

## ZEP response to Climate Law

### Introduction

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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).

### *Low-carbon technologies will drive the transition towards climate neutrality by 2050.*

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ZEP supports the European Union's commitment to climate neutrality by 2050, defined as net-zero greenhouse gas (GHG) emissions by 2050 and welcomes the Climate Law's approach to 2050. To this end, carbon capture and storage (CCS) and carbon capture and utilisation (CCU) technologies play a crucial role. These technologies represent a readily available, cost-efficient pathway for decarbonisation of industrial and energy sectors in the European Union. As shown by several modelling scenarios [1, 2], large volumes of CCS will be needed for the EU to achieve climate neutrality by 2050.

The European Climate Law is establishing a framework for climate neutrality by 2050 and the European Commission has also announced plans to increase 2030 GHG emissions reduction targets. ZEP would like to stress that increased intermediate targets can only be met if readily available low-carbon technologies (CCS and CCU) are effectively deployed at scale within this decade.

The deployment of cross-border CO<sub>2</sub> transport and storage infrastructure in the European Union is crucial to enable large-scale decarbonisation [3] that will be needed to be climate neutral by 2050. Such infrastructure will unlock the benefits of CCS and CCU and substantially decrease emissions from energy-intensive industrial processes while transitioning towards low-carbon production. CCS is a crucial technology to support the production of clean hydrogen from natural gas. Producing large volumes of a low-carbon hydrogen will prove to be central towards building a hydrogen economy and the related infrastructure in the next decades.

In this respect, the European Climate Law gives an overview on how the monitoring towards 2030 will work, yet without outlining how a cost-efficient trajectory from 2030 to 2050 will be designed. A consistent and predictable legislative framework is necessary for private, long-term investments to be triggered for the energy transition.

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<sup>1</sup> European Commission, 2018. A Clean Planet for all A European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy. Available at: [https://ec.europa.eu/clima/sites/clima/files/docs/pages/com\\_2018\\_733\\_en.pdf](https://ec.europa.eu/clima/sites/clima/files/docs/pages/com_2018_733_en.pdf)

<sup>2</sup> IPCC, 2019, Mitigation Pathways Compatible with 1.5°C in the Context of Sustainable Development, page 134, available at: [https://www.ipcc.ch/site/assets/uploads/sites/2/2019/02/SR15\\_Chapter2\\_Low\\_Res.pdf](https://www.ipcc.ch/site/assets/uploads/sites/2/2019/02/SR15_Chapter2_Low_Res.pdf)

<sup>3</sup> ZEP report on "The Role of CCUS in a below 2-degrees Scenario", available at: <https://zeroemissionsplatform.eu/role-of-ccus-in-a-below-2-degrees-scenario/>

## ***Climate neutrality will also require the development of a range of greenhouse gas removal options.***

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While the European Climate Law remains technology-neutral and all solutions should be deployed, technologies for carbon dioxide removal will be needed to address residual emissions and must therefore be one of the tools at disposal to reach net-zero by 2050. CCS and CO<sub>2</sub> infrastructure are enablers for carbon dioxide removals and provide further support to a low-carbon transition for the European industry. Any CO<sub>2</sub> reduction technology needs to be valued based on accurate carbon accounting, covering all processes involved, including e.g. energy inputs and embedded emissions.

Removing carbon permanently from the atmosphere and storing or using it to achieve real climate change mitigation will need to be supported by an adequate regulatory framework and incentivised. In this respect, the Climate Law should take into account the principles of other EU legislations [4] aiming to net-zero GHG emissions by 2050.

ZEP notes that significant and continued investments will be required for CCS and CCU R&I [5] to develop and scale up its deployment at a competitive price. A sharp increase in the number of pilot and demonstration projects is therefore essential to bring costs of deployment down.

## ***Governance***

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The European Climate Law emphasizes the role of National Energy and Climate Plans (NECPs) to monitor national and collective EU progress towards the 2050 climate target. This reinforces the role of NECPs as a robust and transparent reporting legislative mechanism and a platform for Member States and the European Commission to cooperate and coordinate their action.

Finally, the European Climate Law is a central milestone of the European Green Deal, a growth strategy that aims to promote the European Union's leadership in global climate action. International cooperation within the European Union and other parties is essential to realise a significant global emissions reduction and deliver the commitments of the Paris Agreement<sup>6</sup>.

Maintaining a competitive European economy while ensuring a fair transition to a low-carbon one will require unprecedented action from all economic sectors and Member States, adequate policy frameworks and long-term investment decisions. The European Union is well placed to drive forward a sustainable agenda. ZEP welcomes the European Commission's intention to take strong action to reduce emissions across Europe by 2050. ZEP will be pleased to remain engaged in further conversations.

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<sup>4</sup> European Commission, "establishing the framework for achieving climate neutrality and amending Regulation (EU) 2018/1999 (European Climate Law)". Available at: [https://ec.europa.eu/info/sites/info/files/commission-proposal-regulation-european-climate-law-march-2020\\_en.pdf](https://ec.europa.eu/info/sites/info/files/commission-proposal-regulation-european-climate-law-march-2020_en.pdf)

<sup>5</sup> European Commission's communication on "United in delivering the Energy Union and Climate Action - Setting the foundations for a successful clean energy transition". Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1565713062913&uri=CELEX:52019DC0285>

<sup>6</sup> UNFCCC, "Paris Agreement, article 6". Available at: [https://unfccc.int/files/meetings/paris\\_nov\\_2015/application/pdf/paris\\_agreement\\_english\\_.pdf](https://unfccc.int/files/meetings/paris_nov_2015/application/pdf/paris_agreement_english_.pdf)