

Letter to Parties

Serious Problems with Large-Scale Bioenergy and the Belem 4X Pledge on Sustainable Fuels

The Biomass Action Network, comprised of over 220 Non-Government Organizations in 70 countries, draws your attention to our serious concerns about massive expansions of bioenergy production and use proposed by the Belem 4X Pledge on Sustainable Fuels to expand 'sustainable' fuels use globally by at least four times by 2035 from 2024 levels, and the associated Global Renewables and Energy Efficiency Pledge of COP 28 to triple renewable energy generation capacity by 2030.

The problem is the reliance of these pledges on substantial deployment of wood as feedstock to underpin them. This will intensify already unsustainable pressure on forests, dramatically exacerbate climate change during the critical period requiring emissions reductions, and harm communities reliant on forests and those affected by manufacturing processes throughout the supply chain.

Our 2024 report [“Burning up the Biosphere: A Global Threat Map of Biomass Energy Development”](#) assessed the scale of impact and concerns about the expansion of direct use of modern **solid woody biomass** (e.g. wood pellets, wood chips) for stationary heat and power production. The IEA in its Net Zero Scenario provides for tripling the woody biomass supply for stationary bioenergy between 2021 and 2030, including an up to thirteenfold increase in supply of wood from monoculture plantations and woody crops and continued expansion in production from natural forests. Current levels are already having serious adverse impacts.

The [Belem 4X Pledge on Sustainable Fuels](#) now proposes also accelerating the deployment of **liquid and gaseous fuels**, committing to “expand sustainable fuels use globally by at least FOUR times by 2035 from 2024 levels”. The [IEA Report](#) that underpins this pledge makes clear that it involves substantial reliance on wood-based emerging technologies.

The important role of forest protection and restoration in mitigating climate change is set out in IPCC AR6 WG 3 on mitigation, and that **protection of forests has the highest mitigation value**. Exploitation of natural forests, monoculture plantations and woody crops for bioenergy at the scales already experienced, and to be greatly exacerbated by the expansion plans contained in these pledges, undermines this priority.

In fact, most bioenergy approaches risk harming the climate more than mitigating climate change - see the Climate Action Network International [Position on Bioenergy](#), developed in response to Brazil's emphasis on the bioeconomy.

The first impact of combustion of woody biomass for energy is an increase in CO₂, worsening global warming over the critical period to 2100. [IPCC](#) emission factors show that burning wood emits at least as much CO₂ per unit of energy as burning fossil fuels and multiple lifecycle assessments have demonstrated that net emissions from burning woody biomass frequently exceed those from fossil fuels for decades to centuries, for the simple reason that burning wood emits carbon faster than trees can regrow to sequester it. This is well beyond time frames set by the Paris Agreement for action by 2030 and 2050.

Declaring biomass energy to be carbon neutral wrongly assumes that forests regrow quickly and fully offset the emissions from biomass production and consumption. Yet the true carbon cost of biomass burning rarely appears accurately on any country's balance sheet, as a result of flawed carbon accounting practices.

The industry creates a false impression of using small amounts of leftovers when it refers to being based on 'wood waste' and 'residues', when in actuality the volumes are huge and frequently comprise the majority of wood extracted in logging operations. It has also provoked intensification of logging and extension of logging areas, in part encouraged by deployment of generous subsidies for renewable energy.

The current industrialized use of woody biomass for energy is already too much, exhibiting serious adverse social and environmental impacts in North America, Europe, Asia, and Latin America, and undermining forest protection and restoration as priority actions to tackle the climate and biodiversity crises.

Therefore, the Biomass Action Network requests that Parties:

- **Reject bioenergy derived from woody biomass as a climate solution** - both for stationary energy generation and for gaseous and liquid biofuels - excluding it from international and national targets
- **Rule out future use of woody biomass with carbon capture**, since it will not provide real negative emissions
- **End subsidies for production and consumption of woody biomass energy**
- **Prioritize forest protection as a mitigation measure**, and promote halting and reversing deforestation and forest degradation by 2030 through robust, harmonized transparency practices and consistent standards
- **Ensure the COP truly focuses on all aspects of a just transition to genuinely low-carbon renewable energy**, including addressing the impacts of bioenergy on those reliant on forests, and throughout the supply chain.
- **Reform flawed carbon accounting in relation to biomass combustion** so that smokestack emissions appear in Energy sector accounts of the consuming Party as does the combustion of fossil fuels, and reform land sector accounting to explicitly show carbon stock quality and changes rather than netting them out.
- **Recognize that co-firing woody biomass with coal is not abatement**