2020-IP13: CCUS in the EU Recovery Plan

The European Commission's Recovery Plan – "Next Generation EU" – was unveiled on the 27th May 2020 as a proposal to repair the economic and social damage brought on by the coronavirus pandemic, help kick-start European recovery and protect and create jobs. This €750 billion package – along with a revamped work programme for 2021-2027 totalling €1.1 trillion – pledges to keep the allocated spending on climate mitigation at 25%. The plan aims to put climate change at the heart of the region's recovery and is being presented as the world's biggest 'green' stimulus to abide by the proposed European Climate Law[1] and successfully deliver the pledge of net zero emissions by 2050.

We know, following many analyses, by the IEA and the Intergovernmental Panel on Climate Change (IPCC) – to name just two – that CCS is essential to reach net zero goals at the lowest cost.

Could this new recovery plan help to facilitate the large-scale deployment of CCS to reach our climate mitigation goals?

Carbon capture and storage is referred to in May's Communication from the Commission to the European Parliament[2], which notes that there will be a focus on 'unlocking investment in clean technologies and value chains', including specifically CCS and other technologies for the clean energy transition, such as renewables, clean hydrogen, batteries and sustainable energy infrastructure – as we know, CCS supports a clean hydrogen economy.

The European Green Deal (January 2020) is still a key objective in the EC's path for the future of the bloc, which will focus on rolling out renewable projects, kick-starting a clean hydrogen economy and strengthening the Just Transition Fund. In addition, in April the EU announced €980 million of new investment into an infrastructure fund, for key European energy infrastructure projects of common interest (PCIs) that contribute to carbon neutrality objectives.

The Just Transition Mechanism[3] was set as part of the €1 trillion Green Deal Investment Plan, and aims to help the most vulnerable regions deal with the social and economic impacts of the transition towards climate neutrality as set out in the Climate Law; it's a way to assist Member States whilst recognising that the challenges and impacts for this transition may not be equal for all. The Mechanism consists of three areas; a Just Transition Fund, a transition scheme and a public sector loan facility. In light of the pandemic, the EC has recognised that the need for a sustainable, green recovery is key and so they plan to reinforce the Mechanism by increasing the Just Transition Fund to up to €40 billion, along with strengthening the transition scheme and mobilising between €25 and €30 billion for the public sector loan facility.

The Zero Emissions Platform (ZEP) have recognised that CCS technologies could be an 'important tool to both deliver the needed climate change mitigation and safeguard European industrial competitiveness'[4] as per the intentions of the European Green Deal. ZEP recommend that an enabling

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[1] *European Commission*, **European Climate Law**, 4th March 2020, https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1588581905912&uri=CELEX:52020PC0080

[2] *European Commission*, **Europe's moment: Repair and Prepare for the Next Generation**, 27th May 2020, COM(2020) 456 final, https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1590732521013&uri=COM%3A2020%3A456%3AFIN

[3] *European Commission*, **Financing the green transition: The European Green Deal Investment Plan and Just Transition Mechanism**, 14th January 2020, https://ec.europa.eu/regional_policy/en/newsroom/news/2020/01/14-01-2020-financing-the-green-transition-the-european-green-deal-investment-plan-and-just-transition-mechanism

[4] *ZEP*, **A CCS industry to support a low-carbon European economic recovery and deliver sustainable growth**, 20th May 2020, *https://zeroemissionsplatform.eu/a-ccs-industry-to-support-a-low-carbon-european-economic-recovery-and-deliver-sustainable-growth/*

policy framework should be put in place to make it financially feasible for investment in the CCS value chain, have political support ensured for common infrastructure in CO_2 and clean hydrogen, and to use the green recovery to kick-start relevant and applicable projects. The recovery plan is an opportunity to drive the green agenda, particularly with 'shovel-ready' projects; those that are scheduled to begin in 2021 onwards, which would achieve critical climate change mitigation and maintain industrial excellence; this should be an integral part of the recovery plan.

