

[Having problem viewing this email? Click here.](#)

Accelerating large scale deployment of
Carbon Capture Utilisation and Storage
technologies in Europe



Newsletter - February 2021

A word from the Coordinator

Dear reader,

It has been an eventful start of the year with US president Joe Biden presenting his new energy and climate ambitions, giving the possibility for global climate action a real boost. The new US Special Presidential Envoy for Climate, John Kerry, referred to the HeidelbergCement carbon capture project in Norway in his [first address to the B20 Business dialogue](#) a week ago, sending yet another attestation of the importance of carbon capture technologies in the fight against climate change.

This is a signal to Europe on opportunities for cooperation and global leadership on climate change.

In Europe, we are blessed with the Norwegian Longship project, taking Europe from plan-to-reality with the first full-chain commercial CCS project, and the Dutch Porthos project that was awarded CEF funding, taking another important step towards the final investment decision later this year. There are also CCU projects, such as the Norsk E-fuel project in Norway, the first commercial plant for renewable hydrogen- and CO₂-based aviation fuel production. In many countries across Europe we can see that the number of market-ready CCS and CCU projects is increasing.

After a very active 2020 for the CCUS SET-Plan work, the Plenary ended the year with the approval of new ambitious CCS and CCU targets for 2030 – aligning with the European Green Deal and the increased EU 2030 climate ambitions. This sends a strong signal that these technologies need to be deployed and matured at scale during the 2020s to achieve climate ambitions in a cost-efficient way, preserving jobs, stimulating economic growth, and diversifying supply chains into new industries and businesses. More about this in the newsletter below!

The CCUS SET-Plan kick-starts 2021 with the development of the 'CCUS roadmap 2030' – an action plan providing clear information to policymakers, industry, and the finance community on what will be needed to reach the 2030 targets. This work will highlight the steps that will need to be taken in this decade – on policy frameworks and barriers to tackle, business models and research & innovation – to lay solid foundations for a European CCS and CCU industry.

We look forward to working with you on what will be yet another interesting and challenging year. If you are not yet engaged in our work but would like to get involved, please contact us and visit [our website](#).

[Per-Olof Granström](#)

News

A major milestone for CCS in Europe: Norwegian Government proposes launch of 'Longship' CCS project, a step in the right direction for climate action and developing CCS in Europe

A proposal from the Norwegian Government to launch a CCS project in Norway, entitled 'Longship', symbolises a major milestone for the development of CCS in Europe and the Government's strategy for climate action. CCS will be crucial in the transition to reach climate-neutrality by 2050, while ensuring industrial activity and economic growth, and safeguarding jobs. Read the CCUS SET-Plan [press release](#) and a briefing on the project [here](#). 'Northern Lights' is part of the Norwegian full-scale CCS project, which

includes capturing CO₂ from industrial sources in the Oslo-fjord region ([Fortum Oslo Varne AS](#), [Norcem AS](#)) and transporting it to be permanently stored offshore in the North Sea.

First commercial scale e-fuel installation in Europe

Norsk e-Fuel is planning Europe's first commercial plant for renewable aviation fuel in Norway. The leading industry consortium joins forces to make unlimited renewable fuel a reality to achieve climate-neutral transportation. Located in Herøya, Porsgrunn, Norsk e-fuel is generating renewable fuels from CO₂ & water using 100% renewable electricity. Read more in the [press release](#).

102 million euros in funding on the horizon for Porthos carbon storage project

EU member states [recently agreed](#) on the European Commission's proposal to invest €998 million in 10 key European energy infrastructure projects under the Connecting Europe Facility – six of which are for CO₂ transport. One of these projects is the [Porthos CO₂ transport network project](#), which will receive €102 million to develop an open access CO₂ transport network in three of Europe's main ports – Rotterdam, Antwerp, and the North Sea Port – leading to an offshore storage site in the North Sea. An agreement has been [signed](#) between Porthos, Shell, Air Liquide, Air Products, and ExxonMobil.

