



BUILDING A NET- ZERO FUTURE: OUR VISION

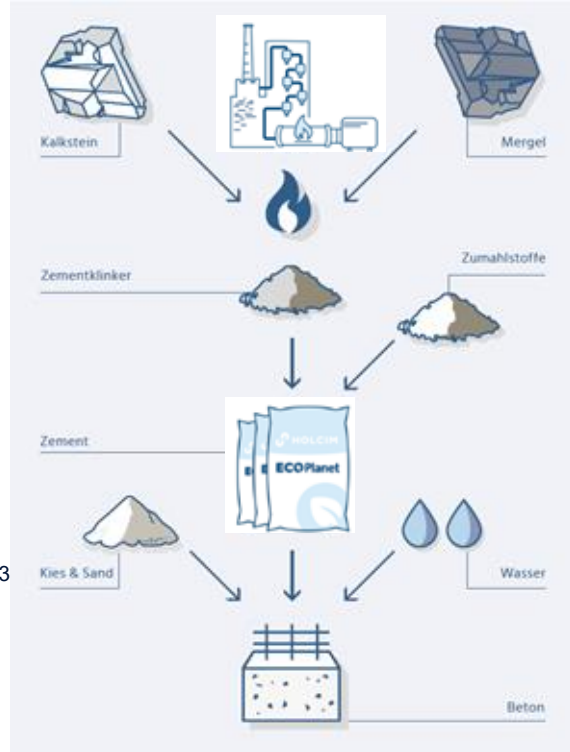
EPFL Solutions4Sustainability CCUS
June 15, 2026 – Energypolis Sion



**OUR VISION:
BY 2050 WE WILL
PRODUCE
EXCLUSIVELY
CLIMATE-NEUTRAL
AND FULLY
RECYCLABLE
BUILDING
MATERIALS**



WHY IT'S DIFFICULT – BUT POSSIBLE!



CLINKER PRODUCTION:

Limestone and marl are fired at over 1450°C:

- $\text{CaCO}_3 \rightarrow \text{CaO} + \text{CO}_2$
- CO_2 from combustion

Cement is based on clinker and additives

Concrete made from cement, gravel and water

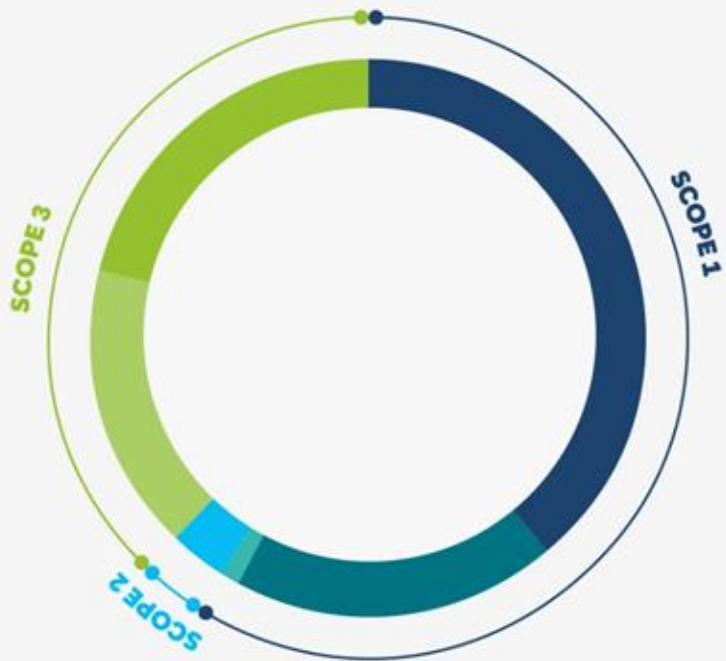
UNIQUE PROPERTIES
OF CONCRETE

POPULATION
GROWTH

NEED FOR
INFRASTRUCTURE,
HOUSING, ETC.

