

DEEP REMOVAL OF CO₂ & INNOVATIVE ELECTRIFICATION CONCEPTS

Welcome to the DRIVE project!

DRIVE envisions a future where industries achieve carbon neutrality or negativity, paving the way for a sustainable environment by 2050 through innovative technological solutions and comprehensive guidance on CO₂ reduction.

Check out the latest news of the DRIVE project in this issue!

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New Explainer Video: Electrified CO₂ Capture in DRIVE

We're proud to present our first animated video explaining the core concept behind one of the technologies in the DRIVE project (CODEC): how electrified and modular technologies can capture and purify CO₂ from various industrial sources — reliably, efficiently, and with minimal environmental footprint.

In just a few minutes, the video walks viewers through:

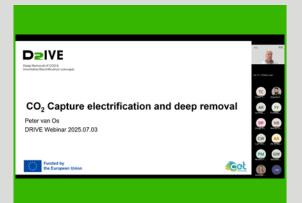
- How the Miniplant + CODEC system capture CO₂ from flue gases and biogas upgrading,
- How it uses low-carbon electricity to power the adsorption and liquefaction processes,
- And how the purified CO₂ can be reused, stored, or transported to other industrial value chains.

The animation highlights how the CODEC flexible, replicable setup can help Europe decarbonise hard-to-abate sectors - from cement and steel to refineries and energy-from-waste.

Watch the video here → https://www.youtube.com/watch?v=R9Mil5fbRgE
Perfect for sharing with your network to raise awareness about deep CO₂ removal technologies!



ACTIVITIES



DRIVE's First Public Webinar:
Unlocking Deep
CO₂ Removal

On July 3^{rd} 2025, the DRIVE project hosted its first public webinar, drawing wide interest from industry, research and policy audiences across Europe and beyond. The event spotlighted the project's four large-scale pilots and showcased how electrified and modular technologies are being deployed to capture and purify CO_2 across a range of hard-to-abate industrial sectors.

Under the title "Unlocking Deep CO₂ Removal", the webinar featured expert insights from partners including TNO, Hovyu, Heriot-Watt University and RWE. Attendees gained a deeper understanding of:

- The technical performance of DRIVE's integrated technology chain in real industrial conditions,
- Challenges and solutions in adapting the system to different CO₂ sources such as cement, steel, waste-to-energy, and biogas upgrading,
- The potential for replicability and scalability across sectors and regions in Europe.

Participants also engaged in a lively Q&A session, where DRIVE researchers and industry representatives addressed questions about: Energy efficiency and electrification, integration with renewable sources, CO₂ purity requirements and end-use options, environmental impact and cost considerations.

Missed the webinar? No problem! The full recording is available online.

Watch the full webinar → https://www.youtube.com/watch?v=oUt1aaUBmp0&t=463s

THE PARTNERSHIP

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