Appropriate CCS, CO_2 infrastructure and clean hydrogen projects for this current opportunity in Europe as noted by ZEP include:

- **5 Projects of Common Interest (PCIs)**: including Northern Lights, Athos, ERVIA CCUS, CO_2 TransPorts, Acorn/Sapling
- **Hydrogen projects**: H2M (clean hydrogen), H2morrow (clean hydrogen for clean steel production), HyDemo (clean hydrogen for maritime sector) and H-Vision
- **Carbon capture projects**: ViennaGreenCO_2 (a solid sorbent capture technology pilot), the Technology Centre Mongstad ('TCM' – looking at post-combustion capture technologies), Norcem (capture from cement plant) and capture projects in Germany, Belgium and Sweden.
- **Industrial projects**: the Leilac 2 project (a pilot installation for breakthrough technology in cement production), various onshore storage projects (including capture of emissions in cement plants) in Eastern Europe and the Net-Zero Teesside CCUS project.

Bellona Europe was slightly ahead of the announcement of the EU recovery plan; on the 27th April, the Technical Expert Group (TEG) on Sustainable Finance issued a recommendation that the already planned Sustainable Finance Taxonomy is used to 'guide and inform coming stimulus packages and recovery plans post COVID-19'[5] and the EC 'sticks to the single technology-neutral threshold covering all technologies of 100gCO_2e/kWh as outlined by the TEG recommendations'. Bellona recognises that the inclusion of CCS with this would help reach the set threshold; again, aligning with the recent proposed recovery plan.

The Northern Lights PCI issued a memorandum in May 2020 looking into the positive economic impact of a European CCS ecosystem[6], which is strong in its view that projects that can move quickly into implementation 'should be considered in any economic recovery plan, due to their capacity to deliver quickly in terms of jobs and economic growth while delivering on the EU emission reduction targets'. Supporting CCS particularly at this time will stimulate new jobs, new infrastructure – key at these times to recover after such a global event. In addition, it will 'help to develop a more optimised energy and industry system, with shared CO_2 transport and storage infrastructure connecting different industrial facilities and processes'; all whilst working toward the aims of the European Green Deal.

Earlier plans to reserve 25% of EU spending for climate-friendly expenditure will persist throughout the EU's updated budget proposal and recovery programme and the spending is to be guided by sustainable finance taxonomy which would include CCS projects. The EU intends to continue to apply the 'do no significant harm' principle to ensure EU countries build a low-carbon economy; to qualify for the green investment label, it excludes coal and gas power from being labelled as 'green' unless plants are fitted with CCS technology. Bellona notes that 'the science remains clear: deep decarbonisation is not attainable without access to CO_2 transport and storage at a large scale' and the Scottish Centre for Carbon Capture and Storage (SCCS) agrees that 'post-Covid-19 economic recovery

[5] *Bellona Europe,* **EU Recover Plans Post COVID-19: TEG call for Taxonomy to Guide It**, 28th April 2020, https://bellona.org/news/eu/2020-04-eu-recover-plans-post-covid-19-teg-call-for-taxonomy-to-guide-it

[6] *Northern Lights PCI*, **CCS and the EU COVID-19 Recovery Plan**, May 2020, https://www.eydecluster.com/media/23954/northern-lights-pci-memorandum-value-of-a-european-ccs-ecosystem-in-green-recovery.pdf

presents an opportunity for governments, regulators and the industry to work together to accelerate these investments'. It really does seem that there is a huge potential for CCS in the post-pandemic recovery stimuli in Europe alone and by January 2021, the implementation of the new Multiannual Financial Framework will begin[7] following political agreements over the next 6 months.

The European Council came to an agreement on the €750bn recovery plan in July 2020[8] and specifically stated that 'climate action will be mainstreamed in policies and programmes' and the Plan will comply with the goals of the EU to be climate neutral by 2050, with all EU expenditure to be 'consistent with Paris Agreement objectives'. MEPs have welcomed the approval but noted that the decrease in some grants could put the Green Deal at risk and so will withhold consent until there are improvements in the deal. Satisfactory agreement will ideally be determined by October 2020 to enable the plans and budgets to come into place in early 2021.

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[7] *European Commission*, **Recovery Plan for Europe,** 2nd June 2020 https://ec.europa.eu/info/live-work-travel-eu/health/coronavirus-response/recovery-plan-europe_en

[8] *European Commission*, **Special meeting of the European Council - Conclusions,** 17th – 21st July 2020, https://www.consilium.europa.eu/media/45109/210720-euco-final-conclusions-en.pdf