**	**+15.9%**	43	0.3	+15.1%
INR	**1**	**0.0**	**+7.6%**	168	1.0	+5.3%
Others	**218**	**1.4**	**+5.1%**	269	1.6	+6.1%
Total	**16,130**	**100.0**	**+2.8%**	**16,905**	**100.0**	**+2.1%**

[1] Weighted average nominal interest rate on financial liabilities at 31 December.

Interest rate structure of total financial liabilities

Million CHF	2022	2021
Financial liabilities at fixed rates	**9,537**	9,956
Financial liabilities at floating rates	**6,593**	6,949
Total	**16,130**	**16,905**

Financial liabilities that are hedged to a fixed or floating rate are disclosed on a post hedge basis.

Information on the maturity of financial instruments is disclosed in note 14.6.

Bonds and private placements as at 31 December

Nominal value		Nominal interest rate	Term	Description[1]	Net book value in CHF[2]	Net book value in CHF[2]
Million					**2022**	2021
Holcim Ltd						
CHF	412	3.00%	2012–2022	Bonds	**0**	412
CHF	222	2.00%	2013–2022	Bonds	**0**	222
CHF	150	1.00%	2015–2025	Bonds	**150**	150
CHF	440	1.00%	2018–2024	Bonds	**440**	440
Lafarge S.A.						
USD	483	7.13%	2006–2036	Bonds	**502**	502
Holcim Finance (Luxembourg) S.A.						
EUR	320	3.00%	2014–2024	Bonds guaranteed by Holcim Ltd	**314**	330
EUR	33	2.00%	2016–2026	Schuldschein loan guaranteed by Holcim Ltd	**32**	34
EUR	152	1.46%	2016–2023	Schuldschein loan guaranteed by Holcim Ltd	**149**	157
EUR	869	1.38%	2016–2023	Bonds guaranteed by Holcim Ltd	**854**	898
EUR	1,150	2.25%	2016–2028	Bonds guaranteed by Holcim Ltd, swapped into floating interest rates in 2019	**950**	1,182
EUR	750	1.75%	2017–2029	Bonds guaranteed by Holcim Ltd	**731**	768
EUR	500	0.50%	2019–2026	Bonds guaranteed by Holcim Ltd (bond exchange)	**460**	476
EUR	500	2.38%	2020–2025	Bonds guaranteed by Holcim Ltd	**491**	515
EUR	850	0.50%	2020–2031	Bonds guaranteed by Holcim Ltd (sustainability-linked), swapped into USD and floating interest rate	**620**	830
EUR	500	0.13%	2021–2027	Bonds guaranteed by Holcim Ltd, swapped into USD and floating interest rate	**415**	501
EUR	650	0.63%	2021–2033	Bonds guaranteed by Holcim Ltd, swapped into USD and fixed interest rate	**454**	633
EUR	500	0.63%	2021–2030	Bonds guaranteed by Holcim Ltd	**486**	510
EUR	1,000	0.50%	2021–2030	Bonds guaranteed by Holcim Ltd, partially swapped into floating interest rate	**869**	1,017
EUR	300	1.38%	2021–2036	Private placement guaranteed by Holcim Ltd	**291**	306
EUR	500	1.50%	2022–2025	Bonds guaranteed by Holcim Ltd	**491**	0
EUR	150	1.63%	2022–2026	Private placement guaranteed by Holcim Ltd (sustainability-linked)	**147**	0
Holcim Finance (Australia) Pty Ltd						
AUD	300	3.50%	2017–2022	Bonds guaranteed by Holcim Ltd	**0**	199
Holcim US Finance (Luxembourg) S.A.						
USD	50	4.20%	2013–2033	Bonds guaranteed by Holcim Ltd	**46**	46
USD	100	2.24%	2021–2031	Private placement guaranteed by Holcim Ltd (sustainability-linked)	**92**	91
USD	50	7.65%	2001–2031	Private placement guaranteed by Holcim Ltd (transferred from Holcim Capital Corporation Ltd.)	**46**	46
USD	250	6.88%	2009–2039	Bonds guaranteed by Holcim Ltd (transferred from Holcim Capital Corporation Ltd.)	**224**	222
USD	250	6.50%	2013–2043	Bonds guaranteed by Holcim Ltd (transferred from Holcim Capital Corporation Ltd.)	**225**	222
Holcim Sterling Finance (Netherlands) B.V.						
GBP	300	3.00%	2017–2032	Bonds guaranteed by Holcim Ltd	**329**	365
GBP	250	2.25%	2021–2034	Bonds guaranteed by Holcim Ltd, partially swapped into CHF and floating interest rate	**232**	301
Holcim (US) Inc.						
USD	33	3.63%	1999–2032	Industrial revenue bonds – Mobile Dock & Wharf, with floating interest rate	**31**	31
USD	25	3.76%	2003–2033	Industrial revenue bonds – Holly Hill, with floating interest rate	**23**	23
USD	27	3.62%	2009–2034	Industrial revenue bonds – Midlothian, with floating interest rate	**25**	24
Subtotal					**10,120**	**11,453**

[1] With fixed rates unless indicated.
[2] Includes adjustments for fair value hedge accounting, where applicable.

Nominal value		Nominal interest rate	Term	Description[1]	Net book value in CHF[2]	Net book value in CHF[2]
Million					**2022**	2021
Subtotal					**10,120**	**11,453**
Holcim International Finance Ltd						
USD	15	3.20%	2016–2023	Schuldschein loan guaranteed by Holcim Ltd	**14**	14
USD	110	5.36%	2018–2022	Schuldschein loan guaranteed by Holcim Ltd, with floating interest rates	**0**	100
USD	38	4.38%	2018–2024	Schuldschein loan guaranteed by Holcim Ltd	**35**	34
USD	28	5.61%	2018–2023	Schuldschein loan guaranteed by Holcim Ltd, with floating interest rates	**26**	26
USD	60	4.59%	2018–2025	Schuldschein loan guaranteed by Holcim Ltd	**55**	55
USD	60	5.81%	2018–2023	Schuldschein loan guaranteed by Holcim Ltd, with floating interest rates	**55**	55
USD	65	5.30%	2022–2025	Schuldschein loan guaranteed by Holcim Ltd, with floating interest rate (sustainability-linked)	**60**	0
USD	58	5.45%	2022–2027	Schuldschein loan guaranteed by Holcim Ltd, with floating interest rate (sustainability-linked)	**53**	0
USD	25	5.70%	2022–2029	Schuldschein loan guaranteed by Holcim Ltd, with floating interest rate (sustainability-linked)	**23**	0
Holcim Finance US LLC						
USD	400	3.50%	2016–2026	Bonds guaranteed by Holcim Ltd	**368**	364
USD	590	4.75%	2016–2046	Bonds guaranteed by Holcim Ltd	**531**	525
USD	180	4.79%	2018–2025	Private placement guaranteed by Holcim Ltd (early repaid)	**0**	164
USD	52	4.92%	2018–2027	Private placement guaranteed by Holcim Ltd (early repaid)	**0**	47
USD	106	5.03%	2018–2030	Private placement guaranteed by Holcim Ltd (early repaid)	**0**	97
Holcim Continental Finance Ltd						
EUR	30	0.88%	2018–2022	Schuldschein loan guaranteed by Holcim Ltd	**0**	31
EUR	60	2.77%	2018–2022	Schuldschein loan guaranteed by Holcim Ltd, with floating interest rates	**0**	62
EUR	109	1.32%	2018–2024	Schuldschein loan guaranteed by Holcim Ltd	**107**	112
EUR	5	1.68%	2018–2025	Schuldschein loan guaranteed by Holcim Ltd	**5**	5
EUR	2	2.22%	2018–2028	Schuldschein loan guaranteed by Holcim Ltd	**1**	2
EUR	55	2.89%	2022–2025	Schuldschein loan guaranteed by Holcim Ltd, with floating interest rates (sustainability-linked)	**54**	0
EUR	42	2.11%	2022–2027	Schuldschein loan guaranteed by Holcim Ltd (sustainability-linked)	**41**	0
EUR	250	3.04%	2022–2027	Schuldschein loan guaranteed by Holcim Ltd, with floating interest rates (sustainability-linked)	**245**	0
EUR	59	2.53%	2022–2029	Schuldschein loan guaranteed by Holcim Ltd (sustainability-linked)	**57**	0
EUR	86	3.29%	2022–2029	Schuldschein loan guaranteed by Holcim Ltd, with floating interest rates (sustainability-linked)	**84**	0
EUR	24	2.99%	2022–2032	Schuldschein loan guaranteed by Holcim Ltd (sustainability-linked)	**24**	0
Holcim Helvetia Finance Ltd						
CHF	250	1.05%	2020–2022	Bonds guaranteed by Holcim Ltd	**0**	250
CHF	300	0.25%	2021–2027	Bonds guaranteed by Holcim Ltd	**301**	301
CHF	145	0.13%	2021–2027	Bonds guaranteed by Holcim Ltd	**145**	145
CHF	185	0.50%	2021–2031	Bonds guaranteed by Holcim Ltd, swapped into floating interest rates	**157**	185
CHF	325	0.38%	2022–2026	Bonds guaranteed by Holcim Ltd, swapped into floating interest rates (sustainability-linked)	**312**	0
CHF	100	1.00%	2022–2032	Bonds guaranteed by Holcim Ltd (sustainability-linked)	**101**	0
Total					**12,972**	**14,026**

[1] With fixed rates unless indicated.
[2] Includes adjustments for fair value hedge accounting, where applicable.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

Sustainability-linked financing

Recognizing the role of sustainable finance in supporting the transition to a low-carbon and more resource efficient economy, Holcim has put in place a sustainability-linked financing framework to link funding activities with its sustainability objectives. Holcim intends to pursue its journey with sustainability-linked finance instruments in the capital, money and loan markets, putting core sustainability indicators such as climate, water and safety at the heart of its financing strategy. To make a bigger impact, the company is committed to reaching at least 40% of sustainable financing by the end of 2025. At the end of 2022, the company had entered into the following sustainability-linked financing agreements:

Year	Description	Sustainability link
2020	EUR 850 million bond with a nominal interest rate of 0.5% maturing 2031	Investors will be entitled to a higher final coupon should the company not meet its target of 475 kg net CO_2 per ton of cementitious material by 2030.
2021	EUR 3 billion 5-year revolving credit facility (with 2 extension options of one year)	The cost of the credit facility will depend on the company's achievement of annual targets linked to climate and safety indicators.
2021	USD 100 million private placement with a nominal interest rate of 2.24% maturing 2031	Investors will be entitled to a higher final coupon should the company not meet its target of 475 kg net CO_2 per ton of cementitious material by 2030.
2022	CHF 325 million bond with a nominal interest rate of 0.375% maturing in 2026	Investors will be entitled to a higher final coupon should the company not meet its target of CO_2 reduction by 9.7% by 2025 (from 2018 baseline)
2022	CHF 100 million bond with a nominal interest rate of 1% maturing in 2032	Investors will be entitled to a higher final coupon should the company not meet its target of CO_2 reduction by 17.5% by 2030 (from 2018 baseline)
2022	EUR 150 million private placement with a nominal interest rate of 1.625% maturing in 2026	Investors will be entitled to a higher final coupon should the company not meet its target of CO_2 reduction by 9.7% by 2025 (from 2018 baseline) and Freshwater reduction by 25% by 2025 (from 2018 baseline)
2022	EUR 391 million Schuldschein with floating interest rates and maturities between 2025 and 2029	Investors will be entitled to higher coupons should the company not meet its target of CO_2 reduction (vs 2018 baseline) by: • 5.9% by 2023 • 9.7% by 2025 • 17.5% by 2030 and Freshwater reduction (vs 2018 baseline) by: • 23% by 2023 • 25% by 2025 • 33% by 2030
2022	EUR 125 million Schuldschein with fixed interest rates between 2.11% and 2.99% and maturities between 2027 and 2032	
2022	USD 148 million Schuldschein with floating interest rates and maturities between 2025 and 2029	

In addition to the above, costs for all new or refinanced committed corporate bilateral and syndicated bank facilities have been linked to Holcim's ESG performance or Sustainability KPIs. At the end of 2022, the sustainable financing ratio stands at 38.3%.

14.5 Derivative financial instruments

Derivative liabilities are included in financial liabilities (note 14.4) and derivative assets are separately disclosed in the consolidated statement of financial position. The Group has assessed the effects of existing netting arrangements in place for financial instruments and these were considered to be immaterial.

Derivative assets and liabilities

Million CHF	Fair value assets 2022	Fair value liabilities 2022	Nominal amount 2022	Fair value assets 2021	Fair value liabilities 2021	Nominal amount 2021
Fair value hedges						
Interest rate	**0**	**834**	**4,256**	7	89	4,134
Total fair value hedges	**0**	**834**	**4,256**	**7**	**89**	**4,134**
Cash flow hedges						
Interest rate	**77**	**0**	**728**	0	0	0
Currency	**2**	**4**	**243**	2	4	290
Cross-currency	**0**	**325**	**2,395**	0	173	2,374
Commodity	**176**	**52**	**966**	226	6	459
Total cash flow hedges	**256**	**381**	**4,331**	**228**	**183**	**3,122**
Held for trading						
Currency	**19**	**5**	**2,749**	10	21	1,668
Total held for trading	**19**	**5**	**2,749**	**10**	**21**	**1,668**
Total	**275**	**1,220**	**11,337**	**245**	**293**	**8,924**

14.6 Financial risks associated with operating activities

Group Risk Management

Group Risk Management supports the Board of Directors, the Executive Committee and the management teams of the countries in analyzing the overall risk exposure. Group Risk Management aims to systematically identify, monitor and manage major risks the Group encounters. All types of risks from industry, operations, finance and legal, up to the external business environment are considered including compliance, sustainability and reputational aspects. Risks are understood as the effect of uncertainty on business objectives which can be an opportunity or a threat. The risk horizon includes long-term strategic risks but also short- to medium-term business risks. Potential risks are identified and evaluated at an early stage and monitored. Mitigating actions are proposed and implemented at the appropriate level so that risk management remains a key responsibility of the line management.

The Group's risk map is established by strategic, operational and topical risk assessments which are combined into a Group risk report. Besides the Countries, the Board of Directors, the Executive Committee and Corporate Function Heads are involved in the risk assessment during the Group's management cycle. The results of the annual Group risk process are presented to the Executive Committee and the conclusions reported to the Board of Directors and the Audit Committee.

Country risk

Holcim operates in many countries across the world and is exposed, directly or indirectly, to the effects of economic, political and social instability such as trade protectionism, foreign exchange volatility, geopolitical tensions, terrorism, civil war and unrest.

In the specific context of rising energy and food prices, we anticipate potential civil unrest and political instability in certain countries, especially in emerging markets but also in some mature markets where inflation affecting both low income households and the middle class has sparked socio-political tensions and demands for a strong response from the governments. Political and military developments in relation to the conflict in Ukraine might also have adverse consequences in neighboring countries where we operate.

Financial risk management

The Group's activities expose it to a variety of financial risks, including liquidity, interest rate, foreign exchange, commodity and credit risk. The Group's overall risk management focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the financial performance of the Group. The Group uses derivative financial instruments such as foreign exchange contracts, commodity and interest rate swaps to hedge certain exposures. The Group does not enter into derivative or other financial transactions which are unrelated to its business needs or for speculative purposes.

Financial risk management within the Group is governed by policies approved by key management personnel. It provides principles for overall risk management as well as policies covering specific areas such as interest rate risk, foreign exchange risk, credit risk, use of derivative financial instruments and investing of cash.

Liquidity risk

Group companies need liquidity to meet their obligations. Individual companies are responsible for raising internal and external credit lines to cover the liquidity needs, subject to guidance by the Group.

The Group monitors its liquidity risk by using a recurring liquidity planning tool and maintains cash, readily realizable marketable securities and unused committed credit lines to meet its liquidity requirements. In addition, the strong creditworthiness of the Group allows it to access international financial markets for financing purposes.

Cash is primarily invested with highly rated banks or money market funds and is readily accessible in the respective entities.

