

European Trade Union Confederation
Boulevard du Roi Albert II, 5
1210 Brussels
Belgium
Register ID number: 06698681039-26

The ETUC response to the EC consultation on “The European Commission’s Consultation on CCS”

For several years the ETUC has refused to frame the climate change debate as a binary choice between either the protection of the environment, or that of an inclusive economy that is a creator of employment. Maintaining and creating quality jobs, and protecting and reinforcing the European Social Model remain its absolute priorities but at the same time, keeping global warming below the threshold of 2°C meets the basic requirements for the protection of the environment as well as the need for solidarity today and for future generations. The union movement is unambiguous in this aim. In this period of economic crisis, the ETUC reiterates strongly that the only feasible way to reconcile the two ambitions is through a ‘Just Transition’.

For the ETUC, CO₂ Capture and Storage (CCS) is a strategic technology tool to ensure a Just Transition towards a low-carbon economy in Europe and globally¹. We recognise that there are different national debates on CCS and reiterate the importance of public and democratic acceptance of new technologies.

While the European Commission’s Communication on CCS technology reaffirms its critical role in meeting the EU’s energy, climate and societal goals, it is largely devoid of an analysis of the economic and societal case for CCS deployment.

Stating that CCS is not only “vital for meeting the Union’s greenhouse gas reduction targets”, it provides a “very visible link between jobs in local communities and continued industrial production.” However, a word search finds only that one reference to “jobs”, no comment on economic or fiscal benefits, and one reference to “skills”. On the other hand, national policies (e.g. in The Netherlands, UK) make frequent reference to the wider economic arguments for CCS. Furthermore, successive ETUC and sectoral studies have considered the potential employment impacts in the power and industrial sectors of various low-carbon technologies. These studies confirm the importance of CCS as a part of that low-carbon technology arsenal, especially for energy intensive industries².

¹ Resolution on Energy Strategy for Europe 2011-2020 (December 2010): <http://www.etuc.org/a/7952>

² ETUC-EMF-EMCEF-Syndex (2010): <https://docs.google.com/file/d/0B9RTV08-rjErQ0hPS1poTExCeFE/edit?pli=1> or EPSU-EMCEF-Eurelectric (2011): <http://www.epsu.org/a/7234>

Currently Europe is falling behind countries such as Canada, Australia, China and the U.S. in the demonstration and deployment of CCS. In the past 12 months Europe has been unable to deliver any large-scale CCS demonstration projects. There was deep disappointment that no projects were selected in the Phase I of the 'NER300' – despite the fact that it was set up expressly to “help stimulate the construction and operation of up to 12 commercial (CCS) demonstration projects” (Article 10a.8, EU ETS Directive).

The EU's current CCS deployment strategy has stalled. It combines the ETS carbon price signal with financial support through the NER300 competition and the European Economic Recovery Programme. However, as the EU's Communication, *The Future of Carbon Capture and Storage in Europe* (2013) acknowledges, at current ETS prices of c. 5 euros per tonne, delivering NER300 revenues at a fraction of initial expectations, “no rationale exists for economic operators to invest in demonstration CCS.”

If CCS is at a crossroads, it is time to rethink the CCS deployment strategy, the role of public funding and the potential benefits to national economies of an ambitious CCS programme. As CCS technology develops outside Europe, there is a danger that further delays will result in the need for European industry to purchase CCS technology from non EU countries in the future, as the Communication acknowledges.

Therefore, to restart the EU's CCS strategy, there appear to be two policy choices:

- Either, take immediate steps to establish an adequate price signal to create the impetus for investment in order to accelerate the low carbon modernisation of European industry, without at the same time threatening the sectors most at risk to carbon leakage.
- Or, reconsider the “division of innovative labour” between the EU, members states and the private sector, to ensure CCS happens, lest it will otherwise not take place. If a central challenge to business investment in this new technology is that it will not make investments that can create “public good”, as is eminently the case with CCS, then it is essential for the State to find an appropriate way to do so. A fresh “systems perspective” is required, which may involve the creation of new institutions or public-private vehicles, where the State is willing to shoulder risk, but where, if CCS deployment is successful, then to reap rewards through a return on its investment.

