

Certification of carbon removals – facilitating the market for renewable, bio-based products

Position Paper

Cepi represents the European pulp and paper industry and gathers, through its 18 member countries, some 895 pulp, paper and board mills across Europe directly, employing more than 180,000 people. Our sector is investing at a rate of more than €5 billion per annum, increasing our production volumes while simultaneously reducing our carbon footprint.

The European pulp and paper industry fully supports the EU objective of reaching climate neutrality by 2050 and is up to the challenge. We provide an ever-increasing range of solutions for today's and tomorrow's needs of our customers, other industries, and society at large. Our renewable and recyclable wood-based fibre solutions are made in Europe predominantly from European sustainably growing forests and recycled in Europe. Building on our position as world champions in recycling, we are set to increase recycling even further to boost the circular economy.

Wood-based products store CO₂ and substitute fossil-based and fossil-intensive materials and energy. Forests and forest-based products have an overall positive climate effect of -806 million tonnes (net) of carbon dioxide equivalent annually¹. This corresponds to 20% of all fossil emissions in the European Union! To continue doing so, political support will be critical.

The upcoming certification of carbon removals is an opportunity for policymakers to support measures enabling our sector to contribute – with sustainable forest management, decarbonised production, and product substitution – to reaching the 2030 and 2050 goals. **This position paper outlines the European paper industry's stance on key aspects of the carbon removals framework. We expect the Commission proposal to:**

1. Enhance carbon removals, but not replace, efforts to reduce fossil emissions

According to the Intergovernmental Panel on Climate Change (IPCC), all pathways that limit global warming to 1.5°C will involve the use of carbon removals. **The solutions to remove and store carbon from the atmosphere cannot compensate for delayed emissions reductions in other sectors.** Reducing fossil emissions should continue to be the priority of the EU climate framework, followed by the need to enhance removals. The carbon removal certification could help Member States to reach their LULUCF targets.

The upcoming certification should ensure all wood processing industries', including the pulp and paper industry, have access to sustainably-produced raw materials. Any future regulation should enable wood availability for the manufacturing of multiple products (such as paper for printing, tissue, carton for packaging, textiles, composites, building materials) that store carbon and/or have a substitution effect.

2. Favour biogenic carbon and distinguish it from recycled fossil carbon

The upcoming certification, and all subsequent or linked policies and regulations, should be explicit about different types of sustainable carbon sources. **Sustainable carbon sources should be an**

¹ P. Holmgren, Climate effects of the forest-based sector in the European Union (2020)

umbrella term, which includes several well-defined sub-categories. Policymakers should use science-based terminology to promote the capture and the use of renewable carbon in the economy, which will contribute to reaching climate neutrality by 2050. **A clear definition of renewable carbon is needed.**

Renewability is the ability of a natural resource to replenish and recover over time (as defined by the draft of ISO 59020). **Renewable carbon is carbon that is part of the biogenic carbon cycles** that substitute the use of any additional fossil carbon. Negative emissions are only possible while capturing those forms of carbon that originate from non-fossil sources. Capturing fossil-based CO₂ is also important, but does not lead to negative emissions, only reduced emissions.

3. Promote renewable, bio-based products and materials

At the moment, the Commission seems to interchangeably use terms and equate all forms of fossil and non-fossil sustainable carbon with renewable carbon. Sustainable carbon sources include sustainably-sourced renewable bio-based carbon, carbon originating from technological CO₂ capture with two sub-categories: biogenic and fossil CO₂, and recycled carbon from non-renewable sources.

The focus of all EU policies should be on phasing out the use of fossils and promoting substitution and material and energy efficiency to reach the climate neutrality target. In order to strengthen the European economy's resilience, the bio-based industries, together with agriculture and forestry, should be made an indispensable part of the EU's geopolitical strategy. The EU could improve its security of supply by ensuring a predictable regulatory framework to facilitate the industry's access to sustainable, home-grown raw materials and energy sources. **A predictable framework is required in order to enable the investments needed to reach climate neutrality.**

Cepi's position is further explained in the following pages.