Non-paper on CCS by the Netherlands, Norway, Denmark, and Sweden

A [non-paper](#) from The Netherlands, Norway, Denmark, and Sweden highlights that CCS is one of many important technologies to achieve the EU's goal of climate neutrality by 2050. The paper gives policy recommendations for the development of CCS across the EU, including robust monitoring and reporting guidelines for CO₂ transportation, incentivising CO₂ removals and broadening the TEN-E regulation to include geological storage and associated infrastructure.

World's largest e-methane installation announced in the Walloon Region, Belgium

Carmeuse, ENGIE and John Cockerill have signed a Joint Development Agreement for an innovative Carbon Capture and Utilisation ("CCU") project in Wallonia. This project will concentrate CO₂ from an innovative type of lime kiln, combine it with green hydrogen and produce "e-methane", a renewable gas that can be injected in the gas grid or used in transport or in the industry. More info in the [press release](#)

First hurdle passed for CO₂ storage beneath Danish North Sea

Maersk Drilling [confirms](#) that the Greensand CCS project in Denmark has taken a step forward, as DNV GL deems CO₂ injection into the intended subsea reservoir. This confirms that the Nini West reservoir is conceptually suitable for injecting around 450,000 tonnes of CO₂ per annum per well over 10 years.

Construction begins on world's first large-scale CO₂ direct air capture and storage plant in Iceland

Three companies [have begun building](#) the world's first large-scale CO₂ capture and storage plant in Iceland, which aims to remove 4,000 tonnes of CO₂ from the atmosphere each year. The plant, "Orca", uses fans to suck in air and filter out some 90% of its CO₂, which is turned into carbonate minerals for storage underground. The plant aims to be running in spring 2021. The plant is being developed by Climeworks, which makes the CO₂ collectors; Carbfix, which owns the CO₂ mineralising technology; and Iceland's ON Power, which will power the plant with geothermal energy.

Multi-million-euro project transforms CO₂ into green raw material in North Sea Port

In October 2020, ten private- and public-sector partners marked the launch of the North-C-Methanol project. Together they will reduce annually the CO₂ emissions by 140,000 tonnes and generate 44,000 tonnes of "green" methanol locally, which can be used as feedstock for the chemicals and renewables industries, as well as fuel for ships and trains. North-C-Methanol is the first large-scale demo plant which is part of the [North-CCU-Hub](#) programme, and right now represents an investment of EUR 140million. The North-CCU-Hub programme has the long-term aim of realising an overall annual reduction in CO₂ emissions of 1 million tonnes in North Sea Port. See the [press release](#).

Potential of CCUS recognised by the International Energy Agency

A recent flagship report by the IEA recognises the critical role of CCUS for achieving net-zero energy system. The report identifies four key contributions: tackling emissions from existing energy infrastructure; a solution for sectors with hard-to-abate emissions; a platform for low-carbon hydrogen production; and removing carbon from the atmosphere. Read more [here](#).

Reduction of CO₂ emissions by 2030: SUEZ and bp sign memorandum of understanding to explore “Net Zero Teesside”

bp and SUEZ recycling and recovery UK have [signed](#) a Memorandum of Understanding to explore feasibility of the UK's first CCS project from energy-from-waste. The Net Zero Teesside CCUS project aims to capture up to 10 million tonnes of CO₂.

Pilot project of four cement manufacturers plans to use captured CO₂ for synthetic fuel production.

The Cement Innovation for Climate (CI4C) consortium of four major cement manufacturers has launched the pilot project “catch4climate”, that is actively tackling the capturing of CO₂ and its subsequent industrial use. Read more [here](#).

UK unveils £12bn Ten Point Plan for net-zero transition

The UK's [Ten Point Plan](#) indicates it wants to become a world-leader in CCS technology, targeting the removal of 10 MT of CO₂ by 2030. An additional £200 million will create two carbon capture clusters by the mid-2020s, and a further two by 2030.

CO₂-based lightweight construction aggregates from fly ash from an Energy-from-Waste installation

Carbon8 Systems, the UK company that invented and owns a process that combines industrial waste residues with captured CO₂ emissions, will be running its first Energy from Waste (EfW) pilot project at AVR's Energy from Waste plant at Duiven, The Netherlands. Read more [here](#).