Contractual maturity analysis

Million CHF	Contractual undiscounted cash flows							
	Within 1 year	Within 2 years	Within 3 years	Within 4 years	Within 5 years	Thereafter	Total	Carrying amount
2022								
Trade accounts payable and others [1]	4,248	0	0	0	0	0	4,248	4,248
Loans from financial institutions	248	303	13	18	1	4	587	586
Bonds, private placements and commercial paper notes	1,099	896	1,308	1,365	1,277	7,913	13,858	12,972
Interest payments	287	267	238	211	187	1,522	2,712	142
Lease liability payments	306	269	211	159	118	429	1,492	1,351
Derivative financial instruments net [2]	47	82	106	124	187	500	1,046	945
Total	6,235	1,817	1,876	1,877	1,770	10,368	23,943	
2021								
Trade accounts payable and others [1]	3,998	0	0	0	0	0	3,998	3,998
Loans from financial institutions	489	46	249	23	22	27	856	856
Bonds, private placements and commercial paper notes	1,616	1,070	943	946	916	9,047	14,538	14,366
Interest payments	293	264	247	228	202	1,695	2,929	278
Lease liability payments	303	171	166	155	154	596	1,545	1,390
Derivative financial instruments net [2]	(140)	(26)	(21)	1	1	117	(68)	48
Total	6,559	1,525	1,584	1,353	1,295	11,482	23,798	

[1] Trade accounts payable and others include trade accounts payable and payables related to purchase of property, plant and equipment included in other current liabilities.
[2] The contractual cash flows include both cash in- and outflows.

The maturity profile is based on contractual undiscounted amounts, including both interest and principal cash flows, and is based on the earliest date on which Holcim could be required to pay. Contractual interest cash flows relating to a variable interest rate are calculated based on the rates prevailing as of year-end.

The table below shows outflows (inflows) for net and gross settled derivatives entered into for the purpose of managing financial risks. Additional information is disclosed in note 14.5.

Cash Outflows / (Inflows) for derivatives financial instruments

	Within 1 year	Within 2 years	Within 3 years	Within 4 years	Within 5 years	Thereafter	Total	Carrying amount
2022								
Net Settled derivatives	(18)	6	30	48	50	48	164	632
Gross settled derivatives	65	76	76	76	137	452	883	313
Inflows	(3,048)	(44)	(44)	(44)	(536)	(1,811)	(5,527)	
Outflows	3,113	120	120	120	673	2,262	6,409	
Total	47	82	106	124	187	500	1,046	945
2021								
Net Settled derivatives	(173)	(45)	(40)	(18)	(18)	(87)	(381)	(138)
Gross settled derivatives	33	19	19	19	19	203	313	186
Inflows	(1,950)	(6)	(6)	(6)	(6)	(2,288)	(4,262)	
Outflows	1,983	25	25	25	25	2,492	4,576	
Total	(140)	(26)	(21)	1	1	117	(68)	48

Interest rate risk

Interest rate risk arises from movements in interest rates which could affect the Group's financial result and market values of its financial instruments. The Group is primarily exposed to fluctuations in interest rates on its financial liabilities at floating rates which may cause variations in the Group's financial result. The exposure is mainly addressed through the management of the fixed/floating ratio of financial liabilities. To manage this mix, the Group may enter into interest rate swap agreements, in which it exchanges periodic payments based on notional amounts and agreed-upon fixed and floating interest rates. The Group is also exposed to the evolution of interest rates and credit markets for its future refinancing, which may result in a lower or higher cost of financing. The Group constantly monitors credit markets and the aim of its financing strategy is to achieve a well-balanced maturity profile to reduce both the risk of refinancing and large fluctuations of its financing cost.

The Group's risk management policy for interest rate risk is to maintain interest rate risk at an acceptable level, whilst minimizing interest expense over the long term in accordance with the Group's funding strategy. As a consequence thereof, under the Group's risk management policy, the Group may enter into derivative contracts which are designated as either cash flow hedges or fair value hedges, as appropriate and also include the hedging of forecasted transactions.

Interest rate benchmark reform

A fundamental reform of major interest rate benchmarks is being undertaken globally, including the replacement of some interbank offered rates (IBORs) with alternative risk-free rates (referred to as 'IBOR reform'). The Group has exposure to IBORs on its financial instruments that will be replaced or reformed as part of these market-wide initiatives. The Group's main IBOR exposure at 31 December 2022 was indexed to Euribor and USD LIBOR:

- In July 2019, the Belgian Financial Services and Markets Authority granted authorization with respect to Euribor under the European Union Benchmarks Regulation. This allows market participants to continue to use Euribor for both existing and new contracts and the Group expects that Euribor will continue to exist as a benchmark rate for the foreseeable future.

- The ICE Benchmark Administration (IBA), the FCA-regulated and authorized administrator of LIBOR, announced the end of the publication of certain USD LIBORs after June 2023 for legacy contracts.

The Group set up an IBOR transition programme comprising the following work streams: risk management, tax, treasury, legal, accounting and systems. The aim of the programme was to identify and manage the risks arising from the interest rate benchmark reform (interest basis risk, liquidity risk, accounting, litigation and operational risk) in order to enable a smooth transition to alternative benchmark rates.

All newly transacted floating rate financial assets and liabilities are linked to an alternative benchmark rate, such as SONIA, SARON or SOFR or if, linked to LIBOR, include detailed fallback clauses clearly referencing the alternative benchmark rate and the trigger event on which the clause is activated.

As of 31 December 2022, the Group holds the following financial instruments indexed to USD Libor:

- Non-derivative financial instruments: USD 338 million notional bank borrowings and bonds maturing in 2023 and 2024 that will be repaid or amended during the first half of 2023.

- Derivative financial instruments:

  USD 3,196 million notional cross currency and interest rate swaps maturing between 2027 and 2033 entered into for risk management purposes that are designated in cash flow hedging relationships. These instruments have floating legs that are indexed to USD LIBOR. These benchmark rates are quoted each day and the IBOR cash flows are exchanged with counterparties as usual.

  The Group's derivative instruments are governed by contracts based on the International Swaps and Derivatives Association (ISDA)'s master agreements. ISDA's fallback clauses were made available in 2021 and the Group has signed up to the protocol, along with each of the Group's counterparties. This ensures all legacy trades will, on cessation of IBOR, follow the fallback clause provided in the protocol.

The Group will continue to apply the temporary reliefs provided by the amendments to IFRS 9 until the uncertainty arising from the interest rate benchmark reform with respect to the timing and the amount of the underlying cash flows to which the Group is exposed to ends. The Group has assumed that this uncertainty will not end until the Group's contracts that reference IBORs are amended to specify the dates on which the interest rate benchmark will be replaced, the cash flows of the alternative benchmark rate and the relevant spread adjustment.

Interest rate sensitivity

The Group's sensitivity analysis has been determined based on the interest rate exposure relating to the Group's financial liabilities at a variable rate on a post hedge basis as of 31 December.

A one percentage point change is used when the interest rate risk is reported internally to key management personnel and represents management's assessment of a reasonably possible change in interest rates.

On 31 December 2022, a one percentage point shift in interest rates, with all other assumptions held constant, would result in approximately CHF 44 million (2021: CHF 49 million) of annual additional/ lower financial expenses before tax on a post hedge basis.

Foreign exchange risk

The Group's global footprint exposes it to foreign exchange risks.

The translation of foreign operations into the Group reporting currency leads to currency translation effects. The Group may hedge certain net investments in foreign entities with foreign currency borrowings or other instruments. To the extent that the net investment hedge is effective, all foreign exchange gains or losses are recognized in equity and included in currency translation adjustments.

Due to the local nature of the construction materials business, foreign exchange risk is limited. However, for many Group companies, income will be primarily in local currency, whereas debt servicing and a significant amount of capital expenditures may be in foreign currencies. As a consequence thereof, under the Group's risk management policy, the Group may enter into derivative contracts which are designated as either cash flow hedges or fair value hedges and may also include the hedging of forecasted transactions.

Foreign exchange sensitivity

The Group's sensitivity analysis has been performed based on the Group's net transaction exposure that arises on monetary financial assets and liabilities at 31 December that are denominated in a foreign currency. The Group's net foreign currency transaction risk mainly arises from CHF, USD and EUR against the respective currencies the Group operates in.

A five percent change is used when the net foreign currency transaction risk is reported internally to key management personnel and represents management's assessment of a reasonably possible change in foreign exchange rates.

A five percent change in CHF, USD and EUR against the respective currencies the Group operates in would have an immaterial impact on foreign exchange (loss) gains on a post hedge basis in both the current and prior year.

Impacts on equity due to derivative instruments are considered as immaterial based on the shareholders' equity of the Group.

Commodity risk

The Group is subject to commodity risk with respect to price changes mainly in the electricity, natural gas, petcoke, coal, oil refined products and sea freight markets. Under the Group's risk management policy, the Group uses derivative instruments to hedge part of its exposure to these risks. Derivative instruments are generally limited to swaps and standard options.

Effects of hedge accounting

Hedge effectiveness is determined at the inception of the hedge relationship, and through periodic prospective effectiveness assessments to ensure that an economic relationship exists between the hedged item and hedging instrument.

Ineffectiveness is recognized on hedges where the cumulative change in the designated component value of the hedging instrument exceeds on an absolute basis the change in value of the hedged item attributable to the hedged risk. Ineffectiveness may arise if there is a difference in the principal terms of the hedging instrument and designated hedged risk, from credit valuation of the hedging instrument or timing of the transaction changes from what was originally estimated.

The effects of applying hedge accounting on the Group's financial position and performance are as follows for cash flow, fair value and net investment hedge accounting relationships:

a) Cash flow hedge accounting

The change in fair value of hedging instruments under cash flow hedge accounting in 2022 was CHF -277 million (2021: CHF 85 million). The change in related hedged items was CHF 277 million (2021: CHF -84 million) and CHF 0 million (2021: CHF 1 million) was recorded as ineffectiveness directly to the consolidated statement of income in 2022.

Cash flow hedge – hedging instruments: maturity analysis	2022	2021
Foreign exchange forwards	2023	2022
Commodity swaps and options	2023–2032	2022–2026
Cross currency swaps	2027–2034	2027–2034

When a hedging instrument expires, is sold or terminated, or when a hedge no longer meets the criteria for hedge accounting, the cumulative gain or loss deferred in equity at that time remains in equity until the forecast transaction occurs, resulting in the recognition of a non-financial asset such as property, plant and equipment or inventory against which the cumulative gains and losses is adjusted. When the forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in equity is immediately reclassified to the consolidated statement of income.

Closing balance in the cash flow hedge reserve for hedges that are accounted as cash flow hedge is CHF 177 million (2021: CHF 198 million).

b) Fair value hedge accounting

The change in fair value of hedging instruments under fair value hedge accounting in 2022 was CHF -729 million (2021: CHF -132 million). The change in related hedged items was CHF 729 million (2021: CHF 132 million) and no amount was recorded as ineffectiveness directly to the consolidated statement of income in 2022 and 2021 for fair value hedges.

Fair value hedge – hedging instruments: maturity analysis	2022	2021
Interest rate swaps	2026–2034	2027–2034

When a hedging instrument expires, is sold or terminated, or when a hedge no longer meets the criteria for hedge accounting, the cumulative gain or loss recorded in the carrying value of the hedged item is amortized over the life of the hedged item using the effective interest rate. When the hedged item is sold or terminated, the cumulative gains and losses recorded in the carrying value are recognized in financial income (expense).

c) Net investment hedge accounting

The change in the fair value of hedging instruments under net investment hedge accounting in 2022 was CHF 3 million (2021: CHF -2 million). The change in related hedged items was CHF -3 million (2021: CHF 2 million) and no amount was recorded as ineffectiveness directly to the consolidated statement of income in 2022 and 2021 for net investment hedges.

Net investment hedge – hedging instruments: maturity analysis	2022	2021
Foreign exchange forwards	–[1]	–[1]

[1] No outstanding hedging instruments as of 31.12.2022 and 31.12.2021.

When a hedging instrument expires, is sold or terminated, or when a hedge no longer meets the criteria for hedge accounting, the cumulative gain or loss deferred in equity remains in equity and will be reclassified to profit (loss) on disposal when forecast transaction occurs (i.e. disposal of a subsidiary).

Closing balance in the foreign currency translation reserve for hedges that are accounted as net investment hedge is CHF 31 million (2021: CHF 27 million).

Credit risk

Credit risks arise, among others, from the possibility that customers may not be able to settle their obligations as agreed. To manage this risk, the Group periodically assesses the financial reliability of its customers.

Credit risks, or the risk of counterparties defaulting, are constantly monitored. Counterparties to financial instruments consist of a large number of established financial institutions. The Group does not expect any counterparty to be unable to fulfil its obligations under its respective financing agreements. At year end, Holcim has no significant concentration of credit risk with any single counterparty or group of counterparties.

The Group considers the probability of default upon initial recognition of accounts receivable based on lifetime expected credit losses by considering available reasonable and supportable historical and forward-looking information.

The Group considers the probability of default upon initial recognition of long-term loans and receivables and whether there has been a significant increase in credit risk on an ongoing basis throughout each reporting period by considering available reasonable and supportable historical and forward-looking information.

The maximum exposure to credit risk is represented by the carrying amount of each financial asset, including derivative financial instruments, in the consolidated statement of financial position.

The following credit risk modelling applies for financial assets:

a) Accounts receivable

For accounts receivable, the Group applies the simplified approach with expected lifetime losses recognized from initial recognition of the receivables in the statement of income.

b) Long-term loans and receivables

The Group uses three categories for long-term loans and receivables which reflect their credit risk and how the loan loss provision is determined for each of those categories.

Summary of the assumptions underpinning the Group's expected credit loss model is as follows:

Category	Definition
Performing	Customers have a low risk of default and a strong capacity to meet contractual cash flows
Non-performing	Interest and/or principal repayments are past due and credit risk level shows an increase
Write-off	Based on observable data the payments will not be collected

Each exposure is allocated to a credit risk category at initial recognition based on available information about the borrower. Exposures are subject to ongoing monitoring which may result in an exposure being moved to a different credit risk category.

Over the term of the loans, the Group accounts for its credit risk by providing for expected credit losses on a timely basis. In calculating the expected credit loss rates, the company considers historical loss rates for each category of customers and adjusts for forward looking macroeconomic data. No significant changes to estimation techniques or assumptions were made during the reporting period.

Capital structure

The Group's objectives when managing capital are to secure the Group's financial needs as a going concern as well as to cater for its growth targets, in order to provide returns to shareholders and benefits for other stakeholders and to maintain a solid investment grade rating.

The Group manages the capital structure and makes adjustments to it in light of changes in economic conditions, business activities, investment and expansion programs and the risk characteristics of the underlying assets. In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares, increase debt or sell assets to reduce debt.

Fair value estimation

The fair value of publicly traded financial instruments is generally based on quoted market prices at the end of the reporting period.

For non-publicly traded financial instruments, the fair value is determined by using a variety of methods, such as the discounted cash flow method and option pricing models. The valuation methods seek to maximize the use of observable market data existing at the end of the reporting period.

The fair value of current financial assets and liabilities at amortized cost is assessed to approximate their carrying amounts due to the short-term nature of these financial instruments.

