



Dalmia Cement (Bharat) Limited



Dalmia Bharat Cement Group's Water Conservation Measures at Dalmiapuram Cement Works, Tamil Nadu, India

CASE STUDY



Summary

Our consistently demonstrated commitment in creating sustainable business practices helped us meet the challenge of insufficient water supply from our captive water source and resulted in significant water conservation measures adopted at Dalmiapuram facility. A water conservation team was constituted that successfully delivered approximately 36 per cent reduction in the daily water consumption in FY 15 as compared to FY 13. The initiatives also helped in creating the enabling atmosphere for water conservation in cement plant and our colony. In order to promote the water conservation drive, initiatives were also taken at our colony through introducing lifting and push type tap cocks, rain water harvesting pits and signage boards on water conservation at high traffic/prominent junction points of the colony.



Objective of Intervention

Reduction in daily water consumption through key identified measures and technological interventions

Type of Intervention and Location

Water conservation drive through various process related improvements and awareness generation.
Dalmiapuram Cement Plant, Tamil Nadu, India

Description of Intervention

The key initiatives taken include switching to air cooling instead of water cooling for clinker cooler through introduction of fresh air damper, installation of auto valve system with level sensors at tank inlet of cement mill water spray system to eliminate the overflow losses, replacement of 127 tape cock with lifting type and process change from semi-dry to dry for oil well cement production. A daily water consumption monitoring format was introduced to monitor water consumption and identify the areas for improvement. Measures were also taken to harvest the rain water by creating 20 rainwater harvesting tanks.

Intangible or Tangible Benefit

The daily water consumption of Dalmiapuram cement plant was 2360 cubic meter in FY 13. It was reduced to only 1,509 cu. m due to the initiatives taken above. It is an impressive 36 per cent reduction in daily water consumption within two years of time at Dalmiapuram plant.



About Dalmia Cement

Dalmia Cement Bharat Limited (DCBL) is a subsidiary of Dalmia Bharat Limited (DBL). Dalmia Bharat Group is one of the top five cement Groups in India with total installed capacity of 24 million tonnes. We are pioneers and market leader in India for super specialty cements used for oil wells, railway sleepers and air strips. Dalmia Bharat group has been in existence for more than 75 years with well diversified geographical presence in India. KKR, a leading private equity player has partnered with us in our Growth journey from regional to a national player. The geographical footprint of the group was diversified from predominantly southern India presence to eastern and north-eastern regions of India through strategic stake acquisitions. Our Greenfield capacity expansions also helped us to gain further access to new markets and strengthening our position in existing markets. The group has developed 178 MW of captive power generation capacity which caters to almost 70 per cent power requirements of total cement capacity. The group is one of the pioneers in developing wind farm in Southern India. The group is also developing solar wind farms to increase the overall renewable portfolio through a subsidiary DCBL Power Ventures Limited. Sustainability has always been a way of life at Dalmia. Being one of the oldest leading business houses in India, our pioneering spirit recognizes the responsibility to uphold sustainable practices in our cement business. Dalmia helped Indian railways by developing cement concrete sleepers to replace wood in 1974 when the term sustainability was largely unknown in the Indian subcontinent. Currently, our strategy is to replace conventional fuels and raw materials with alternative fuels and alternative raw materials. Dalmia group is the largest producer of Portland Slag Cement in India and we are using diverse fuel mix to reduce the fuel costs for a sustainable business case. Our alternative fuel consumption is one of the highest in India. The company's green initiatives have created positive impact on the environment while optimizing the Group's business operations. We have joined Cement Sustainability Initiative (CSI), a sector project of World Business Council for Sustainable Development (WBCSD), in 2012. We have also partnered recently with International Finance Corporation (IFC) to promote sustainable business in India by adoption of low carbon technologies. We are also part of the KKR's Green Portfolio Programme. Being a CSI member company, we have adopted series of measures to reduce water footprint of our manufacturing locations. Our cement plants in Southern India have achieved zero water discharge status. As a result, one of our cement plants in Andhra Pradesh is operating at water consumption level of almost 0.1 m³/ton of cement. Our structured CSR interventions benefitted almost 0.15 million people under various programs and these benefits are being extended to communities near newly acquired plants and Greenfield cement projects.