Leading energy companies form partnership to accelerate the development of offshore transport and storage infrastructure for carbon emissions in UK North Sea

The [Northern Endurance Partnership](#) was formed with an aim to develop offshore CO₂ transport and storage infrastructure in the UK North Sea, and involves ZEP members bp, Equinor, Shell and Total, as well as Eni and the National Grid UK. The infrastructure will connect to the proposed projects Net Zero Teesside and Zero Carbon Humber, which set out to decarbonise industrial clusters in Teesside and Humberside, UK, both of which are to be commissioned by 2026.

Eni aims to increase carbon capture and storage opportunities in Europe

CCS is highlighted as a key part of Eni's decarbonisation strategy, with [plans for projects](#) in Southern and Northern Europe.

Large-scale CCUS plant to be developed in Spain by LafargeHolcim, Carbon Clean

A CCUS [project](#) planned for LafargeHolcim's cement plant in Almeria, Spain, aims to capture CO₂ from cement production to be reused locally for agricultural use in accelerated crop production.

Veolia and Carbon Clean announce first carbon capture trials in UK Energy Recovery Facilities

Veolia is set to become the first UK operator of Energy Recovery Facilities (ERF) to demonstrate the latest carbon capture technology with Carbon Clean, a global leader in low-cost carbon capture technology. Read more [here](#).

R&I priorities for CCUS

At the request of DG RTD, the CCUS SET-Plan together with the Zero Emissions Platform and the European Energy Research Alliance have presented in a [report](#) some key areas of importance for R&I activities in CCS and CCU. The basis for the CCUS R&I priorities is the political EU climate ambition, highlighted in the European Green Deal and in the European Climate Law. The report highlights some key priorities (e.g. CO₂ transport infrastructure, storage appraisal programme, upscaling of capture and utilisation processes, etc.) for CCS and CCU to contribute to reaching net-zero by 2050.

CCUS SET-Plan conference and market ready projects

The [SET-Plan conference](#) took place in Berlin on 23-24 November with a focus on the European economic recovery and how the SET-Plan can help to achieve the objectives of the European Green Deal. The CCUS SET-Plan has contributed with input on the [role of CCUS in an integrated energy system](#) and on European CCS and CCU [market-ready projects](#). This document aims to respond to the SET-Plan Secretariat's request to identify projects that are innovative and mature enough and that could be financed through the Recovery and Resilience Fund as well as other sources.

Progress on CCUS SET-Plan targets and target updates

The CCUS SET-Plan [Implementation Plan](#) developed in 2017 laid down specific targets for CCUS deployment by 2020 and associated R&I priorities for 2020 and 2030. The IMPACTS9 consortium, with the help of the entire CCUS SET-Plan community, undertook a systematic and comprehensive [review](#) of the progress towards reaching those targets. This exercise has revealed that some of the targets have been largely achieved, some are on the way and others are outdated due to the more ambitious political context in terms of climate targets for 2030 and 2050.

It was therefore time to open up the discussion for the [update](#) of the SET-Plan targets. After a further consultation process with the CCUS SET-Plan community, the CCUS SET-Plan plenary endorsed the updated CCUS SET-Plan targets, together with the estimate that 50 Mtpa need to be abated by 2030. Specific challenges for CCS and CCU development for the coming years to make this possible are:

- Getting the commercial framework right.
- Accelerating timely deployment at scale of CCS and CCU technologies.
- Driving costs down – through R&I, learning by doing and economies of scale.
- Enabling rapid scale-up to deliver on the climate goals.
- Enabling EU citizens to make informed choices regarding the benefits that CCS and CCU bring.

The updated targets are now pending formal adoption by the SET-Plan secretariat

Involvement in the Clean Energy Transition Partnership

At the SET-Plan conference held on 23-24 November, [the CETP Strategic Research and Innovation Agenda](#) (SRIA) was launched. The [Clean Energy Transition Partnership](#) (CETP) is a 7-year co-funded Research and Innovation partnership under Horizon Europe to boost and accelerate energy transition across Europe. It reaches out to national and regional stakeholders, as well as industry, public organisations, research and citizens organisations to make Europe a frontrunner in energy innovation and implementation by becoming the first climate-neutral continent. The SRIA is key to the implementation of the CETP and will serve as a guide for multilateral collaboration in Europe – and beyond – over the next 10 years.

