Burning (forest) biomass as a threat to Wilderness

Why the coalition of 70+ NGOs started a petition to remove forest biomass from the Renewable Energy Directive

The EU must protect forests, not burn them for energy



society groups and members of the public. WeMove.EU hosts

EU Renewable Energy Directive promotes harvesting forests for "zero carbon" biomass

- The EU and MSs should promote greater sustainable mobilisation of existing timber and agricultural resources
- Harvesting for energy purposes has increased and is expected to continue to grow, resulting in higher imports of raw materialsfrom thirs countries as well as an increase of the production of those materials within the EU
- FACTS: 260% increase since 1990, 50% of wood harvest is fuelwood (solid biomass)
- Massive and increasing market for low value wood is created



What's wrong with burning forest biomass - Harms climate

- It is not low carbon Burning forest biomass for energy is not carbon neutral. It immediately emits large quantities of greenhouse gases into the atmosphere. 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.
- It is encouraged by flawed accounting 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.

What's wrong with burning forest biomass - Harms Biodiversity / Forest

- It threatens biodiversity and climate resilience Using forest biomass for energy can entrench, intensify and expand logging. This degrades forest ecosystems, depletes biodiversity and soils and harms forests' ability to deliver ecosystem services like clean drinking water, flood protection, and clean air.
- It undermines the climate mitigation potential of forests
- The main mitigation benefit of forests derives from the size and longevity of their ecosystem carbon stocks and not the annual rate of sequestration.
- Carbon stocks in primary forests are greater than in production forests even at harvest maturity



What's wrong with burning forest biomass - Harms Human Health

- It harms human health and well-being Forests play an important role in safeguarding communities from the worst impacts of climate change.
- Particles from wood burning harms health as well
- Biomass manufacturing and combustion facilities are often located in areas of socio-economic disadvantage, where they pollute the air, increasing incidents of respiratory and other diseases.



What's wrong with burning forest biomass - Not good for energy transition

- It provides a life-line for burning coal for energy production Co-firing forest biomass with coal extends the life of coal power stations
- It pulls investment away from other renewables Biomass undermines less emissive renewable energy solutions because it competes for the same government incentives. Unlike investment in low emission technologies, such as wind and solar, biomass energy entails ongoing feedstock costs and relies on continuous subsidies.

The result of promoting forest biomass burning EU forest carb sink is <u>shrinking</u>



What's the result of promoting forest biomass burning

- Generates logging also in protected areas
- Undermines protected area management effectiveness
- Although there are sustainability criteria in the RED II, logging in Natura 2000 forest habitats is not forbiden





What we try to do about this

This study is part of the project Research into Information, Policy & On-ground Action for Primary Forest Protection: Boreal and Temperate Primary Forests

coordinated and implemented by





Mapping primary / old-growth forests 2019 - Update\Expand\Validate



- Aggregates and harmonizes 49 datasets
- 20 new datasets compared to Sabatini et al. 2018
- Updated and expanded literature review (23 new PF from 13 studies)
- 17,327 polygons + 298 points
- 54.6 Mha across 25 countries (50.8 Mha in Russia alone)

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Bioenergy and its impact on the landscape / forest

- Need reliable data
- 50% of timber harvest is fuelwood
- 12,8% of wood comes from unknown sources in Europe
- 60% of fuelwood is burned in the residential sector



Carbon modelling

- Distribution of carbon stock densities (Mg C ha⁻¹) across all the sites, comparing measured data with global modelled spatial data: GloBiomass and GeoCarbon
- Average aboveground living biomass carbon beech 176 Mg C ha⁻¹ spruce 113 Mg C ha⁻¹
- Measured data shows higher carbon stock densities than modelled spatial data, on average X 1.9 - 2.3 higher for beech X 1.5 higher for spruce
- Modelled biomass is likely an underestimate because it is based on current forests that are mostly
 managed regrowth. Hence it does not represent the carbon carrying capacity of primary forests.

Policy recommendations

- Global: influencing CBD and UNFCCC and IPCC default data (biodiversity and climate crises are inseparable
- EU: Climate law (and related regulations such as REDII), EU Biodiversity Strategy for 2030, EU Forest Strategy
- National: National Energy and Climate Plans & National Forestry Accounting Plan, stop subsidising forest biomass burning

Hopes & Threats

- Positive EU Biodiversity Strategy for 2030
- Positive European Parliament report on the EU roles to protect the world's forest

But

- Wrong EP report on the EU Forest Strategy
- Dangerous council document on EU Forest Strategy
- Net accounting of the land sector

Increase knowledge & awareness

- > The link between the biodiversity and climate crises must be well known
- Science helps (EASAC and others)
- European Parliament, European Commission, Member States, consumers and energy users
- Don't forget
- 1. The main mitigation benefit of forests derives from the size and longevity of their ecosystem carbon stocks and not the annual rate of sequestration.
- 2. Carbon stocks in primary forests are greater than in production forests even at harvest maturity.
- 3. A range of ecosystem services provide benefits from primary forests, including carbon storage, biodiversity and water quality.

Why signing the petition

- ► The EU is seen an an environmental leader
- EU legislations penetrate into other countries as well
- Member States as consumers have a big impact
- https://you.wemove.eu/campaigns/die-eu-muss-walder-schutzen-statt-siefur-die-energiegewinnung-zu-verbrennen
- 15 languages
- 70+ organisations
- JOIN US!