

Acting on Climate

#LHLowCarbonTransition

CO₂MENT: Building the First Full-Cycle Solution to Capture and Reuse CO₂ from a Cement Plant

What is the challenge?

The development of carbon capture technologies will be key to further reduce carbon emissions from the cement manufacturing process.

Along with its wide-scale development, one of the key issues for this technology is the usage of the CO₂ streams captured.

How can CO₂ captured from cement operations be reused in concrete manufacturing?

Three Phases

- 1- Reduce organic and inorganic substances from the cement flue gas
- 2- Separate the CO₂ from the flue gas
- 3- Prepare CO₂ for reuse

Our solution

LafargeHolcim launched the CO₂MENT project in Canada, in partnership with Total and Inventys. The objective is to build the world's first full-cycle solution to capture and reuse CO₂ from a cement plant while also reducing greenhouse gas emissions. Over the next four years, Project CO₂MENT will demonstrate and evaluate Svante's CO₂Capture System and a selection of LafargeHolcim's carbon utilization technologies at its Richmond, British Columbia, Canada cement plant. The project has three phases and is expected to be fully operational by the end of 2020.

Subject to the pilot's success, the vision is to scale up the project and explore how the facility can be replicated across other LafargeHolcim plants.

