

Potential impacts of EU policies on biomass supply and markets

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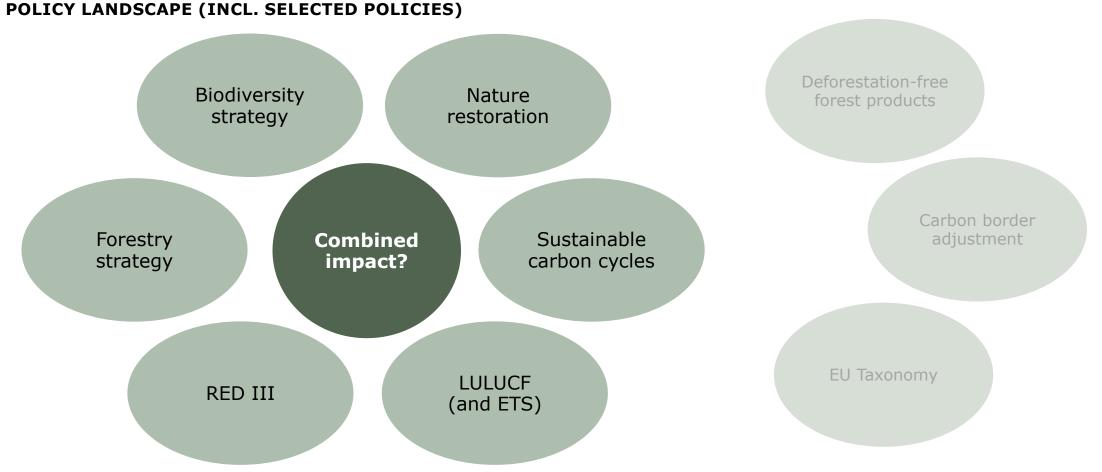
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INTRODUCTION

Fit for 55 policies are foreseen to have a significant impact on sustainable forest management and biomass supply in EU countries







Biodiversity Strategy is targeting to expand protection areas

POLICY OVERVIEW

- EU Biodiversity Strategy is targeting to protect nature and reverse degradation of ecosystems
 - Target is to put Europe's biodiversity on the path to recovery by 2030
- The main objectives are
 - to protect at least 30% of land and 30% of sea in EU, of which one-third should be strictly protected. Designated areas should either be under Natura 2000 or national protection schemes
 - to restore degraded ecosystems through legally binding targets
- All remaining primary and old-growth forests must be strictly protected
- As part of the Strategy, a proposal on legally binding nature restoration targets was published in June 2022 (Nature Restoration Proposal)





Biodiversity Strategy may significantly restrict biomass supply, but this shall depend on implementation on national level

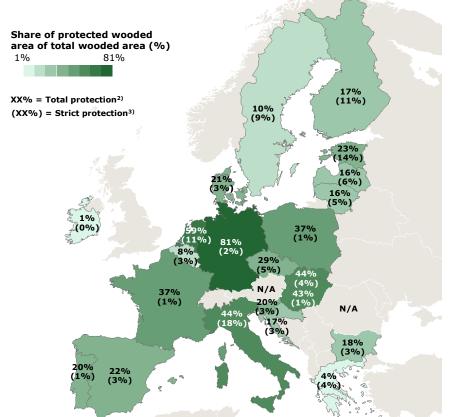
- The strategy may restrict biomass availability through increased protection of forest land including remaining primary and old-growth forests
- To what degree biomass availability will be impacted depends on the current protection level and if the protection targets are implemented fully in each Member State or in EU as a whole
- Biodiversity Strategy is not legally binding, and Member States are not obliged to enforce the targets



BIODIVERSITY STRATEGY

Share of protected forests is significantly higher in Central Europe compared to the Baltic Sea region, but clearly lower when it comes to strict protection

SHARE OF PROTECTION IN FOREST AND OTHER WOODED LAND¹)



¹⁾ https://foresteurope.org/wp-content/uploads/2016/08/SoEF_2020.pdf

²⁾ Total protection includes soft and strict protection, i.e. classes "No active intervention", "Minimum intervention", "Conservation through active management" and "Landscape". protection refers to classes "No active intervention" and "Minimum intervention"

- Although the share of protected forest land is relatively high in Central Europe, the share of strictly protected forests is remarkably higher in the Nordics
- In Finland and Sweden, the majority of protected forest areas are strictly protected, but other protection areas should be expanded
- In Central Europe, there is a significant need to increase strictly protected areas





Nature Restoration Proposal introduces legally binding targets for ecosystems' restoration