40% OF OUR EMISSIONS ARE BARELY AVOIDABLE

OUR CO₂ FOOTPRINT



SCOPE 1

● Raw material calcination	39.0%
● Fuel combustion	18.9%
● Power generation, Aggregates, Ready-Mix and Solutions & Products operations	1.0%

SCOPE 2

● Purchased electricity	3.3%
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SCOPE 3

● Upstream and downstream emissions	16.8%
● Investments	20.9%

INDUSTRY-SHAPING SUSTAINABILITY ROADMAP

THREE MAIN LEVERS: FORMULATION, ENERGY, AND NEW TECHNOLOGIES LIKE CARBON CAPTURE

Sustainability targets 2030

>50% ECOPEct and ECOPlanet
net sales of ready-mix and cement

20+Mt construction demolition materials
3x recycled volume of 2024

<400 scope 1 emissions¹
30% reduction vs 2020

33% freshwater withdrawal²
reduction vs 2020

► Sustainability driving **revenue and margin expansion**

► Scaling **sustainable offering** to meet customer demand

► Accelerate profitable growth in **circular construction**

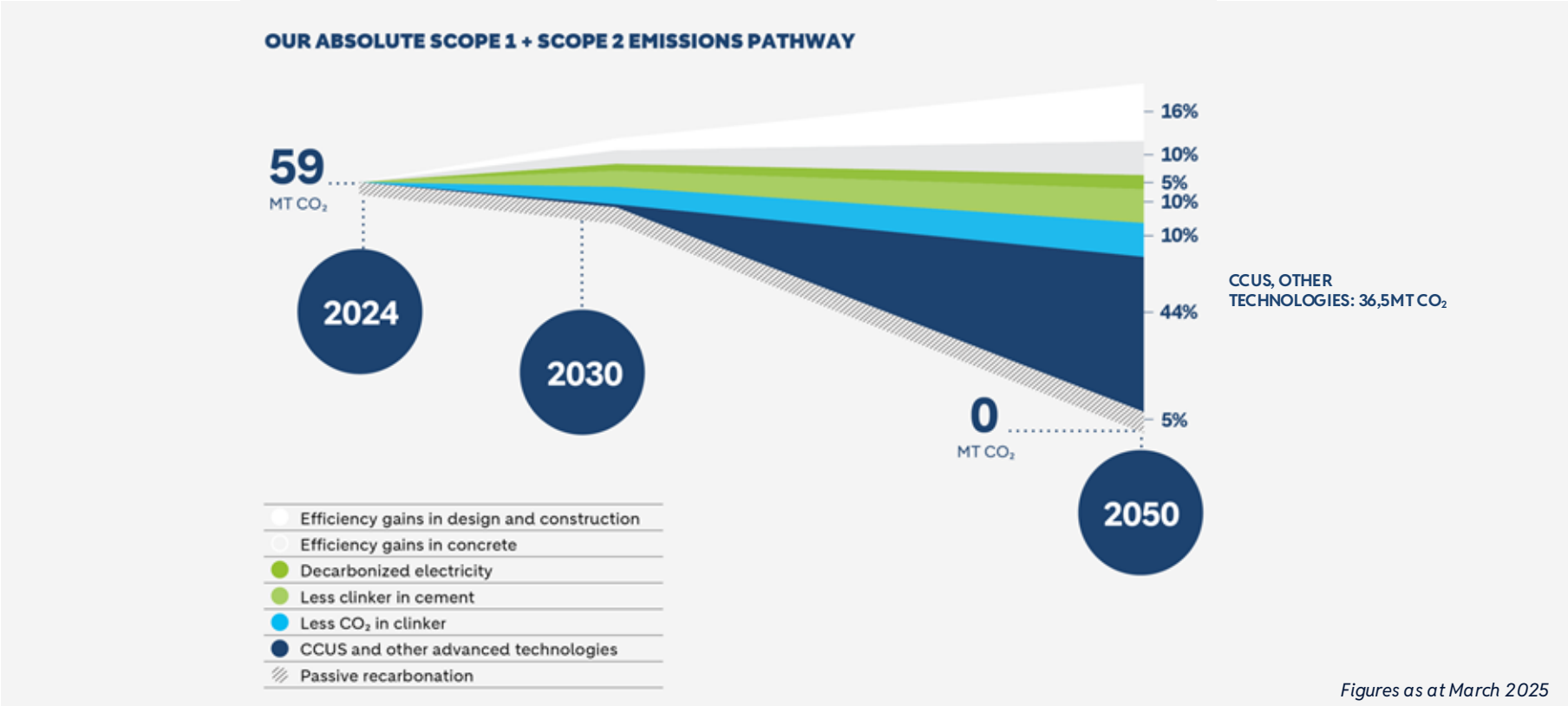
► **Innovation** accelerating decarbonization

