

Guidance for the call for proposals – ‘HORIZON-CL5-2021-D3-02-15: Support to the activities of the ETIPs and technology areas of the SET Plan’

The SET-Plan Implementation Plan Working Group 9 on CCUS (IWG9) is one of the ten actions of the European Strategic Energy Technology Plan (SET-Plan), whose aim is to accelerate the deployment of low-carbon technologies, improve new technologies and bring down costs by coordinating national research efforts. IWG9 has been established to help the progress of Research and Innovation (R&I) activities required to achieve the 2020 targets for CCS and CCU, agreed by the European Commission, SET-Plan countries, and industry. The SET-Plan brings together EU countries, the European Commission, industries, and research institutions.

The Zero Emissions Platform (ZEP) is a European Technology and Innovation Platform under the EU's Strategic Energy and Technology Plan (SET-Plan) and technical adviser to the European Commission on carbon capture and storage (CCS) and carbon capture and utilisation (CCU).

ZEP and IWG9 are grateful for the EC's support and grant, as well as for the funding of the upcoming three year's work programme.

IWG9 and ZEP understand that only one Coordination and Support Action (CSA) project within the CCUS sector will be funded and that the EC would like to see proposals combining the support and co-ordination of the ETIP and the IWG, resulting in a single grant.

The IWG9 Chairs and ZEP would like to share the following views with the EC and potential applicants:

- The selection of grant holder should be guided by quality, efficiency, and proven track record.
- IWG9 and ZEP would prefer the outcome where the dedicated fund is granted to a single bidder/grant holder. If the bidder believes that support from other organisations will be needed to run the CSA successfully, these organisations should be included as linked third parties or subcontractors.
- The call's text highlights the 'advancement towards more interconnected activities, both in terms of contents and implementation mechanisms' as an 'expected outcome'. IWG9 and ZEP would like the new grant to preserve the strengths from both the current governance structures in order to engage the broadest possible group of CCUS stakeholders, but at the same time coordinate the activities in order to increase impact and benefits for stakeholders and efficiency.

The IWG9 Chairs and ZEP have identified the following focus areas as crucial for CCS and CCU for the upcoming three-year grant:

- *The political economy – European Green Deal and linked initiatives, links to member states' policies*

In the EC's communication on a European Green Deal, CCS and CCU have been identified as 'breakthrough technology' in support of the trajectory towards climate neutrality by 2050. The work of ZEP/IWG9 will thus be embedded in a political scenario where the EU needs to deliver on higher climate objectives. Co-operation with member states, EU policy-makers and the different parts of the CCUS value chain – represented in the ZEP membership – is crucial to ensure that these technologies can become operational by 2030 and support the EU's decarbonisation pathway.

- *Outreach, external relations (also international)*

Outreach towards the European institutions and national governments should be pursued and increased to further communicate about the role of CCS and CCU in achieving EU's climate goals. International cooperation with existing CCUS initiatives – such as Mission Innovation, CEM CCUS, ERA-NET ACT, etc. – is increasingly important. Activities in support of this – events, knowledge-sharing seminars, meetings – should be aimed at raising the profile of CCS and CCU, highlighting their current status, potential and developments, enablers and hurdles, and connecting the stakeholders along the value chain.

- *Development of CCS/CCU Technologies*

As CCS and CCU technologies move into operations and are integrated in Europe's industrial value chain, it will be vital to keep a focus on technological developments and ensure that these are shared within and beyond the CCUS community. Technology developments are foreseeable in all the segments of the value chain – capture, transport, storage, and utilisation. Technical reports will be needed to assess the continuous developments on CCS and CCU and offer a continued updated overview on the status of the technologies.

- *Supporting CCS/CCU market-ready projects*

An ever-rising number of CCS/CCU projects is progressing towards becoming operations by mid to late 2020s – projects in all parts of the value chain, linked to industrial processes, combined with the production of low-carbon hydrogen, some offering the possibility to remove CO₂ from the atmosphere, etc. It will be crucial to support these ongoing and upcoming European CCS/CCU projects from a policy and technological point of view, addressing existing barriers for implementation, enabling knowledge-sharing activities, and providing technical reports. Enablers and supportive policy frameworks and funding mechanisms are an equal important element in this focus area.

- *Delivery of the CCUS SET-Plan Implementation Plan*

This activity will support the delivery of the R&I activities and targets identified in the CCUS SET-Plan Implementation Plan, where the targets have been [updated](#) for 2030 and endorsed by the CCUS SET-Plan Plenary in October 2020.

The SET-Plan CCUS Implementation Plan has defined these challenges for CCS and CCU development for the coming years:

- Getting the commercial framework right,

- Accelerating 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.

Developing industrial scale CCS and CCU projects will identify many new challenges that can best be solved by undertaking R&I in parallel with large-scale activities. An iterative process is needed where R&I projects address specific industrial challenges, with the results then implemented in large-scale projects.

- *Governance and management*

This focus area includes the governance, and the service to be provided to support the work of ZEP and the IWG9: in the Advisory Council, Advisory Council Executive Committee, Networks and working Groups, IWG9 Plenary and SCG, etc.

In addition to and to further strengthen the grant work programme, ZEP will also develop an own work programme, funded separately by ZEP members and to be coordinated with the grant programme (as is the case for the current grant). The aim is to enable impactful and well-planned work by adding – leveraging the funding under Horizon Europe in order to maximising the impact – extended/increased resources, commissioning of studies, increased communication, events, campaigns, etc.

The IWG-9 has its own separate targets for 2030 and will continue updating these targets when necessary.

This document has been endorsed by the IWG9 Chairs and the ZEP Advisory Council. For transparency reasons, it should be mentioned that employees of CCSA – who holds the secretariat function in the current ZEP and IWG9 grants – have supported in the drafting of this document.