



# Indian Cement Industry – Leader in Low Carbon Transition

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# Presentation overview

- The need for low carbon transition in industry
- Indian Cement Industry – A brief overview
- Cement industry position on the low carbon transition
- Futuristic scenario and targets taken up by progressive cement companies: Dalmia Bharat
- External support needed to accelerate the low carbon transition

# The need for low carbon transition in industry

- ▶ Climate change - A well established challenges to the mankind
- ▶ Intergovernmental agreements are advancing to take actions at global, national, regional and local level
- ▶ Global level - Paris Climate Agreement and Sustainable Development Goals (SDGs) provide ambition statements and targets
- ▶ National level - Voluntary pledge taken up by Government of India
- ▶ Industrial sector is significant implementation ground for meeting NDC pledge taken by Govt. of India

2°C COMPATIBLE

< 2°C  
WORLD

BHUTAN

COSTA RICA

ETHIOPIA

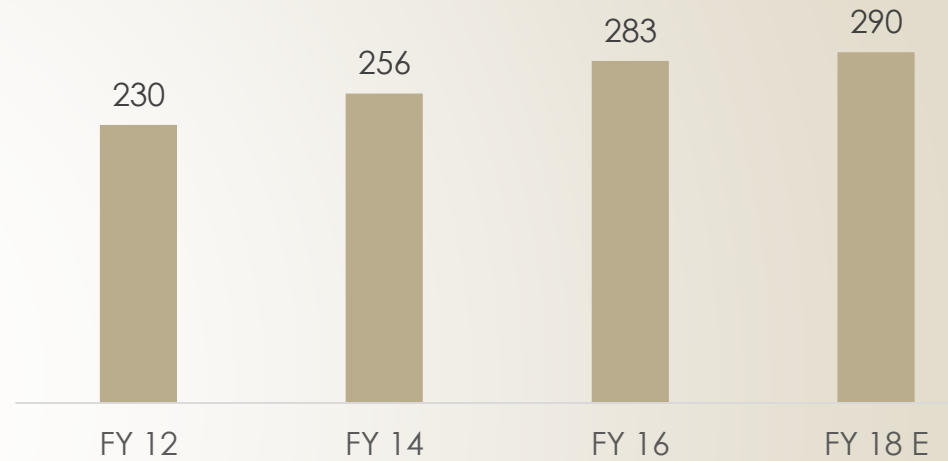
INDIA

PHILIPPINES

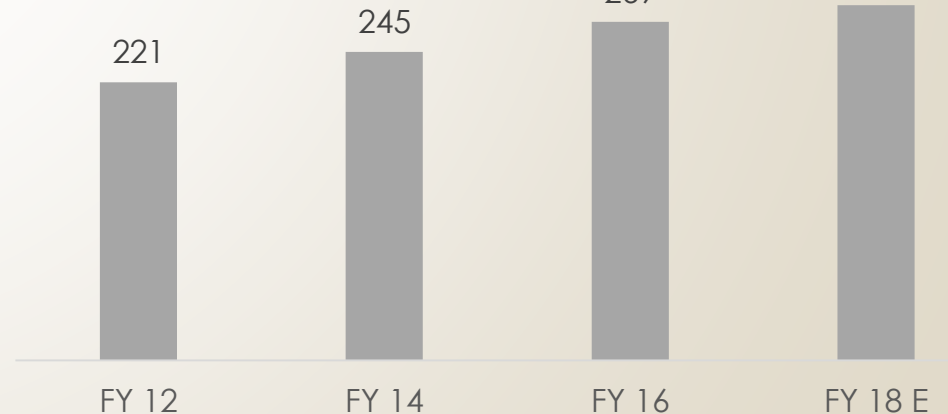
# Indian Cement Industry – A brief overview

- ▶ Cement sector continues to play a vital role in the economic growth of the country
- ▶ Demand drivers - housing (67%), infrastructure (13%), commercial (11%) and the remaining from Industrial
- ▶ Basic building material but taxed at 28% under GST

Cement Production in India (Million Tonnes)



Cement consumption in India (Million Tonnes)



# Cement industry position on low carbon transition

- ▶ Launched Cement Sustainability Initiative (CSI) under World Business Council for Sustainable Development in early 2000
- ▶ Developed global sustainability Key Performance Indicators (KPIs) for cement sector under CSI Charter
- ▶ Developed comprehensive plant and group specific CO<sub>2</sub> and Energy Protocol for energy and CO<sub>2</sub> disclosures
- ▶ Pioneered development of Indian cement sector specific Low Carbon Technology Roadmap (Published in 2013)



