



NEP 2040 Climate Target Position Paper

June 2023

The Negative Emissions Platform (NEP) is a Brussels-based partnership of European and international organisations focused on carbon removals. Our members are primarily technology companies, but also include project developers, investors, carbon marketplaces, and buyers of carbon removals. We provide a forum in which diverse like-minded organisations actively collaborate to improve political and public recognition of carbon removals.

Carbon dioxide removal is not only an important, but an essential, pillar in the world meeting the objectives set out in the 2015 Paris Agreement to limit the global rise in temperatures to 1.5°C. The UN International Panel on Climate Change (IPCC) has signified the need of CDR to address hard-to-abate residual emissions and neutralise any residual emissions to get us to net-zero by 2050. [1] With the UN World Meteorological Organisation's recent warning that the rise of 1.5°C might already be reached by 2027, the need to act is even more urgent. [2]

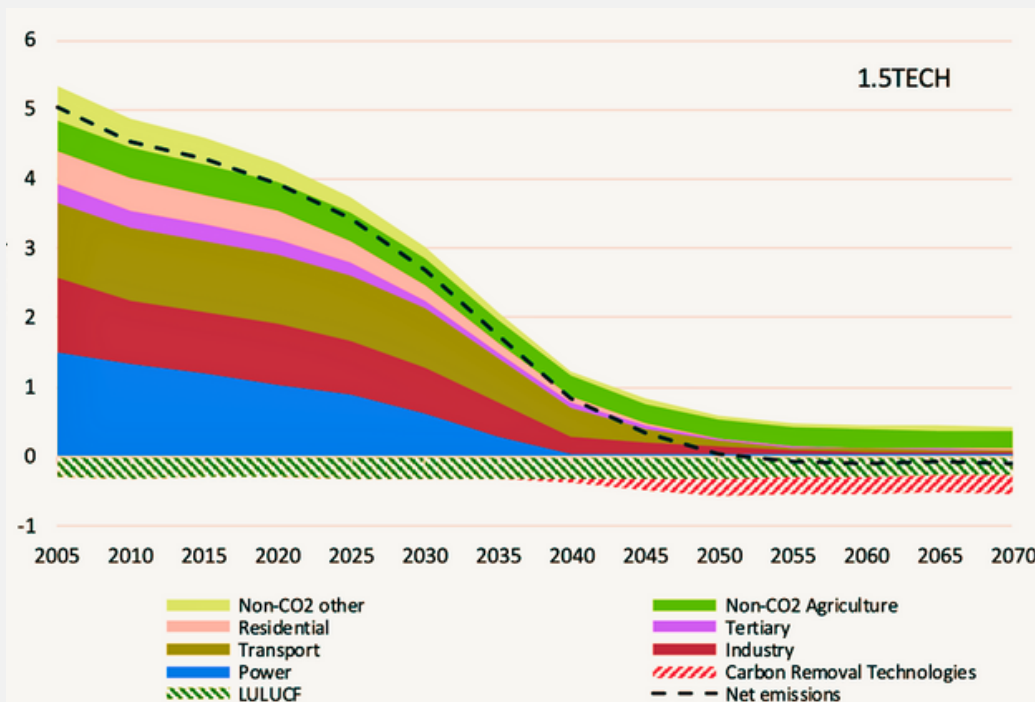
In its own modelling, the European Commission recognised the need of CDR to remove remaining emissions that are the hardest to eliminate.[3] The EU has recently made positive steps in this area through the proposal for a Carbon Removal Certification Framework (CRCF). The 2040 Climate Targets could establish a definitive requirement to concentrate on both emissions reductions and removals. Ultimately, the sector would require a compliance market to facilitate its significant expansion.

The EU is still a long way off before realising its goals for climate neutrality by 2050 and negative emissions thereafter. The next two decades will be vital in getting the EU on track. Establishing climate targets for 2040 represents a major opportunity for the EU to set ambitious carbon removal targets into EU legislation and therefore realising its climate ambitions.

[1] IPCC AR6 Synthesis Report (March 2023)

[2] WMO Global Annual to Decadal Climate Update (Target years: 2023-2027) (May, 2023)

[3] In-depth analysis in support of the Commission's Communication 'Clean Planet For All' COM(2018) 773 .



Source: PRIMES, GAINS, GLOBIUM

The graph shows the role of carbon removal technologies in reaching net-zero GHG emissions.

1. Emissions reductions & Carbon Dioxide Removal targets

The Negative Emissions Platform is pleased to see recognition for the role of CDR in the European Commission's public consultation on the 2040 Climate Targets. Whilst the priority should remain for the EU to continue to drastically reduce emissions, NEP urges the European Commission to recognise the role of carbon removals in an integrated net-zero policy framework and establish separate binding EU targets for carbon removals.

The EU must **clearly distinguish** between the two and clarify the different role each should play in upcoming EU policies. This would ensure continuous and ambitious mitigation efforts, whilst at the same time giving a strong signal to stakeholders on the need to deploy and scale up CDR activities.





Differences between emission reduction and carbon dioxide removal

Emission reduction:

Whereby countries, individuals or other entities reduce the release of greenhouse gases into the atmosphere. To realise the goals of the Paris Agreement, global emissions need to be drastically reduced and at an unprecedented speed.

Carbon dioxide removal:

Defined by the IPCC as activities that remove carbon dioxide (CO₂) from the atmosphere and durably store it in geological, terrestrial, or ocean reservoirs, or in products. Whilst emission reductions should remain the priority, there will come a point where hard-to-abate and possibly historical emissions will need to be actively removed for the EU and the world more largely to get to net-zero. CDR therefore plays a distinct but crucial role in the fight against the climate crisis.



