

Title of the challenge:

Decarbonization of clinker/cement production process at CEMEX plants. Also, circular solution of the captured carbon (storage/uses) in this production process

The company:

Cemex is a global industry leader in producing and supplying cement, aggregates, ready-mix concrete, and urbanization solutions. We're driving innovation further to solve the world's building challenges and help the world reach the next frontier of sustainable living.

See more at: <https://www.cemex.com/>

Full description*

CEMEX is continuing its efforts to lead the transition to a net zero construction industry by implementing several new carbon capture, utilization and storage (CCUS) projects throughout its global cement operations. CCUS can be the final step to reaching net-zero CO₂ after current levers, relying on existing and proven strategies, are maximized to their fullest potential. CEMEX is currently running several CCUS innovation projects that aim to accelerate the creation of new technologies and to enable the implementation of current ones at an industrial scale.

In this context, CEMEX is developing a series of experimental or pilot tests in different geographies, which serve to verify the use and effectiveness of the technology prior to its scaling stage. In this case, financial support is required for the construction and installation of a calibration plant for 48 photobioreactors in a cement plant located in the center of the country (Mexico). This has an approximate cost of 1.4 million dollars.

Carbon BioCapture's patented technology is unique in that industrial gases require no pre-treatment; i.e. it works with "raw gases" delivered from the plant's exhaust point via a pipeline to the photobioreactor (PBR) array or "Carbon Farm". The oxygen resulting from microalgal photosynthesis is continuously released into the atmosphere.

What are we looking for?

<https://carbonbiocapture.com/technology/>

What are we offering?

The startup would benefit from scaling its "now proven" solution. The planet would benefit from the impact on the quality of the air we breathe. CEMEX would benefit by being able to build a competitive capacity (improvement of its emissions).

Opportunity area

Smart production.

Looking for partners from the following regions

Europe.

Specific areas

Others.

Technologies

Others.