# **BUILDING PROGRESS FOR PEOPLE AND THE PLANET**





## ACCELERATING GREEN GROWTH

Our world is growing.

Global population is on the rise, expected to increase from 8 billion today to 10 billion by 2050.

Our future is increasingly urban, with 4 billion people living in cities today, on the way to 6.5 billion by 2050.

Already now, 1.6 billion people lack adequate housing and sanitation, and we expect that number to double to over 3 billion people by 2030.

With our world on a trajectory to consume 2.3 planets by 2040, we are shifting from a linear to a circular economy to make our growth sustainable.

The race for climate is on to keep our planet below 1.5°C to build a net-zero future.

At Holcim, we are turning these challenges into opportunities, to build progress for people and the planet. We are becoming the global leader in innovative and sustainable building solutions to:

- → Make cities greener from foundation to rooftop, with low-carbon and energy-efficient solutions
- → Empower society with smarter infrastructure, from green mobility to renewable energy
- → Improve living standards for all with affordable and sustainable solutions
- → Drive circular construction to build better with less
- → Become a net-zero company, with sustainability at the core of our strategy

Building progress for people and the planet starts right here, right now, with all of us.

Because the future isn't written, it's built.

Jan Jenisch CEO HOLCIM

## "We are building progress for people and the planet, becoming the global leader in innovative and sustainable building solutions."

**Jan Jenisch** CEO HOLCIM



### **OUR PURPOSE:** Building Progress for People and the Planet



MAKING CITIES GREENER

FROM FOUNDATION TO ROOFTOP

### EMPOWERING SOCIETY WITH SMARTER INFRASTRUCTURE

#### FROM GREEN MOBILITY TO RENEWABLE ENERGY





IMPROVING LIVING STANDARDS FOR ALL

WITH AFFORDABLE AND SUSTAINABLE SOLUTIONS

## OUR VISION: BE THE GLOBAL LEADER IN INNOVATIVE AND SUSTAINABLE BUILDING SOLUTIONS



- $\rightarrow$  Driving circular construction
- $\rightarrow$  Pushing the boundaries of digitalization
- $\rightarrow$  Thriving with our communities
  - Becoming a net-zero company

## WE ARE BRINGING OUR VISION TO LIFE WITH STRATEGY 2025 ACCELERATING GREEN GROWTH

With today's megatrends, from the rise in population and urbanization to improving living standards, the construction sector has never been more attractive. We are ready to seize the opportunities ahead with our "Strategy 2025 – Accelerating Green Growth." GLOBAL LEADER IN INNOVATIVE AND SUSTAINABLE BUILDING SOLUTIONS

### THE FOUR PILLARS



ACCELERATING GROWTH Accelerating growth across all markets with leading profitability and cash flow, driven by innovative and sustainable building solutions.



EXPANDING SOLUTIONS AND PRODUCTS Reaching 30% of Group Net Sales by 2025, from new builds to repair and renovation. Becoming a global leader in roofing and expanding specialty building solutions as double-digit growth engines for our company.



LEADING IN INNOVATION AND SUSTAINABILITY Innovating to remain at the forefront of green building solutions and driving circular construction to build better with less.



DELIVERING SUPERIOR PERFORMANCE Fostering a high performance culture while operating at the highest level of ethics and integrity to deliver superior financial and sustainability targets.

### We are decarbonizing building for a net-zero future, from our operations to our products all the way to buildings in use.



**GREEN OPERATIONS Decarbonizing Holcim** 

### **CIRCULAR CONSTRUCTION**

Building new from old







The construction sector accounts for 38% of our world's greenhouse gas emissions. Close to 30% of these emissions take place during the building phase. With our low-carbon materials, from ECOPact green concrete to ECOPlanet green cement, we are reducing this footprint at scale. The larger 70% of these emissions come from buildings in use. With our Solutions & Products, from roofing and insulation to green retrofitting we are making buildings more energy-efficient and durable.

### BUILDING BETTER WITH LESS

Decarbonizing construction

MAKING BUILDINGS SUSTAINABLE Decarbonizing cities









We are at the forefront of decarbonizing construction in Europe:

#### Leading green operations,

our plants in Retznei, Austria, and Cizkovice, the Czech Republic, operate with close to 100% ECOFuels, from materials at the end of their lifecycle, from biomass to municipal waste.

#### Leading green formulation,

we use innovative lowemission raw materials to expand our range of green building materials. Using calcined clay we are reducing the footprint of cement by up to 40% from France and Spain to Austria. We are scaling up the recycling of construction and demolition waste in our green cement ECOPlanet and green concrete ECOPact ranges, from Switzerland and Germany to Austria and Spain.