As the CCS Communication confirms, it is the lack of a solid business case that is still hampering the development of CCS in Europe, i.e. the absence of:

1. Transitional measures to cover the incremental costs of demonstration and early deployment projects over the lifetime of the projects
2. Long-term investor confidence, i.e. a strong and robust EUA price under the ETS
3. A robust regulatory framework that supports the business case for all investors in the CCS value chain: the current regime is not creating confidence.

All three factors have a strong interdependency and are a prerequisite for demonstration, post demonstration and the wider deployment of CCS.

For the ETUC, support for the deployment of carbon capture and storage depends on certain conditions: coordinated European investment in R&D, demonstration and deployment programmes, specific worker training programmes, and initiatives to promote public awareness and confidence,

which could be best ensured through public regulation of carbon transport and storage facilities.

1. Should Member States that currently have a high share of coal and gas in their energy mix as well as in industrial processes, and that have not yet done so, be required to:

- a. develop a clear roadmap on how to restructure their electricity generation sector towards non-carbon emitting fuels (nuclear or renewables) by 2050,*
- b. develop a national strategy to prepare for the deployment of CCS technology.*

The ETUC believes that Europe must aim at ensuring its energy independence and diversify its energy supply, through strategic planning and by means of an ambitious adjustment in favour of renewable energy sources and low-carbon energy technologies.

The ETUC actively advocates a European energy community. Such a community would respond to the inclusion of 'solidarity' and energy policy in the Lisbon Treaty, as well as ensure a basis for common and ambitious European energy policies, but must ensure that democratic control of the energy mix is firmly enshrined. It would support the collective development of the renewable potential around Europe's regions, a sustainable energy mix, the development of strategic energy technologies (as laid out in the SET-plan), and the building of infrastructure links and trust between countries on energy supply questions. It would contribute to greater European cooperation which would go beyond merely coordinated but fragmented national markets, with a strong role for public authorities. A full evaluation of the internal market for electricity and gas is needed. The ETUC supports the idea of a regulated and social European energy market economy, but rejects the proposals of the Commission to move forward with further liberalisation without being clear what the implications are for employment, investment, prices and reductions of greenhouse gas emissions.

National energy roadmaps are needed to chart the path towards decarbonisation of the economy and the deployment of low-carbon technologies, taking into account the employment and social effects, and involving social partners.

CCS should be fully integrated into this vision of a European energy policy. Therefore CCS should be explicitly mentioned in the EU 2030 Energy and Climate Policy framework, alongside binding targets on greenhouse gas emission reduction, renewables and energy efficiency. Member States should then be encouraged to develop roadmaps and national strategies for achieving clear decarbonisation targets. This includes actions to ensure the technological readiness of all key low-carbon technologies so Member States have the range of options necessary not only to reduce emissions cost-effectively, but address supply and demand variations.

Roadmaps should cover national economies at large – including the power sector, carbon-intensive industries (e.g. iron, steel, cement, refining) and other emitters such as transport and building, whose emissions reduction targets are also not achievable without CCS.

Given the cross-border impacts of national energy policy, roadmaps should consider the potential impact on other Member States, as the wider implementation of CCS will, in some cases, depend on the availability of shared transport and storage infrastructure. The impact at regional and European level should also be considered, where a Member State depends on imports or exports to balance its energy production/demand. Member States should provide the Commission with periodic updates on progress made in delivering the roadmap, as well as any changes.

2. *How should the ETS be re-structured, so that it could also provide meaningful incentives for CCS deployment? Should this be complemented by using instruments based on auctioning revenues, similar to NER300?*

The ETUC has consistently raised concerns about the functioning of the Emission Trading Scheme, notably the extremely weak price of carbon per ton (EUA). An adequate price signal must create the impetus for investment in order to accelerate the low carbon modernization of European industry, without at the same time threatening the sectors most at risk to carbon leakage. Revenue generated by the auctioning of emission quotas should in part support low-carbon industrial innovation and the anticipation of change for workers affected by the de-carbonisation of the European economy. Therefore, the ETUC has supported structural reform of the ETS to tighten the overall cap, alongside the CCAP proposal for an EU industrial innovation and Just Transition fund, as endorsed by the EP's environmental committee on the 19 June 2013. CCS is a key low-carbon technology in this arsenal. Therefore, CCS must be fully integrated into a holistic Energy and Climate Policy framework for 2030.