Fair values as of 31 December 2022

		Carrying amount (by measurement basis)				
Million CHF	IFRS 9 category	Amortized cost	Fair value level 1	Fair value level 2	Total	Comparison fair value
Current financial assets						
Cash and cash equivalents	Financial assets	**9,824**			**9,824**	
Trade accounts receivable	Receivables at amortized cost	**2,674**			**2,674**	
Financial receivables	Receivables at amortized cost	**128**			**128**	
Derivative assets	Held for hedging at fair value			**99**	**99**	
Derivative assets	Held for trading at fair value			**19**	**19**	
Long-term financial assets						
Long-term receivables	Loans at amortized cost	**168**			**168**	**168** [1]
Financial investments third parties	Strategic equity investments at fair value through other comprehensive earnings			**137**	**137**	
Derivative assets	Held for hedging at fair value			**157**	**157**	
Current financial liabilities						
Trade accounts payable and others [2]	Financial liabilities at amortized cost	**4,248**			**4,248**	
Current financial liabilities	Financial liabilities at amortized cost	**1,622**			**1,622**	
Derivative liabilities	Held for hedging at fair value			**28**	**28**	
Derivative liabilities	Held for trading at fair value			**5**	**5**	
Long-term financial liabilities						
Long-term financial liabilities	Financial liabilities at amortized cost	**13,288**			**13,288**	**12,573** [3]
Derivative liabilities	Held for hedging at fair value			**1,187**	**1,187**	

[1] The comparison fair value for long-term receivables consists of level 2 fair value measurements
[2] Trade accounts payable and others include payables related to the purchase of property, plant and equipment included in other liabilities
[3] The comparison fair value for long-term financial liabilities consists of CHF 9,975 million level 1 and CHF 2,598 million level 2 fair value measurements

Fair values as of 31 December 2021

Million CHF	IFRS 9 category	Carrying amount (by measurement basis) Amortized cost	Fair value level 1	Fair value level 2	Total	Comparison fair value
Current financial assets						
Cash and cash equivalents	Financial assets	**6,682**			**6,682**	
Trade accounts receivable	Receivables at amortized cost	**2,677**			**2,677**	
Financial receivables	Receivables at amortized cost	**261**			**261**	
Derivative assets	Held for hedging at fair value			**176**	**176**	
Derivative assets	Held for trading at fair value			**10**	**10**	
Long-term financial assets						
Long-term receivables	Loans at amortized cost	**190**			**190**	**190** [1]
Financial investments third parties	Strategic equity investments at fair value through other comprehensive earnings			**136**	**136**	
Derivative assets	Held for hedging at fair value			**59**	**59**	
Current financial liabilities						
Trade accounts payable and others [2]	Financial liabilities at amortized cost	**3,998**			**3,998**	
Current financial liabilities	Financial liabilities at amortized cost	**2,360**			**2,360**	
Derivative liabilities	Held for hedging at fair value			**10**	**10**	
Derivative liabilities	Held for trading at fair value			**21**	**21**	
Long-term financial liabilities						
Long-term financial liabilities	Financial liabilities at amortized cost	**14,252**			**14,252**	**15,264** [3]
Derivative liabilities	Held for hedging at fair value			**262**	**262**	

[1] The comparison fair value for long-term receivables consists of level 2 fair value measurements
[2] Trade accounts payable and others include payables related to the purchase of property, plant and equipment included in other liabilities
[3] The comparison fair value for long-term financial liabilities consists of CHF 12,714 million level 1 and CHF 2,550 million level 2 fair value measurements

The table above shows the carrying amounts and fair values of financial assets and liabilities.

The levels of fair value hierarchy used are defined as follows:

- Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities. The types of assets carried at level 1 fair value are equity and debt securities listed in active markets;
- Level 2 fair value measurements are those derived from valuation techniques using inputs for the asset or liability that are observable market data, either directly or indirectly. Such valuation techniques include the discounted cash flow method and option pricing models. For example, the fair value of interest rate and currency swaps is determined by discounting estimated future cash flows, and the fair value of forward foreign exchange contracts is determined using the forward exchange market at the end of the reporting period; and
- Level 3 fair value measurements are those derived from valuation techniques using inputs for the asset or liability that are not based on observable market data. In 2022 and 2021, there were no financial assets and liabilities allocated to level 3.

There have been no transfers between the different hierarchy levels in 2022 and 2021.

14.7 Leases

At inception of a contract, the Group assesses whether it contains a lease under IFRS 16 and accordingly recognizes a right-of-use asset and a lease liability if it meets the definition of a lease, with the exception of short-term leases and leases of low value assets.

The lease liability is measured at commencement date at the present value of the future lease payments, discounted with the interest rate implicit in the lease or, if not readily determinable, with the lessee's respective incremental borrowing rate. Future lease payments include in-substance fixed payments, variable lease payments depending on an index or rate and payments under termination and extension options when these are reflected in the lease term. The lease term comprises the non-cancellable lease term together with the period covered by extension options, if assessed as reasonably certain to be exercised, and termination options, if assessed as reasonably certain not to be exercised. Non-lease components in contracts are separated from lease components and accordingly accounted for in Operating profit on a cost incurred basis.

The right-of-use asset is recognized at the commencement date at cost, which includes the amount of the lease liability recognized, any lease payments made at or before the commencement date of the lease, initial direct costs incurred and an estimate of costs to be incurred in dismantling and removing the underlying asset or restoring the asset to the condition agreed with the lessor. Unless the Group is reasonably certain to exercise a purchase option, the right-of-use assets are depreciated on a straight-line basis over the shorter of its estimated useful life and lease term. Right-of-use assets are subject to the impairment requirements under IAS 36 Impairments of Assets. The right-of-use assets recorded as of 31 December 2022 are outlined in note 11.2.

In the event that the tax base of a right-of-use asset is not the same as its carrying amount for IFRS purposes on initial recognition of a lease contract, the Group recognizes the deferred tax impact arising on the temporary difference between the carrying amount of the right-of-use asset and its tax base. The same treatment as above also applies to the initial recognition of the lease liability.

As of 31 December 2022, the current portion of the long-term lease liability included in the position "current financial liabilities" amounts to CHF 277 million (2021: CHF 255 million) and the long-term lease liabilities included in the position "long-term financial liabilities" amounted to CHF 1,074 million (2021: CHF 1,135 million).

Various contracts entered into by the Group include extension options, which provide the Group with greater flexibility in terms of future procurement of assets and services. Extension options are included in the lease liability only if they are assessed by management as being reasonably certain to be exercised. The undiscounted future lease payments relating to periods covered by extension options not included in the lease liability at year end amount to CHF 95 million (2021: CHF 102 million).

Additional information related to leases

Million CHF	**2022**	2021
Statement of income		
Expenses for short-term lease payments	**(75)**	(100)
Expenses for variable lease payments	**(72)**	(80)
Cash outflow for leases		
Cash outflow for short-term, low value and variable leases[1]	**(147)**	(186)
Payment of interest[1]	**(53)**	(59)
Payment of lease liabilities[2]	**(362)**	(362)
Total	**(562)**	**(607)**

1 Included within cash flow from operating activities.
2 Included within cash flow from financing activities.

In certain lease agreements of machinery, equipment and vehicles, variable lease payments are included based on operating hours used, kilometres travelled or output. These leases provide greater flexibility in terms of usage, such as for certain types of trucks and vehicles where operating levels depend on production capacity and demand.

The contractual undiscounted future cash outflows for leases included in lease liabilities as at 31 December 2022 is found in note 14.6.

15. Employee benefits and share compensation plans

15.1 Accounting principles

Employee benefits – Defined benefit plans

Some Group companies provide defined benefit pension or other post-employments benefit plans for employees. The Group uses professionally qualified independent actuaries to value the defined benefit obligations on a regular basis. The obligation and costs of pension benefits are determined using the projected unit credit method. The projected unit credit method considers each period of service as giving rise to an additional unit of benefit entitlement and measures each unit separately to build up the final obligation. Past service costs, which comprise plan amendments and curtailments, and gains or losses on the settlement of pension benefits, are recognized immediately in the statement of income when they occur.

Remeasurements, which comprise actuarial gains and losses on the pension and other post-employment obligations, the return on plan assets and changes in the effect of the asset ceiling excluding amounts in net interest, are recognized directly in other comprehensive earnings and are not reclassified to the statement of income in a subsequent period. The pension and other post-employment obligations are measured as the present value of estimated future cash flows using discount rates that are determined by reference to the interest rates on high quality corporate bonds, with the currency and terms of the corporate bonds consistent with the currency and estimated terms of the defined benefit and other post-employment obligations.

A net pension asset is recorded only to the extent that it does not exceed the present value of any economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan.

The cost for defined benefit and other post-employment benefits plans charged to the statement of income consists of service cost (current service cost, past service cost and curtailments as well as gains or losses on settlements) and the net interest expense. The service costs are recorded in “Production cost of goods sold”, “Distribution and selling expenses” or “Administrative expenses” based on the beneficiaries of the plans; the net interest expense is recorded in “Financial expenses” (note 7.3).

Employee benefits – Defined contribution plans

In addition to the defined benefit plans described above, some Group companies sponsor defined contribution plans based on local practices and regulations. The Group’s contributions to defined contribution plans are charged to the statement of income in the period to which the contributions relate.

Employee benefits – Other long-term employment benefits

Other long-term employment benefits include long-service leave or sabbatical leave, medical aid, jubilee or other long-service benefits, long-term disability benefits and, if they are not expected to be settled wholly within twelve months after the year end, profit sharing, variable and deferred compensation.

The measurement of these obligations differs from defined benefit plans in that all remeasurements are recognized immediately in the statement of income.

Employee benefits – Share compensation plans

The Group operates various equity-settled share-based compensation plans. The fair value of the employee services received in exchange for the grant of the options or shares is recognized as an expense. The total amount to be expensed is determined by reference to the fair value of the equity instruments granted. The amounts are charged to the statement of income over the relevant vesting periods and adjusted to reflect actual and expected levels of vesting.

15.2 Group risks management

The Group operates a number of defined benefit pension schemes and schemes with similar or contingent obligations in several of its countries. The assets and liabilities of those schemes may exhibit significant volatility.

Cash contributions may be required to fund unrecoverable deficits. External factors might cause these contributions to change materially from year-to-year. Similarly, the Group's financial results may be impacted.

Where possible, defined benefit pension schemes have been closed and frozen. Significant actions continue to take place to further reduce and eliminate those schemes and related risks. Specifically, actions focusing on deploying scheme-appropriate asset allocation in order to mitigate volatility and optimize investment returns, those intended to reduce and simplify plans' liabilities and exposure, and finally those intended to provide cash funding flexibility, were or are being implemented.

The Group participates in a number of union-sponsored multiemployer pension plans in the United States.

These plans are subject to substantial deficits due to market conditions and business actions, plan trustee decisions, plan failure, as well as actions and decisions of other contributing employers. The Group has essentially no control over how these plans are managed.

There exists material risk that substantial cash contributions could be required in the future to satisfy any outstanding obligations under these plans. Moreover, satisfying the Group's obligations might have a material impact on the Group's reported financial results. The financial condition of these plans is not currently reported in the Group's financial reports.

The Group has undertaken a review of all these plans with the goal being to fully understand the plans' financial circumstances, as well as all the options available to mitigate risks and reduce the Group's actual and potential financial obligations. As the Group's participation in these plans is subject to negotiations with bargaining unions, the Group's ability to take action is limited.

15.3 Employee benefits

Personnel expenses and number of personnel

The Group's total personnel expenses, including social charges, are recognized in the relevant expenditure line by function in the consolidated statement of income and amounted to CHF 4,388 million (2021: CHF 4,169 million). As of 31 December 2022, the Group employed 60,422 FTEs (2021: 69,672 FTEs).

Defined benefit pension plans

The Group oversees the management of its pension plans through the Pension and Benefits Governance team. This interdisciplinary team, which includes finance, human resources and legal representatives acts as a center of expertise for all issues relating to pension and other post-employment benefits and makes recommendations to the Group CFO. A documented directive is used as a base for management actions and decisions.

The Group's main defined benefit pension plans are located in the United Kingdom, North America and Switzerland. They respectively represent 49 percent (2021: 55 percent), 24 percent (2021: 21 percent) and 21 percent (2021: 17 percent) of the Group's total defined benefit obligation for pensions. These main plans are funded through legally separate trustee managed funds. The cash funding of these plans, which may from time to time involve special payments, is designed to ensure that past, present and future contributions should be sufficient to meet future liabilities.

Where possible, defined benefit pension schemes have been closed and frozen. Moreover, since the assets and liabilities of these defined benefit pension plans could exhibit significant volatility, a number of key actions continue to be considered and take place to reduce and eliminate those schemes and related risks. Those include for example employing investment strategies that consider the benefit obligations and selective settlements.

Unfunded pension plans are mainly plans outside of tax regimes' qualification limits, plans for which advanced funding is not required, retirement indemnity schemes, or end of service benefits where benefits are vested only if the employee is still employed by the company at the retirement date.

United Kingdom (UK)

The companies operate three defined benefit pension plans in the UK: the Lafarge UK pension plan, the Aggregate Industries pension plan and the Ronez 2000 pension plan. Pensions payable to employees depend on average final salary and length of service within the plans. The plans are managed by independent boards of Trustees and the Lafarge UK pension plan and the Aggregate Industries pension plan are registered under UK tax law while the Ronez 2000 pension plan is located in the Channel Islands. They are all closed to new entrants and are frozen to future accrual.

Any funding deficits within these plans are funded by employer contributions, which are negotiated every three years based on plan valuations carried out by independent actuaries.

For the Lafarge UK pension plan, based on the 30 June 2021 funding valuation, no deficit repair contributions were required, as the plan had a funding surplus at this date.

For the Aggregate Industries pension plan, based on the 5 April 2021 funding valuation and in recognition of contributions of GPB 85 million being paid in after the valuation date, a contribution schedule was agreed with no further contributions until 30 June 2025, with monthly deficit repair contributions then payable until 31 March 2027 to remove the funding deficit.

For the Ronez 2000 pension plan, based on the 31 December 2021 funding valuation, no deficit repair contributions were required, as the plan had a funding surplus at this date.

In relation to risk management and asset allocation, the Boards of Trustees aim to ensure that they can meet their obligations to the beneficiaries of the plans, both in the short and long-terms. Subject to this primary objective, the Boards of Trustees target to maximize the long-term investment return whilst appropriately minimizing risk and volatility. The Boards of Trustees are responsible for the plans' long-term investment strategies but usually delegate strategy design and monitoring to Investment Committees.

North America (United States and Canada)

The companies operate defined contribution plans and a number of defined benefit pension plans. The majority of the defined benefit pension plans are closed to new entrants and frozen to future accruals. For defined benefit pension plans, pensions payable to employees depend on average final salary and length of service within the Group. For defined contribution plans, benefits depend on accrued contributions with returns at retirement.

The Group companies must contribute a minimum amount to the defined benefit pension plans annually which is determined actuarially and is comprised of service costs, if any, but also of administrative expenses, as well as payments toward any existing deficits.

In North America, the Group companies generally intend to pay the minimum required contributions as prescribed under applicable pension legislation. From time to time though, additional voluntary amounts are considered and remitted as advanced contributions.

The companies delegate various responsibilities to Pension Committees. These committees define and manage long-term investment strategies for reducing risks, including interest rate risks and longevity risks. The assets in the United States and Canada include a certain proportion which hedge the liability swings against interest rate movements, with those assets primarily invested in fixed income investments, particularly intermediate and longer term instruments.

As announced in 2017, effective 1 January 2020, the Canadian pension plan was frozen and active members will no longer acquire further rights in this defined benefit plan. Additionally, effective 1 January 2021, the Canadian supplemental pension plan was frozen to new pay increases.

On 11 April 2022, a buy-in contract was purchased from an insurer for CAD 405 million that will reimburse the Canadian Salaried defined benefit plan for future benefit payments not already covered under one of the previous buy-in contracts. Under the arrangement, the plan remains responsible for paying the benefits for all participants and the insurance company will reimburse the plan for the covered portion of the benefits when those benefits are paid. As a result, there is no net ongoing cash flow to the plans for the covered portion of benefits, as the cost of providing the benefits is funded by the buy-in contract. This effectively locks in the cost of the covered benefits and eliminates future volatility of the covered benefit obligation. The buy-in contract was purchased using assets from the pension trust and is accounted for at fair value as an investment of the trust. This transaction resulted in an additional net experience adjustment loss of CAN 26 million recognized in other comprehensive income in 2022.

In August 2021, a contract was purchased from an insurer for USD 690 million that will reimburse the United States defined benefit plans for future benefit payments covering all current retirees and a portion of future retirees in the plans (referred to as a buy-in contract). Under the arrangement, the plans remain responsible for paying the benefits for all participants and the insurance company will reimburse the plans for the covered portion of the benefits when those benefits are paid. As a result, there is no net ongoing cash flow to the plans for the covered portion of benefits, as the cost of providing the benefits is funded by the buy-in contract. This effectively locks in the cost of the covered benefits and eliminates future volatility of the covered benefit obligation. The buy-in contract was purchased using assets from the pension trust and was accounted for at fair value as an investment of the trust. This transaction resulted in an additional net experience adjustment of CHF 24 million recognized in other comprehensive earnings in 2021. In December 2022, a contract was purchased from an insurer for USD 177 million that will reimburse the LafargeHolcim US Pension plan and LafargeHolcim US Consolidated Union Pension Plan for future benefit payments covering the remaining portion of most future retirees in the plans that were not previously covered under the buy-in contract executed in 2021. The buy-in contract was purchased using assets from the pension trust and is accounted for as an investment of the trust.