POLICY OVERVIEW

- Nature Restoration Proposal introduces legally binding targets to restore ecosystems, and ensure biodiverse and resilient nature within EU
 - The proposal complements the Birds and Habitats Directive by setting deadlines to meet targets, and put restoration measures into place both in and outside Natura 2000 areas
- In the initial proposal issued by Commission in June 2023, restoration measures should cover at least 20% of EU's land areas by 2030 and by 2050 all ecosystems. In addition, certain habitat types should be restored to good condition when this has been reached
- During summer 2023, Council and Parliament adopted their changes to the proposal, which will be the foundation for trialogue negotiations during second half of 2023. The policy will likely be adopted in early 2024
- The Council and Parliament positions vary from the Commission proposal and the final outcome of the policy is still unclear





Nature Restoration Proposal will probably decrease biomass availability, but it is unclear to what extent

- The Commission Proposal would have the biggest impact on biomass availability, the Council Proposal moderate impact and the Parliament proposal the lowest impact
- Needs for additional habitat areas to reach the favourable reference area for each habitat type will be the key factor defining the policy's impacts on biomass availability
- Actual needs for restoration will be defined by Member States in restoration plans, which will be submitted to Commission





LULUCF regulation sets legally binding targets for carbon sinks in the land and forest sector

POLICY OVERVIEW

- Current LULUCF Regulation was adopted in early 2023 to make sure that the sector contributes to increased ambitions set in the Fit for 55 Package. The aims are to
 - set binding targets for increased net greenhouse gas removals in the LULUCF sector for the EU and each Member State
 - increase the flexibility and simplify the accounting
- New EU target of net GHG removals in the LULUCF sector is -310 MtCO2e in 2030
- Targets by Member State are defined as the gap between the EU target and the average GHG net removals 2016-2018 reported by each Member State, adjusted with each Member State's share of the land area in EU
- For the years 2026-2029 GHG net removals shall not exceed the budget for each Member State during this period
- LULUCF is legally binding for Member States





LULUCF targets put pressure to restrict wood harvesting at national level

- If Member States cannot decrease emissions from other land categories than forests, they may be forced to decrease wood harvesting to compensate for emissions in other sectors
- Decreased harvesting will mean less wood supply for wood industries and less forest-based biomass for bioenergy
- LULUCF targets are binding at the national level, but they do not directly impact on individual forest owner
 - Impact on biomass supply will depend on potential policies/restrictions set by Member States
- The set-up and targets of LULUCF (and ETS) are defined up to 2030
 - The climate policy architecture beyond 2030 is still uncertain





Forest Strategy includes some elements, which could have positive impact, and other elements with negative impact on biomass supply

POLICY OVERVIEW

- Forest Strategy is built upon Biodiversity Strategy. The key objectives include
 - planting 3 billion additional trees in EU by 2030
 - promoting the use of sustainably harvested wood in the construction sector
 - boosting sustainable bioeconomy
 - $\ -$ improving monitoring of the state of the EU forests
- The Strategy is not legally binding, but it will provide guidance for future policy processes and legislations
 - Commission has published guidelines for biodiversity-friendly forestation
 - Closer-to-nature guidelines were released in June 2023



1) Skogforsk (2017), Continuous-cover silviculture at landscape level



The emphasis seems to be on elements with negative impact on biomass supply

- Forest Strategy may restrict biomass availability, as it suggests significant changes to forest management practices
 - For example, clearcuts are advised against, and continuous cover forestry is promoted. Some Nordic studies indicate a yield reduction of around 20% in the continuous cover forestry stands compared to clearcut and planted stands
- Even though the Strategy also promotes the planting of 3 billion additional trees by 2030, these are not meant to be used in the forest industry
- Recommendations that would reduce the productivity of forests are not aligned with the objectives to promote sustainable bioeconomy and wood-based construction





Recently adopted REDIII regulation shall allow the use of typical feedstocks by bioenergy sector, having limited impact on biomass availability

REDIII

FEEDSTOCK GUIDELINES

Primary wood biomass	Sawlogs/veneer logs Pulpwood Fuelwood Branches Tree tops, leaves, needles Stumps and roots	$\bigotimes^{(1)}$
Solid forest industry residues	Bark Sawdust Woodchips	\bigotimes
Exemptions	Pre-commercial thinnings Damaged wood (salvage) Recycled wood Landscape care wood	\mathbf{Q}
Allowed Allowed following cascading pr Not eligible for financial suppo Prohibited		

Forest supply

- Harvesting residues and round fuelwood are allowed
- Wood from pre-commercial thinnings, damaged wood and landscape care wood are allowed

Residue supply

- Bark is allowed
- Woodchips and sawdust are allowed based on the cascading principle. However, both assortments may have alternative use in wood-based panels and pulp sectors
- Recycled wood is allowed

