DECARBONIZING BUILDING

STARS SWITZERLAND SYMPOSIUM 2023

ANTONIO CARRILLO, VP SUSTAINABILITY

HOLCIM

SIX MEGATRENDS DRIVING CONSTRUCTION

POPULATION GROWTH
From ~8 billion today to ~10 billion by 2050

URBANIZATION AND MEGACITIES
Approx. 2.5 billion more people are expected to live in cities by 2050

SUSTAINABLE CONSTRUCTION SOLUTIONS
Higher demand due to resource scarcity & climate change

BETTER LIVING STANDARDS
and more efficient infrastructure demand growing

INNOVATION DRIVING BUILDING TECHNOLOGIES AND BUILDING EFFICIENCY
accelerated by light and modular construction solutions

REPAIR & REFURBISHMENT
driving urban demand






DECARBONIZING BUILDING

BECOMING THE GLOBAL LEADER IN INNOVATIVE AND SUSTAINABLE BUILDING SOLUTIONS

LEADING THE WAY TO SUSTAINABLE BUILDING

BUILDINGS ACCOUNT FOR 38% OF GLOBAL EMISSIONS

10% EMBODIED CARBON
from materials and the construction phase

BECOMING A NET ZERO COMPANY

- Low-carbon formulation
- Circular constructio n
- Clean Energy
- CCUS

28% OPERATIONAL CARBON
from heating, cooling and powering

FOR A NET-POSITIVE FUTURE

- Energy efficient systems: roofing to insulation
- Green retrofitting: repair & renovation
- Smart design
- From volume to value

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DECARBONIZING BUILDING

NET ZERO FUTURE HOLCIM APPROACH

Rigorous and science-driven

SCIENCE BASED TARGETS
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Transparent

Industry's first Climate Report in 2022; second report in 2023

Globally recognized

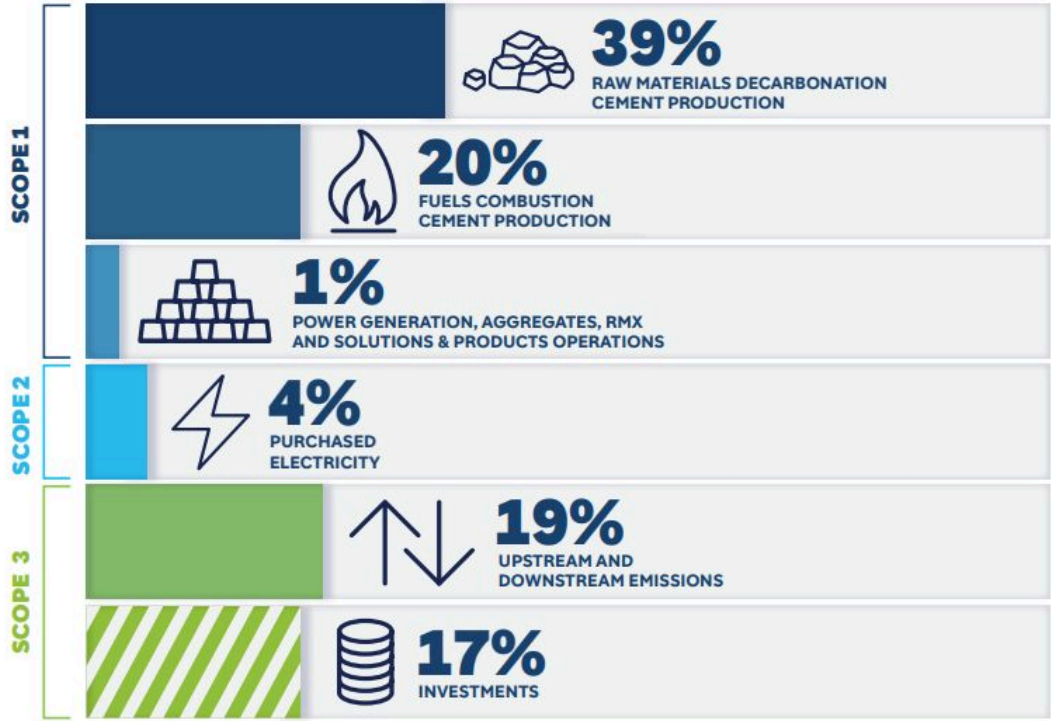
FT FINANCIAL TIMES CLIMATE LEADERS 2022
statista