Finally, the Group participates in a number of union-sponsored multi-employer pension plans in the United States. These plans are subject to substantial deficits due to market conditions and business actions, plan trustee decisions, plan failure as well as actions and decisions of other contributing employers. The Group has essentially no control on how these plans, accounted for as defined contribution plans, are managed. The Group has undertaken a review of all these plans with the goal being to fully understand the plans' financial circumstances, as well as all options available to mitigate risks and reduce the Group's actual and potential financial obligations. As the Group's participation in these plans is subject to negotiations with bargaining unions, the Group's ability to take action is limited.

Switzerland

The pension plans of the Swiss entities are cash balance benefit plans and are accounted for as a defined benefit plans. Employer and employee contributions are defined in the various pension fund rules based on age-related sliding scales of percentages of salary. Under Swiss law, the pension fund guarantees the vested benefit amount as confirmed annually to members. Interest above legal requirements may be added to member balances at the discretion of the Board of Trustees. At retirement date, members have the right to take their retirement benefit as a lump sum, an annuity or part as a lump sum with the balance converted to a fixed annuity at the rates defined in the fund rules. The Board of Trustees, composed of half employer and half employees' representatives, may increase the annuity at their discretion subject to the plan's funded status including sufficient free funds as determined according to Swiss statutory valuation rules. The Swiss pension plans meet the requirements of the regulatory framework which requires a minimum level of benefits.

Status of the Group's defined benefit plans

The status of the Group's defined benefit plans, determined based on actuarial assumptions determined in accordance with IAS 19 rules and requirements for employee benefits, is summarized below. The tables provide reconciliations of defined benefit obligations and plan assets, as well as of the funded status for the defined benefit pension plans to the amounts recognized in the statement of financial position.

Reconciliation of retirement benefit plans to the statement of financial position

Million CHF	**2022**	2021
Net asset arising from defined benefit pension plans	**(75)**	(289)
Net liability arising from other post-employment benefit plans	**160**	201
Net liability (asset)	**85**	**(88)**

Million CHF	**2022**	2021
Present value of funded obligations	**5,365**	8,207
Fair value of plan assets	**(6,053)**	(9,068)
Plan surplus of funded obligations	**(689)**	**(861)**
Present value of unfunded obligations	**503**	653
Effect of asset ceiling	**271**	120
Net liability (asset) from funded and unfunded plans	**85**	**(88)**
Reflected in the statement of financial position as follows:		
Pension assets	**(469)**	(823)
Provision for pensions and other post-employment benefit plans	**554**	735
Net liability (asset)	**85**	**(88)**

	Defined benefit pension plans		**Other post-employment benefit plans**	
Million CHF	**2022**	2021	**2022**	2021
Amounts recognized in the statement of income are as follows:				
Current service costs	**(59)**	(70)	**(2)**	(1)
Past service costs (including curtailments)	**7**	10	**1**	6
Net interest expense	**(2)**	(17)	**(6)**	(6)
Special termination benefits	**(2)**	(1)	**0**	0
Total recorded in the statement of income	**(56)**	**(78)**	**(8)**	**(1)**
Amounts recognized in other comprehensive earnings are as follows:				
Actuarial gains (losses) arising from changes in demographic assumptions	**7**	(72)	**(4)**	(3)
Actuarial gains arising from changes in financial assumptions	**2,243**	281	**34**	27
Actuarial gains (losses) arising from experience adjustments	**(138)**	251	**6**	5
Return on plan assets excluding interest income	**(2,160)**	319	**0**	0
Change in effect of asset ceiling excluding interest income	**(151)**	(115)	**0**	0
Total recorded in other comprehensive earnings	**(199)**	**664**	**36**	**29**

Reconciliation of present value of funded and unfunded obligations

Million CHF	Defined benefit pension plans 2022	Defined benefit pension plans 2021	Other post-employment benefit plans 2022	Other post-employment benefit plans 2021
Opening balance as per 1 January	**8,659**	**9,193**	**201**	**228**
Change in scope	**(188)**	11	**0**	8
Current service costs	**59**	70	**2**	1
Interest expense	**170**	149	**6**	6
Contribution by the employees	**24**	27	**0**	0
Actuarial gains	**(2,112)**	(461)	**(36)**	(29)
Benefits paid	**(477)**	(509)	**(15)**	(14)
Past service costs (including curtailments)	**(7)**	(10)	**(1)**	(6)
Settlements	**(1)**	(0)	**0**	0
Special termination benefits	**2**	1	**0**	0
Currency translation effects and reclassifications	**(421)**	187	**2**	8
Closing balance as per 31 December	**5,708**	**8,659**	**160**	**201**
Of which:				
United Kingdom	**2,856**	4,750	**0**	0
North America (United States and Canada)	**1,297**	1,776	**115**	154
Switzerland	**1,216**	1,476	**0**	0
Others	**338**	658	**45**	47

Reconciliation of fair value of plan assets

Million CHF	Defined benefit pension plans 2022	Defined benefit pension plans 2021	Other post-employment benefit plans 2022	Other post-employment benefit plans 2021
Opening balance as per 1 January	**9,068**	**8,592**	**0**	**0**
Change in scope	**(176)**	10	**0**	0
Interest income	**169**	132	**0**	0
Return on plan assets excluding interest income	**(2,160)**	319	**0**	0
Contribution by the employer	**62**	316	**15**	14
Contribution by the employees	**24**	27	**0**	0
Benefits paid	**(477)**	(509)	**(15)**	(14)
Settlements	**(2)**	(0)	**0**	0
Currency translation effects and reclassifications	**(456)**	181	**0**	0
Closing balance as per 31 December	**6,053**	**9,068**	**0**	**0**
Of which:				
United Kingdom	**3,208**	5,407	**0**	0
North America (United States and Canada)	**1,178**	1,625	**0**	0
Switzerland	**1,549**	1,709	**0**	0
Others	**119**	327	**0**	0

Plan asset allocation

	Defined benefit pension plans	
Million CHF	**2022**	2021
Equity instruments	**17%**	20%
Real estate investments	**15%**	12%
Debt instruments	**32%**	45%
Insurance contracts	**21%**	14%
Cash and cash equivalents	**5%**	3%
Other assets	**10%**	6%
Total plan assets	**100%**	**100%**

Plan assets based on non-quoted prices represent 25 percent (2021: 19 percent) of the total plan assets and mainly consist of insurance policies and real estate investments.

In some of the plans, Liability-Driven Investment (LDI) strategies are in place and consists in using index-linked government bonds and swaps to hedge the plans against liquidity risk and change in interest rates or inflation yields.

The value of insurance contracts is determined based on the membership and benefit payable under the contract using the IAS 19 assumptions.

The other assets mainly consist of hedge funds and various other hedging instruments.

Principal actuarial assumptions (weighted average) used at the end of the reporting period for defined benefit pension plans

	Total Group		United Kingdom		North America		Switzerland	
	2022	2021	**2022**	2021	**2022**	2021	**2022**	2021
Discount rate in %	**4.4%**	2.0%	**4.9%**	2.0%	**5.1%**	2.9%	**2.2%**	0.3%
Life expectancy in years after the age of 65	**22.7**	22.6	**23.6**	23.9	**22.8**	23.0	**23.4**	23.4

Weighted average duration of defined benefit pension plans

	Total Group		United Kingdom		North America		Switzerland	
	2022	2021	**2022**	2021	**2022**	2021	**2022**	2021
Weighted average duration in years	**11.5**	14.0	**12.2**	15.2	**10.9**	13.6	**11.3**	13.2

Sensitivity analysis as per 31 December 2022 on defined benefit pension plans

Impact on the defined benefit obligation	Total Group		United Kingdom		North America		Switzerland	
Million CHF	**Increase**	**Decrease**	**Increase**	**Decrease**	**Increase**	**Decrease**	**Increase**	**Decrease**
Discount rate (±0.5% change in assumption)	**(310)**	**349**	**(164)**	**179**	**(71)**	**83**	**(60)**	**66**
Life expectancy in years after the age of 65 (±1 year change in assumption)	**192**	**(196)**	**115**	**(114)**	**39**	**(40)**	**36**	**(37)**

Sensitivity analysis as per 31 December 2021 on defined benefit pension plans

Impact on the defined benefit obligation	Total Group		United Kingdom		North America		Switzerland	
Million CHF	**Increase**	**Decrease**	**Increase**	**Decrease**	**Increase**	**Decrease**	**Increase**	**Decrease**
Discount rate (±0.5% change in assumption)	(562)	637	(340)	378	(110)	131	(86)	97
Life expectancy in years after the age of 65 (±1 year change in assumption)	378	(374)	260	(254)	57	(59)	53	(53)

The sensitivity analysis above may not be representative of the actual change in the defined benefit pension plans as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated. Moreover, it is worth considering that, for most funded plans, liability hedging strategies (such as LDI investments) are used to mitigate the impact of changes in financial assumptions on the net pension liability.

15.4 Share compensation plans

The total personnel expense arising from the Holcim share compensation plans amounted to CHF 37.0 million in 2022 (2021: CHF 40.3 million) as presented in the following table:

Million CHF	Personnel expenses 2022	Personnel expenses 2021
Employee share purchase plan	**0.8**	0.7
Restricted shares	**8.7**	10.7
Performance Share Plan and Performance Option Plan	**27.4**	28.9
Total	**37.0**	**40.3**

All shares granted under these plans are either purchased from the market or derived from treasury shares.

Description of plans

Employee share purchase plan

Holcim offers an employee share-ownership plan. This plan entitles employees to acquire a limited amount of discounted Holcim Ltd shares, i.e. 50 shares at 50 percent of the market value and further shares at 70 percent of the market value based on the prior-month average share price. The shares cannot be sold for a period of two years from the date of purchase.

Restricted shares

Half of the annual incentive amount for the Executive Committee is paid in blocked Holcim Ltd shares during the first quarter of the following financial year. The share price used to convert the annual incentive amount into a number of shares is the average of the three closing share prices preceding the award date. The shares are blocked for a period of three years from the award date.

Restricted share awards are also granted for senior management at hire, compensating for share awards forfeited from previous employer. The vesting of these restricted shares reflects the vesting dates of forfeited awards.

Board compensation consists of an annual retainer which is paid half in shares subject to a five-year restriction period.

Option plans granted before the merger of Lafarge and Holcim in July 2015

Two types of options were granted to senior management of the Group: the ones, which were granted as part of the annual variable compensation and those, that were allotted to the Executive Committee upon appointment. In both cases, each option represented the right to acquire one registered share of Holcim Ltd at the share market price at grant date. These plans are closed. The last options under this plan were granted in 2015.

The contractual term of the first type of option plan is eight years, with immediate vesting but exercise restrictions for a period of three years following the grant date. The contractual term of the second type of option plan is twelve years and the options have a vesting period (service-related only) of nine years from the date of grant, with sale and pledge restrictions.

The Group has no legal or constructive obligation to repurchase or settle the options in cash.

Performance share plan and performance option plan

Performance shares and/or options are granted to executives and senior management for their contribution to the continuing success of the business. These shares and options will be delivered after a three-to-five-year vesting period following the grant date and are subject to internal and external performance conditions.

Information related to awards granted through the plans is presented below:

	2022		2021	
	Performance shares	Performance options	Performance shares	Performance options
1 January	**1,727,510**	**3,935,840**	**1,887,964**	**3,345,694**
Granted	**659,416**	**1,039,768**	624,994	864,531
Forfeited	**(143,938)**	**0**	(433,564)	(274,385)
Delivered	**(549,236)**	**0**	(351,884)	0
31 December	**1,693,752**	**4,975,608**	**1,727,510**	**3,935,840**

- 659,416 (2021: 624,994) performance shares at the weighted average fair value of CHF 44.98 per share (2021: CHF 51.90) were granted in 2022. Performance shares are subject to a three-year vesting period. Internal performance conditions are attached to the shares and are based on Earnings per Share before impairment and divestments, Group Return on Invested Capital (ROIC) and Sustainability indicators (CO_2 emitted, quantity of waste recycled, freshwater withdrawn).
- 1,039,768 (2021: 864,531) performance options at a fair value of CHF 2.47 (2021: CHF 2.92) were granted in 2022. Performance options are subject to a five-year vesting period. External conditions are attached to the options and are based on Holcim’s relative total shareholder return (TSR) compared to a group of peer companies. The valuation of the performance options is based on the Enhanced American Model (calculation of the fair value without considering the performance condition) and a Monte Carlo simulation (estimation of the expected achievement factor).

Performance option plan

Movements in the number of options outstanding and their related weighted average exercise prices are as follows:

	Weighted average exercise price		Number 2022	Number 2021
1 January	**CHF**	**49.88**	**4,321,144**	**3,897,614**
Granted	CHF	46.14	**1,039,768**	864,531
Forfeited	CHF	50.19	**(18,899)**	(280,685)
Exercised	CHF	0.00	**0**	(37,546)
Expired	CHF	65.89	**(133,082)**	(122,770)
31 December	**CHF**	**48.73**	**5,208,931**	**4,321,144**
Of which exercisable at the end of the year			**233,323**	385,304

Underlying assumptions for the fair value of the performance options granted in 2022 and 2021 are presented below:

Grant date	01 March 2022
Share price at grant date	44.98
Exercise price	46.14
Expected dividend yield (continuous)[1]	+4.8%
Expected volatility of stock[2]	+27.0%
Risk-free interest rate	+0.3%
Expected life of the options	7.5 years

[1] Continuously compounded dividend yield based on expected future dividend payments according to Thomson Reuters.
[2] Based on a historical volatility over the most recent period that is commensurate with the expected term of the options.

Grant date	01 March 2021
Share price at grant date	51.90
Exercise price	51.07
Expected dividend yield (continuous)[1]	+4.0%
Expected volatility of stock[2]	+27.0%
Risk-free interest rate	−0.2%
Expected life of the options	7.5 years

[1] Continuously compounded dividend yield based on expected future dividend payments according to Thomson Reuters.
[2] Based on a historical volatility over the most recent period that is commensurate with the expected term of the options.

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Outstanding options

No options were exercised in 2022. Options outstanding at the end of the year have the following expiry dates and give the right to acquire one registered share of Holcim Ltd at the exercise prices as listed below:

Option grant date	Expiry date		Exercise price	Number	Number
				2022	2021
2010[1]	2022	CHF	70.30	**0**	33,550
2014[1]	2022	CHF	64.40	**0**	99,532
2015[1]	2023	CHF	66.85	**144,970**	144,970
2015[1]	2023	CHF	63.55	**47,333**	47,333
2015	2025	CHF	50.19	**41,020**	59,919
2018	2028	CHF	55.65	**232,150**	232,150
2019	2029	CHF	49.92	**1,095,619**	1,095,619
2020	2030	CHF	45.62	**1,785,497**	1,785,497
2021	2031	CHF	51.07	**822,574**	822,574
2022	2032	CHF	46.14	**1,039,768**	0
Total				**5,208,931**	**4,321,144**

[1] Option granted before the merger of Lafarge and Holcim in July 2015.

16. Provisions and contingencies

16.1 Accounting principles

Site restoration and other environmental provisions

The Group provides for the costs of restoring a site where a legal or constructive obligation exists. The estimated future costs for known restoration requirements are determined on a site-by-site basis and are calculated based on the present value of estimated future costs. The cost of raising a provision before exploitation of the raw materials has commenced is included in property, plant and equipment and depreciated over the life of the site. The effect of any adjustments to the provision due to further environmental damage as a result of exploitation activities is recorded through operating costs over the life of the site, in order to reflect the best estimate of the expenditure required to settle the obligation at the end of the reporting period. Changes in the measurement of a provision that result from changes in the estimated timing or amount of cash outflows, or a change in the discount rate, are added to or deducted from the cost of the related asset to the extent that they relate to the asset's installation, construction or acquisition. All provisions are discounted to their present value.

Climate-related matters may affect the level of provisions recognized such as site restoration provisions as a result of levies imposed by the governments for failure to meet climate-related targets or new regulations and requirements to remediate environmental damages on Holcim's sites.

Specific business risks provisions

Specific business risks comprise litigation provisions, provisions for contractual risks recorded in connection with purchase price allocations and service-type warranties. Provisions for litigations mainly relate to antitrust and commercial disputes, environmental claims and product liabilities and are set up to cover legal and administrative proceedings.

Service-type warranties are provided by the Group in the form of separately priced extended warranties covering roofing systems, generally ranging from 5 to 30 years. Revenues from such activities are deferred and recognized into income over the life of the warranty on a straight-line basis.