2. Disaggregating targets

Both “nature-based” and “industrial” removals (such as DACS, BECCS, Biochar Carbon Removal, BiCRS, Enhanced Rock Weathering, ocean CDR, or permanent storage in materials and products) are part of the solutions needed to tackle the climate crisis. Whilst both have their place, the industrial carbon removal technologies that are being developed and deployed today are promising carbon removals for centuries and millennia. With CDR methods differing in terms of process, permanence and technological readiness, **carbon removal targets should therefore be disaggregated, reflecting both the durability and permanence of CDR activities.**

A breakdown in CDR targets requires a thorough analysis of expected hard-to-abate emissions in different economic scenarios from the European Commission and we would encourage this in the forthcoming impact assessment. Moreover, assessing the durability and permanence of CDR activities should be in consultation with the Expert Group on Carbon Removals and draw on the lessons learned from the CRCF.

The EU should set the most ambitious target possible that takes into account the unconditional need for CDR to address hard-to-abate emissions and possibly historical emissions to combat the climate crisis, while also considering the capacity of the sector to deliver on the target. To do this, **NEP supports an escalating target that gives a strong signal for the sector and the market to grow in the coming decades, and that acknowledges the EU’s long-term climate vision post-2040 for net-zero by 2050 and negative emissions thereafter.**



3. Tonnes vs Percentage-targets

Another element the European Commission should consider in its upcoming impact assessment is what type of target to set:

1. **Target based on absolute tonnage of CO2 removed**, e.g. the revised regulation on the land use, land use change and forestry sector (LULUCF) sets a 2030 EU-target of 310 million tonnes of CO2 removals in the sector;
2. **Target based on percentage of emissions to be addressed through CDR**, e.g. the draft California Carbon Dioxide Removal Market Development Act would require an 85% reduction in direct emissions by 2045, with the remaining 15% of emissions to be addressed through CDR.

NEP believes that:

A percentage-based target should be set to provide an overriding expectation of the need for hard-to-abate emissions to be tackled, but that, in a more flexible legal instrument, targets in tonnes per economic sector should also be set.

A percentage-based target would allow for consistency with emissions reductions targets, as well for global consistency and comparability among other countries and entities. The targets should be based on the amount of hard-to-abate emissions. In its impact assessment, the European Commission should conduct an explicit calculation and look at various scenarios on how much hard-to-abate emissions will have to be removed for the EU to reach its overall climate targets for 2040, 2050 and beyond. This would require an exercise to establish hard-to-abate levels for all sectors and Member States for different scenarios, in tonnes.

Given that the priority should be emissions reductions, a **carbon removals target should range between 10% to 15%**, escalating as the CDR sector scales up over the coming decades. Moreover, the EU may wish to adjust the CDR target that is linked to hard-to-abate emissions depending on what is happening in the area of emissions reductions.

[4] 2022 Scoping Plan for Achieving Carbon Neutrality, CA Gov, <https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp.pdf>



4. EU and Member States targets

EU Member States have different economic and socio-cultural circumstances as well as have vastly different environments (e.g. different geological environment, land-locked countries, countries with access to a sea/ocean). This will lead to differing activities and scale of CDR deployment in Member States.

Therefore:

NEP calls on the European Commission to propose EU-wide targets, while identifying the hard-to-abate levels. EU Member States should bear the responsibility for addressing their hard-to-abate emissions.

The European Commission should work with Member States in assessing the different routes for investing in CDR, ensuring that it is fair and proportionate for each Member State. One example could be the establishment of a new EU funding mechanism, drawing on lessons learned from the EU's Just Transition Mechanism.

Additionally, to ensure that Member States are contributing towards the EU-target, national energy and climate plans, scheduled for an update by 2024, should include the estimates and plans of long-term investment, and strategies for related research, development and innovation in the field of CDR technologies that are deemed necessary to address residual and historical emissions in each Member State.

Furthermore, direct government procurement could help Member States realise their carbon neutrality objectives. Establishing an Important Project of Common European Interest (IPCEI) for carbon removals could serve as a valuable funding mechanism for the research, development, and application of large-scale CDR projects. By utilising an IPCEI, governments can leverage their collective resources and purchasing power to create a supportive market environment for large-scale CDR projects, thus contributing to climate targets.



5. 2040 Climate Targets and broader EU climate policy

In setting specific targets for carbon removal, the EU will be paving the way for recognising CDR as a new pillar in its climate policy and therefore acknowledge the need to scale up CDR to ensure that the EU realises its net-zero objectives by 2050, and negative emissions thereafter.

Through the CRCF, a voluntary market for trading carbon removal units is needed to get the CDR sector started until 2030. Nonetheless, for the EU to achieve its goals within the set timeframe, a compliance market from 2030 becomes imperative to effectively expand the sector. Through a compliance market, carbon removals will be considered an integral element to the EU getting to net-zero. Additionally, the funds generated through a compliance market could be utilised to provide further financial support for the necessary expansion of the CDR sector.

Therefore, the European Commission's impact assessment should look at how a CDR target for 2040 will be integrated into compliance markets. This would involve a modelling exercise on how many removals we actually need based on projections for the number of hard-to-abate emissions we should expect to be removed in the coming years and decades.

The establishment of climate targets for 2040 presents a significant opportunity for the EU to prioritise both emissions reductions and carbon removals as part of a comprehensive approach to combating the climate crisis. To achieve climate neutrality by 2050 and subsequent negative emissions, the EU still has a long way to go. The upcoming two decades will be crucial in aligning the EU with its climate objectives. By incorporating ambitious carbon removal targets into EU legislation, the EU can seize this opportunity to realise its climate ambitions and ensure a sustainable future.