Giving **shareholders** a say on our **climate strategy**

96%
approved in 2023

DRIVING TRANSPARENCY

LEADING IN CLIMATE-RELATED DISCLOSURE REQUIREMENTS



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SCIENCE-DRIVEN ROADMAP FOR NET ZERO OPERATIONS

UPGRADED 2030 TARGETS IN LINE WITH 1.5°C FRAMEWORK VALIDATED BY SBTI

1.5°C UPGRADED TARGETS

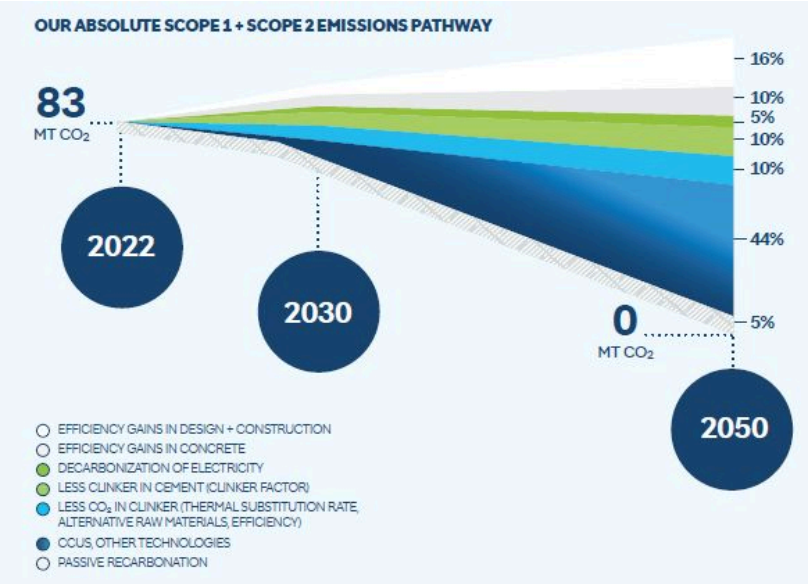
STRETCHED 2030 TARGET:
420 KG CO_2 / TON OF CEMENTITIOUS MATERIAL

	Target Base Year 2018	2022	2030 SBTI 1.5°C	2050 SBTI 1.5°C
SCOPE 1 KG CO_2 / T cementitious	623 gross	602 gross	-22.4% gross	-95%
	590 net	562 net	420 net	net zero
SCOPE 2 KG CO_2 / T cementitious	46	37	-65%	

SCIENCE BASED TARGETS

BUSINESS AMBITION FOR 1.5°C

NET-ZERO PATHWAY



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SCIENCE-BASED TARGETS ACROSS THE THREE SCOPES

UPGRADED TARGETS IN LINE WITH 1.5°C FRAMEWORK VALIDATED BY SBTI

	Target Base Year 2018	2022	2030 SBTI 1.5°C	2050 SBTI 1.5°C
SCOPE 1 KG CO_2 / T cementitious	623 gross	602 gross	-22.4% gross	-95%
	590 net	562 net	420 net	net zero
SCOPE 2 KG CO_2 / T cementitious	46	37	-65%	
SCOPE 3	2020			
PURCHASED CLINKER AND CEMENT KG CO_2e / T purchased	710	709	-25.1%	-90%[2]
PURCHASED FUELS KG CO_2e / T purchased	286	285	-20%[3]	net zero
DOWNSTREAM TRANSPORTATION [KG CO_2e / T material transp.]	11	10	-24.3%[3]	