The timing of cash outflows of provisions for litigations is uncertain since it will largely depend upon the outcome of administrative and legal proceedings.

The sensitivity associated with certain provisions led management to limit the extent of the disclosure discussed above as it believes it could seriously prejudice the position of the Group.

Restructuring provisions

The provision for restructuring only includes direct expenditures arising from the restructuring, notably severance payments, early retirement costs, costs for notice periods not worked and other costs directly linked largely with the closure of the facilities.

Other provisions

The composition of these items is manifold and comprise, as of 31 December 2022, among other things: provisions for health insurance and pension schemes, which do not qualify as benefit obligations and provisions related to sales, other taxes and indemnification provisions. The expected timing of the future cash outflows is uncertain.

Contingent liabilities

Contingent liabilities arise from past events whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of Holcim. They are accordingly disclosed in the notes to the financial statements.

16.2 Provisions

Million CHF	Site restoration and other environmental provisions	Specific business risks provisions	Restructuring provisions	Other provisions	Total 2022	Total 2021
1 January	**818**	**407**	**87**	**808**	**2,120**	**1,712**
Change in scope	(8)	(41)	0	(34)	**(83)**	406
Reclassification (including reclassification to liabilities directly associated with assets held for sale)	(11)	125	(22)	(95)	**(3)**	0
Provisions recognized	47	53	26	269	**395**	352
Provisions used during the year	(56)	(15)	(34)	(40)	**(145)**	(170)
Provisions reversed during the year	(33)	(39)	(5)	(53)	**(130)**	(134)
Unwinding of discount and discount rate changes	(3)	0	0	(1)	**(4)**	(15)
Currency translation effects	(24)	(9)	(2)	2	**(33)**	(31)
31 December	**730**	**480**	**51**	**856**	**2,117**	**2,120**
Of which short-term provisions	43	136	42	178	**399**	413
Of which long-term provisions	687	344	9	678	**1,718**	1,707

The total provision for specific business risks amounted to CHF 480 million as of 31 December 2022 (2021: CHF 407 million).

The total provision for restructuring amounted to CHF 51 million decreasing from 2021 (CHF 87 million) notably due to cash payments during the year for CHF 34 million. The remaining provisions are expected to result in future cash outflows mainly within the next year.

Other provisions relate mainly to provisions that have been set up to cover other contractual liabilities and amount to CHF 856 million (2021: CHF 808 million).

Following the completion of the purchase price allocation (see note 2.3) of Elevate (formerly Firestone Building Products), the service-type warranties are reclassified from “other provisions” to “Specific business risks provisions”.

16.3 Contingencies, guarantees, commitments and contingent assets

Contingencies

In the ordinary course of its business, the Group is involved in lawsuits, claims of various natures, investigations and proceedings, including product liability, commercial, competition, environmental, health and safety matters, etc. The Group operates in countries where political, economic, social and legal developments could have an impact on the Group’s operations.

In connection with disposals of businesses, the Group provided customary indemnification warranties notably related to accounting, tax, compliance with laws, litigation, labor and environmental matters. Holcim and its subsidiaries have received or may receive in the future notices of claims arising from such indemnification warranties.

The Group is exposed to varying degrees of uncertainty related to tax matters and regulatory reviews and audits. The Group accounts for its income taxes on the basis of its own internal analyses, supported by external advice, if appropriate. The Group continually monitors its global tax position, and whenever uncertainties arise, the Group assesses the potential consequences and either accrues the liability or discloses a contingent liability in its financial statements, depending on the strength of the Group’s position and the resulting risk of loss.

As of 31 December 2022, the Group’s contingencies amounted to CHF 615 million (2021: CHF 1,924 million). The decrease is mainly due to the disposal of the business in India and in Brazil and to the resolution of the class action filed against the main Cement players in Colombia including Holcim.

Except for what has been provided for as disclosed in note 16.2, the Group has concluded that due to the uncertainty with some of the matters mentioned below, the potential losses from some of these cases cannot be reliably estimated. There are no further single matters pending that the Group expects to be material in relation to the Group’s business, financial result or results of operations.

The following is a description of the material legal and tax matters currently ongoing.

Legal and tax matters with new developments since last reporting period

On 18 October 2022, Lafarge SA resolved a previously disclosed inquiry by the U.S. Department of Justice ("DOJ") into legacy operations in Syria during the country's civil war. Under the terms of the resolution, Lafarge SA and its long-defunct subsidiary Lafarge Cement Syria paid a financial penalty of USD 778 million and pleaded guilty to one count of conspiring to provide material support to designated foreign terrorist organizations in Syria from August 2013 to October 2014, by which time Lafarge Cement Syria had ceased operations in the country. The resolution provides for a three-year term of probation with certain conditions. The DOJ determined that appointment of an independent compliance monitor was unnecessary based on Lafarge SA's remediation and Holcim's compliance program and internal controls.

The criminal proceedings in France against Lafarge SA related to the same matter are pending with the investigating judges in Paris. The Court of Appeal decided on 7 November 2019 to drop one of the charges, complicity in crimes against humanity. The Supreme Court reviewed the Court of Appeal's decision and decided on 7 September 2021 to refer the case back to the Court of Appeal who decided on 18 May 2022 to uphold the charge. Lafarge SA appealed the decision which is now again being reviewed by the Supreme Court. These decisions are not rulings on the merits of the case, which is still at the investigation phase and Lafarge SA continues to cooperate fully with the French judicial authorities.

In December 2022 and January 2023, two civil lawsuits were filed in the U.S. District Court for the Eastern District of New York against Lafarge SA and Lafarge Cement Syria by the heirs and family members of U.S. nationals who were killed in terrorist attacks in Syria, Iraq, Libya, Jordan, France and Spain from 2015 to 2016. The lawsuits assert claims under the U.S. Antiterrorism Act alleging that Lafarge SA and Lafarge Cement Syria aided and abetted the terrorist organizations that committed, planned or authorized these attacks. Neither of the lawsuits have specified the amount of the damages claimed. It is difficult to predict at this early stage the outcome of these matters, including the timing or any possible impact on Lafarge SA. There is also a risk that additional plaintiffs will join these lawsuits or commence separate actions based on the same conduct.

On 6 July 2020, a class action was filed against the main Cement players in Colombia including Holcim claiming damages based on an alleged price agreement for the years 2010 to 2012. The action was dismissed by the court on 24 September 2020 and the plaintiff appealed the decision. On 13 May 2021, the first instance court admitted the class action. On 10 May 2022, the first instance court issued a decision dismissing the class action as time barred. The plaintiff filed an appeal and on 24 August 2022 the appellate court confirmed the decision of the first instance court which became final.

Previously disclosed legal matters with no developments since last reporting period

In July 2016, LafargeHolcim (Brasil) S.A. received an assessment from the Brazilian Internal Revenue Service, claiming the reversal of a deducted Goodwill for the years 2011 and 2012. The amount in dispute is CHF 67 million (BRL 384 million). After challenging the assessment, the company received a favorable decision from the Administrative Tax Appeals Council in August 2018. The Brazilian Internal Revenue Service (BRA IRS) has appealed this decision before the Superior Administrative Chamber, still pending a judgment. In November 2018, LafargeHolcim (Brasil) S.A. received a further assessment from the Brazilian Internal Revenue Service, again claiming reversal of deducted Goodwill for the years 2013 and 2014. The amount in dispute for this case is CHF 55 million (BRL 313 million). The company challenged it and received a favorable decision at the 1st Administrative Level. The BRA IRS appealed to the CARF (Administrative Tax Appeals Council), and its merit judgment is still pending. In December 2019 LafargeHolcim (Brasil) S.A. received a third assessment on the same topic, referring to the year 2015. The amount in dispute for this year is CHF 4 million (BRL 24 million). The company has challenged it at 1st Administrative Level, had an unfavorable decision and appealed in November 2020 to the Administrative Tax Appeals Council. In 2022, the Group divested LafargeHolcim (Brasil) S.A., but will continue to be liable for these assessments.

On 28 May 2014, the Administrative Council for Economic Defense (“CADE”) ruled that Holcim Brazil (subsequently LafargeHolcim (Brasil) S.A., now under the control of CSN Cimentos S.A.) along with other cement producers had engaged in price collusion and other anti-competitive behavior. The ruling includes behavioral remedies prohibiting certain greenfield projects, divestment of a ready-mix plant, and M&A activities and fines against the defendants. This order became enforceable on 21 September 2015 and applies to LafargeHolcim Brazil, which has been fined CHF 122 million (BRL 509 million) as at the date of the order. In September 2015, LafargeHolcim Brazil filed an appeal against the order, offering a cement plant as guarantee to support its appeal. The fine and the behavioral remedies imposed by CADE were suspended by two decisions of the court of first instance on 29 September 2016 and 21 October 2016. This suspension will remain in effect until the completion of the substantive proceedings against the CADE ruling. During 2019, CADE challenged the guarantee offered, as well as the venue of the proceedings, however, both requests were rejected by the lower court with an appeal pending. On the substantive proceedings, an expert in economics was appointed by the court in 2020, and his economic report was presented during 2022. Following the divestment of LafargeHolcim Brazil to CSN, the Group provided an indemnification guarantee for the fine including interests which as of the closing date of 6 September 2022 was CHF 163 million (BRL 849 million).

The Competition Commission of India (“CCI”) issued in June 2012 and, after a successful appeal, again in August 2016 an order imposing a penalty as of the closing date 15 September 2022 CHF 60 million (INR 4,900 million) on the divested subsidiary Lafarge India for which the Group provided an indemnification guarantee. The order found Lafarge India together with other cement producers in India to have engaged in price coordination and imposed penalties on the cement companies and their trade association. The company appealed the order before the Competition Appellate Tribunal (“COMPAT”). As per the interim order passed by COMPAT in 2016, the company placed a deposit of 10 percent of the penalty amounts with a financial institution with a lien in favor of COMPAT. In May 2017, all matters pending before COMPAT were transferred to the National Company Law Appellate Tribunal (“NCLAT”). In July 2018, the NCLAT dismissed the appeal of Lafarge India (now known as Nuvoco Vistas Corporation) against the CCI order and upheld the fine imposed. The company filed an appeal with the Supreme Court which was admitted on 5 October 2018 and the interim order passed by COMPAT was directed to be continued. The tentative next date of hearing before the Supreme Court will possibly be during 2023.

Following the divestment of Ambuja Cements Ltd. (“ACL”) and ACC Limited (“ACC”) to the Adani Group, Holcim's exposure to the CCI case is limited to the previously divested subsidiary Lafarge India.

There has been litigation in Hungary for a number of years related to the ownership of assets and damage compensation in the context of the privatization of one of the former Holcim cement plants in Hungary. The plant was closed a number of years ago and remains inactive and the Group believes the plant is illegally occupied by the counterparty in the litigation. The litigation is ongoing in a number of different courts in Hungary but Holcim will continue to defend its legal position in all courts of competent jurisdiction.

Guarantees

At 31 December 2022, the Group's guarantees issued in the ordinary course of business amounted to CHF 850 million (2021: CHF 941 million).

Commitments

In the ordinary course of business, the Group enters into purchase commitments for goods and services, buy and sell investments, associated companies and Group companies or portions thereof. It is common practice for the Group to make offers or receive call or put options in connection with such acquisitions and divestments.

At 31 December 2022, the Group's commitments amounted to CHF 2,696 million (2021: CHF 2,848 million) and included CHF 2,235 million (2021: CHF 2,268 million) related to the purchase of various products, inventories and services and CHF 461 million (2021: CHF 580 million) related to the purchase of property, plant and equipment and intangible assets.

17. Shareholders' information

17.1 Equity

On 31 December 2022, the Group's subordinated fixed rate resettable perpetual notes carried in equity amounted to CHF 750 million (2021: CHF 750 million).

Issue	Currency	Coupon	Nominal Amount (Million)
28 November 2018	CHF	3.50%	200
5 April 2019	EUR	3.00%	500

In accordance with the provisions of IAS 32 Financial Instruments – Presentation, and given their characteristics, these instruments were accounted for in equity in the Group's consolidated financial statements.

Incremental costs directly attributable to the issuance of ordinary shares and share options are recognized as a deduction from equity, net of any tax effects. Treasury shares (own equity instruments held by the Group) are accounted for as a reduction of equity at acquisition cost and are not subsequently remeasured. When shares are sold out of treasury shares, the resulting profit or loss is recognized in equity, net of tax.

17.2 Information on share capital

Number of registered shares 31 December	**2022**	2021
Total oustanding shares	**588,564,084**	**608,010,017**
Treasury shares		
Share buy-back program	**9,301,384**	0
Other treasury shares	**18,063,591**	7,919,042
Total treasury shares	**27,364,975**	**7,919,042**
Total issued shares	**615,929,059**	**615,929,059**
Shares out of conditional share capital		
Reserved for convertible bonds	**1,422,350**	1,422,350
Total shares out of conditional share capital	**1,422,350**	**1,422,350**
Total shares	**617,351,409**	**617,351,409**

The par value per share is CHF 2.00. The share capital amounts to nominal CHF 1,232 million (2021: CHF 1,232 million) and the carrying amount of the treasury shares amounts to CHF 1,297 million (2021: CHF 381 million).

In 2022, Holcim initiated a share buyback program of up to CHF 2 billion. Under this program, Holcim plans to repurchase up to 40 million shares until May 2023, to be approved for cancellation at the Annual General Meeting on 4 May 2023. The volume of the monthly share buybacks will depend on market conditions. The program started on 14 November 2022 and 9,301,384 shares were purchased in 2022 for an average price of CHF 48.38.

Swiss tax regulations prescribe to use at least 50% from the Capital Contribution reserves for shares purchased back to be liquidated. The nominal value of CHF 2 per share is tax exempt. For the shares bought back as of 31 December 2022, the domestic capital contribution reserves are affected by a reduction of CHF 216 million. Other Reserves and Retained earnings are increased temporarily by CHF 216 million until the shares' cancellation to be approved at the Annual General Meeting on 4 May 2023.

18. Related party transactions

Key management compensation

Board of Directors

In 2022, 13 non-executive members of the Board of Directors received in total compensation of CHF 4.6 million (2021: CHF 4.9 million) of which CHF 2.6 million was paid in cash (2021: CHF 2.7 million), CHF 0.02 million in the form of social security contributions (2021: CHF 0.01 million), and CHF 1.9 million in shares (2021: CHF 2.0 million). Other compensation paid totaled CHF 0.2 million (2021: CHF 0.2 million).

The total compensation of the Board of Directors as well as the compensation structure and levels remained unchanged from the previous year.

Executive Committee

The total annual compensation for the ten members of the Executive Committee for 2022 amounted to CHF 34.8 million (2021: CHF 36.4 million). This amount comprises base salaries, other fixed pay and annual incentive of CHF 23.3 million (2021: CHF 23.3 million), equity-based long-term incentive of CHF 9.0 million (2021: CHF 10.1 million), employer contributions to social security and pension plans of CHF 2.6 million (2021: CHF 2.9 million).

Compensation for former members of governing bodies

During 2022 and 2021, no payments were made to former members of the Executive Committee.

During 2022 and 2021, no payments were made to parties closely related to members of the governing bodies.

Loans granted to members of governing bodies

There were no loans to members of the Executive Committee, members of the Board of Directors or to parties closely related to members of governing bodies outstanding on 31 December 2022 and 2021.

Other transactions

As part of the employee share purchase plan, Holcim manages employees' shares. It sells Holcim Ltd shares to employees and purchases shares in the open market. In 2022 and 2021, the company did not purchase any Holcim Ltd share from members of the Executive Committee.

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Transactions with associates and joint ventures

Transactions with joint ventures and associates are set at arm's length basis in a manner similar to transactions with third parties.

The transactions and the outstanding balances of the Group with associates and joint ventures are summarised in the table below:

Million CHF	**2022**	2021
Net sales	116	146
Purchase of goods	250	246
Trade accounts receivable	66	47
Other receivables	7	7
Current financial receivables	14	18
Long-term financial receivables	88	91
Trade accounts payable	116	98
Current financial liabilities	11	13
Long-term financial liabilities	0	1

In 2021, Holcim sold its business in Zambia and Malawi to its joint venture company Huaxin Cement Co. Ltd. (see note 2.3).

