

ZEP position paper on the ETS revision

Critical steps to roll out Carbon Capture and Storage (CCS)

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The revision of the EU Emission Trading System (ETS) is a timely and critical undertaking. ZEP believes that the ETS should remain the principal tool for EU climate policy, providing a predictable, meaningful and robust carbon price and serving as a long-term driver for CCS. It should promote decarbonisation as well as effective funding of low carbon technologies – but due to the low price of allowances and issues with the structure of its funding mechanisms its impact on driving investment in CCS has been limited. **ZEP therefore supports both amendments to the ETS structure and a new approach to the funding facilities as critical steps to roll out CCS.**

With this in mind, ZEP welcomes the Council Conclusions on amending the linear reduction factor from 1.74% to 2.2%, and the recent agreement on the Market Stability Reserve (MSR) However we would strongly support timely action on additional measures to further strengthen the scheme.

ZEP would also like to highlight that a **final missing piece in the current ETS is the lack of support for technologies that deliver net negative emissions**, highlighted by the IPCC AR5 as a necessity for delivering deep decarbonisation such as Bio-CCS (CCS on processes fuelled by sustainable biomass). If negative emissions were rewarded, the EUA price, once high enough, could make Bio-CCS economically viable. Notably, the required EUA price for deploying CCS on e.g. bioethanol production is substantially lower than most other CCS applications. Especially in the case of bioethanol production, at present CO₂ is already captured at a large scale and at low cost, yet there is no incentive to permanently remove this CO₂ by geological storage.

In order to achieve the roll out of key low carbon technologies to the EU's climate objectives, the time is right to improve the funding facilities under the ETS. **ZEP strongly commends the establishment of an innovation fund available to both power and industrial sectors and welcomes the institution of the modernisation fund. However, to ensure the smooth and timely operation of the fund it needs to be built on lessons learnt from the NER300.** Analysis shows that one CCS project in the NER300 competition would have generated more low carbon electricity than all of the renewable generation projects awarded funding combined – and with less use of NER300 funds. If we can improve the funding structures, the rewards could be enormous. We therefore propose ZEP's plan for effective Innovation and Modernisation Funding overleaf.

CCS will be crucial to a resilient Energy Union with a forward looking climate policy.

Without CCS, the cost of decarbonising the power sector could be €2 – 4 trillion higher and some energy intensive industries would not be able to decarbonise at all. Globally, according to the IEA, CCS will need to contribute to 1/6 of the CO₂ emissions reductions required by 2050.

CCS creates jobs in Europe. ZEP's modelling shows that 330,000 jobs could be created and secured in fuel supply, CCS equipment manufacture, plant operation, CO₂ storage facility operation and CCS infrastructure for energy-intensive industries.

CCS is crucial to reconciling EU energy security with climate objectives. Deployed in power generation (coal and gas) and energy intensive industries, CCS will ensure that the EU uses an energy which is clean, affordable and reliable.

ZEP's Plan for Effective Innovation and Modernisation Funding

Scope:

- Demonstration projects under the innovation fund should target innovative technologies and business models, which are key for the decarbonisation of the power generation sector and heavy industries.
- The fund should aim at developing full-chain commercial scale CCS projects as well as part-chain projects that contribute towards the commercial deployment of the technology in the 2020s

Implementation:

- The innovation fund should be established as early as possible – if it starts in 2021 there would be a gap of a minimum of seven years from the last NER300 funding, at a critical moment for the funding of low carbon technologies.
- One option could be a **prolongation of the NER300 programme** through an amendment of the ETS Directive in order to allow the first calls well ahead of 2020.
- Alternatively a **bridge fund** between the NER300 and the innovation fund could be envisaged through using returned funds from the NER300, and/or the 50 million allowances for innovation projects as recently agreed during the MSR negotiations.
- Currently planned eligible projects should be accommodated within the programme, given the long lead times.

Project assessment:

- CCS should receive a **fair opportunity in the Innovation Fund – both for industrial and power applications** – with a focus on deliverable projects.
- The **specificity of CCS projects** (capital intensive, long lead times) must be taken in due account and a degree of inbuilt flexibility should be ensured.
- **CCS projects should qualify if there is a realistic chance that the project will continue.** This means that indicative political support from Member States should be accepted when submitting to the EIB, not just full endorsement, if other guarantees are available. The current rules meant that CCS projects in Poland and Romania (Belchatow and Getica) were not eligible for NER300.
- The best way to select projects in both the innovation and modernisation funds would be to **rank them against concrete criteria** - in the power sector on the basis of generation of low carbon electricity and in the industry sector on the production of a low carbon output (e.g. per ton of cement or steel) and on CO₂ reduction efficiency. Previous assessment criteria in the NER300 have resulted in a distorted award process – in practice cost per tonne of CO₂ stored was used which did not reward clean technologies.

What eligibility criteria could be considered in both funds?

- *Storage and transport infrastructure delivered;*
- *Levelised cost of low carbon electricity generated;*
- *CO₂ emissions reduced;*
- *Cost per unit of low carbon product, i.e. low carbon cement, steel;*
- *For CCS projects – ranking not just on thermal efficiency but also on CO₂ reduction efficiency.*

- Finally, **transparency will be absolutely key**. In the first round of the NER300 the EIB did not share information with project sponsors, which meant that they could not react and amend plans. When it comes to the modernisation fund, the EIB should ensure that funding is not used for investments that do not further promote EU decarbonisation objectives.

Funding arrangements:

- CCS projects should be **protected against EUA price fluctuations** by setting up a 'Guarantee Fund' to ensure compensatory funding when EUA price falls below a minimum threshold – a determined 'strike price' – and the Innovation Fund fails to deliver the necessary funding.
- There should also be **flexibility as regards the current cap on EU funding** at 50% eligible costs and for 15% of the total funding available. In certain cases a higher share could be covered where projects have community wide benefits. In addition, the fact that CCS projects tend to be capital intensive compared on a project by project basis with RES projects – although cost effective overall - means that at least 50% of the funding should be kept for CCS projects.
- **Both capital and operating costs should be made eligible for funding**, in line with Article 10a (8) of the ETS Directive – which is currently not the case in the NER300. This would ensure dispatch from CCS plants and compensation for first movers.
- The Innovation Fund should be able to **complement funding from national support programmes or be blended with funding from other EU sources**. These could include:
 - ETS allowances from the NER non-allocated in 2020 and free allocations allowed to plants that will close before 2020, and allowances under article 10c. The allowances could be monetized or used as collateral to leverage financing at an agreed carbon price;;
 - The Modernisation fund;
 - The European Fund for Strategic Investment;
 - Structural Funds.
- **A cluster element in the Innovation Fund** should be introduced to target infrastructure facilities for potential CCS projects as "enabling infrastructure". Strategic collaboration between Member States in developing shared infrastructure and economies of scale would significantly drive down the costs of CCS deployment.