**Driving green mobility,** in Germany and Switzerland we operate electric trucks from our quarries to our cement and ready-mix operations.



## WE ARE AT THE FOREFRONT OF GREEN BUILDING



We are at the forefront of decarbonizing construction with our sector's broadest range of green building materials, from ECOPact green concrete to ECOPlanet green cement. Our solutions are making green building possible at scale around the world, in line with the most advanced sustainability certifications, from LEED and BREEAM to WELL.







Our ECO solutions, from ECOPact to ECOPlanet, are made possible by our green operations, led by:

→ Green Energy: We power our plants with ECOFuels using materials at the end of their lifecycle from biomass to municipal waste, to our broad use of renewable energy from solar and hydro to windpower.

→ Green Formulation: We offer the industry's broadest range of ECOMaterials thanks to our green formulation expertise using innovative low-emission raw materials from calcined clay to construction and demolition waste.

→ Green Mobility: We are leading the transition to green mobility from our quarries to cities, using the greenest and most efficient transport options from electric vehicles to railways and barges.

→ Next Generation Technologies: To accelerate our net-zero journey we are developing next generation technologies.

For instance, we are currently running over 30 pilot carbon capture, utilization and storage projects around the world (see page 23 for more details). Our Plants of Tomorrow program is finding automated and data-driven solutions to make our operations more sustainable, from robotics to predictive maintenance.

#### **DID YOU KNOW?**

We are making green building accessible to all across our emerging markets, from Mexico to the Philippines.

For instance, ECOPact was used in Casa Laguna, Ecuador's largest affordable housing project with 60% less CO<sub>2</sub> inside.



And ECOPlanet is in Egypt's Iconic Tower, the tallest in Africa, with 60% less CO<sub>2</sub> inside.

As a first mover in decarbonizing construction in North America, we are part of iconic projects like the Spheres building in Seattle, made with ECOPlanet with 80% less CO<sub>2</sub> inside. This LEED Gold certified building also has a live rainforest inside.



The Eight Gardens econeighborhood in London is recycling old concrete into new, with ECOPact with 64% less CO<sub>2</sub> inside. Eight Gardens is LEED certified.



### **BUILDING BETTER** WITH LESS

With our world's rising population and urbanization, we are building better with less to improve living standards for all and build a net-zero future.

### LOW-CARBON MATERIALS

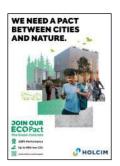
We are decarbonizing construction around the world with our green building materials, from ECOPact green concrete to ECOPlanet green cement, delivering 100% performance with up to 90% less CO<sub>2</sub>.

We are continually innovating to make green concrete the building material for a net-zero future. Concrete is:

→ 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% 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.

→ **Resilient:** Concrete protects our homes, cities and infrastructure like no other material, resisting disasters, from fires and floods to earthquakes.



### **SMART DESIGN**

We are empowering smart design to use minimum materials for maximum strength like 3D printing that can use up to 80% less materials. We make this possible with our proprietary technologies from our 3D concrete printing ink TectorPrint to Dynamax our ultimate high strength concrete.



This lightweight flooring system combines low-carbon materials and smart design to achieve an 80% lower carbon footprint compared to traditional systems. Using the principles of strength through geometry, the design uses 50% less materials. It is built with ECOPact+ green concrete, which offers a 33% lower carbon footprint. The concrete also offers circularity benefits thanks to the use of Holcim's ECOPlanet green cement, with 20% recycled construction and demolition waste inside.

Bringing nature into cities, Elevate enabled Asia's largest urban rooftop farm at Thailand's Thammasat University with its green roof (right).



Malarkey is a leader in sustainable roofing shingles in the US, and a Green Circle Certified company. It is recognized for its smogreducing roofing. The clean air technology in its formulation enables the release of oxygen representing the equivalent of adding two trees in the backyard of each home it roofs.







### WE MAKE SUSTAINABLE BUILDINGS IN USE

We're decarbonizing cities by addressing the 70% of CO<sub>2</sub> emissions from buildings that are generated while they are in use. We're expanding our solutions, from roofing and insulation to advanced mortars and green retrofitting to reduce this footprint. Our technologies make buildings more energy-efficient and longer lasting, while enabling cooler and cleaner cities with more nature inside.

#### **Energy efficiency**

With up to 60% of a building's energy lost through its roof, its envelope plays an essential role in its energy efficiency. We are becoming a global leader in roofing, with a target to reach USD 4 billion 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.

