1 LARGE SCALE FOREST BIOMASS ENERGY GENERATION

Large-scale burning of forest biomass for energy: **Harms the climate** - It is not low carbon, and is encouraged by flawed carbon accounting methodology that gives a false impression of zero emissions and of carbon neutrality; **Harms forests** - It threatens biodiversity and climate resilience, and undermines the climate mitigation potential of forests; **Harms people** - It undermines community rights and interests. It also harms human health and well-being; and **Harms the clean energy transition -** It provides a lifeline for burning coal for energy production. It also pulls investment away from other low emissions renewables.

RELEVANCE FOR BONN/ COP28: Global Stocktake relies on accurate carbon accounting but biomass burning methodology is incongruous with fossil fuel accounting and can wrongly attribute emissions responsibility. Art 6.4 removals assumption of carbon neutrality of biomass energy is incorrect.

HERE ARE SOME THINGS YOU MIGHT HEAR THAT ARE FALSE:

- Biomass energy is zero carbon or carbon neutral
- Forests must be managed for forestry to tackle climate change effectively
- Biogenic carbon is not a problem like fossil carbon

HERE'S HOW TO RESPOND:

1. Burning forest biomass for energy is not carbon neutral. It immediately emits large quantities of greenhouse gases into the atmosphere equal to, or greater than those from coal, per unit of energy produced. In contrast it takes decades to centuries for forests to regrow and sequester the carbon, which is far too long to effectively contribute to the 1.5°C Paris Agreement target.
2. Current carbon accounting rules incentivise forest bioenergy by considering biomass combustion as a zero-emission technology, expressed as zero emissions in the energy sector. The assumption is that all emissions are instead to be accounted for when the biomass is logged, placing the burden on the forest producer rather than the biomass consumer. Yet emissions accounting of forests in the land sector is fatally flawed and generally understates emissions. The true carbon cost of biomass burning rarely appears accurately on any country's balance sheet.
3. Using forest biomass for energy can entrench, intensify and expand logging. This degrades forest ecosystems, depletes biodiversity and soils and harms forests' abilities to deliver clean drinking water, flood protection, and clean air. Conversion of forests and other ecosystems to industrial monoculture tree plantations for biomass is especially harmful. We recognise that rights-based protection and ecological restoration improve the health and well-being of forests and make them more resilient to climate change and other environmental disturbances

Important Links

- Letter Regarding Use of Forests for Bioenergy sent to World Leaders, signed by 500+ scientists and experts. (2021) https://www.documentcloud.org/documents/20482842-scientist-leter-to-biden-van-der-leyden-michel-suga-moon-february-11-2021
- John Sterman, et al., Bulletin of the Atomic Scientists Volume 78, Issue 3. (2022) *Does wood Bioenergy Help or Harm the Climate?* Accessible from: https://www.tandfonline.com/doi/full/10.1080/00963402.2022.2062933
- Timothy Searchinger, Oliver James, Patrice Dumas, Thomas Kastner & Stefan Wirsenius, Nature (2022) *EU climate plan sacrifices carbon storage and biodiversity for bioenergy*. Accessible from: https://www.nature.com/articles/d41586-022-04133-1