3. Should the Commission propose other means of support or consider other policy measures to pave the road towards early deployment, by:
- a. support through auctioning recycling or other funding approaches³
 - b. an Emission Performance Standard
 - c. a CCS certificate system
 - d. another type of policy measure

Yes. CCS is at the start of the learning curve, with huge potential to drive costs down. Early movers, however, will incur significant upfront costs, with little transport and storage infrastructure in place and an uncertain environment for long-term investment. As with any low-carbon technology, investors in CCS need a stable, predictable pathway for deployment. EU targets and support measures – particularly feed-in tariffs – have proved highly successful for other low-carbon technologies, such as wind, solar and energy efficiency.

Support measures are also needed to stimulate CCS in industry sectors beyond power (e.g. iron, steel, cement, refining) – now expected to deliver 50% of the global emissions reductions required from CCS by 2050 (IEA). Indeed, in some industries, it is the only means of achieving deep emission cuts. As several have almost pure CO₂ streams, this dramatically reduces the cost of CO₂ capture, while regional clustering different CO₂ sources to a transport network will result in significant economies of scale for both industrial and power projects. Yet many of these industries face a high risk of 'carbon leakage' due to the global trade of their products. Additional measures are therefore essential to create a long-term business case for CCS.

Even if ETS reforms strengthen the short-term CO₂ price signal, the EU should also now reconsider the "division of innovative labour" between the EU, members States and the private sector, to ensure CCS happens, lest it will otherwise not take place. If a central challenge to business investment in this new technology is that it will not make investments that can create "public good", as is eminently the case with CCS, then it is essential for the State to find an appropriate way to do

³ Taking into account complementarity with the European Structural and Investment Funds (ESI), as set out in the Common Strategic Framework annexed to the Commission proposal for a Common provisions regulation of the ESI Funds

so. A fresh “systems perspective” is required, which may involve the creation of new institutions or public-private vehicles, where the State is willing to shoulder risk, but where, if CCS deployment is successful, then to reap rewards through a return on its investment.

Europe should be maintaining its ambition to tackle climate change and develop a market advantage in low-carbon technologies and the ETUC is convinced that standard setting is a key tool to achieve this. As sulphur emissions have been drastically reduced through legislation and mandatory standards, the ETUC believes that European Emission Performance Standards should be considered.

4. Should energy utilities henceforth be required to install CCS-ready equipment for all new investments (coal and potentially also gas) in order to facilitate the necessary CCS retrofit?

Yes – the ETUC would support a requirement for CCS-ready equipment for all new coal and gas investments. As CCS is rolled out, this provision will ensure that obstacles to decarbonisation are reduced.

5. Should fossil fuel providers contribute to CCS demonstration and deployment through specific measures that ensure additional financing?

CCS is an end-of-pipe technology and should be supported by those who bear the emissions liability. However, the development of CCS will have profound and far-reaching benefits for society – not only complementing intermittent RES with a reliable supply of low-carbon energy, but creating and preserving jobs, skills and investment in a wide range of industry sectors. This suggests that support should come from a much broader base – including fossil fuel providers, utilities, governments and consumers.

6. What are the main obstacles to ensuring sufficient demonstration of CCS in the EU?

EU CCS demonstration projects remain viable and executable in several European countries. Their successful delivery depends on the European Commission and Member States having an active and supportive policy for CCS, aligned at all levels of Government, alongside a real commitment from the companies involved to take their responsibility to ensure that public research and development funds are used to deliver the technology as soon as possible in Europe.

The EU’s forward look at CCS in *The Future of Carbon Capture and Storage in Europe* needs to urgently include an analysis of the economic and societal benefits of CCS deployment. A word search finds one reference to “jobs”, no comment on economic or fiscal benefits, and one reference to “skills”. Yet Member States policies (The Netherlands, UK, etc) make frequent reference to the wider economic arguments for CCS. The EU should fill this knowledge gap as part of the wider case for fresh thinking on CCS deployment.

7. How can public acceptance for CCS be increased?

Greater effort is needed to inform the public about the potential of CCS, while acknowledging and responding to concerns about public health and safety. Initiatives to promote public awareness and confidence should be undertaken, which could be best ensured through effective public regulation of carbon transport and storage facilities. It is only through active engagement and transparency with all stakeholders that confidence will be ensured. The ETUC welcomes its new membership of the Zero-Emissions Platform in this regard.