#### **Green retrofitting**

With up to 80% of today's buildings expected to 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 70% of their sales in the repair market, from PRB's facade systems to Cantillana's insulation boards.

#### **Nature positive**

From our green roof systems to Hydromedia permeable concrete, we are bringing more nature into cities to enhance biodiversity and counter urban heat islands making cities more livable.

#### **DID YOU KNOW?**

PRB Group is the first and only specialty building solutions manufacturer in France to offer a complete range of reduced carbon footprint solutions, with its R&D line "Responsible and Sustainable."



Our SES insulation business offers the US' first bio-based insulation foam certified by the US Department of Agriculture, making buildings more energy-efficient in a nature-friendly way.



In Aubervilliers, France, our permeable concrete Hydromedia is enabling an urban forest that reduces the temperature in the area by up to 6 degrees.



Elevate composite roof pavers are made from up to 95% recycled rubber and plastics.



뉡 ELEVATE

An average Malarkey roof contains more than 3,000 upcycled plastic bags inside, diverting them from landfills and contributing to more circular construction.





As part of our ECOPlanet range, we launched Susteno in Switzerland, the world's first cement with 20% construction and demolition waste inside with no compromise in performance. We are getting ready to scale this solution up across Europe and beyond as regulatory standards evolve.

#### **ECO**Planet



## WITH CIRCULAR CONSTRUCTION WE ARE BUILDING NEW FROM OLD

We only have one planet but are living like we have two. Holcim is a world leader in recycling to build better with less to stay within our planet's boundaries. Today we recycle over 50 million tons of materials across our business on our way to doubling this rate to reach 100 million tons by 2030 as part of our net-zero journey. With ECOPlanet Susteno, we introduced the world's first cement with 20% construction and demolition waste inside (see left). Across our business we recycle industrial byproducts from plastics to minerals into new building solutions. We also turn materials at the end of their life, such as biomass and municipal waste, into ECOFuels.

To accelerate the shift towards more circular living, we are engaging with like-minded partners, from urban leaders with our Circular Cities Barometer to customers and communities with our GO CIRCULAR sail boat and Circular Explorer recycling catamaran.

#### Holcim races around the world to GO CIRCULAR

With our GO CIRCULAR race boat we're sailing around the world to raise awareness and inspire action to preserve our precious ecosystems. Led by skipper Kevin Escoffier, GO CIRCULAR will race around the world from The Ocean Race to the Vendée Globe to push the limits of sailing and promote circular living for people and the planet.



#### **DID YOU KNOW?**



Holcim is recovering marine plastic waste in the Manila Bay, Philippines with the Circular Explorer, a 100% solar powered recycling catamaran. To further its impact the Circular Explorer is driving an education program to raise awareness among students and communities, while operating a live science lab onboard to collect data to advance marine science.

#### **DID YOU KNOW?**



Holcim launched the Circular Cities Barometer in partnership with Bloomberg to map our world's top cities at the forefront of circular living to fast-track circular construction together.

Future-proofing our industrial network, our Plants of Tomorrow are creating connected, smart, carbonneutral and energyefficient sites.



Holcim is deploying its industry-leading Transport Analytics Center (TAC) globally to optimize its logistics for enhanced efficiency, safety and sustainability. TAC improves logistics in a data-driven way, powered by advanced analytics and artificial intelligence. It is active across over 50 markets worldwide and covers 1.5 billion km each year, with tracking systems in more than 60.000 trucks.



## WE ARE PUSHING THE BOUNDARIES OF DIGITALIZATION



#### Digitalizing our Business for Green Growth

We are deploying proprietary digital systems to accelerate green growth across our business: from our operations with PACT, Plants of Tomorrow's Performance and Collaboration Tool, to our Logistics with TAC, our Transport Analytics Center, to our product performance, all the way to ConcreteDirect for connected customers. Digitalizing our business for green growth increases our efficiency and impact while reducing our carbon footprint.

#### **Putting our customers first**

ConcreteDirect is Holcim's proprietary app to help our customers manage orders and track deliveries of concrete.

With ConcreteDirect customers can place, amend and confirm orders in just a few clicks, reducing complexity and workload at the jobsite as well as at the office. Through the app, customers can view upcoming orders, track the progress of the ongoing deliveries, and receive important notifications in real time.

#### **Plants of Tomorrow**

We are making our operations smarter with automated and data-driven solutions, cutting across robotics, artificial intelligence, predictive maintenance and quality. By digitally connecting our manufacturing processes with our sales, sourcing and logistics, we are improving our operational efficiency and carbon footprint.

