

# ZEP response to the public consultation on the EU climate target for 2040

The Zero Emissions Platform (ZEP) welcomes the opportunity to provide input to the European Commission regarding the EU climate target for 2040. This paper complements the responses provided in the questionnaire, aiming to provide further context and rationale supporting our answers.

ZEP is pleased to contribute to this work and remain available to expand on any element of this response.

## EU emission reduction target for 2040

ZEP supports an ambitious target supported by scientific evidence, including a thorough investigation of the social, economic, and environmental impacts associated. The target needs to be in line with the climate urgency and recognise that early and strong action is needed. The cheapest and more costefficient measures (so called low-hanging fruits) are more likely to be implemented first, leaving some proportion of the necessary net GHG emission reductions — those most difficult to abate — to be accomplished later. The implementation of earlier and stronger climate action will allow more time for that proportion of emissions reductions to accomplished, allowing for a smoother transition, with abatement costs spread over a longer period of time.

At the same time, the target for 2040 should be set at a level appropriate for industry, allowing it to invest and adjust, and must be backed by clear conducive policies and funding programmes, enable industry to take significant action.

With this in mind, ZEP supports a target in the order of -80%.

# Role of removals in the 2040 climate target

ZEP supports a more disaggregated 2040 target, with clear and separate targets for GHG emission reductions, for nature-based carbon removals (biogenic sink), and for industrial removals with permanent storage (geologic sink).

This is in recognition that a strong political and legislative direction is needed to support the development and scale up of Carbon Capture and Storage (CCS) and Carbon Dioxide Removals (CDR). Establishing separate targets also contributes to an accurate prioritisation of mitigation activities — while carbon removals have a clear role to play, they must not displace emission reductions, which, in turn, must remain the priority in climate action.

Furthermore, a distinct target for the different types of carbon removals is needed as they are part of different carbon cycles (e.g., only removals to geologic sinks can balance emissions from geologic sinks as fossil carbon and limestone calcination), require different incentives and safeguards, and present different reversal risks. In addition, the different types of carbon removals work under substantially different timescales and are thus not equivalent from a climate perspective. ZEP thus supports a



further disaggregated target, preventing non-permanent removals from undercutting investments in permanent removals.

#### Challenges and enabling actions for the EU climate ambition to 2040 and beyond

CCS, as a mitigation solution for industrial emissions, should be listed among the enabling factors to reach climate neutrality by 2050. All reliable modelling scenarios, including those from the Intergovernmental Panel on Climate Change (IPCC)<sup>1</sup> and the International Energy Agency (IEA)<sup>2</sup>, consider the deployment of CCS critical to reaching climate neutrality by 2050.

# How to improve incentives for climate action

Individual climate footprints can be reduced through a set of policy measures that support the ramp up of demand and create a market for low-carbon products such as through CCS and Carbon Capture and Utilisation (CCU) applications where CO<sub>2</sub> is stored in a manner intended to be permanent (i.e., so that emissions do not enter the atmosphere under normal use, including any normal activity taking place after the end of the life of the product). Notably, labelling can help consumers identify low-carbon industrial products with lower GHG emissions as well as to associate price differences between industrial products with different GHG emissions and climate impact.

# Scope and role of EU-wide carbon pricing instruments

ZEP supports an evolution of emissions trading in the EU that covers applications of CCU where  $CO_2$  is captured and stored in products (in a manner intended to be permanent, i.e., that emissions do not enter the atmosphere under normal use, including any normal activity taking place after the end of the life of the product), as per the revised EU ETS Directive. We further note that that the European Commission will analyse, in 2026, if and how other types of CCU should be included in the EU ETS – a decision regarding the possible inclusion of this type of CCU, in the meaning mentioned in the questionnaire, should be taken considering the findings of that report.

In addition, ZEP strongly supports the coordination/synchronisation of the EU ETS and UK ETS, as a mechanism to create a Europe-wide market for CO<sub>2</sub> storage that covers the European Economic Area and the UK.

#### General role of carbon removals

Tackling climate change will require a plethora of approaches. While removals must never be used as a substitute to emissions reductions, carbon removals are an essential part of that portfolio and necessary to counterbalance both residual and historical CO<sub>2</sub> emissions. It is thus essential that

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<sup>&</sup>lt;sup>1</sup> Intergovernmental Panel on Climate Change (2022). <u>Climate Change 2022: Impacts, Adaptation and Vulnerability</u>.

<sup>&</sup>lt;sup>2</sup> International Energy Agency (2022). <u>Carbon capture, utilisation and storage</u>.



removals do not preclude the much-needed increased efforts in emission reductions. With this in mind, ZEP considers that carbon removals play and important but limited role.

#### Relative contribution of nature-based removals and industrial removals

Both nature-based and industrial removals have an important role to play; however, a stronger reliance on industrial removals is needed as the LULUCF sink does not allow to achieve permanent removals, faces a higher risk of reversal and is decreasing. It is also important to guarantee that both types of solutions offer the same level of reliability regarding their corresponding climate benefit (i.e., in monitoring, reporting and verification).

## Barriers to carbon capture and storage technologies

The cost of CO<sub>2</sub> capture technology, public acceptance, regulatory frameworks, the availability of CO<sub>2</sub> storage, and economic signals (e.g., the price of carbon) are major elements impacting the deployment of CCS and CCU.

The EU ETS is the main vehicle to industrial decarbonisation in the EU, providing economic incentives for industries to make investments in line with the EU climate objectives. Notably, allowance prices are key to incentivise investments in CCS for hard-to-abate industries. With this in mind, the EU ETS market must be allowed to offer price signals that reflect the need for the decarbonisation of all economic sectors.

#### Carbon capture and use or storage

Reducing emissions, including through CCS and CCU, should remain the EU's priority, and they should be complemented by carbon dioxide removals.

ZEP further notes that the deployment of a robust European CO₂ transport and storage infrastructure should be prioritised as an enabler to the deployment of CCS, CCU, and CDR at scale.

# **About the Zero Emissions Platform**

ZEP is the advisor to the EU on the deployment of CCS and CCU – a European Technology and Innovation Platform (ETIP) under the European Commission's Strategic Energy Technologies Plan (SET-Plan).

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  $CO_2$  is stored in a manner intended to be permanent – can also contribute to this goal.

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