

Dear Member of the European Parliament:

We, the undersigned American climate and ecosystem scientists, all of whom have experience in government and national and international organizations, write to urge your support for reforms to the European Union's bioenergy policies to ensure that they advance, rather than retard, global efforts to address climate change, protect forests, and meet sustainability goals. As you consider amendments to the 2030 Renewable Energy Directive, we ask that you vote in favor of amendments that prevent the use of whole trees—the highest carbon emitting form of forest bioenergy—and ensure that less emitting forms are used only in the most efficient co-generation plants for the production of heat and electricity. We also urge that the European Union comply with the emissions accounting system specified by IPCC and UNFCCC and count *all* bioenergy emissions.

Forests, other terrestrial ecosystems and soils currently sequester an amount of atmospheric carbon dioxide (CO₂) equal to nearly one-third of annual emissions from all human sources. By halting deforestation and restoring degraded forests, this removal rate could be increased, but when biomass from forests is burned for heat or electricity, large quantities of CO₂ are immediately released to the atmosphere. As the IPCC has noted bioenergy is *not* carbon neutral,

“The combustion of biomass generates gross GHG emissions roughly equivalent to the combustion of fossil fuels. If bioenergy production is to generate a net reduction in emissions, it must do so by offsetting those emissions through increased net carbon uptake of biota and soils.” (IPCC AR5 WG III 11.13.4)

When forest bioenergy is used to produce electricity, emissions are substantially greater than coal per unit of electricity, and is more costly than more efficient options such as wind and solar, which do not emit any climate altering gases during operation.

If permitted to grow to their previous size, replacement trees eventually absorb the amount of CO₂ emitted during previous biomass combustion, but this takes many decades to a century or more - far beyond the time required to meet emission reduction goals specified in international agreements and EU plans. As the recently released U.S. National Climate Assessment states, we cannot defer action to reduce CO₂ emissions to some distant future time. To meet the Paris goals, it is insufficient to slowly offset emissions from burning wood or fossil fuels through replacement forest growth. The only way to reduce the atmospheric burden of CO₂ is to increase total forest carbon stocks while using carbon free energy.

To meet the expectation that bioenergy use will double in EU nations by 2030 the already very large import of wood pellets and chips from abroad must grow

substantially leading to increased rates of deforestation in North America and developing countries. This will compromise Article 5 of the Paris Agreement to protect and restore forests in developing countries through REDD+. Increased bioenergy use also runs counter to the goals of every international forest agreement and statement that has been negotiated beginning with the 1992 Non-Legally Binding Authoritative Statement of Principles for the Management, Conservation and Sustainable Development of All Types of Forests, through the 2007 UN Forum on Forests Agreement and the 2014 New York Declaration on Forests. Unconstrained bioenergy use is also inconsistent with the Convention on Biodiversity and with at least four of the UN's Sustainable Development Goals, Climate Action (#13), Life on Land (biodiversity #15), Affordable and Clean Energy (#7), and Ensure Sustainable Consumption and Production Patterns

We call your attention specifically to the impacts of EU wood pellet imports on the forests of the Southeast United States, a region of biologically diverse wetland forests. In 2016, the coastal plain was recognized as a global biodiversity hotspot, providing habitat to more than 1,500 endemic vascular plants and many animal species. Unfortunately, it is also the center for global wood pellet manufacturing and export to the European Union, and 70% of the habitat has been lost. Remote sensing reveals that this is now the most disturbed forest area in the world. The scale of this loss of biodiversity and forest-stored carbon is occurring because of the large European subsidies to burn wood for electricity and claim it to be carbon neutral. A detailed 2016 study commissioned by the European Commission found that European imports of U.S. wood pellets are primarily sourced from whole trees (stem wood), and that the wood pellet industry poses a serious risk to species found exclusively in these forests. It concluded that burning wood could undermine the European Union's ability to achieve its climate targets.

Wood pellet production also has created a major social justice issue. Most of the deforestation and polluting pellet manufacturing takes place in low-income communities of color that suffer severe health effects from air pollution and experienced recent major flood events. These practices and their consequences appear to be headed to developing countries to meet increasing EU demand. We call upon the European Parliament to support bioenergy policies that correctly account for bioenergy greenhouse gas emissions, and prevent the use of biomass in unsustainable ways. We urge you to support amendments that exclude the use of high-carbon biomass such as whole trees as subsidized bioenergy feed stocks, and ensure that the limited supply of defined lower carbon biomass resources such as residues be only used in highly efficient co-generation facilities. Let us work together to replace these destructive practices with truly sustainable energy sources like wind and solar at which European nations excel.

Sincerely,

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First to measure the role of forests in the carbon cycle and defined the structure of the UN Framework Convention on Climate Change