

OGCI position on policies to scale up carbon capture, use and storage (CCUS)

Proposed policies for inclusion in revised national climate strategies to accelerate the commercial deployment of CCUS

FEBRUARY 2021

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WHY CCUS IS IMPORTANT

In line with the positions of the Intergovernmental Panel on Climate Change, UNFCCC, IEA and other organizations, OGCI believes that carbon capture, use and storage (CCUS) is a critical technology to achieving the goals of the Paris Agreement.

CCUS is gaining momentum as a growing number of countries set net zero targets and recognize the potential of CCUS as a decarbonization tool that can help to:

- decarbonize heavy industries, including industrial process emissions for which there is currently no scalable solution
- provide low carbon gas power as a back-up to renewables
- kickstart the hydrogen economy, by using CCUS in the production of low carbon blue hydrogen at scale
- create the transport and storage infrastructure for negative emissions systems
- preserve the value of existing infrastructure and industry and create jobs

A massive scale-up is needed if CCUS is to develop at the scale required to support the aims of the Paris Agreement – and that will require policies to facilitate and incentivize the deployment of CCUS.

This paper sets out some policy principles and mechanisms for consideration by countries in their "high ambition low emissions development strategies" (referred as national climate strategies below), especially when revising Nationally Determined Contributions (NDCs), to accelerate deployment of CCUS¹.

Policies are an important part of successful national climate strategies. Well-designed policies and regulations, so as to achieve a balance of greenhouse gas emissions between sources and sinks aiming for a net zero future, should take into account energy security, market stability, affordability as well as reliability to ensure promotion of sustainable development.

1 As of February 2021, only 13 countries and the EU (on behalf of its member states), out of 186 Parties, have submitted nationally determined contributions (NDCs) that reference CCUS as a decarbonization lever to support the goals of the Paris Agreement.

OGCI principles on policy mechanisms to scale up CCUS

Clear reference to CCUS targets in national climate strategies (including revised NDCs and mid-century, long term development strategies) will signify national governments' support for CCUS.

OGCI believes the following actions and policy mechanisms are needed to scale up the CCUS industry and should be considered by governments.

IDENTIFY THE POTENTIAL AND THE VALUE OF CCUS

OGCI believes that Governments should perform an assessment of the potential for CCUS in their respective countries. An analysis of source, concentration and purity of carbon dioxide (CO₂) streams should be combined with the localization/type & volume of storage reservoir and transportation options to determine the potential for CCUS to deliver greenhouse gas mitigation and contribute towards the long-term climate goals of the country.

OGCI and its member companies are uniquely positioned to assist Governments in making these assessments due to our relevant expertise, capability and resources, as well as collective work we are currently undertaking to define CCUS hubs globally and quantify the value of CCUS in socioeconomic terms, including the potential for job savings/creation.

SET UP NATIONAL STRATEGY AND TARGETS FOR CCUS DEPLOYMENT

National strategies should put in place appropriate resources within ministries with relevant expertise on CCUS development to support the integration of CCUS as part of the overall development of industrial, commercial and environmental policy. At a deeper level, policies are needed to incentivize industries to capture a target amount of CO₂ over specific periods of time (as in a roadmap) as well as regulatory frameworks to provide clarity on a list of issues. These include incentives to capture CO₂, CO₂ transport regulations, site characterization, subsurface integrity and monitoring, verification frameworks, and long term stewardship. OGCI, in collaboration with other industries and societal stakeholders, can support Governments in setting up such strategies.

POLICY AND REGULATORY DEVELOPMENTS TO INITIATE DEPLOYMENT

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Governments should be clear in assigning roles and responsibilities to the appropriate competent authorities in the development of Government policies, incentives, and regulatory frameworks. Doing so transparently and predictably in the context of a roadmap could provide the muchneeded conditions for reducing uncertainties and de-risking major capital investments.

In developing these policies, incentives, and regulatory frameworks, community acceptance and coalitions with local, regional, national environmental organizations, trade unions, and other industries will be important. OGCI member companies have decades of policy experience to partner with Governments and stakeholders to enable these developments.