The CCUS SET-Plan has made significant contributions to the work on the CETP SRIA. In cooperation with the ZEP, EERA and ERA-Net ACT, the IWG9 has actively given input to the drafting of the SRIA, specifically in the sections on [CCUS](#), which highlighted the main challenges for the 2020s and associated key areas for R&I activities to be funded in the next years.

Involvement in Energy System Integration

The European Commission has recently released a Communication on 'An EU Strategy for [Energy System Integration](#)', outlining how a climate-neutral energy system should be developed and what steps Europe needs to take to deliver on this promise. To achieve the EU's objective of becoming climate-neutral by 2050 in a cost-effective way, all low-carbon technologies, such as CCS and CCU, that are scientifically proven and readily available, should be deployed. The strategy for Energy System Integration also takes the view that a technology-neutral approach should be privileged to deliver a net-zero compliant energy system. View the CCUS SET-Plan input on 'the role of CCUS for energy system integration' [here](#).

IWG9 Modelling exercise - reviewing of CCUS in future EU decarbonisation scenarios

The [report by the UCL Energy Institute](#) – a part of the CCUS SET-Plan work – has reviewed the role of CCS and CCU in Europe in decarbonisation scenarios consistent with the 1.5°C and 2°C global temperature targets. The scenarios provide insights on the combinations of technologies that could be compatible with the climate targets under different conditions. They were produced by a range of global and Europe-scale models. These are some of the key messages that emerge from the work:

- Published scenarios indicate that CCS is essential for Europe to reach net-zero CO₂ emissions by 2050, which is consistent with the 1.5°C global target.
- This implies that Europe needs a large-scale CCS industry to meet future targets.
- In the 1.5°C scenarios, the median CO₂ captured by CCS is 230-430 MtCO₂/yr in 2030, increasing to 930-1200 MtCO₂/yr by 2050. There is a significant range across these scenarios, implying some key uncertainties.
- CCS enables CO₂ removal when combined with bioenergy, provided biomass is sourced sustainably. Bioenergy with CCS (BECCS) plays a key role in the modelled scenarios for Europe.
- Models indicate significant annual investments are needed in CCS in Europe until 2050 – \$14 billion (median) in scenarios consistent with 1.5°C.
- This review does not give a clear consensus if and how CCU can play a role in European decarbonisation. Some studies foresee a significant role while others do not consider it.

Input on SETIS Annual Report

The '[Implementing the SET Plan](#)' 2020 report has been released. It reflects on the state of the SET-Plan and is based on the input provided to SETIS by the Implementation Working Groups. Based on the input received from the CCUS community during the summer, this report's highlights on CCUS include: 10 targets (of which 9 are being updated) and 8 activities, 81 projects reported.

Events

CCUS 2020: Delivering Clean & Sustainable Growth

This conference provided delegates with the latest developments in the rapidly evolving CCUS sector and included a number of parallel programmes to explore the wider landscape for CCUS and to deep-dive into specific aspects of project delivery. CCUS 2020 provided a detailed understanding of CCUS developments both in Europe and in the UK, reaching out to a network of CCUS industry, stakeholders, policymakers and researchers.

Counting down to 2030: The role of CCS and CCU in National Energy and Climate Plans

On 3 December, at the CCUS 2020 conference, the Zero Emissions Platform (ZEP) hosted a session focusing on CCS and CCU in National Energy and Climate Plans (NECPs). The session was coordinated with ZEP's Government Group and featured speakers from Norway, Ireland, Spain, and The Netherlands. Each of these countries – with varying experience in the deployment and research of CCS and CCU – discussed their countries' plans and strategies to reach the EU's 2030 energy and climate targets, highlighting the role that CCS and CCU will play. Read more about the session below. View ZEP's [Twitter thread](#) from the session.