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Certification for carbon removals – policy recommendations

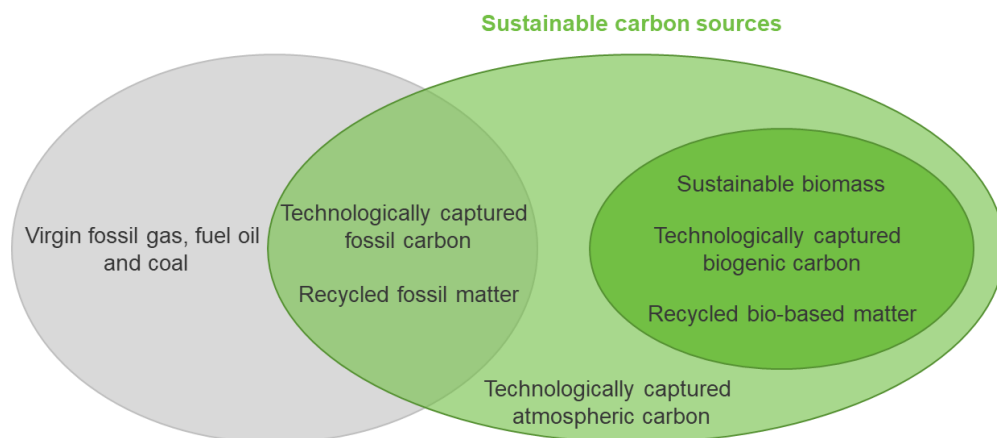
The key to appreciating the large contributions of forests and the forest-based sector is the perspective of an integrated and circular bioeconomy. CO₂ is removed from the atmosphere in very large quantities and stored in growing forests. Part of this carbon is then stored in a variety of forest products before re-entering the natural biogenic carbon cycle.

In the context of the upcoming certification for carbon removals, Cepi makes policy recommendations for an enabling policy framework. **Policymakers should consider the following solutions, ensuring the pulp and paper industry's contribution to reaching climate neutrality with sustainable forest management, decarbonised production, and product substitution:**

1. Recognising renewable carbon stored in products and its substitution effects

The overall climate effect of prevented fossil emissions by substituting fossil-based materials and fossil energy equates to -410 Mt CO₂e/yr². The upcoming certification should recognise this contribution of renewable carbon to climate neutrality. The upcoming certification, and all subsequent or linked policies and regulations, should be explicit about different types of sustainable carbon sources. **Sustainable carbon sources should be an umbrella term, which includes three well-defined sub-categories:**

- Renewable carbon
- Recycled carbon (coming from non-renewable waste streams)
- Carbon originating from technological CO₂ capture with two sub-categories: biogenic and fossil CO₂



A clear definition of renewable carbon is needed. The terminology of sustainable carbon sources must be standardised across various pieces of EU legislation. From climate and energy policies, such as the Renewable Energy Directive (RED) or the delegated acts on renewable fuels of non-biological origin, to the chemicals and materials legislation, the definitions should be consistent. The RED already distinguishes bio-based renewable fuels from recycled carbon fuels (liquid and gaseous fuels that are produced from liquid or solid waste streams of non-renewable origin).

The cycles of biogenic carbon and fossil carbon should continue to be treated differently as is already the case in CO₂ calculations, bookkeeping and the EU Emissions Trading System (ETS). Biomass is a renewable resource. At its end of use, carbon in bio-based products can enter

² P. Holmgren, Climate effects of the forest-based sector in the European Union (2020)

recycling systems or return to the environment (see for example the application of biochar to improve the properties of the soil). Besides additional emissions (e.g. from processing or transport), the emitted carbon corresponds to the carbon taken up by the biomass during its growth. Thus, the pattern of biogenic carbon use is circular by nature.

If certification for products is to be developed, it could be based on existing tools such as the Product Environmental Footprint Category Rules or the Framework for Carbon Footprints for Paper and Board Products (Cepi Ten toes). Existing carbon footprint protocols and frameworks (e.g. ISO/TS 14067:2013 and the WRI/ WBCSD GHG Protocol Product Standard) typically require that carbon removals are included in the calculated Carbon Footprint and reported separately. Given the complexity of reporting, the upcoming certification should be aligned with EU methodologies, for example, using standardised methods like Life Cycle Assessment/Carbon Footprinting (ISO 14040 and ISO 14067) when calculating climate benefits of the substitution of fossil products with harvested wood products. This should also be applied when calculating different duration of carbon storage³.

