ForestPaths
Co-designing holistic forest-based policy pathways for climate change mitigation

ForestPaths Features #3:
a series showcasing ForestPaths' insights and results.

How do current climate change and biodiversity policies affect European forests and wood use?

Policies set standards, incentives and targets that can affect forests directly or indirectly, such as forest protection areas or regulations that change the demand for wood use. Mapping the policy landscape helps to better understand the current framework conditions, as well as the conditions under which European forests and wood use need to develop in the future to achieve climate mitigation, adaptation and biodiversity goals.

Analysis of current forest policies in the context of climate change and biodiversity, at the international, EU and national levels, shows that most policies have an expected positive contribution on climate change mitigation. Adaptation to climate change and protection of biodiversity are less stringently addressed. However, none of the policies assessed had overall negative impacts on any mitigation, adaptation or biodiversity goals, as shown in Table 1.

Table 1. Number of policies contributing to climate change mitigation, climate change adaption and biodiversity.

	Climate mitigation	Climate adaptation	Biodiversity
Positive contribution expected	12	10	10
Positive and negative contributions expected	4	7	7
No contribution expected	1	0	0
Negative contribution expected	0	0	0

Analysis of international and EU policies

Based on a review of existing policies, 17 policies have been identified to have strong impact on forest-based activities that contribute to achieving climate and biodiversity goals in Europe in the future, as shown in Table 2. These include forestry-related provisions within the international climate and biodiversity regimes, and European policies related to forestry, climate mitigation and adaptation, nature protection, energy and environmental policies.

Policies make use of different types of **governance mechanisms** that steer target group behaviour with regard to Climate and Biodiversity-Smart (CBS) forestry activities in different ways.

- **Standards** appear to be used most frequently in the analysed policies across all categories.
- **Targets** are included in many of the identified policies. They can include concrete values to be achieved or be rather vaguely formulated. Targets with high relevance include the LULUCF Regulation setting a target for net removals from land of -310 Mt CO_2 in 2030, and the EU Nature Restoration Law that aims at 20% of land and sea to be under restoration measures by 2030.
- **Prohibitions** as a governance mechanism do not appear in policies addressing restoration and are also to only a small degree in policies targeting wood use.
- **Incentives** particularly target the sub-category "active management (other than harvesting)".

"Climate and Biodiversity-Smart forestry is a comprehensive approach that aims to enhance the resilience and productivity of forest ecosystems and related forest value chains, seeking to integrate adaptation and mitigation strategies to cope with climate change and improve biodiversity status while maintaining forest systems (which sustainably provide ecosystem services and contribute to a circular bioeconomy). It is a holistic concept that considers and needs to be adapted to regional differences and country-specific challenges."

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Table 2. What governance mechanisms are used that affect European forestry and wood use; and how many policies use these? Colours indicate the number of policies for different Climate and Biodiversity-Smart forestry (CBS) activities and governance mechanisms: the darker the colour, the more policies were found to be important. The CBS activities are categorised according to Verkerk *et al.* (2022)[1].

CBS category	CBS sub-category	Governance mechanism				
		a) Target	b) Prohibition	c) Standard	d) Incentive	e) Other
Protect	Avoiding deforestation	3	2	2	1	1
	Forest conservation	3	2	5	2	2
	Species conservation	3	1	3		1
	Other (carbon stock conservation)	2				
	Other (genetic diversity)	1		1		1
	Other (guidelines for closer-to-nature-forestry)				1	1
Manage	Forest harvesting	3	2	2	2	1
	Active management (other than harvesting)	3		6	7	1
	Other (enhancement of carbon stocks & sinks)	2				
	Other (regulation on EU forest observation, reporting, and data collection)	1		1		
	Other (genetic adaptation)				1	
Restore	Forest restoration (including peatlands)	3		4		1
	Afforestation	3		5	1	1
Wood use	Shifts in wood uses (including by-products)	4	1	5	2	3
	Cascading (end-of-life)	2	1	4		
	Increased efficiency			4		1
	Other (increasing carbon stock in HWP)	2			1	

References

[1] Verkerk, H., Delacote, P., Hurmekoski, E., Kunttu, J., Matthews, R.M., Mosley, F., Perugini, L., Reyer, C.P.O., Dtephanie, R., Trømborg, E.. (2022). ***Forest-based climate change mitigation and adaptation in Europe.*** DOI:10.36333/fs14

This ForestPaths Features #3 is based on:

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