SCIENCE BASED TARGETS

BUSINESS AMBITION FOR 1.5°C

BUILDING FOR PEOPLE & PLANET net zero

1 The target boundary includes land related emissions and removals from bioenergy feedstocks.
2 This net-zero validation was evaluated within the parameters of the Business Ambition for 1.5°C campaign, and covers categories 1, 3, 4, 6, 7 and 9 of Holcim's Scope 3 emissions.
3 Targets aligned with well-below 2°C

PIONEERING NEW TECHNOLOGIES FROM CCUS TO CALCINED CLAY

DECARBONIZING HOLCIM

GREEN OPERATIONS

GREENER ENERGY

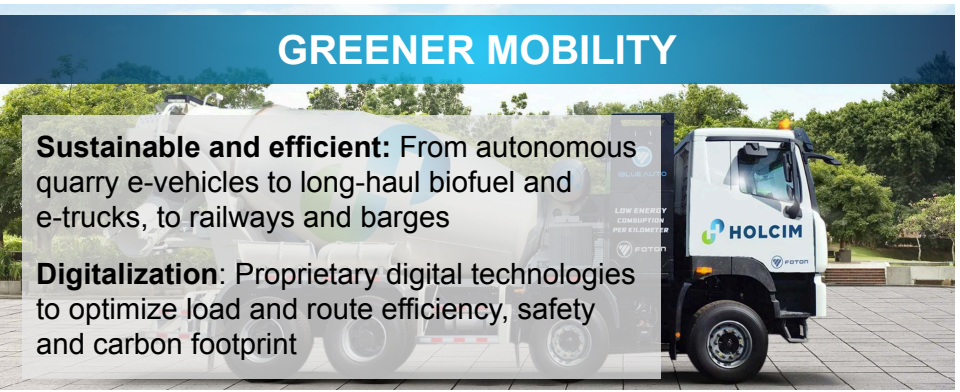
Alternative Fuels
from biomass to municipal waste

Renewable energy
from solar, wind and hydro to waste heat recovery

GREENER FORMULATIONS

Broad range of alternative materials
from construction and demolition waste to calcined clay

GREENER MOBILITY



Sustainable and efficient: From autonomous quarry e-vehicles to long-haul biofuel and e-trucks, to railways and barges

Digitalization: Proprietary digital technologies to optimize load and route efficiency, safety and carbon footprint

NEXT GEN TECHNOLOGIES

CCUS and mineralization: Over 50 projects recycling CO_2 for applications like transport and agriculture

Plants of Tomorrow: automated and data-driven solutions, from robotics to predictive maintenance

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ACCELERATING CLIMATE ACTION WITH CCUS