► Building a **nature-positive** future



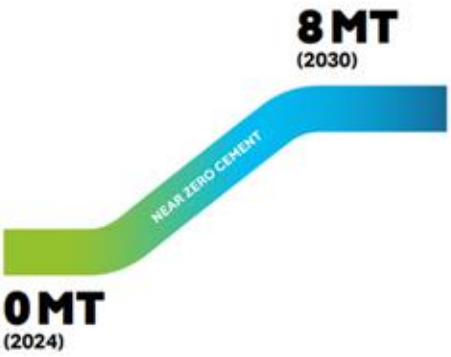
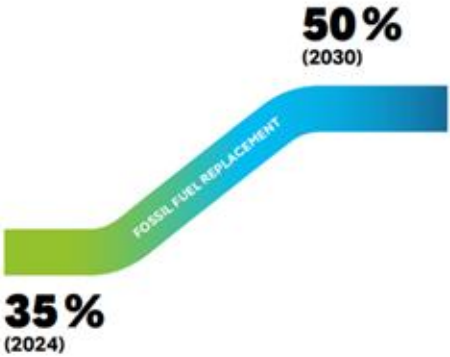
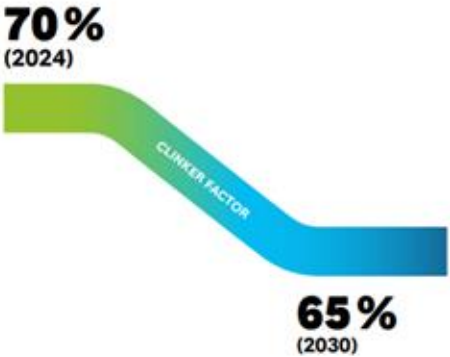
HOLCIM'S PATHWAY TO NET-ZERO: CCUS IS KEY

CCUS WILL HAVE TO BE APPLIED IN ALL OF OUR CEMENT PLANTS BEFORE 2050



Figures as at March 2025

OPERATIONAL EFFICIENCY & NEXTGEN TECHNOLOGIES



Formulation
5 pp of clinker factor reduction and alternative raw materials will bring:

- 25 - 35 kg CO₂ reduction, net per ton of cementitious

Energy
15 pp of alternative fuel increase will bring:

- 25 - 35 kg CO₂ reduction, net per ton of cementitious

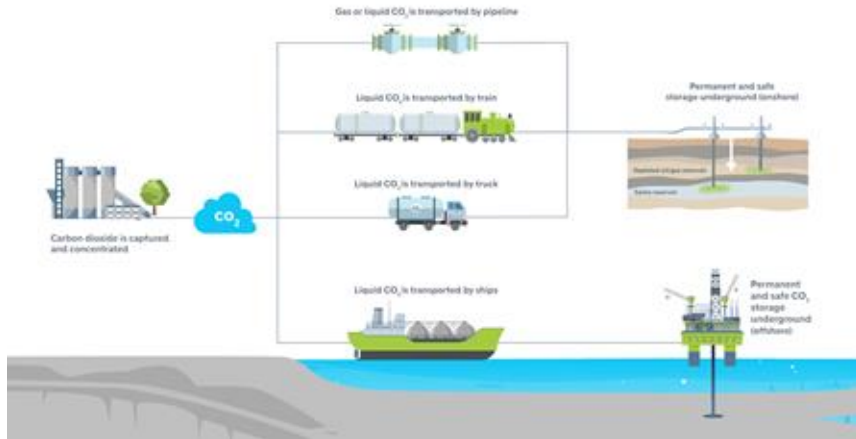
Carbon Capture
8 Mt of near zero cement produced by 2030 brings:

