

Policy Roundtable on Advancing Carbon Capture and Utilisation: Defossilising the Heavy Industry for a Competitive and Sustainable Europe

24 April 2025, 10 am – 12.30 pm

Press Club Brussels (BE)

Carbon Capture and Utilisation (CCU) technologies play a crucial role in the iron and steel industry by capturing CO₂ emissions from production processes and converting them into valuable carbon-based products. This can help significantly reduce the sector's carbon footprint by transforming captured CO₂ for applications such as e-chemicals, synthetic fuels, and construction materials.

The EU has consolidated in the last years crucial EU legislations to drive companies towards reducing emissions through carbon pricing and exemptions (e.g. ETS, CBAM), through mandates on renewable energy (e.g. Renewable Energy Directive), or through carbon removals to make up for residual emissions and reach net-zero targets (e.g. Carbon Removals Certification Framework).

Looking ahead, the EU's Clean Industrial Deal, due to be published on 26 February 2025, is setting the agenda, priorities, and new initiatives proposed by the European institutions to accelerate the transition to a net-zero industry, while aiming to strengthen its competitiveness and its sovereignty. The core question is whether, through this Clean Industrial Deal and in the next five years, the EU can create the right incentives and rules to address both climate and economic challenges for European sectors that are both critical and strategic like steel and iron, and facing unprecedented difficulties with global competition.

To explore these challenges and ensure a sustainable and competitive future for the iron and steel sector, it is essential for policymakers, iron and steel producers, as well as CCU technology providers, to come together in a roundtable discussion.

Building on the lessons and recommendations from INITIATE, the roundtable—co-organised by the INITIATE project and CO₂ Value Europe—will provide a platform for open dialogue among key stakeholders on achieving climate objectives while sustaining their activities in Europe. Discussions will explore whether existing energy regulations, ETS rules, and emerging perspectives on carbon removals are fit for purpose, whether they pose additional challenges for the sector, or how they might be adjusted to create new opportunities. The event will also address the implications of the Clean Industrial Deal and cross-sector collaboration to drive the transition towards a low-carbon iron and steel industry while ensuring Europe remains an industrial leader.

The EU-funded INITIATE project has been demonstrating how residual carbon-rich gases from the steel sector can be converted into valuable feedstock for the chemical industry. The TRL7 demonstration integrates continuous production of Nitrogen+Hydrogen and CO₂ streams with innovative ammonia production, which serves as a precursor for urea. This process not only supports the sustainability of carbon capture costs but also contributes to an economically viable defossilisation strategy.

DRAFT AGENDA	
10 – 10.15 am	Welcome Coffee, Tour de Table and Introduction
10.15 – 10.30 am	Keynote Speech European Parliament MEP TBC
10.30 - 10.50 am	The INITIATE Project: The Industrial Transformation of the Steel and Chemical Industries of Europe Eric van Dijk, <i>INITIATE Project Coordinator</i> , TNO
10.50 – 11.15 am	The Clean Industrial Deal: Towards Clean and Competitive Industry in Europe European Commission TBC
11.15 am – 12.15 pm	Stakeholder discussion: Unlocking the potential of CCU for energy-intensive industry Moderator: Tudy Bernier, <i>Policy Director</i> , CO ₂ Value Europe Industry Trade associations R&D community Universities
12.15 – 12.30 pm	Wrap-up and recommendations summary Moderator: Tudy Bernier, <i>Policy Director</i> , CO ₂ Value Europe



The INITIATE project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 958318.