

Press release

25 March 2025

For immediate release

Collaboration to accelerate CCUS and hydrogen deployment for a net-zero future

Bergen, Norway - 25 March 2025 - With growing concerns over an anticipated capacity gap, energy companies, utilities, and heavy industries are actively seeking an integrated portfolio of decarbonisation solutions that can be deployed efficiently and cost-effectively.

To demonstrate their commitment to developing and scaling carbon capture, utilisation, and storage (CCUS) as a critical decarbonisation pathway, high-level industry leaders gathered in Bergen ahead of exclusive site visits to Northern Lights and the Technology Centre Mongstad on 25 March 2025.

CCUS and hydrogen: securing the energy transition

The presentation by ETN Global's Managing Director Christer Björkqvist highlighted how CCUS, alongside hydrogen and other alternative low-carbon and carbon-free fuels, can play a key role in addressing the energy trilemma—balancing sustainability, affordability, and security of supply on the path to net-zero.

As electricity demand surges alongside the increasing share of Variable Renewable Energy (VRE) and the phase-out of coal, dispatchable power becomes essential for grid stability. This is driving a more integrated energy strategy, where thermal generation powered by natural gas with CCS, hydrogen, or other low-carbon fuels plays a crucial role in complementing VRE sources such as wind and solar.

CCUS: a crucial piece of the net-zero puzzle

As industries worldwide strive for net-zero emissions, CCUS is increasingly recognised as a key technology for decarbonising power generation and hard-to-abate sectors such as cement, steel, refining, and chemicals. However, despite record investment, challenges remain in policy clarity, infrastructure development, and commercial incentives.

"We have the ambition of becoming a net-zero energy company by 2050, where CCS plays a very important role for achieving this ambition. Offering CO₂ transport and storage solutions to other industries, both supports our net zero ambitions, but also the decarbonisation of these other industries. CCS is therefore a win-win solution for us all," says Jalal Fahadi, VP for Thermal Power Development at Equinor.

Industrial users and utilities - key stakeholders in the CCUS ecosystem - stressed the urgent need to scale up CCS to maintain economic competitiveness while reducing emissions. They also highlighted the critical role of continued research, which could increase the process efficiency, expand CO₂ utilisation opportunities and extend transport and storage options.

Participants emphasised that collaboration is essential to accelerate technical developments in a cost-efficient way; particularly because as a transitional technology, CCUS is indispensable in achieving the goals of the EU Green Deal, while ensuring a balanced approach to the energy trilemma - security, affordability, and sustainability.

"CCUS is a key technology for accelerating global CO₂ emissions reduction, and industry collaboration is crucial for advancing carbon capture efficiently and cost-effectively. A prime example is BASF's OASE® blue technology, an advanced carbon capture process for post-combustion CO₂ removal in industrial applications, developed in close collaboration with Linde. Through this innovation, we can deliver scalable solutions that enhance both sustainability and industrial competitiveness for power plants, refineries, chemical, and other industries." said Jens Walter, Senior Expert for Gas Turbine Technology at BASF, and Chairman of ETN Global's CCUS Working Group.

It was also highlighted that the growing global liquefied natural gas (LNG) supply, expected reductions in natural gas prices, and rising carbon prices could significantly influence CCS adoption trends.

Key industry takeaways

- Securing reliable power supply As highlighted in ETN Global's latest white paper, the growing gap in dispatchable capacity could threaten Europe's ability to maintain a stable electricity grid. CCUS-equipped gas-fired power plants or hydrogen operated gas turbines can provide clean, flexible, and dispatchable electricity, ensuring both security of supply and emissions reduction.
- A coordinated portfolio approach Energy companies, utilities, and heavy industries need a mix of solutions that can be integrated efficiently to ensure security of supply at the lowest cost. CCUS, in combination with hydrogen, biofuels, ammonia, and synthetic fuels, can provide flexible, low-carbon dispatchable power while supporting the growth of renewable energy sources.
- Unlocking large-scale hydrogen production By capturing CO₂ from gas-based hydrogen production, CCUS can support large-scale hydrogen deployment while electrolyser capacity scales up. A reliable, low-carbon hydrogen supply is essential for decarbonising hard-to-electrify sectors and strengthening Europe's hydrogen economy.
- **Driving cost reductions through collaboration** ETN Global is launching a dedicated CCUS technical working group to share operational experiences, improve system flexibility, and reduce costs, ensuring CCUS becomes a commercially viable and scalable solution.

A unified effort: launch of ETN Global's CCUS working group

The event also marked the launch of ETN Global's CCUS working group, serving as a collaborative platform, bringing together energy users, technology providers, and research institutes to accelerate CCUS deployment.

The ETN Global CCUS working group will focus on:

- Gathering key information to assess the status of CCUS solutions and document their advantages and challenges.
- Providing guidelines on R&D priorities to accelerate CCUS deployment.
- Exploring opportunities for cross-industry collaboration to drive innovation and costeffective CCUS implementation

Visits to Northern Lights and Technology Centre Mongstad

Following the meeting, attendees visited two of Europe's most advanced CCS projects:

- Northern Lights The world's first commercial CO₂ transport and storage facility, designed to receive and permanently sequester captured carbon 2,600 meters below the seabed.
- Technology Centre Mongstad The world's largest most flexible and open test center for post-combustion CO₂ capture test center, where cutting-edge technologies are being tested and verified to derisk and accelerate commercial deployment of CCS technologies at scale.

These site visits provided a first-hand look at operational CCS technologies, reinforcing that the industry is ready to deliver large-scale solutions—provided the right policy and investment frameworks are in place.

"Northern Lights offers CO₂ transport and storage as a service. Our mission is to enable reduction and removal of European and Norwegian industrial emissions and by such offering a solution to decarbonise", says Director for Communication and Political and Public Affairs, Benedicte Staalesen.

A call to action for policymakers

The event demonstrated a unified industry commitment to CCUS, backed by technological innovation and collaborative efforts like ETN Global's CCUS working group. However, for CCUS to reach its full potential, stronger policy frameworks, streamlined permitting processes, and dedicated investment in CO_2 transport and storage infrastructure are required.

As CCUS hubs like the East Coast Cluster (UK) and other initiatives, like Northern Lights (Norway), and Porthos (Netherlands), lead the way, the challenge now is scaling these models across Europe to meet the European Commission's carbon capture targets of 50 million tonnes per year by 2030, 280 million tonnes by 2040 and 450 million tonnes by 2050.

ETN Global leading the way

"Collaboration is the key to unlocking the full potential of CCUS and hydrogen technologies. By bringing together industry leaders, technology providers, and policymakers, we can accelerate

innovation, reduce costs, and drive the large-scale deployment of these critical decarbonisation solutions. ETN Global is committed to fostering cross-industry partnerships that will help deliver a secure, affordable, and sustainable energy future", says ETN Global's Managing Director Christer Björkqvist.

Through a coordinated approach to developing a portfolio of decarbonisation solutions and strong collaboration among stakeholders and technical experts, ETN Global is working to shape the future of dispatchable power and industrial competitiveness in the transition to a net-zero society.

For more information or media inquiries, please contact: Viktorija Charbagi, Communications Manager, ETN Global via email vc@etn.global

"ETN Global is a non-profit membership association that, through cooperative efforts and by undertaking collaborative activities and projects, encourages and facilitates knowledge sharing and cooperation among its members. It aims to accelerate research, development, and demonstration of safe, secure, affordable, and dispatchable carbon-neutral energy solutions within the next decade."