Recommendations

- Align the upcoming certification with existing EU methodologies for assessing the climate benefits of the substitution of fossil products with harvested wood products in order to calculate the positive substitution effect of harvested wood products and carbon footprint protocols
- Develop separate certificates for natural removals (with specific criteria), carbon capture and biogenic carbon stored in products
- Develop a clear and comprehensive set of definitions for all categories of sustainable carbon sources: i) renewable carbon, ii) recycled carbon (coming from non-renewable sources) and iii) carbon originating from technological CO₂ capture with two sub-categories: biogenic and fossil CO₂

2. Incentivising carbon storage and removals

Pulp and paper mills are potential application sites for carbon capture, storage (CCS) and utilisation (CCU). Negative emissions can be achieved by combining bioenergy production with carbon capture, use and storage (BECCUS) but a regulatory framework is needed in order to incentivise the deployment of this technology.

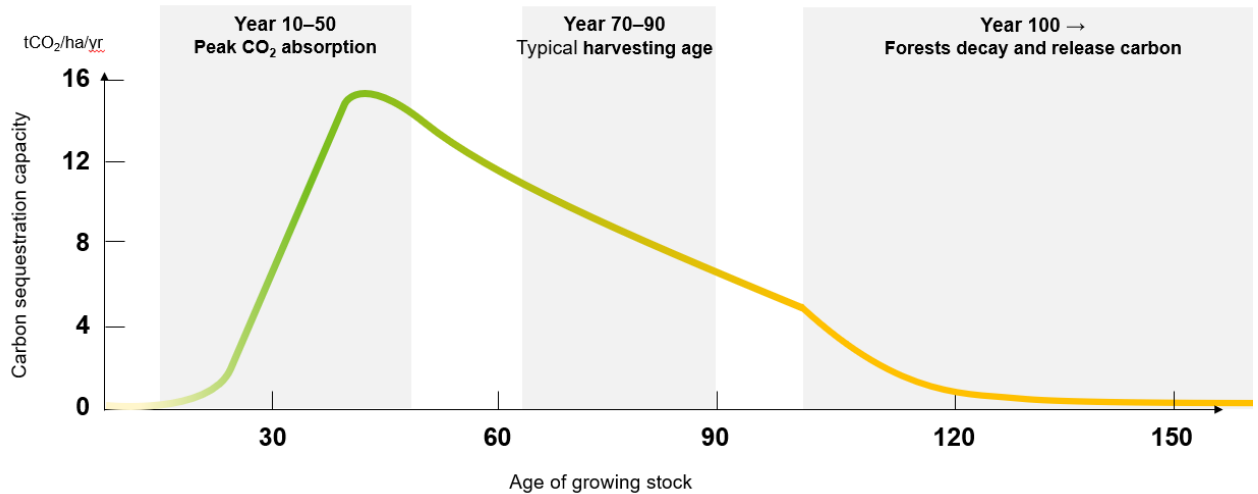
In the “Fit for 55” package, there is a positive proposal for the revision of the EU ETS Directive establishing that surrender obligations do not arise for CO₂ emissions that are stored in a storage site or end up bound in products. By guaranteeing a recognition of captured sustainable carbon under the EU ETS Directive, investments in carbon removal technologies could be incentivised, while captured biogenic carbon is accounted for under the LULUCF Regulation.

The EU climate policy framework should consider that products and energy from forests are just as central to climate change mitigation as large and growing forests that absorb and store carbon. Focusing exclusively on the vulnerable and non-permanent forest carbon sinks would lead to reduced raw materials availability for the forest sector, which would strongly impact its ability to deliver wood-based products to society and therefore its contribution to climate change mitigation.

³ Metsäteollisuuden tuotteiden ilmastovaikutukset (2020) VTT

It would also increase "harvest leakage", in other words, pressure on the use of forests outside Europe.

An example of carbon sequestration capacity of growing stock in forests of Northern Europe



Considering this holistic assessment of the climate benefits of forests and forest products, the manufacturing industry should be the holder of the certificate linked to storage and/or substitution related to products. Linking the ownership of the certificate to the actor that enables the storage in the product could be a safeguard against the concern of having a “lock-in” effect for carbon in the forests and consequently reduced raw materials availability.

