

Heidelberg Materials Our Concrete Promises

Decarbonizing Power & Heavy Industry 2023 Carbon Management Meeting

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Concrete is essential for building a sustainable and resilient society



Significant advantages, but a few things to solve:

- Locally made, locally sold
 - 100% recyclable
 - Durable
 - Sound-absorbing
 - Non-flammable
 - Customizable & flexible
 - Attractive life cycle cost
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- CO₂- and energy-intensive
 - Low-value recycling



Heidelberg Materials is one of the world's largest building materials companies...



51,000

employees
on 5 continents



3,000

locations
worldwide



Leading positions in cement,
aggregates, and ready-mixed
concrete



... and the leading supplier of building materials in North America

North America Overview



Revenue

\$5.2 billion

Strong market position in major metropolitan growth centers



Locations

> 450

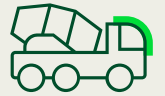
Operations in 28 states and 6 provinces with almost 10,000 employees



Cement

13.5 mt

Significant plant and terminal network across North America



Aggregates

122.9 mt

Long-term reserve position with ~11bt AGG reserves across almost 300 deposits

Concrete

6.0 mm³

Market leading Concrete positions in major urban areas



Our concrete promises



1.

We focus on heavy building materials

2.

We commit to generate 50% of our revenue from sustainable products by 2030.

3.

We commit to reduce CO₂ emissions by almost 50% to 400 kg CO₂/t CEM by 2030.

4.

We will make this transition a successful business case: on growth, margins, cash flow, ROIC, and leverage.

5.

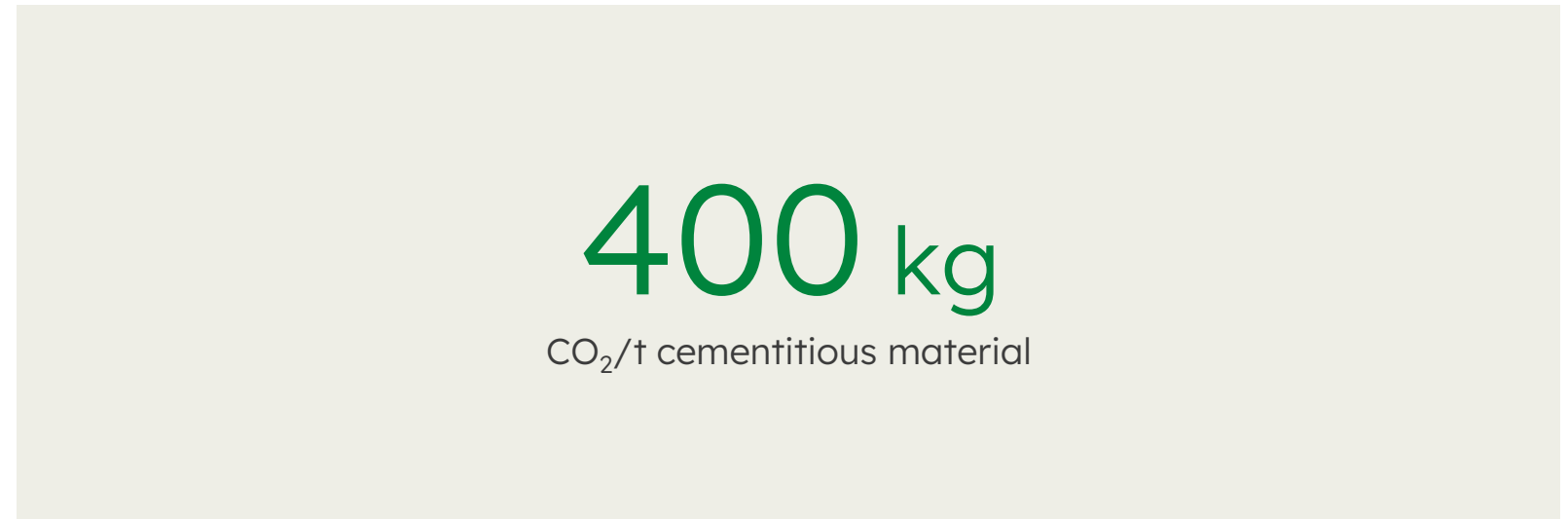
We drive the change for the benefit of our customers, our shareholders, our employees, and the society we live in



We set new standards with our CO₂ reduction targets

- We have the speed, knowledge, technology, and partners to lead the transition in the sector.
- We are early movers and have a sustainable advantage with our CCUS project pipeline.
- Carbon-free and carbon-reduced products will allow for differentiated customer offerings.