4th CO₂ Value Day

On 4 November 2020, CO₂ Value Europe organised the 4th version of its lighthouse event on CCU, the CO₂ Value Day. During this virtual event, more than 200 attendees learned about the development of CCU in the European context, participated in break-out sessions on policy and funding and exchanged ideas in a virtual match-making session. Follow the presentations [here](#).

IWG9 Seminar at CCUS Projects Network – Knowledge sharing event

The CCUS Projects Network – 4th Knowledge sharing event took place in October 2020. The session was coordinated with the IWG9 to gain input regarding [key enablers and hurdles](#) for large-scale CCUS deployment from the many project representatives. The IWG9 subgroup 1 on 'large-scale projects' circulated the text for comments and presented the key takeaways of the report, which focuses on barriers to the development and deployment of large-scale CCS projects, why they exist, how they can be avoided, how to tackle them, and best practices. This report will be the basis for an engagement program with policymakers within the European Institutions and member states.

Workshop on mineralisation

On 15 December 2020, CO2 Value Europe organised a workshop on the importance of CO2 mineralisation as climate mitigation technology. Attendees were presented with various case-studies of mineralisation technologies leading to real-life applications and demonstrations and heard about the potential of mineralisation for reduction in GHG emissions from a life cycle perspective. For more information see [here](#).

Policy update

Climate Law and increased 2030 climate targets

The discussions on a European Climate Law – defining climate neutrality as the *'balance between anthropogenic economy-wide emissions and removals, through natural and technological solutions, of greenhouse gases domestically within the Union at the latest by 2050'* – have now entered into the final phase of negotiation between the European Commission and Parliament, and the Council.

In October, the Environment ministers of the European Union agreed on a [partial general approach](#) regarding net-zero by 2050, [stating](#) that the Union-wide 2050 climate-neutrality objective should be pursued by all member states collectively. Discussions on a higher and updated 2030 greenhouse gas emission reduction target have resulted in December 2020 in an [agreement](#) by the European Council for a reduction of at least 55% in GHG emissions by 2030. The work between the Parliament, Council and Commission to ratify the European Climate Law will continue under the Portuguese European Council presidency, kickstarted in January 2021.

First Innovation Fund calls

The first Innovation Fund [call](#) for *small-scale projects* was launched on 1 December and is open for applications until 10 March 2021. The call targets projects with a capital expenditure between €2.5 and €7.5 million and will provide grant funding of €100 million for innovative clean technologies that will contribute to Europe's green recovery. The call is open for projects in eligible sectors – renewable energy, energy-intensive industries, including products substituting carbon-intensive ones, energy storage and carbon capture and storage – from all member states, Iceland, and Norway.

The first Innovation Fund [call](#) for *large-scale projects* closed on the 29 of October (1st stage). Three hundred eleven applications have been submitted requesting for a total of €21.7 billion and claiming CO2 reductions of 1.2 billion tonnes during their 10-year operations. The best ranked 70 projects will be invited to submit a full application for the second stage by 23 June 2021. Rejected proposals that have the potential to improve their maturity may be invited for the project development assistance provided by the European Investment Bank. The information on the evaluation results from the second stage will be provided in the fourth quarter of 2021.

Hydrogen developments

Following the publication of the [EU Hydrogen strategy](#) in July by the European Commission, the debate has moved on to the European Parliament and Council. The Parliament's ITRE Committee has released a draft report on "A hydrogen strategy for a climate-neutral Europe", which supports the strategy presented in July – a clear focus on renewable hydrogen in the long-term and with low-carbon hydrogen seen as a transitional measure. The Parliament asked the Commission to develop European standards and a single European certification and labelling system based on an LCA.

