



Ambuja Cements Ltd

Waste as Wealth at Ambuja Cements Ltd

CASE STUDY

Summary

Ambuja understands that scarcity of natural resources is a major concern now and more so for the generations to come. Being a resource-intensive industry, Ambuja continuously strives to reduce the use of non-renewable resources and CO2 emissions. Since waste has a potential to replace a substantial amount of non-renewable resources in cement production, the company is establishing co-processing technology in cement kilns to treat many industrial waste streams that cannot be practically reused or recycled. Co-processing is an environmentally sound waste management practice that addresses the issues of waste disposal by waste generators and at the same time conserves scarce natural resources; thus realizing benefits for society.

Ambuja is providing waste management services under the brand name Geocycle. It provides sustainable solutions to waste generators by treating a wide range of undesirable wastes. To ensure that Geocycle meets all world class standards, a thorough control system is maintained for operations. The integrated policy on environment, cement quality, and health and safety guides our operations. Important parameters are recorded and reported to relevant authorities to ensure that all standards and regulatory requirements are met. Approvals to customers are granted only after a thorough investigation of sample waste in the laboratory to ensure its compatibility with our process quality, environment, and health and safety.



“Geocycle” brand is a promise to deliver customer excellence when providing waste management solutions. Providing hassle free services requires professional know-how and experience. Thus, we have developed a dedicated team of Geocycle professionals to help position ourselves as a safe and reliable partner for waste treatment.

Objective of Intervention

Safe waste management is one of the biggest environmental challenges faced by the country today. Ambuja is aiming to provide state-of-the-art waste management services to the industry and society through waste co-processing in cement kilns under our Geocycle brand. We aim to utilize wastes from different industrial, agricultural, and municipal sources as alternative fuels and raw materials (AFR) that can help in conserving scarce conventional fuels used in our kilns and captive power plants (CPPs), to achieve our goal for sustainable development and mitigation of climate change. Co-processing helps in substitution of fuels, recycling and elimination of waste, and also facilitates scientific destruction of wastes that cannot be recycled and/or reused.

Type of Intervention and Location

Waste Management & Co-Processing Activities

Description of Intervention

Investments made on technology up gradation/ alternative business practice

To add momentum to our efforts in providing sustainable waste management services to industry and society, four new pre-processing facilities have been set up at our Rabriyawas, Ambujanagar, Maratha, and Bhatapara plants.

Pre-processing is a procedure by which a wide variety of waste materials are combined into a homogeneous product of defined size and chemical composition. It involves size reduction and blending operations. Pre-processing is carried out in state-of-the-art facilities. The designing, commissioning, and installation of these facilities are carried out with the highest regard to safety in every aspect. In addition to these facilities, feeding systems as well as waste storage facilities at various co-processing locations have been ramped up for handling increased volumes. As part of our internal safety and risk management programme, ACert, we continuously train our people, systematically assess risks, and raise the bar for our performance.



Intangible or Tangible Benefit

Monetary savings and payback period

Geocycle has been instrumental in co-processing 1.78 lakh tonnes of alternative fuel in 2014 as compared to 1.74 lakh tonnes in 2013. Through this activity, Ambuja decreased the negative impact of the waste on the environment. It also decreased its overall ecological footprint by reducing its reliance on natural resources. Apart from co-processing agricultural and industrial waste and that obtained from the public sector, we have also provided solutions for sorted municipal waste under the aegis of the Geocycle brand. Ambuja achieved a thermal substitution rate of 3.95 per cent in 2014 as compared to 3.65 per cent in 2013, showing an increase of more than 8 per cent. This added financial value is important to ensure that the waste management model being adopted under the Geocycle brand is sustainable in the long term.

About Ambuja Cements Ltd

Ambuja Cements Ltd, a part of the global conglomerate Lafarge Holcim, is one of the leading cement companies in the Indian cement industry. Operating for over 25 years, Ambuja has proved to be the best cement for construction and the best cement manufacturing company in India with its uniquely sustainable development projects. Its environment friendly initiatives have played a key role in India's efforts to become a green state. The sustainable constructions and renewable energy projects undertaken by it have a lion's share in creating a blueprint for sustainable development in India's bright future.