#### **Open innovation**

Holcim's open innovation ecosystem, led by its MAQER and Accelerator teams, engages with hundreds of innovative start-ups around the world to scale up by pioneering new technologies to accelerate our world's transition to net-zero. For instance, partnering with start-up Magment Holcim is making concrete roads charge e-vehicles while in motion.



#### **DID YOU KNOW?**

Holcim was recognized by Fast Company as a top innovative company for urban development for driving affordable and low-carbon housing and schools.



Clickit is Holcim's all-in-one retail app for building materials in the Middle East and Africa region, which is helping individual home builders across our retail network to build and thrive.



#### **DID YOU KNOW?**

Holcim and Habitat for Humanity are accelerating access to affordable housing driven by an innovative digital platform: iBUILD<sup>®</sup>. It enables low-income families to access finance as well as building materials and solutions in a safe and seamless way.



We are committed to reaching over 40% women in senior management as part of "Strategy 2025 – Accelerating Green Growth".



Fostering a diverse and inclusive workplace for all to thrive, Holcim is a recognized top female-friendly company from Forbes to EDGE.



Leading the way in diversity, our Loma Alta Plant in Ecuador is our first genderbalanced site in the world with a team of over 50% women.

#### **DID YOU KNOW?**

Africa's largest 3D-printed affordable housing project, Mvule Garden, is made possible by Holcim's proprietary TectorPrint ink. It enables affordable and climate-resilient housing at scale, building better with less material.



## THRIVING WITH OUR PEOPLE AND COMMUNITIES



At Holcim, we are 70,000 people coming from diverse backgrounds and cultures, combining a unique breadth of expertise and abilities. We are committed to unleashing everyone's potential, fostering a culture of diversity and inclusion.

From empowering diverse teams to respecting human rights and thriving with our communities we put people at the heart of everything we do.

#### Human rights is at the core of our business

We operate according to the highest standards of governance around the world, from health and safety to human rights. Applying our Human Rights and Social Policy across our markets, we conduct regular assessments and operate in an open dialogue with our communities to ensure shared value creation across our operations.

#### Thriving with our communities

Holcim operates as a local business around the world with over 90% of local suppliers across its business. Wherever we operate we support essential services like education, healthcare and transport as a responsible local employer, business partner, neighbor and taxpayer. In 2021 Holcim's total economic contribution reached more than CHF 25 billion, benefiting all of our stakeholders from our employees to our suppliers.

#### Bridging our world's infrastructure gap

Our solutions, from Durabric to 3D Concrete Tector Print, are increasing access to affordable and greener housing and schools from Africa to Latin America. Playing an essential role in bridging the world's infrastructure gap, we built the world's first 3D printed school in Malawi as well as Africa's largest 3D printed affordable housing complex, the Mvule Gardens in Kenya.

Empowering communities in Latin America, we are enabling resilient rural roads that resist flooding with our sustainable Agrovial smart blends. With our Disensa network, we contribute to improving the livelihoods of construction entrepreneurs by supplying building materials, training and credit support.



#### **DID YOU KNOW?**

Fast Company ranked Holcim in its Top 2022 Innovative Team of the Year list as part of its Best Workplaces for Innovators program.



#### **DID YOU KNOW?**

Holcim encourages women to become truck drivers with its Women on Wheels initiative. Building on its success in Uganda it has expanded to over ten countries across all regions. Women on Wheels is improving the livelihoods of hundreds of women and their families around the world.



SECURE



Holcim and Eni are partnering to shape next-generation low-emission raw materials based on carbon capture and utilization. Eni's technology stores CO<sub>2</sub> into olivine, a widely available mineral. Holcim will then use the carbonated olivine as a new lowemission raw material for the formulation of green cements. Holcim and Eni's global operations, combined with olivine's broad availability worldwide. would make this CCUS solution highly scalable.



#### **DID YOU KNOW?**

Holcim has secured two investments from the European Union Innovation Fund for its breakthrough CCUS projects in Germany and Poland. Both projects feature scalable technologies to put Holcim at the forefront of Europe's decarbonization.





### WE ARE BECOMING A NET-ZERO COMPANY

Taking a rigorous science-driven approach to climate action, Holcim was the first in its industry to set itself net-zero targets for 2030 and 2050, validated by the Science Based Targets initiative (SBTi) as a signatory of the UN "Business Ambition for 1.5°C".