- 8 projects in execution with funding from EU Innovation Fund

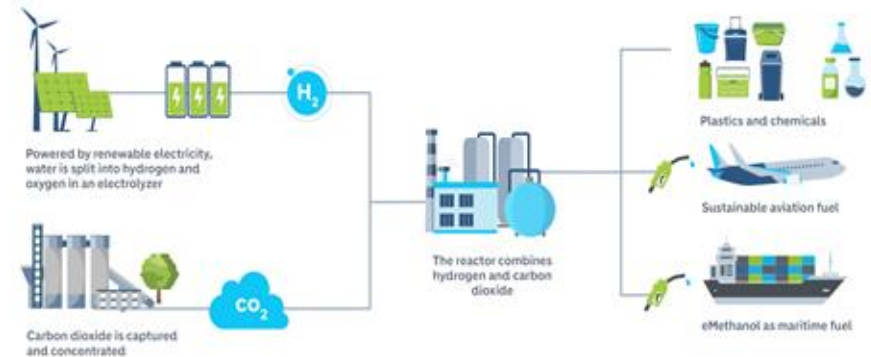
HOLCIM SCOPE IS OFTEN LIMITED TO CAPTURE PART OF CCS CHAIN

HOLCIM COLLABORATED WITH EXTERNAL PARTNERS TO UNLOCK THE VALUE CHAIN

CARBON CAPTURE AND STORAGE (CCS) VALUE CHAIN



CARBON CAPTURE AND UTILIZATION (CCU) VALUE CHAIN



DECARBONIZATION THROUGH CCUS

8 GRANTS AWARDED FOR CCUS PROJECTS BY EU INNOVATION FUND

Go4ECOPlanet



Kujawy,
Poland

Carbon2Business



Lägerdorf,
Germany

eCapt-Rhône



Le Teil,
France

KOdeCO



Koromačno,
Croatia

Olympus



Milaki,
Greece

GO4ZERO



Obourg,
Belgium

CarboClearTech



Martres,
France

Carbon Hub CPT01



Campulung,
Romania

Near-zero
cement

2.0 Mt

1.5 Mt

0.2 Mt

0.7 Mt

2.0 Mt

2.0 Mt

1.0 Mt

2.0 Mt

8

EU Innovation Fund grants awarded for
cement CCUS projects

8Mt

Near-zero cement production
capacity by 2030

CARBON CAPTURE UTILIZATION STORAGE

8 PROJECTS SUPPORTED BY EU INNOVATION FUND FOR CHF 2.3BN NET CAPEX

Portfolio of
16+ Projects
in Europe

8 Projects
Supported by the EU
Innovation Fund.

8MT
near-zero cement by 2030

Up to
35%
Green Premium



CCUS IN SWITZERLAND

8 PROJECTS SUPPORTED BY EU INNOVATION FUND FOR CHF 2.3BN NET CAPEX

~ 10 PILOT PROJECTS

Objective 2030

A plant with an annual capture capacity of >20,000 tonnes of CO₂

Focus

Capturing CO₂ directly from cement kiln emissions

Challenge

Long-term development cycles

ÉCLÉPENS PLANT PILOT PROJECT

- A pilot initiative focused on carbon capture and utilization (CCU)
- Supported by the CO₂-Plume Geothermal (CPG) consortium, led by ETH Zurich

GREEN ENERGY COALITION

- Partnership between:
 
- Goal:
To achieve near-term market maturity and industrial-scale deployment of CCUS technologies

STRATEGIC REQUIREMENTS FOR CCUS IMPLEMENTATION



- ✓ Full-scale projects involve a complex, multi-year process from initial planning through to construction.
- ✓ Reliable legal frameworks and dedicated infrastructure are mandatory for the successful handling of CO₂.
- ✓ Public awareness and debate must be prioritized to address concerns and demystify CCUS technologies.
- ✓ Innovation depends on a collective will to break old patterns and collaborate across all industry sectors.

