

ZEP response to consultation on the revised Climate, Energy and Environmental Aid Guidelines (CEEAG) – formerly EEAG

General Comments

ZEP is pleased to see that most of the input submitted in a previous response has been incorporated in the draft Communication.

The inclusion of CCS, CCU and low-carbon hydrogen in the sections on ‘Aid for the reduction and removal of greenhouse gas emissions including through support for renewable energy’, ‘Aid for the security of electricity supply’ and ‘Aid for energy infrastructure’ is a critical step on the pathway towards climate neutrality by 2050.

CCS is essential for Europe to reach climate neutrality by 2050 in a cost-efficient way, is deemed sustainable in the Taxonomy and may be the only alternative to decarbonise the many industries in hard-to-abate industrial sectors, such as steel, cement and chemicals. The European Commission’s consideration that “*the aid for CCS contributes to the common objective of environmental protection*” in order to promote the long-term decarbonisation objectives has become even more valid. This, in combination with the expectation that the market failure for many CCS projects will still exist for some time, makes it crucial to continue the current setup in the guidelines, stimulating commercial deployment of CCS, enabling state aid at an intensity of 100% for CCS projects, allowing both operating and investment aid. This is even more essential as Europe recovers from the COVID-19 crisis.

The guidelines need to be updated and aligned with the market developments and the more ambitious new climate agenda, the European Green Deal, the European Climate Law for climate neutrality by 2050, the EU Taxonomy for Sustainable Finance (Taxonomy) and linked initiatives. It is crucial that the guidelines are compliant with net-zero GHG emissions by 2050 and the new climate target to reduce GHG emissions by 55% compared to 1990 levels by 2030.

When updating the guidelines in accordance with the current technological, market and climate developments, new areas need to be included:

- *CO₂ transport via modalities other than pipelines* – In line with the Taxonomy, transfer of captured CO₂ to a storage site by all modalities – pipeline, ship, barge, truck, and train – should be taken into account in the guidelines. It is important that this piece is coordinated and consistent with other EU legislation that is being revised – such as the TEN-E regulation, EU ETS Directive, MRR regulation, etc. As geological storage sites are not evenly distributed among member states, the large-scale deployment of cross-border, European CO₂ transport and storage infrastructure is crucial to reach the EU’s objective of net-zero GHG emissions by 2050. This infrastructure will enable clean, competitive energy and industrial

sectors, early large-scale clean hydrogen and, not least, the delivery of significant volumes of carbon emission removals (CDR).

- *Retrofitting of natural gas networks into CO₂ pipelines* – Investments to retrofit existing natural gas pipeline networks into CO₂ pipeline networks, with the main purpose to integrate captured CO₂ for permanent storage, will in many cases be advantageous and cut initial infrastructure costs. As a reference, the Taxonomy has included retrofit of gas pipelines for integration of captured CO₂ for permanent storage as a sustainable investment in a net-zero economy.
- State aid – both *operating and investment aid* – may be necessary in order to overcome market failures and to ensure that the Union’s considerable infrastructure needs are met and to meet the EU’s infrastructure needs.
- The definition of CCU should be consistent with the definition proposed in the revised EU ETS Directive – where CCU is defined as ‘*emissions of CO₂ that end up permanently chemically bound in a product so that they do not enter the atmosphere under normal use*’. This definition is in line with ZEP’s recommendation.

It will be important to ensure coordination of the cost definition among different European legislations. This should be taken into account in the revision of the CEEAG. In this context, ZEP would like to highlight that the definition given in the Innovation Fund – where the emissions factor for electricity input as zero, based on the assumption that all grids across every member state will be zero-emission/net-zero by 2050 – is counterproductive.

In the shorter term, this means that successful projects under the Innovation Fund may in fact increase emissions, which risks the Fund later receiving backlash from EU citizens and civil society. For this reason, ZEP believes that this approach should not be replicated in the CEEAG or other relevant EU policies.

About the Zero Emissions Platform

The Zero Emissions Platform (ZEP) is a European Technology and Innovation Platform (ETIP) under the Commission’s Strategic Energy Technology Plan (SET-Plan), and acts as the EU’s technical adviser on the deployment of Carbon Capture and Storage (CCS), and Carbon Capture and Utilisation (CCU) under Horizon2020 R&I programme (grant agreement 826051).

ZEP supports the European Union’s commitment to reach climate neutrality by 2050, defined as net-zero greenhouse gas (GHG) emissions by 2050. To this end, CCS technologies represent readily available and cost-efficient pathways for the decarbonisation of industrial and energy sectors in the European Union. Some applications of CCU – where CO₂ is stored in a manner intended to be permanent – can also contribute to this goal.