

LEGAL PROTECTION OF THE FORESTS IN A CHANGING CLIMATE ECOSYSTEM

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Abstract: *Forests are vulnerable to climate change. It is therefore important to maintain and enhance their resilience and adaptive capacity, including through fire prevention and other adaptive solutions (e.g. appropriate species, plant varieties, etc.). At the same time, forest management can mitigate climate change if forests' role as sinks in the carbon cycle is maintained or enhanced and by providing bio-materials that can act as temporary carbon stores or as carbon substitutes, replacing carbon-intensive materials and fuels. The European Union recently adopted rules for accounting, monitoring and reporting on Land Use, Land-Use Change and Forestry under which Member States will, for example, provide information on their plans for enhancing sinks and reducing forest-related emissions. The EU and Member States have also made Land Use, Land-Use Change and Forestry -related commitments to be achieved by 2020, the 2nd Commitment Period under the Kyoto Protocol. Forests also mitigate the impact of extreme weather events by moderating temperatures, and reducing wind speed and water runoff.*

Key words: *ecosystem, emissions, forest sector, biological productivity, available resources*

INTRODUCTION

Forests provide ecosystem services on which rural and urban communities depend, and host an enormous variety of biodiversity. Pressures on forests, such as habitat fragmentation, spread of invasive alien species, climate change, water scarcity, fires, storms and pests call for enhanced protection. European Union rules cover the movement and trade of certain plants, plant products and objects that can threaten plant health.

Protection efforts should aim to maintain, enhance and restore forest ecosystems' resilience and multi-functionality as a core part of the European Union's green infrastructure, providing key environmental services as well as raw materials. Further emphasis should be put on preventing negative impacts on forests rather than on damage mitigation and restoration. For forests to be able to react to future threats and trends, genetic diversity must be enhanced and endangered genetic resources protected.

MATERIAL AND METHODS

Both the nature and the effects of certain threats are trans-boundary and therefore action at European Union level is needed. Forest Management Plans (FMPs) or equivalent instruments based on the principles of sustainable forest management are key instruments in delivering multiple goods and services in a balanced way. FMPs are at the core of both the European Union 2020 Biodiversity Strategy and European Union Rural Development funding. The strategy encompasses them and promotes and supports their use. Member States should demonstrate: how they intend to increase their forests' mitigation potential through increased removals and reduced emissions, including by cascading use of wood, taking into account that the new LIFE+ subprogram for Climate action and Rural Development funding can promote and support new or existing forest management practices that limit emissions or increase net biological productivity (CO₂ removal). They do this by mid-2014 and in the context of their

information on Land Use, Land-Use Change and Forestry actions; how they enhance their forests' adaptive capacities and resilience, building on the actions proposed in the European Union Strategy on Adaptation to Climate Change and the Green Paper on Forest Protection and information, such as bridging knowledge gaps and mainstreaming adaptation action in forest policies.

Member States will, with the Commission's assistance, develop a conceptual framework for valuing ecosystem services, promoting their integration in accounting systems at European Union and national levels by 2020. They will build on the Mapping and Assessment of the state of Ecosystems and of their Services. They also should maintain and enhance forest cover to ensure soil protection, water quality and quantity regulation by integrating sustainable forestry practices in the Programme of Measures of River Basin Management Plans under the Water Framework Directive and in the Rural Development Programmes. The Member States should achieve a significant and measurable improvement in the conservation status of forest species and habitats by fully implementing European Union nature legislation and ensuring that national forest plans contribute to the adequate management of the Natura 2000 network by 2020. They should build on the upcoming guide on Natura 2000 and forests; will implement the Strategic Plan for Biodiversity 2011-2020 and reach its Aichi targets adopted in the context of the Convention on Biological Diversity, building on the upcoming common Restoration Prioritization Framework; should strengthen forest genetics conservation (tree species diversity) and diversity within species and within populations. The Commission may support them in particular via the Rural Development Programme.

