

New carbon market initiative to scale-up carbon capture and storage solutions

Northern Lights, TotalEnergies, Oxy Low Carbon Ventures, South Pole, Perspectives and Carbon Finance Labs announce launch of the **CCS+ Initiative**

June 16, 2021 – Today an alliance of organizations announced the formation of the **CCS+ Initiative**, a new venture to leverage carbon markets and to scale up global decarbonization and carbon removal efforts. The CCS+ Initiative will focus on advancing carbon accounting for a range of carbon capture, utilization, storage, and removal technologies that are underpinned by robust ‘cradle-to-grave’ life cycle assessments (LCA) and rigorous verification standards to ensure environmental integrity.

The founding partners behind the CCS+ Initiative include Northern Lights, TotalEnergies, Oxy Low Carbon Ventures, as well as climate solutions experts South Pole, Perspectives Climate Group, and Carbon Finance Labs. The CCS+ Initiative is an open initiative that welcomes new partners. To date, Mitsubishi Corporation, Fortum Oslo Varme, Carbon Engineering, Climeworks and Carbfix are the first partners to join. To ensure high quality and transparency, an Advisory Group, which already includes the Global CCS Institute, IETA and the Negative Emissions Platform will be formed to evaluate the work of the Initiative.

Both the Intergovernmental Panel on Climate Change (IPCC) and most recently the International Energy Agency have reinforced the importance of safe carbon storage solutions in the global ‘race to zero’. Such solutions will be critical, both as a decarbonization tool and in meeting global climate targets*. Safe geological carbon storage of CO₂ combined with carbon removal from the atmosphere via direct air capture (DAC) or photosynthesis (biomass), for example, allows for carbon dioxide removal of excess CO₂ that is already in the atmosphere. But these solutions will also be key in decarbonizing hard-to-abate industries where there are very few alternatives to getting to a net zero emissions pathway by 2050 or earlier.

There are a number of important factors necessary to incentivize the scaling up of carbon capture, utilization, and storage and removal technologies. These include **government policies** that incentivize investments in the technologies, as well as **robust methodologies** to ensure environmental integrity through proper carbon accounting and independent verification of the climate benefits. The CCS+ Initiative will address the latter by developing a comprehensive modular methodological framework under the Verified Carbon Standard (VCS), the world’s leading GHG crediting program, which is managed by the environmental non-profit organization (NGO) Verra.

Environmental integrity and life-cycle analysis will be at the heart of the CCS+ Initiative. The framework will clearly distinguish between removals and emission reductions in its quantification methodologies. The development of the framework will be directed by a steering committee while collaborative advisory groups and working groups will guide and review the outputs of the Initiative (including draft methodologies), identify technical issues, and recommend solutions. The transparency and strength of the framework will be further reinforced by the VCS’s rigorous methodology approval process, which includes independent reviews by accredited auditors, technical experts, and public consultation.

The methodological framework envisaged by the CCS+ Initiative will cover a wide range of carbon capture technologies for point source emissions, technical carbon removal solutions, different CO₂ transport modalities

and various carbon utilization and storage solutions. It will enable the verification of emission reductions and/or removals from CCS and CCU projects, and allow for the certification of projects under the VCS program. The first set of modules will address capture of fossil carbon from point sources and the removal of atmospheric CO₂ (via DAC), as well as storage of CO₂ based on mineralization technologies and geological storage. The CCS+ Initiative will also explore how the framework can be adapted to the global policy framework, including Article 6 of the Paris Agreement and carbon pricing mechanisms at national or subnational levels.

The CCS+ Initiative welcomes the participation of new prospective partners and advisory group members in its efforts to scale up climate action through innovative technological solutions.

ENDS

Note to editors

**According to the IPCC Special Report “Global Warming of 1.5 °C” (SR15) there is an urgent need to scale up efforts to remove CO₂ from the atmosphere in order to achieve the 100-1’000 Gt of CO₂ removals by 2050 required to keep global warming within 1.5°C. If we are to reach net-zero GHG emissions by 2050, we will require both nature-based and technological solutions in addition to steep decarbonization and emissions avoidance efforts (such as forest conservation for example).*

Definitions (IPCC):

- CCS: Carbon Capture and Storage is a process whereby CO₂ is captured at the point of a greenhouse gas emissions source and stored in a way that it is not released into the atmosphere within a climate-relevant time horizon. By applying CCS to point source emissions, it is possible to mitigate the effect of greenhouse gas emissions on the climate.
- CCU: Carbon Capture and Utilization is a process in which CO₂ is captured at point source or from the atmosphere and then used to produce a new product. Depending on the outcome of a life-cycle analysis, CCU solutions can have climate mitigation benefits.
- CDR: CDR is a process whereby CO₂ is physically removed from the atmosphere and stored with the intention to be permanent, with all greenhouse gas emissions over the entire chain of removal and storage included in the life-cycle analysis and whereby the total amount of CO₂ removed and stored is greater than the CO₂ emitted.

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About

Northern Lights is developing the world’s first open-source CO₂ transport and storage infrastructure. We deliver carbon storage as a service. Our aim is to help industrial emitters stop emissions that cannot be avoided in other ways from reaching the atmosphere and to provide a safe and permanent storage option for CO₂ that is removed from the air. <https://northernlightscs.com/>

TotalEnergies is a broad energy company that produces and markets energies on a global scale: oil and biofuels, natural gas and green gases, renewables and electricity. Our 105,000 employees are committed to energy that is ever more affordable, clean, reliable and accessible to as many people as possible. <https://www.totalenergies.com/>

Oxy Low Carbon Ventures (OLCV) is a subsidiary of Occidental, an international energy company with assets in the United States, Middle East, Africa and Latin America. OLCV is focused on advancing cutting-edge, low-carbon technologies and business solutions that enhance Occidental's business while reducing emissions. OLCV also invests in the development of low-carbon fuels and products, as well as sequestration services to support carbon capture projects globally. <https://www.oxylowcarbon.com/>

Carbon Finance Labs is working on bringing carbon finance to energy, technology and commercial development projects, such as CCS. <https://carbonfinancelab.com/>

Verra is a non-profit organization (NGO) focused on addressing climate and sustainable development issues through the development and management of market-based standards. Verra manages the Verified Carbon Standard (VCS) - the world's leading carbon crediting program, with more than 1,600 registered projects in 80 countries.

<http://www.verra.org>

South Pole is a leading project developer, advisor and provider of global climate solutions, which helps private and public organizations reduce their impact on the climate. www.southpole.com

Perspectives Climate Group is internationally recognised for its innovative, practical and high-quality solutions in many fields of international carbon markets and climate policy. <https://www.perspectives.cc/home/>
