



Accelerating Smart Power and Renewable Energy in India (ASPIRE)

WEBINAR ON

OPPORTUNITIES FOR LOW-EMISSION BULK DRYING TECHNOLOGY TO DECARBONISE THE CEMENT SECTOR

Wednesday, 13 December 2023

16:00 – 17:30 IST / 10:30 – 12:00 GMT



Background

The ASPIRE Programme¹ aims to strengthen partnerships between UK technology/ solution suppliers and Indian industries to accelerate the adoption of industrial energy efficiency and decarbonisation (IEED) measures. India is the second largest producer of cement in the world, with an installed capacity of 500+ million metric tons per annum (MTPA)². In 2022, India produced 370+ million metric tons (MT) of cement (~9% of global production)³. Demand for cement in India is estimated to touch ~420 MT by FY 2027⁴ and the industry promises huge potential for growth as India has a high quantity and quality of limestone deposits throughout the country.

The cement industry is a significant contributor to greenhouse gas emissions, particularly due to the high carbon intensity of the cement production process. To address this challenge and align with global efforts towards achieving net-zero targets, leading cement industries in India have announced several initiatives as part of their decarbonisation commitments. In view of this, the ASPIRE Programme in collaboration with the Bureau of Energy Efficiency (BEE), organised a one-day sectoral workshop on “Best Practices in Energy Efficiency & Decarbonisation in Cement Sector” on 14th March 2023 in Udaipur, Rajasthan. The workshop witnessed around 80 participants including various Indian cement manufacturers and UK technology and solution providers.

¹ The Accelerating Smart Power and Renewable Energy in India (ASPIRE) programme is a bilateral technical assistance programme implemented by Government of UK, in association with the Ministry of Power and the Ministry of New and Renewable Energy, Government of India.

² Cement | Bureau of Energy Efficiency, Government of India, Ministry of Power (beeindia.gov.in)

³ Cement: Production Ranking Top Countries 2022 | Statista

⁴ Indian Cement Industry Analysis | IBEF

During the workshop, stakeholders deliberated on various best practices and technology interventions required to accelerate the decarbonisation of the cement sector. Amongst the various innovative and new-age global technologies presented during the workshop, Coomtech’s low-emission kinetic air-drying technology was identified as one of the potential solutions for improving industrial energy efficiency and decarbonisation. In view of this, a follow-up webinar is being organized on 13th December 2023 with a focus on disseminating information on Coomtech’s low-emission kinetic air-drying technology, helping cement plant operators reduce energy consumption and carbon emissions.

About Coomtech’s Technology

Coomtech Limited, a UK company, has developed innovative technology for drying and upgrading bulk-solid materials. Coomtech’s innovative modular kinetic driers remove surface moisture by shearing the water from particle surfaces, keeping the air and moisture separate from the dried particles which go to storage, transport or directly into processing. This technology can result in up to a 75% reduction in CO2 emissions and energy costs compared with legacy drying technology. Details are provided in the Annexure.

Objectives of the webinar

- (i) Knowledge transfer - Share details of the innovative low-carbon drying technology offered by Coomtech that can be leveraged by Indian industries for IEED.
- (ii) Feedback from Indian Industries - Understand the views of Indian industries on the nature of support required for greater and wider adoption of such innovative technologies.
- (iii) Matchmaking and partnership discussions - Identify and facilitate potential partnership opportunities between UK technology providers and Indian industries.

Agenda for the deployment facilitation Webinar:

Time (IST)	Agenda Item	Presenter
15:30- 16:00	Registration	
16:00 – 16:05	Welcome Address	Mr. Vivek Negi Joint Director, Bureau of Energy Efficiency Ministry of Power
16:05 – 16:10	Introduction to ASPIRE Programme	Mr. Ramit Malhotra Director, KPMG & Lead- Smart Power ASPIRE Programme
16:10 – 16:15	Keynote Address	Mr. S.K. Khandare Director, Bureau of Energy Efficiency Ministry of Power

16:15 – 17:00	Presentation on Low-Emission Bulk Drying Technology	Mr. Richard Atkinson Vice President, Coomtech Clean Technologies
17:00 – 17:25	Question and Answer Session	Mr. K.K. Chakarvarti Senior Advisor, Knowledge Sharing Platform ASPIRE Programme
17:25 – 17:30	Summary and Vote of Thanks	Ms. Sanyukta Das Gupta Senior Advisor, Smart Power, Climate and Energy Team, Foreign, Commonwealth and Development Office (FCDO), British High Commission in India

Annexure –Details of Coomtech’s Low-emission Bulk Drying Technology

Coomtech Limited is a UK-based company that stands at the forefront of innovation in bulk drying technology, revolutionizing traditional drying processes with its cutting-edge solution. The company's strategic focus on sustainable solutions has culminated in the development of a modular kinetic drying technology that has revolutionised the way global industry dries bulk raw materials, offering a route to zero emissions.