19. Cash flow

Cash flow information related to investing activities

Million CHF	2022	2021
Purchase of property, plant and equipment net		
Replacements	(979)	(941)
Proceeds from sale of property, plant and equipment	114	112
Capital expenditures on property, plant and equipment to maintain productive capacity and to secure competitiveness	**(865)**	**(829)**
Expansion investments	(570)	(591)
Total purchase of property, plant and equipment net (a)	**(1,435)**	**(1,420)**
Acquisition of participation in Group companies (net of cash and cash equivalents acquired)	**(2,559)**	**(3,409)**
Disposal of participation in Group companies (net of cash and equivalents disposed of)	**6,093**	**209**
Purchase of financial assets, intangible and other assets		
Purchase of financial investments including associates and joint ventures	(9)	(13)
Purchase of other financial assets, intangible and other assets	(246)	(251)
Total purchase of financial assets, intangible and other assets	**(255)**	**(264)**
Disposal of financial assets, intangible and other assets		
Disposal of financial investments including associates and joint ventures	17	18
Disposal of other financial assets, intangible and other assets	219	155
Total disposal of financial assets, intangible and other assets	**236**	**173**
Total (purchase) disposal of financial assets, intangible and other assets businesses net (b)	**3,516**	**(3,291)**
Total cash flow from investing activities (a + b)	**2,081**	**(4,710)**

20. Events after the reporting period

On 5 January 2023, Holcim acquired Chrono Chape, one of France's leading independent providers of on-site self-leveling screeds.

On 9 January 2023, Holcim acquired Nicem srl (Nicem), a leader in grounded calcium carbonate in Northern Italy based near Bergamo, Italy.

On 18 January 2023, Holcim has signed an agreement to acquire FDT Flachdach Technologie GmbH (FDT), a leading manufacturer of thermoplastic roofs.

On 20 January 2023, Holcim acquired the sand and aggregates quarries of Pioneer Landscape Centers, a market leader in the fast growing metropolitan markets Denver, Phoenix and Colorado Springs and a major supplier of construction aggregates reserves in Greeley, Colorado.

On 31 January 2023, Holcim acquired Ol-Trans, the leader in ready-mix concrete in the Gdansk-Sopot-Gdynia area, Poland.

On 7 February 2023, Holcim has signed an agreement to acquire Duro-Last, a US leader in commercial roofing systems.

21. Authorization of the financial statements for issuance

The consolidated financial statements were authorized for issuance by the Board of Directors of Holcim Ltd on 23 February 2023 and are subject to shareholder approval at the Annual General Meeting of shareholders scheduled for 4 May 2023.

TO THE GENERAL MEETING OF HOLCIM LTD, ZUG ZURICH, 24 FEBRUARY 2022

Ernst & Young Ltd
Maagplatz 1
P.O. Box
CH-8010 Zurich

Phone: +41 58 286 31 11
Fax: +41 58 286 30 04
www.ey.com/ch

To the General Meeting of
Holcim Ltd, Zug

Zurich, 23 February 2023

Report of the statutory auditor

Report on the audit of the consolidated financial statements

Opinion
We have audited the consolidated financial statements of Holcim Ltd (the Company) and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2022, the consolidated statement of income, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements (pages 178 to 272) give a true and fair view of the consolidated financial position of the Group as at 31 December 2022 and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS) and comply with Swiss law.

Basis for opinion
We conducted our audit in accordance with Swiss law, International Standards on Auditing (ISA) and Swiss Standards on Auditing (SA-CH). Our responsibilities under those provisions and standards are further described in the “Auditor's responsibilities for the audit of the consolidated financial statements” section of our report. We are independent of the Group in accordance with the provisions of Swiss law, together with the requirements of the Swiss audit profession, as well as those of the International Ethics Standards Board for Accountants’ *International Code of Ethics for Professional Accountants (including International Independence Standards* (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters
Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the “Auditor's responsibilities for the audit of the consolidated financial statements” section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.

Impairment of goodwill and long-lived assets	
Area of focus	As described in note 11 of the consolidated financial statements, the Group has CHF 13’675m of goodwill and CHF 22’125m other long-lived assets subject to impairment test (property, plant and equipment, as well as intangible assets), the sum of which represents 62% of total assets. Management performed annual impairment tests for all Cash Generating Units (“CGUs”) to which goodwill has been allocated as of 31 December 2022. In addition, management reviewed all Cash Generating Units (“CGUs”) and operating segments for their design and for any indicators of impairment and impairment reversal as of 31 December 2022. The impairment assessment requires management to estimate future cash flows based on several assumptions related to future profitability, including revenue growth and EBITDA margins, the determination of an appropriate discount rate and long-term growth rate. The outcome of the impairment assessments could vary significantly based on the judgements applied on the different assumptions. In the year ended 31 December 2022, impairment charges of CHF 685m have been recorded against long-lived assets, primarily related to Russia. Management has performed a sensitivity analysis and identified certain CGUs (aggregated in the Middle East Africa operating segment) with a total carrying amount of CHF 2’254m for long-lived assets and CHF 767m for goodwill. They determined these CGUs to be sensitive as they would be most at risk of a material impairment as a result of reasonably possible changes in the key assumptions, particularly discount rates and EBITDA margin.
Our audit response	Our audit procedures included obtaining an understanding of the Group’s impairment testing process, the controls implemented by management in testing for impairment and the determination of key assumptions used in the impairment valuation tests. We recalculated the mathematical accuracy of the discounted cash flow models and compared the extracted inputs to the source documents.

We performed an independent assessment of impairment indicators, including challenging management's sensitivity analysis by performing an independent sensitivity analysis utilizing management's models.

We considered management's determination of CGUs for long-lived assets' impairment testing and management's determination that goodwill is monitored at the operating segment level for goodwill impairment testing. We considered whether there existed any contradictory evidence by reviewing internal financial reporting presented to the Board of Directors, CEO and executive committee and other information included in the Annual Report. We held discussions with the CEO and Regional Executives to understand both the process of evaluating results, monitoring performance and how decisions are made on the allocation of capital. In addition, we obtained an understanding of how the performance of members of the Group's management is monitored, and bonuses determined.

We agreed the underlying cash flow forecasts to the Board-approved plans.

We held discussions with management to identify areas where Holcim's 2030 sustainability targets will impact future cash flows. We have performed procedures to confirm that the impact of these projects had been appropriately taken into consideration.

We validated whether the Group's goodwill and long-lived assets impairment methodology was appropriate and tested the clerical accuracy of the impairment models.

We assessed management's historical forecasting accuracy, whether estimates have been determined on a consistent basis across the Group and where relevant, compared management's prior year models for testing impairment with the current year models.

We considered the adequacy of management's disclosures in respect of long-lived assets and goodwill impairment testing and whether they appropriately disclose the sensitivities and the impacts of the change in the level at which goodwill impairment testing is undertaken.

Further, we performed the following substantive procedures on the key assumptions:

Recurring EBITDA margin
We analyzed the individual components of the Recurring EBITDA margin, including market growth, cement prices and cost components, and benchmarked these against external sources.
We performed a lookback analysis on the historical trends as well as held discussions with regional and country management to corroborate their views on the market developments on the four-year forecast.

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Discount rates
We involved internal valuation specialists to develop an independent estimate of the relevant discount rates and compared these to discount rates used by management.

Long-term growth
We performed a reconciliation to confirm that the long-term growth rate used to extrapolate cash flow projections beyond the planning period does not exceed the combination of long-term inflation rate and Gross Domestic Product growth rate for the relevant market.

Our audit procedures did not lead to any reservations regarding the valuation, presentation and disclosure of goodwill and long-lived assets.

Contingent Liabilities

Area of focus	The group is involved in lawsuits, claims of various natures, investigations and proceedings, as disclosed in note 16.3 to the consolidated financial statements. In particular, criminal proceedings in France against Lafarge SA and related to legacy operations in Syria during the country's civil war are still ongoing. These decisions are not rulings on the merits of the case, which is still at the investigation phase and Lafarge SA continues to cooperate fully with the French judicial authorities. In addition, and pertaining to the same legacy operations, two civil lawsuits were filed in the U.S. District Court for the Eastern District of New York against Lafarge SA and Lafarge Cement Syria by the heirs and family members of U.S. nationals who were killed in terrorist attacks in Syria, Iraq, Libya, Jordan, France and Spain from 2015 to 2016. Management has concluded, considering all available evidence, including advice from both external and internal legal counsels, that the outcome from the above-mentioned legal proceedings cannot be reliably estimated. Consequently, no liabilities have been recognized, nor is any possible estimate of the contingent liability in relation to these matters capable of being quantified and therefore disclosed as of 31 December 2022.
Our audit response	We gained an understanding of the Group's design and implementation of processes and controls for the identification and evaluation of legal proceedings and regulatory investigations at the different levels of management, including those charged with governance, as well as for the continuous assessment and recording of the related contingent liabilities and provisions required by IAS 37 Provisions, contingent liabilities and contingent assets. We enquired the Group Head Legal and Compliance and the Group's external legal counsels as to the current status of the proceedings and

their professional assessment of their outcome and obtained written legal opinions when deemed necessary.

We obtained minutes of meetings of the Board of Directors. We assessed whether any of the evidence obtained contradicted management's assessment.

We assessed the adequacy of the related disclosures made in the consolidated financial statements.

Our audit procedures did not lead to any reservations regarding the valuation, presentation and disclosure of contingent liabilities.

Divestment of the Russian business

Area of focus	As disclosed in notes 11.2 and 13.2 to the consolidated financial statements, the Group signed an agreement on 13 December 2022 to sell its business in Russia to the local management team. The accounting treatment applied to the Russian operations as of 31 December 2022 involves the application of management's judgment over the assessment of loss of control of the Russian business at the time of closing of the transaction, as well as over the valuation of the assets and liabilities of the Russian business as of 31 December 2022. Closing of the transaction is subject to regulatory review. Management expects the closing of the transaction to occur within one year and has consequently classified the assets and the related liabilities as held for sale in the consolidated balance sheet. The assets to be divested comprised largely of three integrated cement plants and one grinding station in the reportable segment Europe. An impairment of CHF 623 million of which CHF 580 million in property, plant and equipment, CHF 9 million in intangible assets and CHF 34 million in current assets has been charged.
Our audit response	Taking into account all elements included in the signed agreement, we considered management's assessment of future loss of control at the time of the closing of the transaction. We enquired the Group Head Legal and Compliance and Group's external legal counsels as to the key assumptions underlying management's control assessment over the Russian operations. We obtained management's assessment of classification of the Russian business as held-for-sale and assessed it in relation to the relevant accounting standards. We obtained management's valuation assessment of the Russian business as of 31 December 2022 and recalculated the impairment charges recorded.

We assessed the adequacy of the related disclosures made in the consolidated financial statements.

Our audit procedures did not lead to any reservations regarding the valuation, presentation and disclosure related to the Holcim's Russian operations.

Other matter
The consolidated financial statements of the Group for the year ended December 31, 2021, were audited by another statutory auditor who expressed an unmodified opinion on those financial statements on 24 February 2022.

Other information
The Board of Directors is responsible for the other information. The other information comprises the information included in the annual report, but does not include the consolidated financial statements, the stand-alone financial statements, the remuneration report and our auditor's reports thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Board of Directors' responsibilities for the consolidated financial statements
The Board of Directors is responsible for the preparation of the consolidated financial statements, which give a true and fair view in accordance with IFRS and the provisions of Swiss law, and for such internal control as the Board of Directors determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Board of Directors is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern, and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the consolidated financial statements
Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law, ISA and SA-CH will always detect a material misstatement when it exists. Misstatements

can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

A further description of our responsibilities for the audit of the consolidated financial statements is located on EXPERTsuisse's website at: https://www.expertsuisse.ch/en/audit-report. This description forms an integral part of our report.

Report on other legal and regulatory requirements

In accordance with Art. 728a para. 1 item 3 CO and PS-CH 890, we confirm that an internal control system exists, which has been designed for the preparation of the consolidated financial statements according to the instructions of the Board of Directors.

We recommend that the consolidated financial statements submitted to you be approved.

Ernst & Young Ltd

Jacques Pierres	Daniel Zaugg
Licensed audit expert (Auditor in charge)	Licensed audit expert

HOLDING COMPANY RESULTS

Statement of income Holcim Ltd

Million CHF	Notes	2022	2021
Dividend income – Group companies		**7,387**	767
Financial income – Group companies		**229**	198
Financial income – Third parties		**7**	1
Other income	2	**496**	402
Total income		**8,119**	**1,368**
Financial expenses – Group companies		**(374)**	(93)
Financial expenses – Third parties		**(31)**	(43)
Other expenses	3	**(521)**	(391)
Impairment of financial investments and financial receivables – Group companies	4	**(5,366)**	(38)
Total expenses		**(6,292)**	**(565)**
Net income before taxes		**1,827**	**803**
Income tax		**(23)**	(15)
Net income		**1,804**	**788**

Statement of financial position Holcim Ltd

Million CHF	Notes	2022	2021
Cash and cash equivalents		**2,730**	595
Current financial receivables – Group companies		**479**	805
Current financial receivables – Third parties		**245**	165
Other current receivables – Group companies		**144**	52
Other current receivables – Third parties		**4**	2
Total current assets		**3,602**	**1,619**
Non-current financial receivables – Group companies	5	**4,814**	2,585
Financial investments – Group companies	6	**33,307**	38,104
Other assets		**76**	103
Total non-current assets		**38,197**	**40,792**
Total assets		**41,799**	**42,411**
Current interest-bearing liabilities – Group companies		**807**	1,258
Current interest-bearing liabilities – Third parties	7	**14**	734
Other current liabilities – Group companies		**79**	146
Other current liabilities – Third parties		**164**	75
Total current liabilities		**1,064**	**2,213**
Non-current interest-bearing liabilities – Group companies		**5,182**	4,204
Non-current interest-bearing liabilities – Third parties	8	**590**	590
Total non-current liabilities		**5,772**	**4,794**
Total liabilities		**6,836**	**7,007**
Share capital	13	**1,232**	1,232
Capital reserves from tax capital contributions			
– Domestic		**1,298**	1,514
– Foreign		**13,567**	14,897
Statutory retained earnings		**2,531**	2,531
Voluntary retained earnings			
– Retained earnings		**15,828**	14,824
– Net income		**1,804**	788
Treasury shares	9	**(1,297)**	(382)
Total shareholders' equity		**34,963**	**35,404**
Total liabilities and shareholders' equity		**41,799**	**42,411**

NOTES TO THE FINANCIAL STATEMENTS OF HOLCIM LTD

Holcim Ltd, with registered office in Zug, is the ultimate holding company of Holcim Group which comprises subsidiaries, associated companies and joint ventures around the world. During the reporting period, Holcim Ltd employed fewer than ten employees (2021: fewer than ten employees).

1. Accounting Policies

Basis of preparation

The financial statements of Holcim Ltd comply with the requirements of the Swiss accounting legislation of the Swiss Code of Obligations (SCO). Holcim Ltd is presenting consolidated financial statements according to IFRS. As a result, these financial statements and notes do not include additional disclosures, cash flow statement or a management report.

Due to rounding, numbers presented throughout this report may not add up precisely to the totals provided. All ratios and variances are calculated using the underlying amount rather than the presented rounded amount.

Accounting principles applied

Other income and expenses

Non-monetary assets and liabilities are carried at historical rates. Monetary assets and liabilities in foreign currencies are translated at year-end exchange rates. Realized exchange gains and losses and all unrealized exchange losses arising from these as well as those from business transactions are recorded as other income or other expenses. Unrealized exchange gains on non-current assets and liabilities are deferred.

Cash and cash equivalents

Cash and cash equivalents are bank accounts and short-term deposits, highly liquid and readily convertible to known amounts of cash with maturities of three months or less from the date of acquisition.

Financial receivables

Financial receivables are valued at acquisition cost less any impairment of value.

The CO_2 certificates are classified as current financial receivables and valued at acquisition costs less impairment of the value. The result of the sales of the CO_2 certificates is recorded in other income and other expenses.

Financial investments

Financial investments are initially recognized at cost. Investments in Holcim Group subsidiaries are assessed annually and in case of an impairment adjusted to their recoverable amount.

Interest-bearing liabilities

Interest-bearing liabilities are valued at nominal value. Any bond premium is accrued over the duration of the bond so that at maturity the balance sheet amount will equal the amount that is due to be paid.