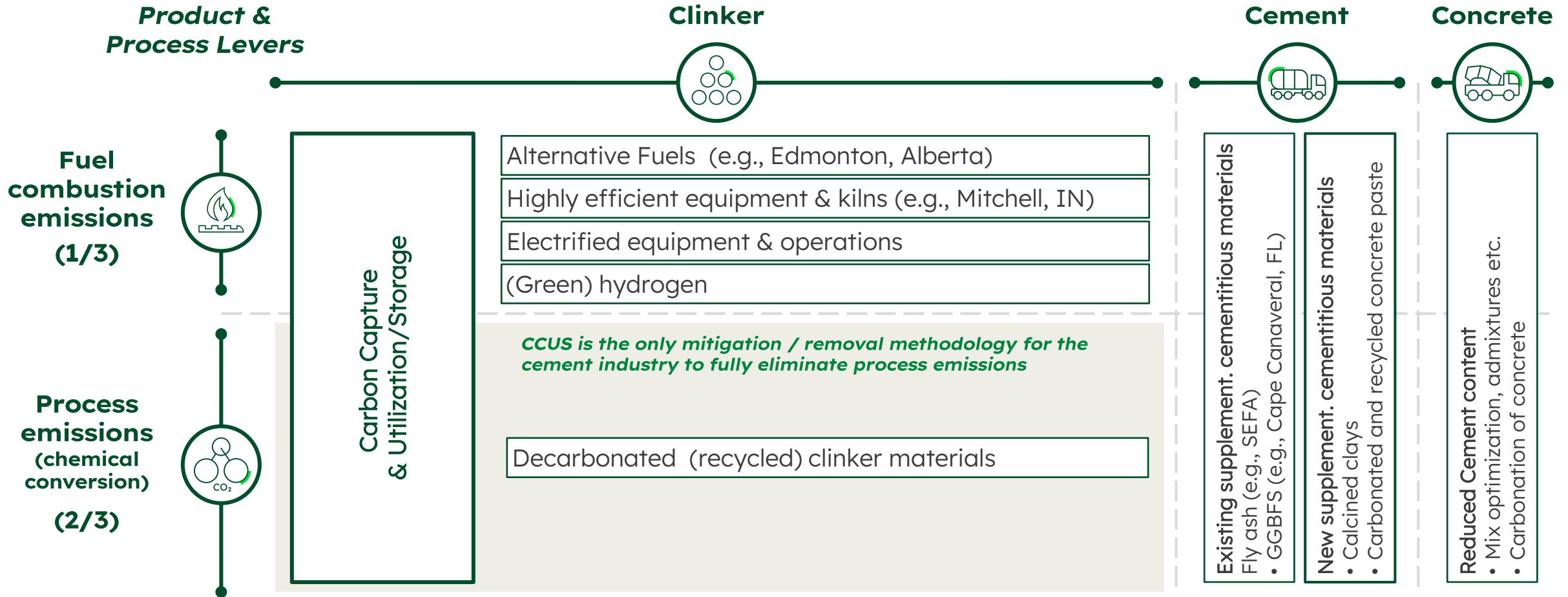
CO₂ target for 2030 (1990: 752 kg / 2022: 551 kg)



Key levers	Products	Clinker incorporation/circularity
	Process	Alternative fuels/biomass fuels rate
	CCUS	10 mt CO ₂ captured by 2030 (cumulative)



We lead the way to carbon neutrality













Carbon neutrality across the links in the clinker, cement and concrete value chain



Driving CCUS with extensive and most advanced project portfolio in the sector



Our published mature CCUS projects

<p>CCS Brevik, Norway Capacity: 400 kt CO₂ p.a.</p> 	<p>CC Hannover, Germany LEILAC 1: completed LEILAC 2: in development Capacity: 100 kt CO₂ p.a.</p> <p>CC Mergelstetten, Germany Oxyfuel pilot plant</p>  	<p>CCS Edmonton, Canada Capacity: 1.0 mt CO₂ p.a.</p> <p>CCU Safi, Morocco Increase of capacity</p>  	<p>CCUS Padeswood, UK Capacity: 800 kt CO₂ p.a.</p> <p>CCUS Devnya, Bulgaria Capacity: 800 kt CO₂ p.a.</p> <p>CCUS Antoing, Belgium Capacity: 800 kt CO₂ p.a.</p>   	<p>CCS Slite, Sweden Capacity: 1.8 mt CO₂ p.a.</p> <p>CCS Mitchell, Indiana, USA Capacity: 2.0 mt CO₂ p.a.</p> <p>CCS Eastern Europe Two industrial large-scale CCS projects</p>  
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We target to cumulatively capture 10mt CO₂ by 2030





Edmonton's Net Zero Future

1 million
mt CO₂ p.a.

