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Josh Bennett, National Technical Manager for Readymix - Tarmac

SOLUTIONS

SUSTAINABLE CONSTRUCTION

Driving Innovation Through Partnership: Introducing MevoCem



A major success emerging from the CRH Ventures Sustainable Building Materials Accelerator is the development and commercial scale piloting of MevoCem. The Accelerator is designed to scale market ready innovations that lower construction related emissions and advance next generation binder technologies and created a platform for MevoCem to move from concept to commercial application. As a next-generation ultra-low cement MevoCem delivers a 77% carbon saving compared with CEM I cement, while maintaining the strength and durability required for readymix and precast concrete applications.

Applying Advanced Materials Science to Real-World Delivery

As an early adopter within the CRH group, Tarmac is playing a central role in bringing this breakthrough technology into real world delivery, demonstrating how accelerator programmes can transform pioneering materials science into practical, lower carbon construction solutions. Selected through the programme for its strong commercial potential, MevoCem is enabling Tarmac to trial an advanced lower carbon binder that aligns directly with customer needs, future performance standards, and the industry’s wider decarbonisation trajectory.

“Through our accelerator programmes, CRH is supporting the delivery of market ready innovation to our customers across the construction value chain. Winners gain access to CRH’s extensive network and expertise to drive forward the availability of smarter solutions to support a more resilient built environment.”

Eduardo Gomez, Head - CRH Ventures

Through its role in the pilot, Tarmac is helping demonstrate how advanced cement technologies can be integrated into mainstream construction. The collaboration includes mix optimisation, application testing, and performance evaluation under real project conditions.

Josh Bennett, National Technical Manager for Readymix at Tarmac, highlighted this shared commitment:

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The pilot brings Material Evolution’s advanced manufacturing approach together with Tarmac’s readymix expertise to validate the product under real project conditions and assess its suitability for wider industry adoption.

Scaling Production Through the Mevo A1 Facility

The trial is supported by Material Evolution’s Mevo A1 production facility in Wrexham, the UK’s largest dedicated ultra-low carbon cement plant, with capacity to produce 120,000 tonnes annually. This commercial scale capability provides the foundation needed to validate performance at volume, helping build the confidence and technical data required to support wider market use and integration.

Looking Ahead

The partnership between CRH Ventures, Material Evolution and Tarmac shows how targeted innovation programmes can translate breakthrough technologies into practical solutions for industry. By advancing MevoCem through commercial-scale trials, Tarmac is helping bring an ultra-low carbon cement option closer to widespread adoption.

As trial results continue to build, MevoCem will support the construction sector’s progress toward net zero by providing a scalable, high performance alternative to traditional cement. The partnership reflects Tarmac’s commitment to working with supply chain innovators to accelerate lower carbon material development and support the future of sustainable construction.