Other assets

Other assets contain goodwill and other intangible assets, which are capitalized and amortized over a period between three and seven years.

Provisions

Provisions are made to cover general business risks.

Treasury shares

Treasury shares are recognized at acquisition cost and deducted from equity. Gains and losses on the sale are recognized in the statement of income.

2. Other income
The other income contains intangible property related fees of CHF 229 million (2021: CHF 165 million) and other income of CHF 267 million (2021: CHF 237 million).

3. Other expenses
The other expenses contain the stewardship and project expenses of CHF 282 million (2021: CHF 323 million), administrative expenses of CHF 15 million (2021: CHF 17 million), other expenses of CHF 91 million (2021: CHF 51 million) and net foreign exchange losses of CHF 133 million (2021: CHF 0 million).

4. Impairment of financial investments and financial receivables – Group companies
In the reporting period there have been impairments on financial investments and financial receivables in the amount of CHF 5,366 million (2021: CHF 38 million).

5. Non-current financial receivables – Group companies
The non-current financial receivables amount to CHF 4,814 million (2021: CHF 2,585 million). In 2022, Holcim Ltd granted a subordinated loan of USD 3,500 million to a fully owned subsidiary.

6. Financial investments – Group companies
The principal direct and indirect subsidiaries and other holdings of Holcim Ltd are shown in note 2.4 to the Group's consolidated financial statements.

7. Current interest-bearing liabilities – Third parties

Million CHF	**2022**	2021
3.00% fixed, Bond, 2012–2022	**0**	412
2.00% fixed, Bond, 2013–2022	**0**	222
Other current debt	**14**	100
Total	**14**	**734**

8. Non-current interest-bearing liabilities – Third parties

Million CHF	**2022**	2021
1.00% fixed, Bond, 2015–2025	**150**	150
1.00% fixed, Bond, 2018–2024	**440**	440
Total	**590**	**590**

9. Treasury shares movements in equity

		Number held by Holcim Ltd	Million CHF	Average price per share in CHF	Number held by subsidiaries	Reserve for treasury shares held by subsidiaries in Million CHF	Average price per share in CHF
01.01.2022	Opening	**7,919,042**	**382**	**48.2**	**0**	**0**	**0.0**
2022	Purchases share buyback program	**9,301,384**	**450**	**48.4**	**0**	**0**	**0.0**
2022	Other purchases	**10,953,722**	**504**	**46.0**	**0**	**0**	**0.0**
2022	Sales and delivery for remuneration plans	**(809,173)**	**(39)**	**47.9**	**0**	**0**	**0.0**
31.12.2022	**Closing**	**27,364,975**	**1,297**	**47.4**	**0**	**0**	**0.0**
01.01.2021	Opening	**4,216,907**	**202**	47.8	0	0	**0.0**
2021	Purchases	**4,340,581**	**215**	49.5	0	0	**0.0**
2021	Sales and delivery for remuneration plans	**(638,446)**	**(35)**	54.9	0	0	**0.0**
31.12.2021	**Closing**	**7,919,042**	**382**	**48.2**	**0**	**0**	**0.0**

In 2022, Holcim initiated a share buyback program of up to CHF 2 billion. Under this program, Holcim plans to repurchase up to 40 million shares until May 2023, to be approved for cancellation at the Annual General Meeting on 4 May 2023. The volume of the monthly share buybacks will depend on market conditions. The program started on 14 November 2022 and 9,301,384 shares were purchased in 2022 for an average price of CHF 48.38.

Swiss tax regulations prescribe to use at least 50% from the Capital Contribution reserves for shares purchased back to be liquidated. The nominal value of CHF 2 per share is tax exempt. For the shares bought back as of 31 December 2022, the domestic capital contribution reserves are affected by a reduction of CHF 216 million. Retained earnings are increased temporarily by CHF 216 million until the shares' cancellation to be approved at the Annual General Meeting on 4 May 2023.

10. Contingent liabilities

Million CHF	2022	2021
Guarantees in favor of subsidiaries to cover capital and interest of bonds, private placements, Schuldschein loans, credit facilities and commercial paper programs	**14,799**	14,912
Guarantees for committed credit lines, utilization CHF 0 million (2021: CHF 0 million)	**5,581**	5,479
Total	**20,380**	**20,391**

Holcim Ltd is part of a value added tax group and therefore jointly liable to the Swiss Federal Tax Administration for the value added tax liabilities of the other members.
Holcim Ltd guarantees Holcim Finance (Luxembourg) S.A. any amount needed to fulfill its obligations from financing agreements.

11. Share interests of Board of Directors and Executive Committee

Shares owned by Board of Directors

On 31 December 2022, members of the Board of Directors held a total of 712,437 (2021: 630,389) registered shares in Holcim Ltd. This number comprises privately acquired shares and those alloted under the Group's participation and compensation schemes.

Name	Position	Shares held as of 31 December 2022	Shares held as of 31 December 2021
Beat Hess	Chairperson	**116,928**	100,510
Hanne B. Sørensen	Vice-Chairperson (since 4 May 2022)	**17,114**	15,124
Dieter Spälti	Vice-Chairperson (until 4 May 2022)	**n/a**	58,653
Philippe Block	Member	**3,150**	1,159
Kim Fausing	Member	**3,150**	1,159
Leanne Geale	Member (since 4 May 2022)	**0**	0
Colin Hall	Member (until 4 May 2022)	**n/a**	3,126
Jan Jenisch	Member	**531,000**	400,000
Patrick Kron	Member	**9,276**	7,285
Naina Lal Kidwai	Member	**5,117**	3,126
Adrian Loader	Member (until 4 May 2022)	**n/a**	25,527
Ilias Läber	Member (since 4 May 2022)	**8,000**	0
Jürg Oleas	Member	**13,585**	11,594
Claudia Sender Ramirez	Member	**5,117**	3,126
Total		**712,437**	**630,389**

Ownership of shares and options: Executive Committee

As of 31 December 2022, members of the Executive Committee held a total of 924,815 (2021: 684,513) registered shares in Holcim Ltd. This figure includes both privately acquired shares and those allocated under participation and the Group's compensation schemes.

Furthermore, at the end of 2022, the Executive Committee held a total of 2,208,613 (2021: 1,837,411) performance options (at target) and 373,970 (2021: 352,319) performance shares (at target); these arose as a result of the participation and compensation schemes of various years. Options are issued solely on registered shares in Holcim Ltd. One option entitles the holder to buy one registered share in Holcim Ltd.

Number of shares and options held by Executive Committee members as of 31 December 2022

Name	Position	Total number of shares owned	Total number of performance options held (at target)	Total number of performance options held (at maximum)	Total number of performance shares held (at target)	Total number of performance shares held (at maximum)
Jan Jenisch	CEO	531,000	948,902	1,897,804	136,956	273,912
Magali Anderson	Member	32,502	128,632	257,264	28,746	57,492
Mathias Gärtner	Member	9,266	31,944	63,887	12,230	24,460
Jamie Gentoso	Member	11,834	56,763	113,526	18,452	36,904
Feliciano González Muñoz	Member	48,111	170,532	341,064	28,746	57,492
Miljan Gutovic	Member	58,793	177,086	354,172	30,343	60,686
Martin Kriegner	Member	73,296	197,822	395,643	30,537	61,074
Oliver Osswald	Member	43,011	194,656	389,311	30,956	61,912
Géraldine Picaud	Member	114,281	270,061	540,121	44,224	88,448
Toufic Tabbara	Member	2,721	32,215	64,429	12,780	25,560
Total		**924,815**	**2,208,613**	**4,417,221**	**373,970**	**747,940**

Number of shares and options held by Executive Committee members as of 31 December 2021

Name	Position	Total number of shares owned	Total number of performance options held (at target)	Total number of performance options held (at maximum)	Total number of performance shares held (at target)	Total number of performance shares held (at maximum)
Jan Jenisch	CEO	400,000	757,971	1,515,941	130,760	261,520
Magali Anderson	Member	20,444	94,027	188,053	20,084	40,168
Mathias Gärtner	Member	0	0	0	4,502	9,004
Jamie Gentoso	Member	1,500	24,549	49,097	11,072	22,144
Feliciano González Muñoz	Member	25,050	135,927	271,853	27,999	55,998
Miljan Gutovic	Member	30,334	139,819	279,637	28,978	57,956
Martin Kriegner	Member	52,821	165,377	318,153	30,454	60,908
Oliver Osswald	Member	26,284	157,388	314,776	30,152	60,304
Géraldine Picaud	Member	88,710	216,822	433,643	41,673	83,346
René Thibault	Member	39,370	145,531	278,461	26,645	53,290
Total		**684,513**	**1,837,411**	**3,649,614**	**352,319**	**704,638**

12. Significant shareholders

According to the share register and disclosed through notifications filed with Holcim Ltd and the SIX Swiss Exchange, shareholders owning 3 percent or more are as follows:

Percentage of shares outstanding	**2022**	2021
Thomas Schmidheiny[1]	**8.1**	8.4
BlackRock Inc.[2]	**4.9**	4.9
Holcim Ltd[3]	**4.4**	< 3.0
Dodge & Cox[4]	**3.0**	3.0

[1] Excluding the shares of the family members; Thomas Schmidheiny directly and indirectly held 8.1 percent as per 31 December 2022
[2] BlackRock Inc. declared holdings of 4.9 percent as per 2 December 2020
[3] Holcim Ltd held 4.4 percent as per 31 December 2022
[4] Dodge & Cox declared holdings of 3.0 percent as per 8 February 2022

13. Share capital

As of 31 December 2022, Holcim Ltd share capital amounts to CHF 1,232 million (2021: CHF 1,232 million) and consists of 615,929,059 registered shares (2021: 615,929,059) with a nominal value of CHF 2.00 each.

PROPOSED APPROPRIATION OF AVAILABLE EARNINGS

Appropriation of available earnings

Million CHF	2022	2021
Retained earnings	**15,828**	14,824
Net income of the year	**1,804**	788
Capital reserves from tax capital contributions:		
– Domestic	**1,298**	1,514
– Foreign	**13,567**	14,897
Amount available for annual general meeting of shareholders	**32,497**	**32,023**
The Board of Directors proposes to the annual general meeting of shareholders to distribute from the foreign capital reserves from tax capital contributions	**(1,472)**	(1,338)
Balance to be carried forward	**31,025**	**30,685**

Payout from the foreign capital reserves from tax capital contributions

The Board of Directors proposes to the Annual General Meeting of shareholders a distribution from the foreign capital reserves from tax capital contributions and payout of CHF 2.50 (2021: CHF 2.20) per registered share up to an amount of CHF 1,472 million[1].

[1] There is no payout on treasury shares held by Holcim. As per 31 December 2022 treasury shares holdings amounted to 27,364,975 registered shares.

TO THE GENERAL MEETING OF HOLCIM LTD, ZUG
ZURICH, 24 FEBRUARY 2023

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Ernst & Young Ltd
Maagplatz 1
P.O. Box
CH-8010 Zurich

Phone: +41 58 286 31 11
Fax: +41 58 286 30 04
www.ey.com/ch

To the General Meeting of
Holcim Ltd, Zug

Zurich, 23 February 2023

Report of the statutory auditor

Report on the audit of the financial statements

Opinion
We have audited the financial statements of Holcim Ltd (the Company), which comprise the statement of financial position as at 31 December 2022, the statement of income for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the financial statements (pages 280 to 286) comply with Swiss law and the Company's articles of incorporation.

Basis for opinion
We conducted our audit in accordance with Swiss law and Swiss Standards on Auditing (SA-CH). Our responsibilities under those provisions and standards are further described in the "Auditor's responsibilities for the audit of the financial statements" section of our report. We are independent of the Company in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters
Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the "Auditor's responsibilities for the audit of the financial statements" section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the financial statements.

Financial investments – Group companies

Area of focus	Holcim Ltd holds financial investments in Group companies with a carrying amount of CHF 33,307 million as at 31 December 2022, which represents 79.68% of the Company's total assets. According to the Swiss CO para 960, each investment held is valued individually. In case of specific indications that assets have been overvalued or that provisions are too low, the values must be reviewed and adjusted, if necessary. The Company's note in respect of the accounting policies on financial investments is included in Note 1 of the statutory financial statements. The principal direct and indirect subsidiaries and other holdings of Holcim Ltd are disclosed on pages 197 to 201 of the consolidated financial statements. The assessment of the carrying value of investments includes certain complexity and judgement. It is related to the value of the underlying assets held by each investment which themselves depends on the value of other underlying assets. Management has developed valuation models that depend on estimation of the future earnings and the discount rates applied. Due to this complexity and judgment in relation to whether the carrying amounts of the financial investments are supported through their value in use calculated on the basis of budgeted future cash flows, this area represents a key audit matter.
Our audit response	We assessed the Company's accounting policy in respect of financial investments valuation. We obtained an understanding of the internal controls surrounding the valuation process for financial investments valuation and assessed their design and implementation. We assessed, with involvement of our valuation specialists, the valuation methodology, the underlying assumptions and the mathematical accuracy of the valuation models. Our procedures included assessment of the assumptions and methodologies used by the Company in its value-in-use calculation and discount rates applied. We analyzed, for each financial investment, the excess of the recoverable amount over carrying amount. We compared the amount of investment impairment recognized in the financial statements with impairment assessment in the valuation models. Our audit procedures did not lead to any reservations concerning the valuation, presentation and disclosure of investments in group companies.

Other matter
The financial statements of the Company for the year ended 31 December 2021 were audited by another statutory auditor who expressed an unmodified opinion on those financial statements on February 24, 2022.

Other information
The Board of Directors is responsible for the other information. The other information comprises the information included in the annual report, but does not include the consolidated financial statements, the stand-alone financial statements, the remuneration report and our auditor’s reports thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Board of Directors’ responsibilities for the financial statements
The Board of Directors is responsible for the preparation of the financial statements in accordance with the provisions of Swiss law and the Company's articles of incorporation, and for such internal control as the Board of Directors determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors is responsible for assessing the Company’s ability to continue as a going concern, disclosing, as applicable, matters related to going concern, and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements
Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor’s report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law and SA-CH will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on EXPERTsuisse’s website at: https://www.expertsuisse.ch/en/audit-report. This description forms an integral part of our report.

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Report on other legal and regulatory requirements

In accordance with Art. 728a para. 1 item 3 CO and PS-CH 890, we confirm that an internal control system exists, which has been designed for the preparation of the financial statements according to the instructions of the Board of Directors.

We further confirm that the proposed appropriation of available earnings and the proposed repayment of legal capital reserve comply with Swiss law and the Company's articles of incorporation. We recommend that the financial statements submitted to you be approved.

Ernst & Young Ltd

Jacques Pierres	Daniel Zaugg
Licensed audit expert (Auditor in charge)	Licensed audit expert

5-YEAR-REVIEW HOLCIM GROUP

		2022	2021	2020	2019	2018[1]
Statement of income						
Net sales	million CHF	**29,189**	26,834	23,142	26,722	27,466
Gross profit	million CHF	**11,614**	11,536	9,689	11,281	11,548
Recurring EBITDA after leases[2]	million CHF	**6,554**	6,562	5,616	6,177	6,016
Recurring EBIT	million CHF	**4,752**	4,612	3,676	4,102	3,781
Recurring EBIT margin	%	**16.3**	17.2	15.9	15.4	13.8
Operating profit	million CHF	**3,221**	4,401	3,371	3,833	3,312
Depreciation, amortization and impairment of operating assets	million CHF	**2,845**	2,337	2,515	2,559	2,229
Income taxes	million CHF	**1,027**	963	717	806	656
Tax rate	%	**23**	26	26	24	28
Net income	million CHF	**3,528**	2,681	2,002	2,513	1,719
Net income – shareholders of Holcim Ltd	million CHF	**3,308**	2,298	1,697	2,246	1,502
Statement of cash flows						
Cash flow from operating activities	million CHF	**4,562**	5,045	4,618	4,825	2,988
Free cash flow after leases[3]	million CHF	**2,765**	3,264	3,249	3,019	1,703
Investments in property, plant and equipment for maintenance net	million CHF	**(865)**	(829)	(647)	(911)	(882)
Investments in property, plant and equipment for expansion	million CHF	**(570)**	(591)	(379)	(486)	(403)
(Purchase) Disposal of financial assets, intangible and other assets and businesses net	million CHF	**3,516**	(3,291)	(205)	1,178	(100)
Statement of financial position						
Current assets	million CHF	**16,784**	13,696	10,886	12,210	11,658
Non-current assets	million CHF	**40,819**	46,188	42,338	46,100	48,037
Total assets	million CHF	**57,603**	59,885	53,224	58,310	59,695
Current liabilities	million CHF	**8,857**	9,745	8,178	9,144	10,727
Non-current liabilities	million CHF	**19,132**	19,666	16,422	17,667	18,914
Total shareholders' equity	million CHF	**29,614**	30,473	28,625	31,499	30,053
Shareholders' equity as % of total assets	%	**51.4**	50.9	53.8	54.0	50.3
Non-controlling interest	million CHF	**940**	2,788	2,553	2,933	3,128
Net financial debt	million CHF	**6,032**	9,977	8,483	10,110	13,518
Personnel						
Number of personnel		**60,422**	69,672	67,409	72,452	77,055

1 The comparative periods are not restated for IFRS 16 “Leases”.

2 For the year 2018 this line reflects the former alternative performance measure indicator “Recurring EBITDA”. “Recurring EBITDA after leases” is a performance indicator introduced following the implementation of IFRS16 “Leases” to ensure comparability with “Recurring EBITDA” published in prior years.

