

European Academies



Science Advisory Council

EASAC PRESS RELEASE:

**EASAC POLICY REPORT: “MULTIFUNCTIONALITY AND SUSTAINABILITY IN THE EUROPEAN UNION’S FORESTS”**

embargoed to 1200, May 11, 2017

*“Managing Europe’s forests under conflicting objectives calls for a holistic view and new tools” says a new report released by EASAC*

Forests provide spaces for leisure and recreation, a habitat for our wildlife, wood for our houses and more recently, fuel for power stations. They serve many functions that cut across different sectors – such as wealth creation and employment, natural resources and raw materials, nature conservation and biodiversity, mitigation of and adaptation to climate change, energy and agriculture. Whilst EU policy recognizes the interplay of these different policy objectives, the sustainable and systemic management of forests is a significant challenge to policymakers, not least when managed by 10 different Directorate Generals in the Commission. This complexity is further challenged by global policy commitments on biological diversity and climate that require fast and firm actions on the use and management of forests and their products. Reconciling national, regional and global policies across this plethora of functions requires coherent, integrated policymaking.

With a significant increase in scientific knowledge over the last decade, EASAC (led by the Finnish Academy of Science and Letters) together with a wide and multidisciplinary expert group, undertook to review this knowledge and consider how the multiple functions of forests can be managed sustainably and deliver optimal social, environmental and economic benefits.

The expert group found that, with ever increasing demands and expectations on our forests, there are emerging conflicts in the way they are managed and used. An illustration of this is the conflict between demands for increased extraction of biomass from forests and the contributions made by the same biomass in situ to soil fertility, biodiversity and protective functions. Biodiversity increases productivity and resilience against climate change and other environmental stresses, and underpins the ecosystem services provided by forests. Europe is committed in international agreements to enhancing protection of its threatened and endangered species in which forests play a critical role. The small areas of remaining old growth and virgin forests (currently only 2% of Europe’s forests) need to be protected and other forests managed with greater attention paid to biodiversity.

The contribution of forests to mitigating climate change is complex and the latest science is not yet reflected in policy. Forest management can mitigate or worsen climate change through a range of complex interactions, and, if not designed appropriately, forest policies run the risk of having perverse effects on climate. The report discusses several alternatives for forest management, evaluates their consequences and recommends a number of practical and policy tools for improving the climate and biodiversity impact of forestry.

This EASAC report also considers the conflict between the latest knowledge and current policy on the use of forests as biomass for large scale energy production, and the potential tension between their role as a carbon sink or source of energy. The expert group explores the range of possible, sometimes long-term impacts on climate, and calls for the latest scientific knowledge to be integrated into policy and governance compatible with the Paris Accord target of limiting warming to 1.5° C above pre-industrial levels in a reasonable time scale. Critical to this is the time it takes to reabsorb carbon dioxide released when biomass is burnt (the payback period). The report notes that energy from biomass is currently an integral part of the wood chain in many managed forests, which includes side streams and residues with very short carbon payback times. However, increased demand for bioenergy requires new science-based forest management tools to ensure an effective contribution to climate change mitigation. The report also suggests that, where other forms of renewable energy with shorter payback periods are available, policymakers should take biomass payback periods into account when setting financial incentives.

The report also notes the major differences in forest management required between northern, central and Mediterranean forests; and that priorities between different uses of forests differ markedly between Member States. It argues for a scientific base for the determination of forest reference levels under Land Use, Land-Use Change and Forestry (LULUCF) regulations, the need to prioritise the use of wood in durable commodities and construction so that the embedded carbon is stored for long periods, notes the potential of biorefineries to deliver higher-value products (relative to bioenergy alone), and supports a cascade approach to utilising forest resources.

The report is released on 11 May 2017 at 1200 and is embargoed until then. It can be accessed on [www.easac.eu](http://www.easac.eu)

EASAC's President Professor Thierry Courvoisier said, on release of EASAC's latest report. *"This thorough scientific analysis of the conflicts and trade-offs between different demands on our forests allows us to better manage carbon stocks, enhance forest biodiversity, while ensuring forest biomass use actually helps mitigate climate change over a time that is consistent with meeting the Paris targets to limit warming to 1.5-2°C above pre-industrial levels."*

#### Notes for editors

***EASAC is formed by the national science academies of the EU Member States, Norway and Switzerland, to collaborate in giving advice to European policy-makers. EASAC provides a means for the collective voice of European science to be heard. Through EASAC, the academies work together to provide independent, expert, evidence-based advice about the scientific aspects of European policies to those who make or influence policy within the European institutions***

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