Dalmia Cement Carbon Negative Roadmap 2040
Vision:

To be a leader in building materials and evoke pride in all stakeholders through customer centricity, innovation, sustainability and our values

Business Philosophy:

Clean and Green is Profitable and Sustainable
Dalmia Cement - Green manufacturing makes business sense

FY'11: 9 MnT
3 plants in 2 states

FY'21: 28.5 MnT
13 plants in 9 states

FY'23: 38.5 MnT
17 plants in 10 states

Our Markets
Existing Plants
Planned Capacities
Inorganic
Organic

Green manufacturing makes business sense
Global Recognitions

Global companies such as Apple, Dalmia Cement and Movida have made net zero commitments. I am enormously grateful to all those who have come forward with announcements today. Hon’ble COP-26 President Mr. Alok Sharma (12 Dec. 2020)

“Companies such as Dalmia Cement and Mahindra are driving innovation. But we need many more to join them”. Hon’ble UN Secretary-General Mr. António Guterres (Aug. 2020)

“Dalmia Industries (cement) today is world’s lowest carbon emitting cement industry and they are going ahead with their plan of Carbon Capture and Use”. Hon’ble Minister of Environment, Forest and Climate Change, Mr. Prakash Javadekar at UN Climate Action Summit (Sept. 2019)

Dalmia Cement is:
- COP 26 Business Leader
- Among the five climate defenders identified by BBC World globally
- Ranked #1 by CDP in global cement sector on business readiness for a low carbon economy transition
- First heavy-industry sector company to commit carbon negative roadmap in 2018
- Only heavy-industry sector company committed to 100% RE transition by 2030
Manufacturing Green Cement - Grey to Green

MOVING FROM GREY TO GREEN.
The concrete will still look grey but will embody green carbon footprint.

Transforming Hard-to-Abate Cement Sector to Possible-to-Abate Cement Sector
Dalmia Cement – Committed to Carbon Negative Roadmap

1. Energy efficiency

2. Resource efficiency through circular economy concept

Carbon Negative 2040

Main deep decarbonisation technologies considered

3. Deep decarbonisation

- Green Hydrogen
- Solar Calcination
- Novel Cements

RE, Biomass, CCU
Carbon Negative Roadmap to Dalmia Determined Contributions (DDCs)

- Usage of 100% renewable power under fossil free electricity initiative by 2030 (RE 100)

- Double energy productivity by 2030 (EP 100)

- Use of renewable biomass, hazardous waste, hydrogen and Municipal Solid Waste to fully replace fossil fuel by 2035

- Carbon Capture and Utilisation (CCU) to make value added products; Carbon Sequestration and adoption of other advanced green technologies by 2040

Dalmia Determined Contribution (DDC)
Grey to Green Roadmap for Carbon Negative Transition

Carbon footprint net CO₂/ton of cementitious material

~ 472 FY 21
### How Dalmia decoupled GHG emissions from cement capacity growth?

<table>
<thead>
<tr>
<th>Measures taken in business activities</th>
<th>Impacts resulted in GHG emissions reduction</th>
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<tbody>
<tr>
<td>Natural resource conservation by optimal use of Industrial wastes from other industries such as Steel, Thermal Power, Aluminium</td>
<td>Less Limestone and energy consumption /ton of cement</td>
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<td>Strategic acquisitions of cement companies to further optimise the low carbon cement production – Blended Cements</td>
<td>Became largest producer of Portland Slag cement in India - A lowest carbon footprint cement</td>
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<td>Commissioned state-of-the-art new cement plants with latest available technologies</td>
<td>One of the best energy efficiency ratings globally resulted in energy demand reduction</td>
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<td>Plant-wise/unit-wise monthly GHG footprint monitoring and target settings</td>
<td>GHG emissions monitoring with discussions on opportunities for improvement</td>
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<td>Accelerated the alternative fuel use in cement kilns</td>
<td>Replacement of fossil fuels</td>
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<td>New power plants based on renewable energy such as solar, wasted heat from kiln off-gases</td>
<td>Renewable power to replace fossil fuel based electricity</td>
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<td>Targeted to become water positive cement group</td>
<td>Better relations with local communities, community wide GHG reductions and more than 5 times water positive cement group.</td>
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What Green Manufacturing means to Dalmia Cement

**Transparency**
- CDP disclosure – ranked No.1 in global cement sector
- First company to start integrated reporting in Indian cement sector
- GHG emissions calculated as per international standards
- Third party assurance of disclosures

**Leadership by Commitment**
- Committed to become carbon negative cement group by 2040
- Business aligned to 1.5 degree scenario and SDGs
What Green Manufacturing means to Dalmia Cement

Leadership by Action

- COP 26 Business Leader
- More than 40% reduction in GHG footprint since 1990
- Ranked no. 1 globally on business readiness for a low carbon economy transition in cement sector
- Part of UN Leadership Group on industry transition, Alliance for CEO Climate Leaders
- Members of leading platforms such as ETC, Mission Possible, UNGC, 1.5 degree ambition, etc.
What Green Manufacturing means to Dalmia Cement

Leadership by Engagement

- COP 26 Business Leader,
- Commissioner, Energy Transitions Commission
- Chair, Global Cement and Concrete Association (GCCA), India
- Immediate Past President - Cement Manufacturers Association (CMA), India
- Chairman - National Council for Cement and Building Materials (NCCBM) India
- Co-Chair, TERI Council for Business Sustainability (TERI-CBS), India
- Director, Global Cement and Concrete Association (GCCA), and World Cement Association, London. U.K.
What Green Manufacturing means to Dalmia Cement

Global Engagements
“Companies such as Dalmia Cement and Mahindra are driving innovation. But we need many more to join them”. Hon’ble UN Secretary-General Mr. António Guterres (Aug. 2020)

Source: https://www.youtube.com/watch?v=G5FBpm4-6eg