50 CCUS PROJECTS WORLDWIDE

FIRST IN THE INDUSTRY WITH 6 GRANTS FROM THE EU INNOVATION FUND

GERMANY

POLAND

BELGIUM

CROATIA

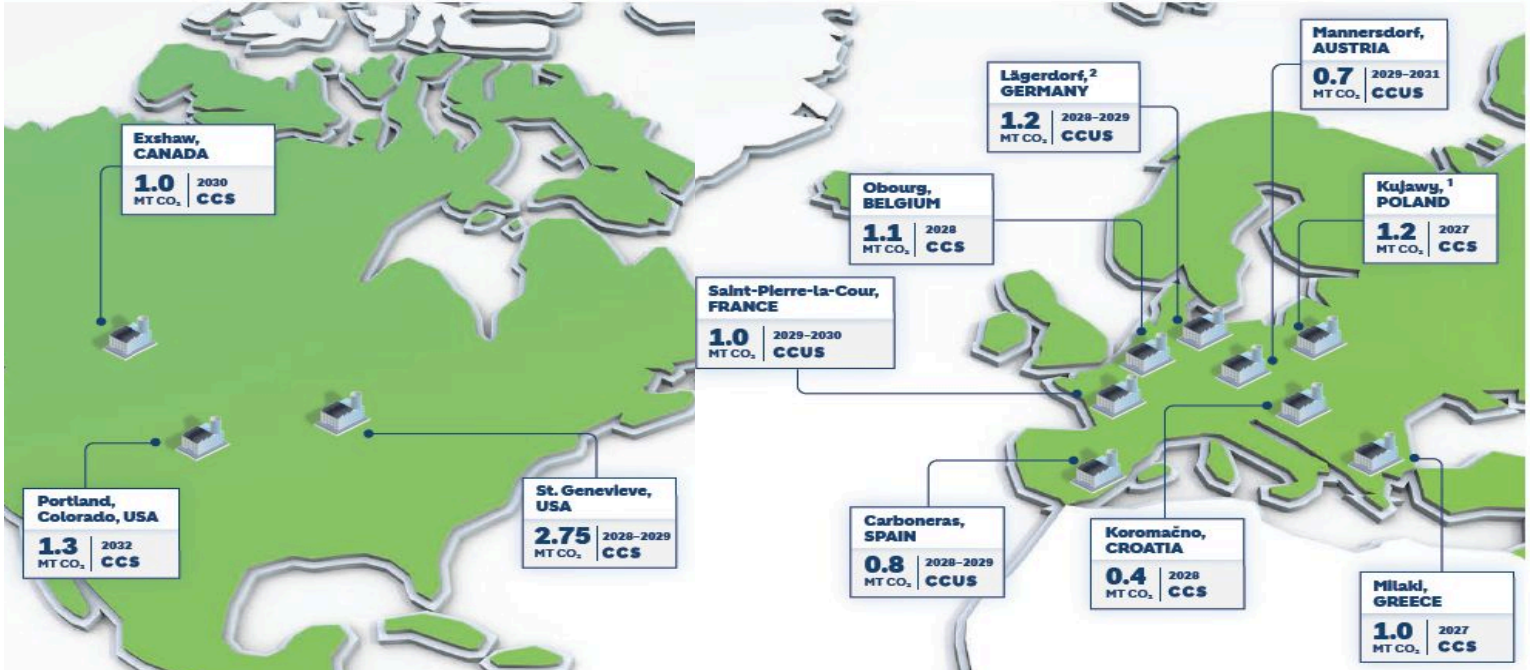
FRANCE

GREECE

OVER 50 CCUS PROJECTS

CHF 2 BILLION CAPEX BY 2030 TO CAPTURE MORE THAN 5M TONS OF CO2/YEAR

11 FLAGSHIP PROJECTS TO START CAPTURING +5 MT CO2 BEFORE 2030
From storage and utilization, including mineralization and carbonation