#### Our 2030 targets on our way to net-zero



Accelerate the use of low-carbon and carbonneutral products, including ECOPact and Susteno



Double waste-derived fuels in production to reach 37%

Recycle 100 million tons per year of waste and byproducts for energy and raw materials



Reach 475 kg of Scope 1 CO<sub>2</sub> per ton of cementitious material



Scale up the use of calcined clay and develop novel cements and new binders

Operate its first net-zero carbon cement production facility

#### Our path to 2050

Building on our 2030 net-zero levers, we will accelerate our journey to 2050 by leveraging advanced technologies. They include innovative raw materials like calcined clay and construction and demolition waste and the broad adoption of electric vehicles all the way to Carbon Capture, Utilization and Storage (CCUS) technologies.

#### **Next generation technologies**

To accelerate our net-zero journey we are developing next generation technologies, such as CCUS and concrete-based renewable energy systems.

Advancing our carbon capture strategy, we are currently running over 30 pilot projects around the world, ranging from recycling CO<sub>2</sub> from our plants into low-emission raw materials for our green cement, all the way to using it as a greenhouse gas for farming or as a source for aviation fuel.

Working with a range of start-ups, we are developing breakthrough technologies to accelerate the transition to renewable energy. For instance, with Magment we are developing magnetizable concrete enabling roads to charge electric vehicles while in motion.

#### **DID YOU KNOW?**

Holcim's Climate Report shares our net-zero journey with 2030 and 2050 targets. validated by the Science Based Targets initiative. A first in our industry, it details Holcim's decarbonization actions, from green building solutions to circular construction, and next generation technologies to innovation programs.



#### **DID YOU KNOW?**

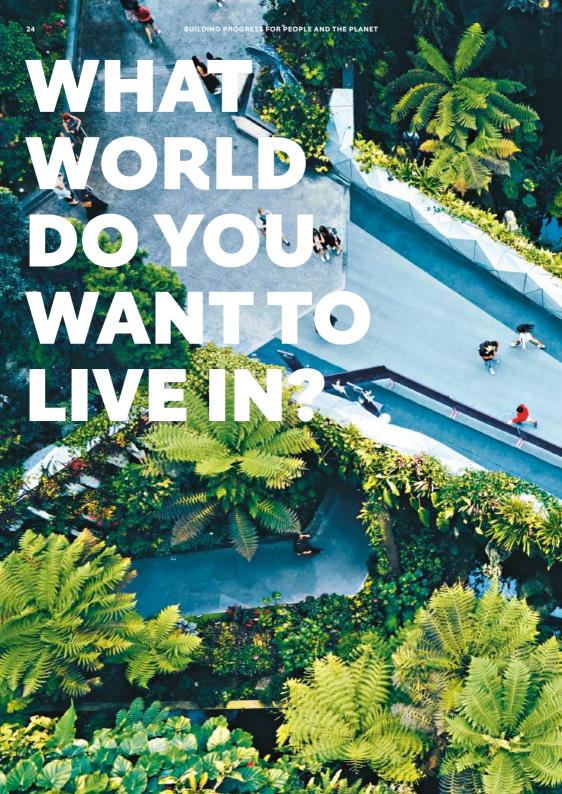
We are recognized as a global climate and ESG leader across a range of third party endorsements.











### A GREEN CITY?

### POWERED BY RENEWABLE ENERGY?

Mezell

### PEOPLE CONNECTED BY GREEN MOBILITY?

## WITH HOUSING FOR ALL?





"Being curious means for me being open-minded, passionate. That's how you can create industry firsts like Susteno, the world's first cement with 20% construction and demolition waste inside."

CATHLEEN HOFFMANN PRODUCT ENGINEER SWITZERLAND

"Without a great team you have no product, and with no product you have no Holcim. To see our people work to achieve such great success for themselves and our company makes me proud to be part of Holcim."



THOMAS MCGRAW CONCRETE LAB MANAGER USA



"I'm particularly proud to work at Holcim because we are committed to progress, implementing sustainable solutions in the construction industry and because an environment is being created to drive innovation."

ERIK JANTZEN SENIOR PROJECT ENGINEER GERMANY

## MEET SOME OF OUR BUILDERS OF PROGRESS

"Working at the Guayaquil plant gives you the satisfaction of knowing that you work for a company that cares about what's important...And we're always striving for what we build today to be good for tomorrow."



ERIKA ARAGUNDY PROCESS COORDINATOR ECUADOR



"There is always a way! Yes we face obstacles, but the question is always how are we going to resolve them and we never see them as definitive road blocks."

RANEIM RASHID ACCOUNT MANAGER AT GEOCYCLE EGYPT



