

UK company with innovative low carbon cement replacement, seeks concrete product manufacturers (pre-cast and ready mix) in the EU for a large volume market pilot in Algeria.

Summary

Profile type

Technology offer

Company's country

United Kingdom

POD reference

TOGB20250822013

Profile status

PUBLISHED

Type of partnership

**Commercial agreement with
technical assistance**

Targeted countries

• **World**

Contact Person

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Term of validity

22 Aug 2025

22 Aug 2026

Last update

22 Aug 2025

General Information

Short summary

A UK company with an innovative range of low carbon binders which are “drop in” replacements for Ordinary Portland Cement ("OPC") proven across a wide range of concrete applications, seeks EU commercial partners in the construction sector to help them scale up their manufacturing process and take their products to market in Algeria. This collaboration is offered on a commercial basis, with technical support.

Full description

The company is a UK based start-up which is backed by a larger business operating in the commercial property and business investment field. The company was founded by a chemical engineer with extensive experience in academia and industry. The company is now preparing to scale.

They have discovered a chemical process that activates the hardening of the concrete mixture, unlike the crystallisation and hydration process associated with Ordinary Portland Cement. This carefully calculated process can be tailored to meet various concrete application requirements. As it is a chemical reaction, it allows for the inclusion of a wide variety of waste materials in the mix. The concept is that materials should be used that are local to where the concrete will be produced, thereby minimising carbon footprint associated with transportation.

The company has developed a range of high-performance Ordinary Portland Cement ("OPC")-free binders that have a substantially reduced (>68%) Global Warming Potential (GWP) and enable the production of concrete with superior engineering properties.

The company's innovative binders can produce a range of concrete grades suitable for diverse industries and applications.

Ideal concrete applications are porous (pervious), pre-cast structures, cladding panels, marine structures.

Since the company's binder-based concrete relies on a chemical bonding process, it has been possible to tailor the chemical composition for properties such as high strength, high permeability, shock absorption, conductivity, water durability, or rapid setting. The company seeks a EU partner with an established market within Algeria. New regulations there are driving increased demand for low carbon cement. The company seeks a partner that is wanting to take advantage of their innovating low carbon cement to establish a market leading position to meet this new growing market demand. Partnership is offered under a commercial agreement with technical support.

Advantages and innovations

It reduces the carbon footprint of concrete products by circa 70%

- Min. 5% - 30% ** less water used
- Lower (min. 10%) equivalent dosage of binder/m3 concrete and lighter (min. 5%)
- Better flow characteristics
- Better and more flexible setting times
- Increased durability and no shrinkage
- Better water resistance

Technical specification or expertise sought

Stage of development

Available for demonstration

Sustainable Development goals

- **Goal 11: Sustainable Cities and Communities**
- **Goal 12: Responsible Consumption and Production**
- **Goal 13: Climate Action**
- **Goal 9: Industry, Innovation and Infrastructure**

IPR Status

IPR granted

IPR Notes

US and EU Markets, India, Malaysia
Currently extending to the Algerian market

Partner Sought

Expected role of the partner

Type of partner sought: Concrete product manufacturers (pre-cast and readymix) with Algerian market presence and knowledge.

Target sector: Cement and Concrete Industry

Role/tasks to be performed by the partner: Whilst the company can supply small tonnage quantities of novel binders via existing contractors, they ideally seek partners with in-house milling and blending capability (which could be used to produce and pack the binder at larger volumes) plus a captive demand for binders to produce concrete products for use in pilot projects.

Type of partnership

Commercial agreement with technical assistance

Type and size of the partner

- **SME 11-49**
- **Big company**
- **SME <=10**
- **SME 50 - 249**

Dissemination

Technology keywords

- **02006001 - Materials, components and systems for construction**
- **03004010 - Special chemicals, intermediates**
- **02007002 - Building materials**

Targeted countries

- **World**

Market keywords

- **09007002 - Manufacture of construction materials, components and systems**
- **08001015 - Other speciality materials**

Sector groups involved

- **Construction**