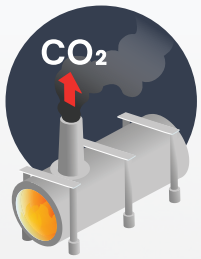
CILANTRO

Pioneering Carbon-Negative Cement Technology

Let's Connect!

A European innovation project developing a novel manufacturing technology that results in **net negative CO_2 emissions** over the cement's lifetime.



The Problem

Traditional Cement accounts for 8% of global CO_2 emissions.

High Heat (1,450°C) chemically generates CO_2 when converting limestone into quicklime.

The CILANTRO Solution

We prevent CO_2 generation by replacing high-heat thermal processing.

Our method uses mechanochemical activation of raw materials under a controlled gas atmosphere.

Innovation

CILANTRO is tackling this challenge by developing a revolutionary **non-thermal cement manufacturing technology**. We aim to produce the components of ordinary Portland cements without generating any process CO_2, leading to **net negative CO_2 emissions** over the cement's lifetime.

Climate Positive

Cement that actively helps absorb CO_2 over its lifespan.

Zero Process Emissions

Eliminating CO_2, generation during manufacturing.

New Energy Sources

Co-production of valuable gases for clean fuels or chemical synthesis.

CSIC · UAM Universidad Autónoma de Madrid · Tekniker · Fraunhofer IWM · CTT-INNOVATIONS · FGS · HOLCIM · Rtec instruments

European Innovation Council — Funded by the European Union

Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Health and Digital Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.

Project funded by

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs, Education and Research EAER
State Secretariat for Education, Research and Innovation SERI