

Brussels, 19 September 2023

OPEN LETTER

To deliver on “net zero”, the NZIA must support carbon dioxide removal technologies

Dear Members of the European Parliament ITRE Committee,
Dear Council Industry and Competitiveness Attachés,

Over recent months, Europe has once more experienced unprecedented temperatures accompanied by wildfires spreading across Southern Europe. These events further highlight the urgency of taking immediate action to address the climate emergency.

EU policy can be fundamental in correcting this course, setting itself on a path to achieving its climate goals, and promoting greater climate ambition globally. The Net-Zero Industry Act (NZIA) provides a great opportunity to do so, while boosting European competitiveness and supporting the scaling-up of key clean technologies required to reach climate neutrality.

However, the text proposed by the Commission falls short by not including **carbon dioxide removal (CDR) technologies in the definition of the net zero technologies that will benefit from the regulation**. This omission is paradoxical given that the deployment of CDR across the EU will be crucial to reach climate neutrality by 2050 and negative emissions thereafter.

We welcome the efforts made so far by the ITRE Committee and the Council COMP Working Party to improve the proposal. **We call on you to ensure CDR technologies are included in the Parliament and Council positions in light of the strong scientific and economic reasons outlined below**. We also recommend that the NZIA make clearer provisions for supporting low-TRL technologies to get to the market to stimulate innovation and support the advancement of carbon removal efforts.

The scientific case

In its [sixth assessment report](#) published last year, the Intergovernmental Panel on Climate Change (IPCC) made the case clear: **net zero is impossible without CDR**. The IPCC has stated that if we are to reach net zero globally, we will have to remove at least 10 billion tonnes per year by 2050. At present, we are removing 2 billion

tonnes per year of which the minority (0.1%) comes from highly-durable and permanent CDR¹.

This formidable task not only necessitates reducing emissions at a staggering rate but underscores the imperative of integrating CDR technologies into our toolkit of solutions. **To get to the scale needed, Europe and the world need to start acting now to begin growing the CDR sector. To delay action would undermine the EU's net zero climate objectives.**

CDR must not be confused with carbon capture and storage (CCS), nor with carbon capture and utilisation (CCU). While CDR, CCS and CCU are all part of the broader family of 'carbon management', they have different impacts on climate change due to their crucial divergence in source and destination of CO₂². **CDR is the only family of methods that leads to the generation of "negative emissions".**

The business case

The CDR sector is primarily composed of SMEs which frequently encounter unique challenges in building their business. Concretely, lengthy permitting processes and lack of access to finance have posed significant barriers to the adoption of their technologies, despite demonstrating their effectiveness and beneficial outcomes. These circumstances illustrate a lost chance for the EU, which holds substantial potential to significantly grow its permanent CDR initiatives.

For the CDR sector to effectively support net zero goals, the workforce in this sector must grow substantially compared to its current size. Consequently, there will eventually be a skills gap where the CDR sector would need the support of teaching and training. The Net-Zero Industry Academies would ensure that there is a pipeline of qualified talent to work in the CDR sector.

The EU currently risks falling behind other countries and regions in terms of the necessary large-scale deployment of CDR technologies. The US' Inflation Reduction Act has attracted multiple European CDR companies to invest and scale up their activities in the country, taking advantage of the favourable incentives provided. Not only is this a big missed economic opportunity for the EU, but it could undermine the EU's position as a technological and environmental frontrunner. **The provisions set out in the NZIA could therefore be pivotal for supporting the deployment of CDR technologies in Europe.**

¹ For more information see: [The State of Carbon Dioxide Removal](#) (2023)

² For more information see Carbon Gap's factsheet: [The difference between CCS, CCU, and CDR – and why it matters](#)

Shortcomings of the current TRL provisions

The main beneficiaries of the current NZIA proposal are technologies with a TRL of 8 or more under the International Energy Agency's (IEA) Technology Readiness Level (TRL) system. Whilst there are several CDR technologies that are close to or have already surpassed this level, we would caution against solely focusing on the IEA's system.

Only including technologies that are currently ready to deploy and scale quickly **could hinder innovation and unnecessarily impede the pace of advancement of carbon removal efforts. With new CDR technologies continuing to undergo constant innovation and development, it is imperative that the NZIA make clear provisions to support technologies with a lower-TRL that would help** shape the trajectory of the EU not only in the present but also for the foreseeable years ahead.

In conclusion, the NZIA presents a major opportunity for the EU to scale up the necessary technologies that will deliver on its climate objectives. **We urge you to consider these recommendations and include CDR in the scope of the regulation.** This addition would allow the Net-Zero Industry Act to **support the development of a European carbon removal ecosystem and truly deliver on the "net" in its net zero goal.**

Yours sincerely,

The undersigned