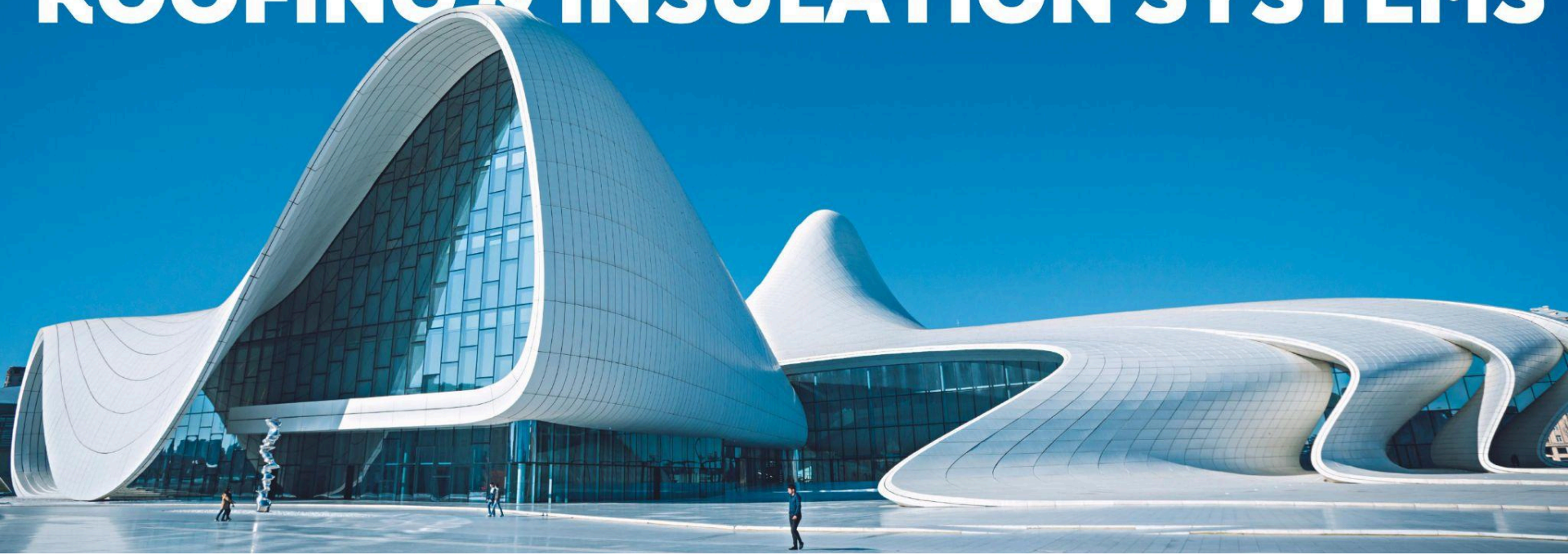
HOLCIM

DRIVING CIRCULAR CONSTRUCTION

IN ALL METROPOLITAN CITIES WHERE WE OPERATE

ECOCycle® geocycle DURO-LAST® THE WORLD'S BEST ROOF® Malarkey® Roofing Products®

GLOBAL LEADER IN ADVANCED ROOFING & INSULATION SYSTEMS



Malarkey Roofing Products®

ELEVATE

DURO-LAST® THE WORLD'S BEST ROOF®

PRB Produits de Revêtement du Bâtiment

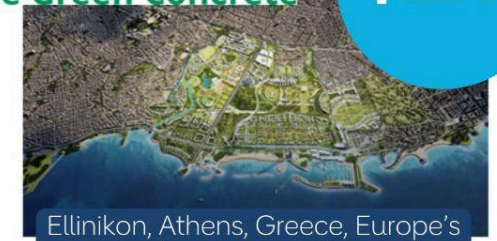
cantillana

IZOLBET®

DRIVING PERFORMANCE WITH BILLION DOLLAR BRANDS

ECOPact
The Green Concrete

$1BN



Ellinikon, Athens, Greece, Europe's largest urban regeneration project

ECOPlanet
The Green Cement

$2BN

Iconic Tower, the tallest tower in Africa, Cairo, Egypt

ELEVATE

$3BN

Winthrop Center, World's First Passive House Office, Boston, USA

ECOCycle

Recygénie, The world's first fully recycled concrete building, Paris, France

Malarkey
Roofing Products

Architectural Shingles, Black Oak, USA

DURO-LAST
THE WORLD'S BEST ROOF

Davies Symphony Hall, San Francisco, USA

STRATEGY 2025 – ACCELERATING GREEN GROWTH

ECOPact

25%

TO NET SALES GROWTH

Circular Economy

45

MILLION TONS

Construction Demolition Materials

10

MILLION TONS

Green Capex

0.5

BILLION CHF

Freshwater Withdrawal

-25%

LITERS / TON OF CEMENT

Diversity

+40%

MORE WOMEN IN SENIOR MANAGEMENT

Climate

520

KG CO_2 NET / TON OF CEMENT

Sustainable Financing

> 40%

LINKED TO CLIMATE, WATER & SAFETY GOALS

HOLCIM


HOLCIM