3 For the year 2018 this line reflects the former alternative performance measure indicator “Free Cash Flow”. “Free Cash Flow after leases” is a performance indicator introduced following the implementation of IFRS16 “Leases” to ensure comparability with “Free Cash Flow” published in prior years.

5-YEAR-REVIEW HOLCIM GROUP CONTINUED

Cautionary statement regarding forward-looking statements

This document contains forward-looking statements relating to the Group's future business, development and economic performance. Such forward-looking statements do not constitute forecasts regarding results or any other performance indicator, but rather trends or targets, as the case may be, including with respect to plans, initiatives, events, products, solutions and services, their development and potential. Although Holcim believes that the expectations reflected in such forward-looking statements are based on reasonable assumptions as at the time of publishing this document, investors are cautioned that these statements are not guarantees of future performance. Actual results may differ materially from the forward-looking statements made in this document as a result of a number of risks and uncertainties, many of which are difficult to predict and generally beyond the control of Holcim, including but not limited to the risks described in this annual report and uncertainties related to the market conditions and the implementation of our plans. Accordingly, we caution you against relying on forward-looking statements. Holcim assumes no obligation to update or alter forward-looking statements whether as a result of new information, future events or otherwise.

Disclaimer

The complete annual report for Holcim Ltd is published in English and is available on *holcim.com*
A printed extract of the annual report is available in English and German. The English version is legally binding.

Financial reporting calendar

	Date
Results for the first quarter 2023	21 April 2023
Annual General Meeting of shareholders	04 May 2023

DEFINITION OF ALTERNATIVE PERFORMANCE MEASURES USED IN THIS REPORT

Like-for-like

Like-for-like information is information factoring out changes in the scope of consolidation (such as divestments and acquisitions occurring in the current year and the prior year and currency translation effects (current year figures are converted with prior year exchange rates in order to calculate the currency effects).

Recurring operating costs

The recurring operating costs is an indicator representing all recurring costs. It is defined as:

+/– Recurring EBITDA after leases;
– Net sales; and
– Share of profit of joint ventures.

Recurring EBITDA

The Recurring EBITDA (earnings before interest, tax, depreciation and amortization) is an indicator to measure the performance of the Group excluding the impacts of non-recurring items. It is defined as:

+/– Operating profit/loss (EBIT);
– Depreciation, amortization and impairment of operating assets; and
– Restructuring, litigation and other non-recurring costs.

Recurring EBITDA margin

The Recurring EBITDA margin is an indicator to measure the profitability of the Group excluding the impacts of non-recurring items. It is defined as the Recurring EBITDA divided by net sales.

Recurring EBITDA after leases

The Recurring EBITDA after leases (earnings before interest, tax, depreciation and amortization) is an indicator to measure the performance of the Group including the impacts of lease depreciation and excluding the impacts of non-recurring items. It is defined as the Recurring EBITDA less the depreciation of right-of-use assets.

Recurring EBIT

The Recurring EBIT is defined as Operating profit/loss (EBIT) adjusted for restructuring, litigation and other non-recurring costs and for impairment of operating assets.

Recurring EBIT margin

The Recurring EBIT margin is an indicator to measure the profitability of the Group excluding the impacts of non-recurring items. It is defined as the Recurring EBIT divided by net sales.

Restructuring, litigation and other non-recurring costs

Restructuring, litigation and other non-recurring costs comprise significant items that, because of their exceptional nature, cannot be viewed as inherent to the Group's ongoing performance, such as strategic restructuring, major items relating to antitrust fines and other business-related litigation cases.

Profit (loss) on disposals and other non-operating items

Profit (loss) on disposals and non-operating items comprise capital gains or losses on the sale of Group companies and of material property, plant and equipment and other non-operating items that are not directly related to the Group's operating activities such as revaluation gains or losses on previously held equity interests, indemnification provisions, disputes with minority shareholders.

DEFINITION OF ALTERNATIVE PERFORMANCE MEASURES USED IN THIS REPORT CONTINUED

Operating profit/loss (EBIT) before impairment

The Operating profit/loss (EBIT) before impairment is an indicator that measures the profit earned from the Group's core business activities excluding impairment charges which, because of their exceptional nature, cannot be viewed as inherent to the Group's ongoing activities. It is defined as:

+/– Operating profit/loss;
– impairment of goodwill and long-term assets.

Net income/loss before taxes, impairment and divestments

Net income/loss before taxes, impairment and divestments excludes impairment charges and capital gains and losses arising on disposals of investments which, because of their exceptional nature, cannot be viewed as inherent to the Group's ongoing activities. It is defined as

+/– Net income/loss before taxes;
– Gains and losses on disposals of Group companies; and
– Impairments of goodwill and long-term assets.

Net income/ loss before impairment and divestments

Net income/loss before impairment and divestments excludes impairment charges and capital gains and losses arising on disposals of investments which, because of their exceptional nature, cannot be viewed as inherent to the Group's ongoing activities. This indicator is net of taxation and it is defined as:

+/– Net income/loss;
– Gains and losses on disposals of Group companies, net of taxation; and
– Impairments of goodwill and long-term assets, net of taxation.

EPS (Earnings Per Share) before impairment and divestments

The EPS (Earnings Per Share) before impairment and divestments is an indicator that measures the theoretical profitability per share of stock outstanding based on a net income/loss before impairment and divestments. It is defined as Net income/loss before impairment and divestments attributable to the shareholders of Holcim Ltd divided by the weighted average number of shares outstanding.

Capex or Capex Net (Net Maintenance and Expansion Capex)

The Capex or Capex Net (Net Maintenance and Expansion Capex) is an indicator to measure the cash spent to maintain or expand its asset base. It is defined as:

+ Expenditure to increase existing or create additional capacity to produce, distribute or provide services for existing products (expansion) or to diversify into new products or markets (diversification);
+ Expenditure to sustain the functional capacity of a particular component, assembly, equipment, production line or the whole plant, which may or may not generate a change of the resulting cash flow; and
– Proceeds from sale of property, plant and equipment.

Employee benefits and other operating items

Employee benefits and other operating items reflect the non-cash impact on the operating profit of the employee benefits schemes net of any cash payments, the non- cash impact of the specific business risks provisions net of any cash payments, the non-cash share based compensation expenses and any other non-cash operating expenses.

Change in other receivables and liabilities

Change in other receivables and liabilities includes the net change of other receivables and liabilities that are not already disclosed separately in the consolidated statement of cash flows or that are not of a tax or of a financial nature.

Free Cash Flow after leases

The Free Cash Flow after leases is an indicator to measure the level of cash generated by the Group after spending cash to maintain or expand its asset base. It is defined as:

+/– Cash flow from operating activities;
– Net Maintenance and Expansion Capex; and
– Repayment of long-term lease liabilities.

Net financial debt ("Net debt")
The Net financial debt ("Net debt") is an indicator to measure the financial debt of the Group after deduction of the cash. It is defined as:

+ Financial liabilities (short-term and long-term) including derivative liabilities;
– Cash and cash equivalents; and
– Derivative assets (short-term and long-term).

Debt leverage
The Net financial debt to Recurring EBITDA ratio is used as an indicator of financial risk and shows how many years it would take the Group to pay back its debt.

Working Capital days on sales
The Working Capital days on sales is an efficiency ratio which measures the level of trade accounts receivable, trade accounts payable and inventories in comparison to sales on a 12 months rolling basis. For better comparability, this indicator is calculated factoring out any changes in scope and exchange rates. It is defined as:

+ Days sales outstanding;
+ Days inventories outstanding;
– Days payables outstanding.

Invested Capital
The Invested Capital is an indicator that measures total funds invested by shareholders, lenders and any other financing sources.

It is defined as:

+ Total shareholders' equity;
+ Net financial debt;
– Assets classified as held for sale;
+ Liabilities classified as held for sale;
– Current financial receivables; and
– Long-term financial investments and other long-term assets.

Net Operating Profit/loss After Tax ("NOPAT")
It is defined as:

+/– Net Operating Profit/loss (being the Recurring EBIT and share of profits of associates)
– Standard Taxes (being the taxes applying the Group's tax rate to the Net Operating Profit/loss as defined above)

ROIC (Return On Invested Capital)
The ROIC (Return On Invested Capital) measures the Group's ability to efficiently use invested capital. It is defined as Net Operating Profit/loss After Tax (NOPAT) divided by the average Invested Capital. The average is calculated by adding the Invested Capital at the beginning of the period to that at the end of the period and dividing the sum by 2 (based on a rolling 12-month calculation). In case of material change in scope during the year, the average invested capital is adjusted pro rata temporis.

Cash conversion
The cash conversion is an indicator that measures the Group's ability to convert profits into available cash. It is defined as Free Cash Flow after leases divided by Recurring EBITDA after leases.

Personnel (FTE)
Personnel (FTE) measures the number of full time equivalent own personnel (FTE) assigned to functions and tasks.

Net CO_2 emissions (kg per ton of cementitious material)
Net CO_2 emissions are CO_2 emissions from the calcination process of the raw materials and the combustion of traditional kiln and non-kiln fuels. Cementitious materials refer to clinker production volumes, mineral components consumed in cement production and mineral components processed and sold externally.

DEFINITION OF ALTERNATIVE PERFORMANCE MEASURES USED IN THIS REPORT CONTINUED

CO_2 per net sales
The absolute CO_2 (thousand metric tons) emissions Scope 1 and Scope 2 divided by millions of net sales.

Freshwater withdrawal (liter per ton of cementitious material)
Total volume of freshwater withdrawn by the cement plant divided by the total production of cementitious material.

Lost time injury frequency rate (LTIFR)
Number of on-the-job injuries that require a person to stay away from work for a day or more per one million hours worked.

Green Capex (million CHF)
The Sustainability Capital Expenditures with significant positive impact on Process Decarbonization, Clean Energy, Carbon Efficient Construction, Circular Economy, Biodiversity, Air & Water and Communities such as but not limited to carbon capture, waste heat recovery, 3D printing, electrical fleet, calcined clay technology, alternative fuels & raw materials installations.

Waste recycled (million tons)
Waste recycled is the sum of all waste raw materials and fuels consumed in the production processes as well as recycled materials processed sold externally. This includes: alternative raw materials, alternative fuels, industrial mineral components, return concrete, recycled aggregates and asphalt. Construction and Demolition Waste is included in waste recycled.

Construction and Demolition Waste (CDW) Recycled (million tons)
CDW Recycled volume is generated from construction, renovation, repair and demolition of houses, large building structures, roads, bridges, piers and dams. This includes alternative raw materials, recycled aggregates, asphalt and return concrete reused in Cement, Aggregates, Ready-mix concrete, Asphalt and Concrete Products.

Contribution in Social Initiatives (million CHF)
Any initiatives Holcim puts in place to address social issues and to contribute to society that are not primarily motivated by generating a direct financial return to the Group's business such as but not limited to housing & infrastructure, health, education & skills, environment, cultural and recreational.

Sustainable financing
Any committed financing instrument drawn and undrawn with a sustainability feature which includes performance-based (sustainability KPI, ESG linked) or use-of-proceed-based products (green, social, transition bonds) incurred by the parent company or consolidated entities.

Thermal Substitution Rate (TSR)
Thermal substitution rate (TSR) corresponds to the relation of thermal energy consumption of alternative fuels to the total amount of thermal energy consumption in the cement kiln system.

Ton
Refers to a Metric ton, or 1,000 kg.

This set of definitions can be found on the Group's website:
holcim.com/alternative-performance-measures

Reconciliation of Alternative Performance measures

Reconciling measures of Profit and Loss to the Consolidated statement of income

Million CHF	2022	2021
Net sales	**29,189**	**26,834**
Recurring Operating costs	**(22,942)**	(20,747)
Share of profit of joint ventures	**308**	474
Recurring EBITDA after leases	**6,554**	**6,562**
Depreciation and amortization of property, plant and equipment, intangible and long-term assets	**(1,802)**	(1,949)
Recurring EBIT	**4,752**	**4,612**
Restructuring, litigation and other non-recurring costs	**(846)**	(194)
Impairment of operating assets	**(685)**	(17)
Operating profit	**3,221**	**4,401**

Million CHF	2022	2021
Recurring EBITDA after leases	**6,554**	**6,562**
Depreciation of right-of-use assets	**358**	370
Recurring EBITDA	**6,912**	**6,932**

Million CHF	2022	2021
Net income before taxes, impairment and divestments	**3,513**	**3,795**
Impairment of goodwill and long-term assets	**(719)**	(17)
Gain (loss) on disposals of Group companies	**1,761**	(134)
Net income before taxes	**4,555**	**3,644**

Million CHF	2022	2021
Net income before impairment and divestments Group share	**2,218**	2,448
Net income before impairment and divestments Non-controlling interests	**228**	382
Net income before impairment and divestments	**2,446**	**2,830**
Impairment of goodwill and long-term assets, net of taxation	**(682)**	(14)
Gain (loss) on disposals of Group companies, net of taxation	**1,764**	(135)
Net income	**3,528**	**2,681**
EPS before impairment and divestments in CHF	**3.66**	**3.98**

Reconciling measures of Free Cash Flow to the Consolidated statement of Cash Flows

Million CHF	2022	2021
Cash flow from operating activities	**4,562**	**5,045**
Purchase of property, plant and equipment	**(1,549)**	(1,532)
Disposal of property, plant and equipment	**114**	112
Repayment of long-term lease liabilities	**(362)**	(362)
Free Cash Flow after leases	**2,765**	**3,264**

Reconciling measures of Net financial debt to the Consolidated statement of financial position

Million CHF	2022	2021
Current financial liabilities	**1,655**	2,391
Long-term financial liabilities	**14,475**	14,514
Cash and cash equivalents	**(9,824)**	(6,682)
Short-term derivative assets	**(118)**	(186)
Long-term derivative assets	**(157)**	(59)
Net financial debt	**6,032**	**9,977**

About this document
This extract is an integral part of the Holcim 2022 Integrated Annual Report, available in English and German. The English version is legally binding. The complete Holcim 2022 Integrated Annual Report (English only) is available at *annual-report.holcim.com*

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ABOUT HOLCIM

Holcim is a global leader in innovative and sustainable building solutions. Driven by its purpose to build progress for people and the planet, its 60,000 employees are on a mission to decarbonize building, while improving living standards for all. The company empowers its customers across all regions to build better with less, with its broad range of low-carbon and circular solutions, from ECOPact to ECOPlanet. With its innovative systems, from Elevate's roofing to PRB's insulation, Holcim makes buildings more sustainable in use, driving energy efficiency and green retrofitting. With sustainability at the core of its strategy, Holcim is becoming a net-zero company with 1.5°C targets validated by SBTi.

More information is available on *holcim.com*

INTEGRATED REPORTING

This report applies the principles of Integrated Reporting to show how we manage the company sustainably, as well as the financial and non-financial value we created in 2022.

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Holcim's sustainability leadership recognized by CDP with a double "A" ranking for climate and water.

In 2022 the SBTi validated that Holcim's updated 2030 targets are aligned with a 1.5°C scenario.

For TCFD-guided disclosures see page 116 of the complete 2022 Integrated Annual Report.

Holcim Ltd
Grafenauweg 10
6300 Zug
Switzerland

holcim.com