The Commission will monitor Member States' progress as regards the uptake of forest management plans or equivalent instruments and the integration of biodiversity considerations in them, including Natura 2000 conservation objectives; should, together with the Member States, strengthen the mechanisms for protecting forest against pests, building on increased cooperation with neighbouring countries, enhanced research and the ongoing review of the Plant Health Regime; will assess the impacts and consider a possible extension of the obligation to apply within the European Union the International Standard for Phytosanitary Measures no. 15 on wood packaging materials; will provide relevant information and data at its disposal to the Parties to the United Nations Convention to Combat Desertification to support the implementation of their Plans of Action for protecting forests and soil in areas most threatened by land degradation and desertification. It will do this especially through the European Forest Data Centre and the European Soil Data Centre.

RESULTS AND DISCUSSIONS

Strengthening the forest knowledge base is needed to better understand the complex environmental and societal challenges facing the forest sector. Mapping and assessing the state of forest ecosystems and their services requires better European Union forest information. Relevant variables and parameters will be harmonised at European Union level, based on cooperation between international, pan-European and national data acquisition systems, and on a detailed analysis of European Union challenges. European Union programmes such as LIFE+ could help mobilize the resources needed.

The Commission and Member States have developed a modular system for forest information, and work on biomass and biodiversity is ongoing. The Commission and the Member States will set up of the Forest Information System of Europe by collecting harmonised Europe-wide information on the multifunctional role of forests and forest resources and integrating diverse information systems (e.g. EFFIS16) and data platforms (e.g.

EFDAC17) into a dynamic modular system that combines data and models into applications. The Commission align European Union forest information so that it is primarily based on data collected by Member States with European Union data architecture requirements such as Inspire, Seis and Copernicus, and follow international and regional processes. The Commission promotes the further development of the European Union database of forest reproductive material, including hyperlinks to national registers and maps; improve, make comparable and share forest information and monitoring, building on successful experiences such as EFFIS, forest health, European Union forestry statistics and the EFDAC.

In close consultation with stakeholders, the Commission will develop several modules, e.g. on forests and natural disturbances like fires and pests, forest and the bio-economy, forests and climate change and forest and ecosystem services that could contribute to the European Union's forestry statistics and Integrated Environmental and Economic Accounting for Forests.

A coherent and ambitious European Union forest-based research area is required to stimulate innovation across the forest sector. It should take into account forest specificities such as long timeframes. European Union framework programmes for research and development support the forest sector. The forest sector is more present in the 7th Research Framework Programme and in Horizon 2020, in line with the Bioeconomy Strategy for Europe²¹. The goal is to enhance the sector's sustainability and its contribution to the rural economy through sustainable forest management, improve its capacity to face biotic and abiotic stresses, and develop better forestry production systems and products. The Commission will assist Member States and stakeholders in transferring technological and scientific knowledge to forest practice and the market, in particular through Horizon 2020 and the European Innovation Partnership on Agricultural Productivity and Sustainability, supporting the development of new products with higher added-value.

The Commission and the Member States should cooperate on advanced research and modeling tools to fill data and knowledge gaps to better understand the complex issues around social, economic and environmental changes related to forests (e.g. identifying environmental thresholds). The Standing Committee on Agricultural Research (SCAR) will be used to strengthen coordination of research and innovation work between the European Union, Member States and Stakeholders. The Commission will ensure that results and good practices are disseminated through the European Union forest governance structure and other relevant fora.

Various crosscutting policy issues address forests, and their objectives sometimes differ. Coordination, cooperation and communication are therefore essential to achieving policy coherence and consistency. Various options to improve coordination and implementation were discussed with Member States, including a framework directive on sustainable forest management. However, no consensus on going beyond a voluntary approach was found. In any case, links with forest related policies must be improved.

The current European Union forest governance structure relies on the Standing Forestry Committee (SFC). The SFC should remain the forum for discussing all forest-related issues, ensuring coordination and coherence of forest-related policies. However, improvements are needed to ensure that the SFC responds to inputs from other policies. The SFC worked with the Advisory Group on Forestry and Cork, the Habitat Committee and the Expert Group on Natura 2000 management to jointly prepare the guide on Natura 2000 and forests – this could be used as best practice. Also, more emphasis could be put on the SFC's role of keeping forests multifunctional.