In December 2020, European ambassadors adopted a set of [conclusions](#) on 'Towards a hydrogen market for Europe'. Notably, the EU ambassadors discussed what kind of support the EU should offer to renewable and low-carbon hydrogen. The conclusions mention the role of 'safe and sustainable hydrogen', leaving the expression rather flexible and open to include nuclear-based and natural gas-based hydrogen with CCS, although recognising the primary role of hydrogen produced from renewable electricity for the EU's decarbonisation. While adopting high-level conclusions, the Council asks the Commission to further elaborate and operationalise the EU Hydrogen Strategy. The conclusions are available [here](#). Discussions will be ongoing at the Parliament and Council to finalise the respective positions in Q1 2021 and enter trilogues after that.

Finally, the [Clean Hydrogen Alliance](#) has been kicked off with a full list of its [members](#). The Commission is currently evaluating the received applications to host roundtables on the thematic groups, which are responsible for the operational work of the alliance. They will be in charge of building a pipeline of scale-up projects and the investment agenda in their area, while ensuring interdependence with the other roundtables. Further details can be found [here](#).

Preparing for 2021 – The revision of the EU ETS and REDII Directives and other relevant legislative packages

The Commission has announced its intention to review the EU ETS directive by Q2 2021, with a view to align it with the objective of climate neutrality by 2050 and the increased 2030 emissions reduction target. The revision of the EU ETS directive will bear several consequences for CCS and CCU projects. A public [consultation](#) is open for feedback until February 2021.

Similarly, the Renewable Energy Directive is also planned to be revised to assess how renewable energy systems can further contribute to higher EU climate goals. A public [consultation](#) is open for feedback until February 2021.

Further legislative packages of relevance for CCS and CCU projects are introduced or updated:

- EU Taxonomy – Delegated Regulation on a climate change mitigation and adaptation taxonomy, [consultation](#) closed 18/12/2020
- Sustainable Products Initiative, [consultation](#) closed 16/11/2020
- ReFuelEU – Sustainable Aviation Fuels, [consultation](#) closed 28/10/2020
- State Aid for environmental protection and energy – revised guidelines, [consultation](#) closed 07/01/2020

German presidency of the Council reaches political agreement with European Parliament on the multiannual financial framework and recovery package

On 10 November, an [agreement](#) was reached between the German presidency of the Council and the EU Parliament in discussions to secure the Parliament's consent to the next multiannual financial framework, the EU's long-term budget. The agreement concerns a comprehensive recovery fund and the Multiannual Financial Framework (MFF, 7-year budget) 2021-2027, for a total budget of 1.8 trillion euro, with 1.074 trillion for the MFF and 750 billion for the COVID-19 recovery fund. On 17 December, following the European Parliament's consent, the Council has adopted the regulation laying down the MFF for 2021-2027. This agreement will now have to be ratified by the member states' national parliaments. For more background information, here is a comprehensive [breakdown](#) of costs and a [press release](#) from the European Council.

European Commission gearing up for presentation of revised TEN-E regulation

As announced in the [European Green Deal Communication](#), the Commission intends to review the guidelines of the TEN-E regulation, which lays down the rules for the timely development and interoperability of cross-border energy infrastructure networks in order to achieve the EU's energy policy objectives. Carbon dioxide networks are one of the categories covered by the Regulation.

The Commission has previously opened periods of [feedback](#) from stakeholders and is expected to release the revised guidelines early Q2 2021. At the European Parliament the file is followed by the ITRE Committee (rapporteur: Zdzisław Krasnodębski (ECR, PL)). The work is at the preliminary stages and a first draft of the report will be presented to the ITRE members in March 2021 for an initial exchange of views. At the Council, the Working Party (WP) on Energy has started to hold technical meetings and prepare for the negotiations.

Clean Energy Transition – Technologies and Innovations Report

On 15 October, the European Commission published its “Progress Report on Competitiveness” and “Clean Energy Transition – Technologies and Innovations Report (CETTIR)”, as part of the State of the Energy Union Package. The reports can be found [here](#). This is the first time the Commission published the competitiveness report and sees this as the starting point for the discussion on how to assess and promote competitiveness. For the purpose of the report, the Commission took the view to define the competitiveness in the clean energy sector as the capacity to produce and use affordable, reliable and accessible clean energy through clean energy technologies, and compete in energy technology markets, with the overall aim of bringing benefits to the EU economy and people.