Coomtech’s innovative modular kinetic driers remove surface moisture by shearing the moisture from particle surfaces, keeping the air and water separate from the dried particles which go to storage, transport or directly into processing. Coomtech’s patented system can be rolled out faster and can be scaled up to suit the demand and can be dismantled and relocated. It also features the Flexible Run Mode (FRM), a revolutionary feature that allows plant managers to turn down or turn up the performance of the plant to match the production requirements of the day.

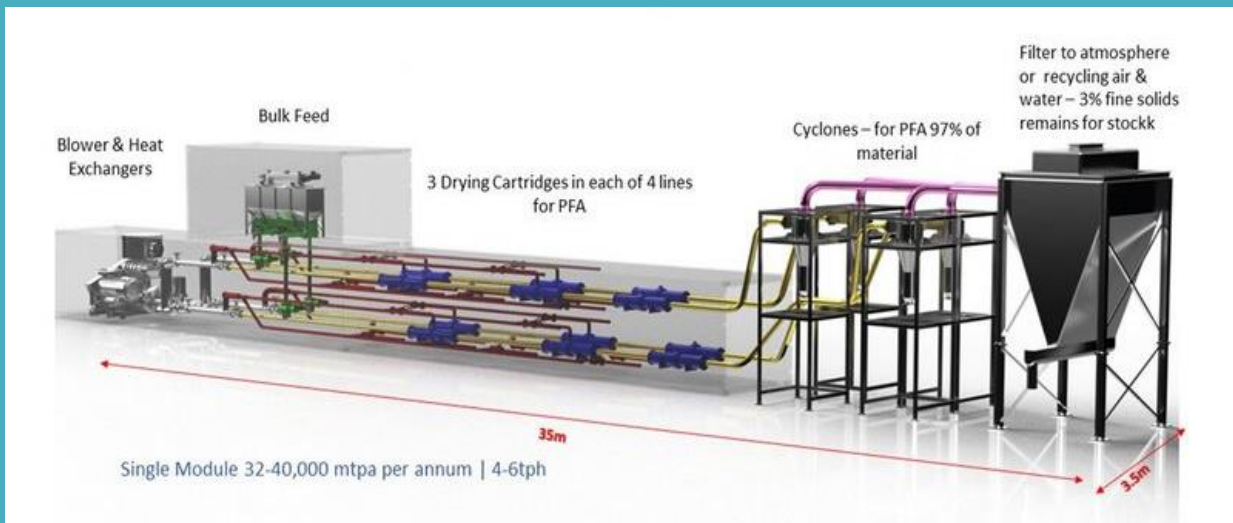


Figure 1: Coomtech Kinetic Drying Technology - Single Module

The Coomtech’s innovative technology doesn't use high temperatures and leverages nature in a modular and more efficient way. Coomtech-enabled plants can even run multiple types or specifications of material at the same time, increasing production optimization and improving customer service. Coomtech's technology combines low-carbon and circular benefits that require up to 75% less energy than thermal dryers, with equivalent CO₂ and cost-saving.

Coomtech was selected for the Global Cement and Concrete Association’s first Innovandi Open Challenge which brings together innovative start-ups and the industry’s leading manufacturers to work together on innovative ways to cut emissions throughout the cement and concrete value chain. As a part of this programme, Coomtech has been working with a consortium of leading cement companies like Buzzi Unicem, CRH, JSW Cement and UltraTech Cement⁵. Initial results of testing different materials from the consortium show the potential of Coomtech technology to reduce energy consumption and carbon emissions by up to 75%.

For more information on Coomtech Technology please join the webinar on 13th December 2023 | <https://coomtech.com/>

⁵ Innovandi Open Challenge Consortia: GCCA (gccassociation.org)