

To: Members of the European Parliament
From: Global Scientists
Re: Forest Policy and Legislation in the European Union
15 May 2020

Dear Honorable Members of the European Parliament

The European Parliament will soon be voting on forest and biodiversity policies that will have consequences for global climate, biological diversity and human health. As research scientists from many nations, we are providing Members of the European Parliament information to inform them as they consider and create policies and pass legislation that meets these 21st century challenges. Attached is a list of scientists with their affiliations from many countries who endorse the message of this letter.

It is important to recognize the relationship between forests and climate change. Forests (as distinct from tree plantations) are the single most effective means for removing carbon dioxide from the atmosphere and storing the carbon for long periods of time in the wood of trees and in forest soilsⁱ. Carbon that is stored in trees and soils is carbon that is not in the atmosphere. It is the amount of carbon dioxide that remains in the atmosphere (along with other gases) that determines the atmospheric, land and ocean heating we are experiencing and will experience in the future.

To address the climate emergency, it is urgent that action be taken immediately to reduce heat trapping greenhouse gas emissions (especially carbon dioxide) from all energy and industrial sources and from agriculture, land use change and bioenergy. Simultaneously atmospheric carbon dioxide must be removed in order to meet any of the temperature limiting goals agreed to by the EU and all other nations of the world in Paris in 2015.

The Intergovernmental Panel on Climate Change summarized scientific findings of the need to decrease the difference between heat trapping gases humans add to the atmosphere, and what natural processes remove by 45% by 2030, reaching zero by 2050ⁱⁱ. The EU has set a goal of a 55% reduction by 2030 – less than a decade from now. **In order to maintain a stable and livable climate, it will be necessary to continue reducing emissions and removing and accumulating additional atmospheric carbon dioxide in forests and other natural systems after 2050.**

Avoiding further emissions from forests and storing additional carbon in them is therefore essential for achieving this ambitious goal. Identifying strategies and creating policies and legislation that are based upon available scientific knowledge must guide these efforts. The only means for removing atmospheric carbon dioxide at scale to achieve the stated EU climate goals in the coming decades is to protect the carbon stocks in remaining primary and older forests, and allow these and secondary forests to grow and restore their ecological potential for carbon storage and biological diversityⁱⁱⁱ, a mitigation strategy called Proforestation^{iv} Management. If this is not done, irreversible and uncontrollable alteration of the climate will occur, and these systems will become less resilient in protecting the climate and biodiversity.

While some may wish to continue business as usual using traditional forest management and harvesting practices, these forests are less capable of adapting to changing conditions compared to forests under proforestation management. **'Sustainable forest management' refers only to maintaining harvested biomass at or below the rate of annual growth. It does not maximize accumulated forest carbon storage or maintain full biodiversity and other ecosystem services.** Forests managed for commodity production never accumulate

the amount of carbon as protected forests and those under proforestation management because trees are harvested before they reach the large size found in older forests. Proforestation and primary forest protection provide the most cost-effective and efficient system for removing and storing carbon^v, whereas technological carbon removal systems are in the early stages of development, their costs and energy inputs are high, and they are unlikely to be available at scale during the critical decades ahead^{vi}.

Commodity production forests have a limited number of tree species because many native species have little or no commercial value - however important they may be for a functioning forest ecosystem. Globally, some 80% of land-based species are found in forests, with most of them in unharvested forests^{vii}. The resiliency of forests depends upon having a biodiverse composition of trees, animals, insects, fungi and bacteria. Some studies have found that multispecies, multiage forests are more productive in terms of accumulating carbon^{viii}.

Most European forests are managed primarily for continuous production of forest products, which has contributed to additional global warming^{ix}. Forest products will continue to be produced in some forests. However, to also meet EU goals for addressing climate change, biodiversity loss and threats to human health it is essential that a EU-wide forest policy be developed.

Here are suggestions for an effective European Forest Policy:

- 1. Conduct full, certified lifecycle carbon accounting for EU forests and the production of forest products and bioenergy. Specify the appropriate scale of forest carbon accumulation and storage in meeting overall climate goals.**
- 2. Designate a portion of Europe's secondary forests to utilize proforestation management, and protect from logging all remaining primary and other old forests to meet climate and biodiversity protection goals, and resilience to a changing climate, while meeting demand for wood-based products from managed tree plantations.**
- 3. Ensure that the Forest Plan is integrated with the Biodiversity Plan and monitor the implementation.**
- 4. Create incentives that promote forest carbon accumulation and biodiversity with subsidies, including payments for eco-system services; redirect subsidies for carbon intensive bioenergy to effective low carbon technologies like wind and solar and enhanced energy performance through efficiency measures.**
- 5. Inspect and certify sources of feed stocks for forest products to assure that none of it is from illegal harvesting, and that it meets specified biodiversity and sustainability criteria for low impact sourcing.**
- 6. Recognize and account for the climate, biodiversity and social consequences of imported forest products, biofuels and bioenergy. Exporting emissions does not solve the climate problem.**

All of us are experiencing the devastation from the COVID-19 pandemic because individuals and governments were unprepared for events that scientists had been predicting for years. Climate change and species loss are happening more slowly than this pandemic, but they are accelerating and scientists have provided compelling evidence that the world has reached a critical moment that requires decisive action. Recovering from the economic shocks of COVID-19 provides an excellent opportunity to shift to greener resilient development in Europe through the proposed Green Deal. Acting now to incorporate the elements of a new European Forest Strategy presented here can become a core component of the European Green Deal, and prevent irreversible and potentially uncontrollable climate change. **Now is the time to act and dedicate a substantial portion of European forests to increased carbon storage, biological diversity and climate resilience.**

We appreciate this opportunity to contribute to the development of scientifically sound, economically appropriate, and socially just environmental policy for the EU. Individuals from this group of scientists from many countries are available to assist you in developing a new European Forest Strategy.

Sincerely,

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- ⁱ Hudiburg et al 2019 <https://iopscience.iop.org/article/10.1088/1748-9326/ab28bb/meta>
- ⁱⁱ IPCC 2018 <https://www.ipcc.ch/sr15/>; IPCC 2019 <https://www.ipcc.ch/srccl/>
- ⁱⁱⁱ Mackey et al 2020 <https://link.springer.com/article/10.1007/s11027-019-09891-4>
- ^{iv} Moomaw et al <https://doi.org/10.3389/ffgc.2019.00027>
- ^v IUCN 2020 <https://www.iucn.org/crossroads-blog/202003/primary-forests-a-priority-nature-based-solution>
- ^{vi} Jacobson 2019 <https://pubs.rsc.org/en/content/articlelanding/2019/ee/c9ee02709b#!divAbstract>
- ^{vii} IPBES 2019 <https://ipbes.net/global-assessment-report-biodiversity-ecosystem-services>
- ^{viii} Lutz et al 2018 <https://doi.org/10.1111/geb.12747>
- ^{ix} Naudts et al 2016 <https://science.sciencemag.org/content/351/6273/597.full>