Scope: Amine-based CO₂ removal system & combined heat & Power plant

Status: Feasibility study complete and project preparation well on track (Commissioning: 2026)

Objective: The world's first full-scale carbon neutral cement plant





Mitchell K4 - One of the most technologically and sustainable cement plants ever built



2 million
mt CO₂ p.a.

Scope: Amine-based CO₂ removal system, targeting 2mt CO₂ annually at 95% rate

Status: Feasibility study for capture and onsite storage onsite; three (3) DOE grant awards

Objective: The first full-scale carbon neutral cement plant in the United States



Summary & Expectations

Leading the way – We have the speed, knowledge, and technology to successfully manage the transformation to carbon neutrality with targets throughout our organization to support our Concrete Promises.

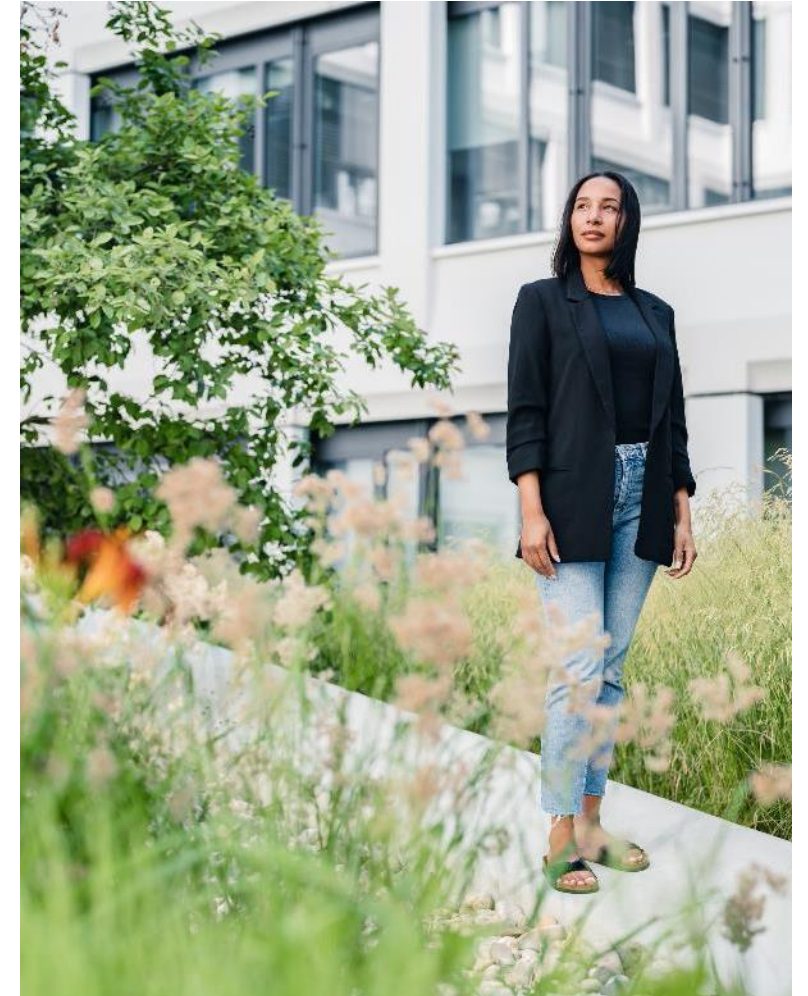
Commitment

To make progress, we need to expand use of alternative fuels, continued innovation in product specifications and procurement, CO₂ transport & storage infrastructure, permitting certainty. The long-term horizon on value of CO₂ is unclear.

Challenges

We need policy and permitting that addresses challenges in all aspects of the value chain – certainty and efficiency are critical for these large investments, and we need longer-term visibility into means that build a sustainable business case.

Support





Heidelberg
Materials