## Technology Roadmap

Low-Carbon Technology for the Indian Cement Industry



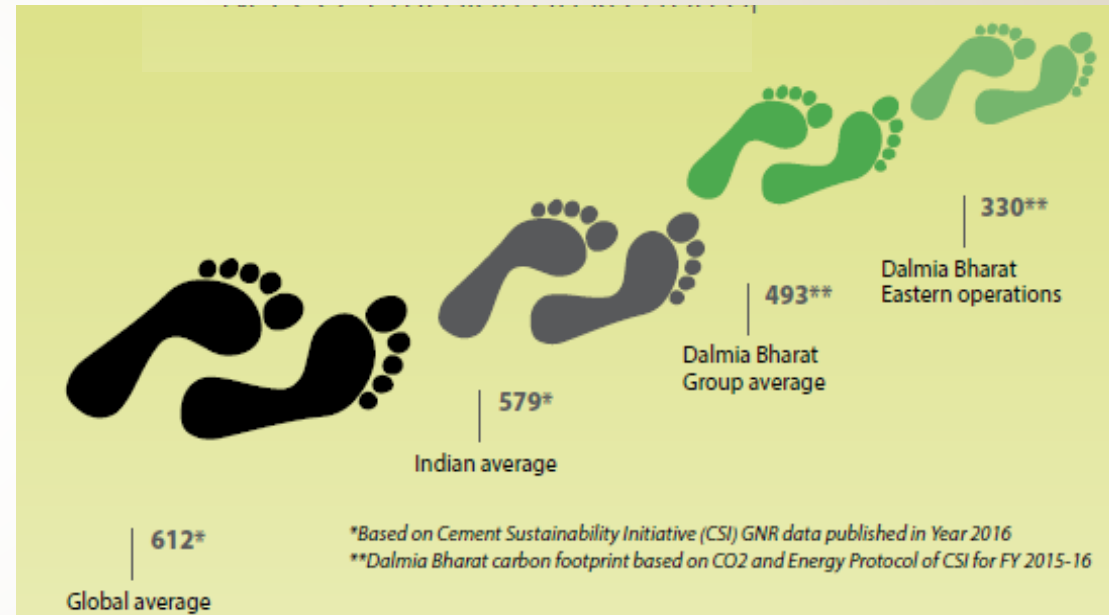
# Cement industry position on low carbon transition

Early actions from cement industry paid off. Indian Cement companies are ranked at the top in Global Cement Sector on Low Carbon Transition

League Table rank	2016 League Table rank	Company	Ticker	Stock exchange listing	Average market cap 2017 (US\$bn) <sup>(*)</sup>	2016 cement production (million tonnes) <sup>(**)</sup>	League Table weighted rank
1	n/a	Dalmia Bharat	DBEL IN	NSE India	3.4	15	4.64
2	n/a	Ambuja Cement®	ACEM IN	NSE India	7.7	21	5.62
3	5	Cementos Argos	CEMARGOS CB	Colombia SE	5.3	14	5.90
4	2	Shree Cement	SRCM IN	NSE India	9.4	20	5.91
5	1	LafargeHolcim®	LHN SW	SIX Swiss SE	34.8	233	6.03
6	6	HeidelbergCement	HEI GR	Deutsche Borse	19.3	125	6.08
7	4	CRH	CRH ID	Irish SE	29.7	34	6.85
8	n/a	ACC®	ACC IN	NSE India	4.7	23	7.02
9	8	UltraTech Cement	UTCEM IN	NSE India	17.0	48	7.32
10	7	CEMEX	CEMEXCPO MM	Mexico SE	12.6	67	8.04
11	10	Taiheiyo Cement	5233 JP	Tokyo SE	4.7	32	8.58
12	11	Cementir Holding	CEM IM	Borsa Italiana	1.1	10	9.00
13	n/a	Asia Cement Corporation®	1102 TT	Taiwan SE	3.1	34	9.80

# Futuristic scenario and targets taken up by progressive cement companies: Dalmia Bharat

- ▶ CO<sub>2</sub> and Climate protection: Dalmia Bharat has pledged to reduce its carbon footprint by 45% compared to 2010 baseline levels. The company is lowest carbon footprint cement producer globally
- ▶ RE 100: Dalmia Bharat is first cement company (globally) to sign RE 100 and pledged to four fold increase in the share of renewable electricity consumption by 2030
- ▶ Water positivity: Dalmia Bharat is a water positive organisation by creating over 7 million m<sup>3</sup> water harvesting potential. We are 2.5 times water positive company. Target to become 5 times water positive by 2020.



**Dalmia Bharat – One of the lowest carbon footprints from cement manufacturing globally**

# Futuristic scenario and targets taken up by progressive cement companies: Dalmia Bharat

- ▶ Plastic waste Positive: We have taken a pledge to be a plastic positive organisation by becoming a solution provider to the issue of plastic waste disposal
- ▶ Corporate responsibility blueprint: Aligned to our long term targets and pledges, we have also developed our Corporate Responsibility blue print





# External support needed to accelerate the low carbon transition

- National Cement Policy – It is strongly encouraged to have a national level policy on cement (in similar lines of National Steel Policy)
- Polluter to pay – To be used as precautionary way for ensuring maximum utilisation potential of generated industrial waste through development of new economic models
- Accelerate Blended cements – Incentivise projects using blended cement
- BIS standards – BIS standards may be revised to add further waste materials such as fly ash towards greater resource efficiency
- Plastic waste disposal – Strict enforcement of Plastic Waste Management rules so that enabling environment is created for solution providers

# Memberships and associations

 <p>IN PARTNERSHIP WITH </p>	 <p>BROUGHT TO YOU BY THE CLIMATE GROUP IN PARTNERSHIP WITH </p>	 <p>DRIVING SUSTAINABLE ECONOMIES</p>	
	 <p>INDIA BUSINESS &amp; BIODIVERSITY INITIATIVE</p>	 <p>Confederation of Indian Industry</p>	 <p>Council for Business Sustainability</p>
			Caring for Climate
 <p>EARBON PRICING LEADERSHIP COALITION</p>			

We are also a member of United Nations Global Compact (UNGC)