The Advisory Committee on Forestry and Cork will remain the main multi-stakeholder platform for discussing issues related to forestry and sustainable forest management, and the Advisory Committee on Forest-based Industries will remain the main platform for issues related to industrial value chains. These three fora should be the cornerstones for developing and following up on the new strategy. Communication is a particular challenge for the sector, as the public is generally not aware of how significant sustainable forest management is, or of the various ways in which the forest sector contributes to the green economy. The Commission will ensure that the Standing Forestry Committee's work builds on other European Union policies relevant for forests and the forest sector, ensuring that managing European Union forests remains multifunctional.

The Commission and the Member States will explore various options for better coordination of sustainable forest management, harmonised forest information and cooperation between and with Member States. The Commission will create a European Forest Bureau Network (National Forest Inventories – NFI) to develop harmonised criteria for NFI data. Complementary work is planned through Cost actions and research projects. Member States should improve public information about forests and wood, and build on the European Union Forest Communication Strategy developed by the SFC. The Commission will further assess public perception of forests (via a Eurobarometer survey by 2015). At pan-European level, the focus is on the ongoing negotiations on establishing a legally binding agreement on forests, with the European Union as a key actor. Through this agreement, the European Union aims to improve sustainable forest management across the region.

The new strategy forms a suitable vehicle for the implementation of the agreement. At global level, the European Union is at the frontline of work on combating deforestation and forest degradation. It promotes sustainable forest management as a way of protecting biodiversity, fighting desertification and responding to climate change, whilst ensuring that forest ecosystems deliver goods and services. In this way it contributes to sustainable development and to eradicating poverty. REDD+, FLEGT and the European Union Timber Regulation aim towards these goals. By 2015, the Commission will review the functioning and effectiveness of the European Union Timber Regulation.

This strategy aims to ensure consistency between European Union and Member State policies, objectives and commitments on forest-related issues at international level. It supports the European Union and Member States by formulating clear and coherent objectives.

The Commission and the Member States will:

- ensure consistency between European Union and Member State policies and commitments on forest related issues at international level;
- promote sustainable forest management across Europe and globally, and the role of forests in the transition to a green economy in the context of European Union development cooperation and external action;
- ensure continued support for global efforts to fight illegal logging through the FLEGT

Action Plan;

- support developing countries in their efforts to improve forest policies and regulations, strengthen forest governance, value and monitor forest ecosystems, and address the drivers of deforestation and forest degradation through REDD+.

The Commission will assess the environmental impact of European Union consumption of products and raw materials likely to contribute to deforestation and forest degradation outside the EU. If appropriate, it will consider policy options for limiting such

impacts, including the development of an European Union action plan on deforestation and forest degradation. It will do this in line with the 7th EU Environment Action Programme.

CONCLUSIONS

The Commission and Member States, within their respective competences, will ensure the strategy's implementation and follow-up, paying particular attention to stakeholder involvement.

In order to set milestones for meeting the 2020 forest objectives and to address the strategic priorities of actions in forest policy and forest-related policies, the Commission will work with the Standing Forestry Committee to reinforce links with related European Union policies. When necessary, it will work with other committees and fora. Given how important European Union funds are for forests and the forest sector, there is a need to improve the quality of European Union -level discussions.

Other areas, in which Member States should advance further, such as preventing forest fires, combating pests and diseases, promoting sustainable wood and regional/cross-regional cooperation, will be identified. Forests and the forest sector currently receive significant European Union funding. Forestry measures under the Rural Development Regulation are the strategy's resource backbone (90% of total European Union forestry funding). According to the updated plans, €5.4 billion from the European Agricultural Fund for Rural Development have been earmarked for forestry measures in 2007-2013. Although it will depend on Member States' Rural Development Plans, a similar level of spending to that in the current period could be expected for 2014-2020. This spending should be dedicated to contributing to the objectives of this strategy, and in particular to ensuring that European Union forests are demonstrably managed according to sustainable forest management principles. LIFE+ supports nature conservation, climate change adaptation, information and protection needs, the structural funds support cohesion projects and Horizon 2020 supports research and innovation actions, including the public-private partnership on bio-based industries. Development and climate change policies also provide financing for third countries, in particular through European Union development funds, REDD+ and FLEGT. Rationalizing available resources and improving coordination between European Union and national funding can contribute to the strategy's better implementation.

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