Recommendations

- Incentivise investments in carbon removal technologies by guaranteeing a recognition of captured sustainable carbon under the EU ETS Directive, while captured biogenic carbon is accounted for under the LULUCF Regulation.
- Consider that the entity responsible for maintaining carbon sink or providing carbon removal should be the certificate holder.
- Ensure that the capture of biogenic CO₂ remains voluntary as different production plants have their own specific features and are often in symbiotic relationships with other industrial plants.

3. Enhancing the carbon sink provided by vital forests

The certification of carbon removals by forests could be a useful tool to further enhance the contribution of the sector to climate change mitigation, on the condition that the overall system does not exclusively focus on the sink function at the expense of storage and substitution benefits.

The certification of forest removals should start from activities for which it is easier to establish a clear baseline, namely afforestation and reforestation after damages. Increasing the forest area in Europe is a win-win solution in the long-term because it has the highest potential for enhancing removals, if an area is sustainably managed afterwards. The Commission could draw inspiration from existing projects on certifying removals linked to afforestation and restoration, such as the French label “[Bas Carbone](#)”.

For what concerns forest management, Cepi questions the added value of introducing new concepts such as “enhanced sustainable forest management” as mentioned in the Commission’s

Communication⁴. Active and sustainable forest management (SFM) is essential in order to protect forests from the effects of climate change and avoid increased disturbances endangering the permanence of carbon sinks whilst ensuring the supply of climate-friendly raw materials, and should therefore be supported. By active sustainable management Cepi means management adapted to local conditions ensuring regeneration and increased growth, as well as the provision of wood-based products, while taking into consideration other values and ecosystem services, such as biodiversity and recreation. This will prevent the sink's saturation in the long-term while enhancing storage and substitution effects. Increased attention should also be paid to the prevention of disturbances and calamities resulting from changing climate conditions. Adaptation to climate-stable and productive forests through sustainable management should be a priority.

The establishment of a certification system for forest removals must be accompanied by a thorough impact assessment detailing the potential impact on raw materials availability and, consequently, the effects on the development of the EU forest-based circular bioeconomy.

Recommendations

- Carbon removals certification could help Member States reach their LULUCF targets.
- Initiate a carbon certification system for afforestation and reforestation projects as a priority.
- The establishment of certification for “enhanced sustainable forest management” requires further clarification and a thorough assessment of the potential impact of a certification system on the development of the EU forest-based bioeconomy.

4. Creating a stable policy framework

A stable policy framework will ensure the contribution of bio-based products towards Europe's climate neutrality by 2050. Carbon removal certification can be seen as a basis for creating a market for biogenic CO₂. Such a market should not be used for compensating fossil emissions in other sectors.

When integrated in the legislation, there would be new options to account for negative emissions and financing investment in carbon removals. The Commission's proposal is needed in order to recognise the substitution effects of renewable, bio-based products. It can be integrated in the LULUCF Regulation.

Biogenic carbon is accounted for in LULUCF hence why emissions from sustainable forest biomass are zero-rated under the EU ETS Directive. Technological carbon removals are not integrated in any specific piece of legislation. Negative emissions/biogenic CO₂ emissions should continue to be accounted for in the LULUCF Regulation and recognised in the EU ETS Directive.

The EU ETS's Innovation Fund could, nevertheless, potentially offer financing opportunities and drive the implementation of CCS schemes. IEA Bioenergy⁵ mentions that deployment of BECCUS will require public support at several levels, for example, European and national. There is a need for financing to de-risk and/or co-finance industrial large-scale investments.

⁴ European Commission Communication on Sustainable Carbon Cycles, COM(2021)800 final.

⁵ Deployment of BECCS/U value chains. Technological pathways, policy options and business models (2020) IEA Bioenergy

Any legislation related to carbon removals and the use of recycled carbon should use the same set of definitions and requirements.

Recommendations

- Ensure that the LULUCF Regulation remains the core legislation for the accounting of biogenic emissions – technological or natural.
- In the context of EU legislation, decouple the accounting of renewable carbon under LULUCF Regulation from financing of technological carbon removals which will be needed towards 2050, while fossil emissions steadily decrease.