CCUS SET-Plan representation

- **G-STIC 2020: [Special Session](#) on CO2 Capture- from postponed, cyclic to zero emissions economics and opportunities.** On 26 October 2020, CO2 Value Europe presented the EU context for the development of CCU, focusing also on the CCUS SET-Plan.
- **NCCS Consortium Days.** On 4 November 2020, SINTEF Vice President Research and Director EERA JP CCS, Marie Bysveen, spoke at the [consortium day](#) of the Norwegian CCS Research Centre (NCCS). She gave an overview of the European energy strategy and the role of CCS in the energy transition to the NCCS consortium, which includes most of the key actors in the

Norwegian CCS arena. In addition, she presented ongoing processes and opportunities for alignment of national and European funding.

- ZEP Chair **Dr Graeme Sweeney** speaks at **Bellona Europa and Carbon Market Watch** workshop: On 18 November 2020, Bellona Europa and Carbon Market Watch hosted a virtual workshop in the scope of the [NEGEM](#) Horizon 2020 project. The workshop aimed to highlight [four proposed principles](#) to define Carbon Dioxide Removal (CDR) and how these would be applied in practice.
- **Presentation from ZEP Vice-Chair featured at ERTC 2020**. On 18 November 2020, ZEP Vice-Chair Lamberto Eldering spoke at the [ERTC 2020](#) event. Questions such as how CCS and CCU can contribute to the EU's objective of climate neutrality and the role of CO₂ infrastructure in a low-carbon industrial cluster were discussed. The presentation focused on the role of CCS and CCU in the decarbonisation of industry and power sectors, including the importance of developing CO₂ infrastructure – CO₂ transport and storage infrastructure would enable industrial CO₂ emitters to connect to storage sites and enable extensive decarbonisation needed to meet the climate neutrality target.

Save the dates

- The future of CCU deployment: The European and national perspective, 23 February 2021 (CVE Webinar in the context of the EU Industry Days 2021)
- ZEP Advisory Council meetings – 17 March, 16 June, 22 September, 15 December 2021
- [9th Conference on CO₂-based fuels and chemicals](#), 23-24 March 2021
- [Carbon Pricing Conference](#), 2-3 June 2021
- [Trondheim CCS conference](#), 22-23 June 2021
- [17th Carbon Dioxide Utilisation Summit](#), 27 October 2021

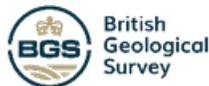
The CCUS SET-Plan and the IMPACTS9 project

The European Strategic Energy Plan (SET-Plan) recognises **Carbon Capture, Utilisation and Storage (CCUS)** as one of the priorities towards climate-neutral energy systems. An [Implementation Plan](#) laying down specific targets for CCUS deployment by 2020 and associated R&I priorities for 2020 and 2030 has been developed and the Implementation Working Group (IWG9) has been mandated to follow-up the progress. To assist IWG9 with this work, the H2020 project IMPACTS9 has secured funding for three years, starting May 2019. IMPACTS9 is therefore the operational arm of IWG9 and organises a series of activities to reach the targets of the CCUS SET-Plan and accelerate deployment of CCUS technologies.

The team



- **Luke Warren**, Chief Executive
- **Per-Olof Granström**, EU Director
- **Giorgia Bozzini**, EU Policy & Communications Officer



- **Jonathan Pearce**, Principle Geochemist
- **Karen Kirk**, Geologist



- **Marie Bysveen**, Vice President Research
- **Luca Riboldi**, Research Scientist
- **Øyvind Langørgen**, Research Scientist



- **Anastasios Perimenis**, Secretary General
- **Célia Sapart**, Climate Expert & Head of Communication
- **Françoise Maon**, Association Manager



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 842214

+32 2 880 3651 impacts9@ccsassociation.org www.ccus-setplan.eu

CONTACT DETAILS

Carbon Capture & Storage Association

Rue de la Science 14b
B-1040 Brussels
Belgium

CO₂ Value Europe AISBL

Avenue de Tervueren 188A
B-1150 Brussels
Belgium

www.ccus-setplan.eu/

