

Global assessment of technologies and providers that enable low carbon concrete



Our client, a multinational industrial conglomerate, asked us to explore current and emerging technology players in the low-carbon concrete space. Their goal was to identify the most promising technology company(s) to collaborate with, and/or make a strategic investment in.

Expertise and domain knowledge

- CO₂ mineralisation
- CO₂ capture and utilisation
- Concrete curing with CO₂
- Sustainable aggregates
- Cement electrification
- Mineral waste alternative to cement
- Cement/concrete industry
- Sustainability





The project story:

Using a phased approach, Sagentia Innovation developed an understanding of the ingredients' functionality within the specific matrix. This allowed us to search and identify ingredients and recommend high-performing alternatives for our client.

We achieved this through:

- Conducting a broad search within academic literature
- Identifying and interviewing suppliers and sourcing samples
- Applying a set of criteria to select ingredients taken forward for further evaluation
- Experimentally validate the functionality of the ingredients against the product specification

Results: deliverables and outcomes

By developing an understanding of the science underpinning the ingredient functionality and combining our advisory skillsets and lab testing development capabilities, we could recommend a set of high-performing alternative ingredients with a very high functionality and specification to meet the product criteria. This enabled our client to grow their supply network and reduce costs.