Micro Brief

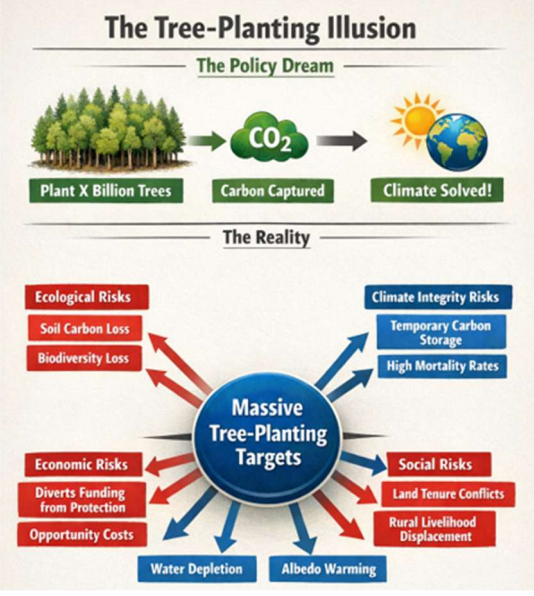
Why Large-Scale Tree-Planting Targets Risk Undermining EU Climate and Biodiversity Goals

Key message: While trees are essential to Europe's climate and biodiversity strategy, massive, target-driven tree-planting programmes are a blunt and risky policy instrument. Data show they can undermine biodiversity, water security, climate mitigation integrity, and social legitimacy. The EU should prioritize ecosystem protection, natural regeneration, and people-centred restoration, rather than numerical tree-planting targets.

From Tree-Planting Targets to Systemic Risks: Why Counting Saplings Is Not Climate Policy	
Tree planting does not equal ecosystem restoration	Climate discourse often equates trees with carbon sequestration. However, carbon is stored across entire ecosystems, including soils, grasslands, peatlands and agro-ecosystems. Afforestation in ecosystems that are naturally open can damage protected habitats and release long-stored soil carbon. This directly contradicts the EU Biodiversity Strategy for 2030 and the Nature Restoration Law.
Protecting existing ecosystems delivers higher climate returns	Preventing deforestation, peatland drainage, and land-use conversion is more cost-effective and reliable than compensatory tree planting. Large tree-planting programmes risk diverting CAP, LIFE, and climate finance away from ecosystem protection and sustainable land management.
Natural regeneration often outperforms planting in Europe	Across Europe, many degraded or abandoned lands can recover through natural or assisted regeneration, delivering faster gains in biodiversity, soil carbon, and ecosystem resilience at lower cost. Inappropriate planting, especially dense, uniform stands, can hinder this recovery. EU restoration policy should therefore include natural regeneration, with targeted planting only where evidence clearly supports it.
Plantations are not climate-secure forests	Fast-growing monocultures store carbon temporarily and are increasingly vulnerable to drought, storms, pests, and wildfire, risks that are intensifying under climate change. Large-scale plantation expansion may inflate short-term carbon sinks while increasing long-term reversal risk, undermining EU climate neutrality targets.
Water and climate trade-offs matter in Europe	In Mediterranean, continental, and alpine regions, tree planting can reduce water availability and exacerbate drought stress. In northern and mountainous regions, darker tree cover can reduce albedo and contribute to local warming, partially offsetting carbon benefits. EU policy must therefore require site-specific hydrological and climatic assessments, rather than uniform planting targets.
Social legitimacy and rural livelihoods are at stake	Top-down planting schemes risk marginalising farmers, pastoralists, and forest users, particularly where land tenure or incentives are poorly aligned. Counting planted trees rather than supporting long-term stewardship can weaken trust in EU climate policy and conflict with the Just Transition and Farm to Fork agendas.

Policy recommendations for the EU

- Replace tree-count targets with ecosystem-outcome targets (carbon durability, biodiversity status, water regulation).
- Prioritise protection and restoration of existing high-carbon ecosystems, especially peatlands, old forests, and semi-natural grasslands.
- Make natural regeneration the default option under EU restoration and LULUCF frameworks.
- Differentiate between plantations and natural forests in EU climate accounting and funding.
- Embed restoration in CAP reform, rewarding long-term land stewardship.
- Require social and ecological safeguards for all EU-funded tree-based interventions.



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