



CONCRETE IN TOMORROW'S GREEN CITIES

SWISS RE - CONCRETE SOLUTIONS FOR SUSTAINABLE CONSTRUCTION

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SIX MEGATRENDS DRIVING CONSTRUCTION

SUSTAINABLE CITIES ARE KEY TO OUR SHARED FUTURE

POPULATION GROWTH

From ~8 billion today to ~10 billion by 2050



URBANIZATION AND MEGACITIES

Approximately 2.5 billion more people are expected to live in cities by 2050



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



Increased demand for **BETTER LIVING STANDARDS** and more efficient infrastructure



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



More **REPAIR & REFURBISHMENT** driving urban demand



HOLCIM GROUP MANIFESTO

OUR PURPOSE - BUILDING PROGRESS FOR PEOPLE AND THE PLANET

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

- At the forefront of green building solutions
- Leading the circular economy
- Pushing the boundaries of digitalization
- Becoming a net-zero company
- Thriving with our people and communities



FAST FACTS ABOUT HOLCIM – BECOMING THE GLOBAL LEADER IN INNOVATIVE AND SUSTAINABLE BUILDING SOLUTIONS



Largest
footprint



2,300
operating sites



~70,000
employees



27
billion CHF net sales

The **world's global leader** in building solutions



Net Zero
pledge



SBTi
validated 2030 targets



ESG Rankings
from MSCI to Sustainalytics



Green Solutions
1/3 of our sales

Leading the way in sustainability



Global R&D
organization - 6 hubs worldwide



300 Scientists
in green construction



1,500 Patents
in green construction



100+ startups
open innovation ecosystem

#1 R&D organization
in our industry

OUR ABSOLUTE SCOPE 1 AND SCOPE 2 EMISSIONS PATHWAY

Leaders in transparency



THE OPPORTUNITY FOR CITIES

GREEN CONCRETE IS THE SOLUTION

Climate adaptation will require more resilient cities ¹

Global building floor area will double by 2060 ²

The built environment generates nearly 50% of global emissions ²

80% of the worlds buildings in 2050 already exist ³

SMART DESIGN & LOW CARBON CONSTRUCTION

- *Building better with less* using efficient design
- Climate adaptation means upgrades to cities and infrastructure
- Cities will maximise space by *building up and below*
- Low carbon efficient materials to tackle upfront emissions
- Building strong durable buildings and infrastructure to extend operational the life of assets

REUSE, REPAIR & RETROFIT

- Repairing and extending the life of existing buildings and infrastructure
- Renovating and reusing what is already built
- Circular construction using recycled materials
- Retrofitting buildings to be more energy and space efficient
- Mining the urban environment to *build new from old* in a *closed loop* circular system

¹ United Nations - Climate Action, 2022: Climate Adaptation

² Architecture 2030, 2022: Why the built environment

³ Mckinsey & Co, 2021: Call for action: Seizing the decarbonization opportunity in construction

CONCRETE IN CITIES

HOLCIM'S SOLUTIONS TO BUILD GREEN CITIES

ECOPact
ECOPlanet

- Low carbon concrete and cement range with 30% to >70% lower emissions
- No compromise of performance - deployed in > 24 countries

Hydromedia
FASTER DRAINING THROUGH CONCRETE

- Permeable concrete used for climate adaptation and bringing nature into cities
- Prevents flooding events and allows nature to grow reducing temperatures

DYNAMax
The Ultimate Performance Concrete

- High strength concrete range designed for buildings and infrastructure
- Reduces mass of structures and allows more useable built area

SUSTENO

- First cement to use Construction & Demolition Waste in the manufacture
- Circular low carbon cement to truly *build new from old*

HOLCIM'S CIRCULAR CONSTRUCTION MODEL AT THE CORE OF OUR STRATEGY & NET ZERO JOURNEY

Driving Circular Construction to Build More With Less:

Recycling Materials

Building more new from the old

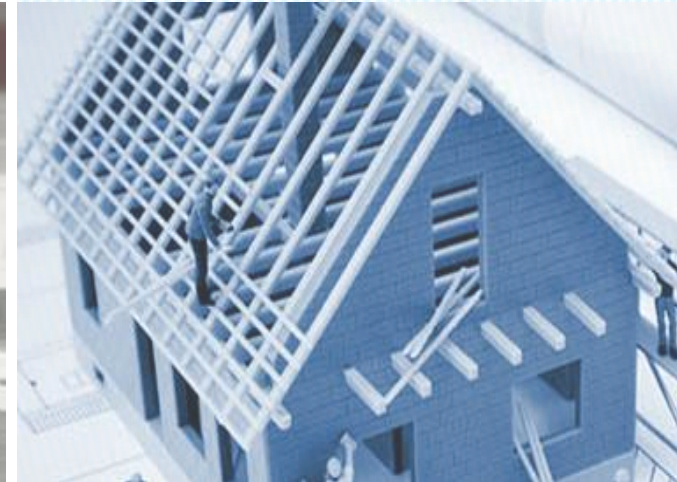
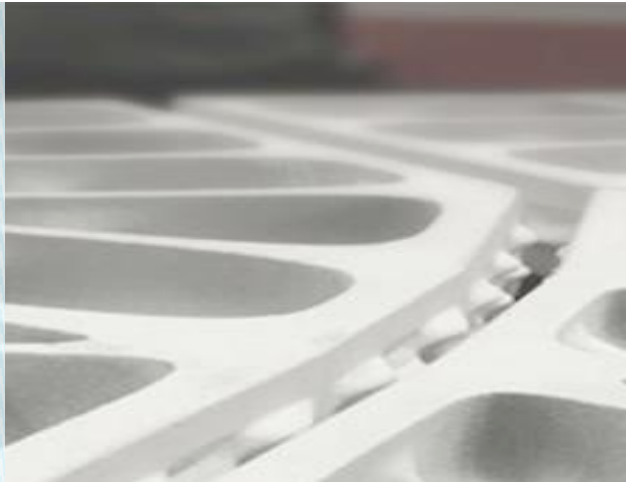
From Construction & Demolition Waste to low emission raw materials in green building solutions

Goal to recycle 100m tons by 2030



Reducing Materials

Empowering Smart Design



Repairing & Renovating

Making buildings last longer

DRIVING CIRCULAR CONSTRUCTION TO RECYCLE 100M TONS MATERIALS BY 2030

FOCUS ON URBAN MINING TO RECYCLE 10M TONS OF CONSTRUCTION & DEMOLITION WASTE BY 2025



SCALING UP CAPACITY WITH NEW TECHNOLOGIES & SYSTEMS

World's first cement
with **20%** recycled
Construction & Demolition
Waste inside



Advanced Crushing Technology

Digital Material Management

Smart Recycling Hubs



NEW METHODS OF CONSTRUCTION

REDUCING EMISSIONS AND RESOURCE CONSUMPTION

We are innovating next generation materials and technologies including:

- Digital design systems to optimise mass
- Carbon Prestressed Concrete (CPC) systems that reduce mass by >75%
- Solutions with recycled Construction and Demolition Waste (CDW) inside

We are using 3D printing to Build More with Less

- Putting materials only where needed - reducing mass by >70%
- Increasing the time to construct
- Using new geometries to reduce mass
- Reducing waste by onsite
- Printing structures designed to capture passive energy eg. solar





HOLCIM

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