LEGAL AND REGULATORY ISSUES TO ACCELERATE DEPLOYMENT

To enable the success of CCUS, governments should create clear regulatory and legal structures to:

- incentivize and permit the use of existing pipeline infrastructure or the construction of new CO₂ transport infrastructure (such as pipelines, trucks, rail, ships)
- clarify the risk-sharing mechanisms and regulations with respect to long-term stewardship of stored CO₂
- introduce monitoring, reporting and verification (MRV) protocols and processes for injected CO₂ to ensure safe, reliable, and permanent storage²
- introduce standards for construction, operation and CO₂ injection
- provide legal certainty on pore space ownership
- provide access to CO₂ storage capacity owned / controlled by governments
- streamline permitting for CCUS facilities

OGCI can support Governments in developing the relevant regulatory and legal frameworks needed to enable the development and deployment of CCUS and in sharing lessons learnt to incentivize public acceptance. With respect to CO₂ use, governments should work with relevant stakeholders, including OGCI, to frame the elements of a circular carbon economy and help the markets define the near-term products that would build towards a circular carbon economy in the long term.

FINANCIAL INCENTIVES STRUCTURES

To enable CCUS, governments should develop incentive structures that facilitate the emergence of market conditions for CCUS uptake nationally and globally. These frameworks can enable international collaboration by setting the building blocks for credit transfer mechanisms across nations.

The frameworks include but are not limited to:

- Tax incentives for the capture, storage and/or utilization of CO₂
- Investment incentives through contracts for differences for decarbonized power or services reliant on CCUS, including blue hydrogen
- Offsets on carbon content, such as the California Low Carbon Fuel Standards (LCFS)

- Public procurement for low- or zero carbon industrial products
- Emission trading linkages recognizing the role of CCUS credits

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- Development of a new transferable asset class/ units such as a carbon storage unit (CSU), which would be a unit representing a verified tonne of CO₂ or carbon, securely stored in geological formations
- Incentivizing and cost-sharing the capture of CO₂ across a range of heavy emitting industries
- Explicit support for CCUS in Article 6 of the Paris Agreement on international emissions trading (see OGCI position paper on <u>Article 6</u>)

To maximize their efficiency, such policy and regulatory frameworks should be:

- adapted to the local context and existing options to deliver a low carbon strategy
- be complementary / synergistic with other existing policies and low carbon technologies
- established with sufficient long-term visibility and stability to allow the necessary time for hubs and projects to develop in predictable enabling economic conditions

OGCI and the CEM to advance CCUS ambitions

The oil and gas industry brings a unique combination of skill sets needed to scale up CCUS, ranging from geoscience and CO₂ operational knowledge to commercial development, large and complex engineering project management, strong foundations in developing technologies and resource management (both human and natural), a strong capital base and multi-stakeholder joint venture experience. In 2019, OGCI entered the <u>"Accelerating CCUS together"</u> partnership with Clean Energy Ministerial (CEM) countries to create the necessary national conditions for CCUS uptake. OGCI's collaboration with the CEM will be an important vehicle to help these governments advance and accelerate the scale up of CCUS.



WHAT IS THE OIL AND GAS CLIMATE INITIATIVE (OGCI)?

The Oil and Gas Climate Initiative is a CEOled initiative that aims to accelerate the industry response to climate change. OGCI member companies explicitly support the Paris Agreement and its aims. As leaders in the industry, accounting for almost 30% of global operated oil and gas production, we aim to leverage our collective strength and expand the pace and scope of our transitions to a lowcarbon future, so helping to achieve net zero emissions as early as possible.

Our members collectively invest over \$7B each year in low carbon solutions. OGCI Climate Investments was set up by members to catalyze low carbon ecosystems. This US\$1B+ fund invests in technologies and projects that accelerate decarbonization in oil and gas, industry and commercial transport.

OUR APPROACH TO ADVOCACY

OGCI is at the forefront of climate action in the oil and gas sector. OGCI constructively engages and advocates with external stakeholders on the basis of positions agreed by consensus.

For more details about our advocacy practices, please visit https://oilandgasclimateinitiative.com/ about-us/#advocacy

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