Potential flexibilities

- Further changes (restrictions) may be implemented during rollout of legislation by Member State
- Member States can deviate from official cascading principles due to market specifics

1 Categorised as industrial roundwood, but to be assessed according to local industry and markets regarding cascading principle



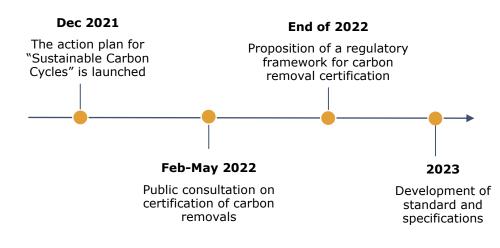


Sustainable Carbon Cycles initiative is targeting to accelerate the development of voluntary markets for forest carbon credits

KEY OBJECTIVES

The key objective of the Sustainable Carbon Cycles Communication is

- to upscale the carbon sequestration in natural ecosystems and industrial value chains within EU
- to set up a framework for carbon removal certification that will assure the quality of carbon removal initiatives launched in voluntary carbon markets



Carbon farming (CF) will be rewarded both in the agriculture and forest sectors (e.g. afforestation/reforestation, agroforestry and restoration of peatlands).

To promote carbon farming, Commission shall develop

- standard methodology of CF reporting and monitoring (Carbon Removal Certification)
- funding that can be provided by EU (for agricultural CF) or by Member States (for forest CF)¹
- Increase the knowledge and create a database about emissions and removals accessible by all land managers in EU

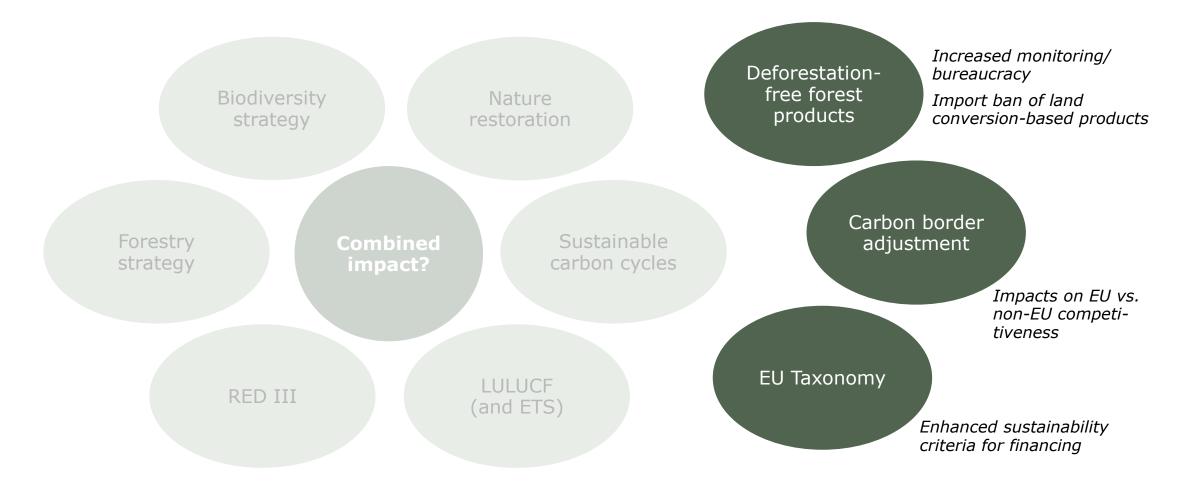
POTENTIAL IMPACTS ON BIOMASS MARKETS

- Funding and standardisation of CF by EU is targeted to accelerate the development of voluntary carbon markets
- Carbon credits could become an additional product that forest owners could sell
 - High price level for CF credits would lead to changes in forest management, which could curtail biomass supply

¹⁾ Distinction is made between agricultural CF, which will be connected to the CAP, and forest CF, which will be a responsibility of the Member States.



OTHER POLICIES Impacts of other policies on European biomass markets are more indirect





CONCLUDING REMARKS

EU policies are foreseen to restrict the biomass availability for energy and industry sectors

Impact of the EU's Fit for 55 policies on biomass supply are mostly negative

 This is conflicting with the objectives to promote sustainable bioeconomy and wood-based construction

Individual policies and their impacts are partly overlapping

- Therefore, combined impact is difficult to quantify

Large uncertainties remain on how the policies will eventually be implemented by Member States, which will define the actual impact

- Several policies are not legally binding
- Some key terms still lack exact definition

Full implementation of policies could result in major biomass shortages in several Member States



CONTACT DATA

Potential impacts of EU policies on biomass supply and markets

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