

## DEEP REMOVAL OF CO<sub>2</sub> & INNOVATIVE ELECTRIFICATION CONCEPTS



### Overview

DRIVE envisions a future where industries achieve carbon neutrality or negativity, paving the way for a sustainable society environment by 2050 through innovative technological solutions that will enable deep removal of CO<sub>2</sub> from point sources at acceptable costs. Aligned with the Clean Energy Transition Partnership (CETP) and the EU's climate neutrality goals, DRIVE focuses on revolutionizing CO<sub>2</sub> capture in industrial settings.

Website: [drive-co2.eu](https://drive-co2.eu)

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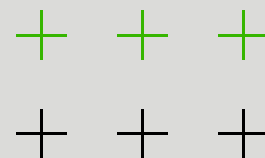
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# → Our Approach



Through DRIVE technologies and methodologies, industries can transition towards carbon-neutral or carbon-negative operations, aligning with global climate goals. The following objectives are set for the project:

1. Contribute to a carbon neutral society by developing technologies and methods for applying cost-effective deep removal of CO<sub>2</sub> from industrial sources, in thermally- and electrochemically-driven processes, demonstrated at TRLs 5-7.
2. Demonstrate thermally and electrochemically driven CO<sub>2</sub> capture processes: Showcase the viability of thermally and electrochemically driven processes for efficient CO<sub>2</sub> capture.
3. Increase capture rate to surpass 95% efficiency: Enhance CO<sub>2</sub> capture technologies to achieve capture rates exceeding 95%.
4. Ensure cost-effectiveness compared to Direct Air Capture (DAC): Ensure that the developed technologies are more cost-effective than Direct Air Capture methods by reducing the marginal cost of capture to less than 200€ per ton of CO<sub>2</sub>
5. Achieve deep removal marginal cost target of less than 200€/TCO<sub>2</sub> for all technologies studied in DRIVE.

# Our Target Groups

## → SCIENTIFIC & RESEARCH COMMUNITY

Professionals and researchers involved in scientific and research activities related to climate change mitigation and industrial processes.

## → INDUSTRIAL END USERS

Companies and organizations engaged in industrial activities that emit CO<sub>2</sub> and require solutions for carbon capture and reduction.

## → INDUSTRIAL SUPPLY AND VALUE CHAINS

Suppliers, manufacturers, and stakeholders involved in the supply chain of industrial processes seeking sustainable solutions for CO<sub>2</sub> emissions.

## → FINANCIAL ACTORS / POLICY MAKERS

Investors, financiers, and financial institutions interested in supporting and funding innovative technologies and projects aimed at reducing CO<sub>2</sub> emissions.

## → POLICY MAKERS

Government officials, policymakers, and regulatory bodies responsible for shaping environmental policies and regulations related to carbon capture and climate change mitigation.

## → GENERAL PUBLIC

Individuals, communities, and societal groups concerned about climate change and interested in supporting initiatives that promote sustainability and carbon reduction efforts.

# → PARTNERS AND FUNDING



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for Applied Scientific Research  
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Co-funded by  
the European Union

This research was funded by C&ET Partnership, the Clean Energy Transition Partnership under the 2022 C&ET Partnership joint call for research proposals, co-funded by the European Commission (GAN°101069750) and with the funding organizations detailed on <https://cetpartnership.eu/fundingagencies> and call modules.

