



Position on the Proposed Net Zero Industry Act

The Negative Emissions Platform is an association representing a broad range of carbon dioxide removal (CDR) technologies. Our members are primarily technology companies, but also include project developers, investors, carbon marketplaces, and buyers of CDR. We are therefore uniquely placed to understand the needs of the CDR sector. This paper offers insights that we hope are useful in the policy making process.

General Remarks

The Negative Emissions Platform urges EU legislators to amend the European Commission's proposal for a Net-Zero Industry Act (NZIA) so that carbon dioxide removal (CDR) is considered a strategic net-zero sector. The Commission has missed a big opportunity to support an activity that [the IPCC has repeatedly confirmed is necessary](#) if the world is to meet the Paris Agreement's targets. Including CDR would make the NZIA truly "net zero", since the European Union will only achieve "net zero" emissions if atmospheric carbon is permanently removed.

NEP therefore urges EU legislators in the Parliament and the Council to seize the opportunity to include CDR fully in the NZIA and make it a truly "net-zero" piece of legislation.

CDR is clearly a strategic net-zero technology; Net zero can only be achieved with CDR

The science is clear: the world needs to dramatically reduce carbon emissions at an extraordinary pace in order to meet the Paris Agreement targets. This is where, as a society, our biggest efforts should be focused.

But the science is also clear that emissions reductions will not be enough. The world needs carbon removals if it is to reach net zero carbon emissions. The IPCC confirmed this in its 6th Assessment Report last year. A net-zero policy that focuses on emissions reductions and avoided emissions is not really a net-zero policy at all.

CDR is needed to help tackle hard-to-abate and residual emissions. And additional carbon removals will be needed if we are to go beyond net zero and reduce the levels of CO₂ in the atmosphere and go some way to reversing climate change. Europe has a particular historical responsibility in this regard. CDR is therefore inherently a strategic net-zero technology.

CDR is a major economic opportunity for Europe

Today we are emitting approximately 50 billion tonnes of carbon annually. The IPCC estimates that to reach the 1.5 degree Celsius goal by 2050, we will have to reduce emissions to 10 billion tonnes per year. If we are to reach net-zero globally, we will have to remove those 10 billion tonnes of CO₂ from the atmosphere. If the cost of removing a tonne can be brought down to \$100/tonne (it is currently much higher on average for industrial

CDR), that will make CDR a \$1 trillion/year industry (at least). If we are to go further and seek to reverse global warming, this number will be much higher.

It's a similar story when it comes to employment. Today, around 5,000 people work in CDR worldwide. This will need to become many millions by 2050 if CDR is to be climate-relevant.

An industry of this scale is one that the EU cannot afford to cede to other regions of the world.

The NZIA should include CDR

There is no cost to the climate - only benefit - associated with extending permitting provisions to CDR.

The NZIA offers specific benefits to deployers of “strategic net-zero technologies” - notably faster permitting processes for the infrastructure and facilities that will need to be built for large-scale emissions reductions, as well as capture and storage of CO₂. These benefits should be extended to carbon removal technologies. There is no maximum number of permits available, so there is no competition for permits between eligible technologies. Extending permitting benefits to CDR would not affect higher priority emissions reductions, renewable energy, or other projects.

Provisions making it easier and quicker to get permits for the deployment of projects must apply to CDR technologies too.

There is no reason to exclude CDR-related teaching and training from Net-Zero Industry Academies.

The same is true when it comes to Chapter V of the NZIA, which will stimulate the creation of Net Zero Industry Academies to ensure that there is a pipeline of qualified talent to work in cleantech sectors. If successful, this policy could bring enormous value to European cleantech deployment, and help ensure that large numbers of Europeans find high-quality and meaningful employment in fast-growing sectors. But European students should be taught about *all* net-zero technologies. If this is not done, the CDR industry in Europe will hit a big skills bottleneck in a few years' time.

Net Zero Industry Academies and other EU support for teaching and training related to net zero technologies must apply to CDR technologies too.

Using the IEA's TRL system as a filter for strategic technologies could stifle innovation and make the EU dependent on an external source of authority.

The NZIA categorises technologies by reference to the [International Energy Agency's Technology Readiness Level \(TRL\) system](#). The main beneficiaries of the NZIA are technologies with a TRL of 8 or above. Technologies with a lower TRL only benefit from “regulatory sandboxes” under Article 26. This is problematic for two reasons. Firstly, the rationale appears to be that efforts should be focused on technologies that are ready to deploy and scale quickly. But this could stifle innovation and needlessly reduce the speed of progress on carbon removals, given that there is not a finite supply of this regulatory support. Secondly, the TRL tool is outside the control of the EU, and there is therefore no mechanism for the EU to change the TRL of a technology that it believes is ready if the IEA has not got around to updating its TRL. In a context where success in tackling global warming is being counted in months, the EU cannot afford to outsource this kind of determination to the IEA.

NEP doubts that reference to a TRL system is helpful, but if the EU is determined to do this, it should either set up a nimble European TRL system instead, or include a mechanism to bring technologies (such as selected CDR technologies) into the NZIA scope that are considered strategic for other good reasons.

Storage provisions are a step forward but need calibration

NEP welcomes the NZIA's approach to CO₂ storage, which will be an essential part of the solution set. CDR technologies produce CO₂ in various forms for permanent sequestration (e.g. liquified gas, slurries, inert carbon in solid form, or various kinds of biomass). The setting of ambitious storage capacity targets is a good step forward. But storage should be envisaged for carbon in many forms. Moreover, availability of storage should not be an excuse for continuing to combust fossil fuels.

EU legislators should ensure that storage capacity is developed for various forms of carbon.

Importantly, carbon storage operators should not discriminate between sources of captured CO₂, including industrial point sources and carbon removal activities.

Conclusion

In conclusion, the NZIA presents a major opportunity to support the development of CDR technologies in Europe - technologies that are strategic in the fight against climate change and constitute a huge economic and social opportunity. The Negative Emissions Platform urges EU legislators to seize this opportunity.