

To protect nature and the climate, we must reform how bioenergy is treated in the EU's Renewable Energy Directive

The European Union's (EU) Renewable Energy Directive (RED) enables Member States to subsidise energy derived from biomass (bioenergy). EU citizens paid out €10.3 billion to support bioenergy in 2018.

These subsidies are causing considerable harm to the climate, people and nature.

As part of the European Green Deal, the RED is being revised, providing the last opportunity for a long time to ensure it supports, rather than undermines, the EU's climate and biodiversity ambitions.

The European Commission's July 2021 proposed RED amendments do not address the key damage bioenergy causes to people, our health, nature and the climate. This position paper outlines how the EU can create a bioenergy policy that civil society and citizens can support.



EU bioenergy subsidies have dramatically increased the burning of [forest biomass](#) and [agricultural crops](#) for energy, harming people and leading to ecosystem destruction across the world. Such burning [forces people off their land](#), destroys wildlife habitats, [impacts food prices](#), makes our air toxic and considerably increases greenhouse gas emissions for decades to come.

The following issues are of particular concern:

- » **Burning biomass emits massive amounts of carbon dioxide (CO₂).** Logging and burning forest biomass¹ increases CO₂ emissions for [decades to centuries](#) even taking into account hypothetical fossil fuel substitution and potential forest regrowth. But emissions reductions need to happen now. Even if trees do grow back, they cannot do so fast enough to tackle the present climate emergency.
- » **Burning biomass toxifies the air.** In 2018, particulate matter pollution was [responsible](#) for about 379,000 premature EU28 deaths, and wood burning was a [major and growing](#) source (bigger than road transport). The World Health Organisation is now [calling on](#) governments to phase out energy produced from coal and biomass combustion.
- » **Crop-based biofuels undermine food security and are worse for the climate than fossil fuels.** Deforestation is also driven by EU demand for biofuel crops like palm oil, soy and rapeseed. If previously forested land used to grow energy crops were restored, it would increase biodiversity and do more for the climate.

» The RED's forest biomass provisions undermine climate and biodiversity goals.

The EU's Joint Research Centre [found](#) in its assessment of forest biomass scenarios that harvesting and burning coarse woody debris – in other words, forestry residues – increases emissions compared to fossil fuels for more than 100 years and is “high risk” for biodiversity and ecosystem functions. Despite this indictment, the RED continues to falsely claim that burning forest biomass reduces emissions compared to fossil fuels, and its current sustainability criteria [do not protect forests and the climate](#).

- » **Biomass is not carbon neutral.** Burning biomass releases more CO₂ than coal, but it is counted as zero carbon in EU energy policy on the [flawed assumption](#) that forest carbon loss is correctly tracked and counted as part of the Land Use, Land Use Change and Forestry (LULUCF) sector. Now that [carbon prices are soaring](#), this zero rating acts as a big indirect subsidy for the biomass industry, making it unfairly competitive and threatening forests.

- » **Forests are already under excessive pressure:** In Europe, about half the wood logged today is burned, and an [estimated 79 per cent of EU forest habitats](#) are already threatened by over-logging for timber, pulp, and bioenergy. The forest carbon sink is shrinking and will continue to weaken unless there is a significant reduction in logging pressure.

The European Commission proposal reflects a growing awareness of the problems, but still fails to propose meaningful remedies:

- » It only excludes feedstocks (sawlogs, veneer logs, roots and stumps) that are either never or rarely burned.
- » It only excludes primary and old growth forests (representing only three per cent of European forests).
- » It ends subsidies for electricity-only forest biomass power plants from 2027 onwards, but most biomass plants produce both electricity and heat (as is the case for most thermal combustion plants), and there are loopholes to

allow continued subsidies for plants located in coal dependent regions, and those that try to capture and store the carbon from combustion.

- » It proposes applying the cascading principle (only burning wood that has fulfilled all other uses), but it is too vague and focuses on “quality roundwood”, thereby allowing the burning of wood with low economic, but high ecological value, as well as feedstocks that are already used by other industries.
- » It includes a phase out of palm oil biofuels, but the end date is too far away, and fails to phase-out other first generation crops.

¹ We use “forest biomass” in the document as an equivalent to primary woody biomass, i.e. all wood taken directly out of the forest.

To be compatible with the European Green Deal ambitions, the RED must stop allowing public subsidies for forest biomass, stop allowing Member States to count it towards renewable energy targets, and phase out crop-based biofuels. Related reforms should be enacted in the LULUCF Regulation and the EU's Emissions Trading System (ETS).

Specifically EU legislators should:

- » **Remove** forest biomass from the list of eligible fuels in the RED.
- » **Stop** treating biomass as a “zero carbon” fuel in the EU ETS.
- » **Apply the cascading principle** in a way that only allows biomass from wood product manufacturing and post-consumer wood (“secondary woody biomass”, excluding forestry residues) to count towards renewable energy targets if such materials cannot be turned into durable products.
- » **Increase the target for land sector carbon removals** in 2030 from the current 310 to 600 Megatons, as [several studies have indicated](#).
- » **Redirect bioenergy subsidies towards practices** that store more carbon in forests, in full respect of ecological principles.
- » **Reduce the target for greenhouse gas intensity reduction of the transport sector** to maximise climate benefits, based [on latest available science](#), to avoid driving the use of unsustainable fuels.
- » **Stop counting crop-based biofuels**, including from oilseed rape, cereals, energy crops and intermediate crops, towards RED targets.
- » **End support for biofuels produced from palm oil and soy immediately.**
- » **Amend** the list of ‘advanced’ biofuels to remove forest biomass and other problematic feedstocks, and ensure no competition with other sectors using the same feedstocks in a material way (‘cascading principle’). The target for ‘advanced’ biofuels must remain at 1.75 per cent.
- » **Support transport sector decarbonisation and reduce** its energy consumption by phasing out new internal combustion engines and increasing public transport.
- » **Reduce** heating needs by increasing the energy efficiency of buildings, for instance by introducing mandatory Minimum Energy Performance Standards in line with the EU’s climate neutrality objective.
- » **Improve support schemes and permits** for wind, solar, geothermal and cleaner heating alternatives such as heat pumps, as long as they respect community rights and maintain high levels of biodiversity protection.

These recommendations would help the RED achieve climate goals, free up land for local food production and forests, promote the Biodiversity Strategy forest restoration goals, and reduce air pollution.



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List of signatoires

1. Association workshop for all beings
2. Biofuelwatch
3. Biomass Action group (BAG)
4. Birdlife Europe
5. ClientEarth
6. Colectivo VientoSur
7. Comite Schone Lucht
8. Deutsche UmweltHilfe (DUH)
9. EuroNatur
10. Fern
11. Forum Umwelt & Entwicklung
12. Green Impact
13. Green Transition Denmark
14. Greenpeace
15. Instytut Spraw Obywatelskich
16. Landelijk Netwerk Bossen- en Bomenbescherming
17. Latvian Ornithology Association
18. LeefMilieu
19. Mobilisation for the Environment
20. NOAH (Friends of the Earth Denmark)
21. Natural Resources Defense Council (NRDC)
22. Oxfam
23. Partnership for Policy Integrity (PFPI)
24. Pro Regenwald
25. Quercus (Associação Nacional de Conservação da Natureza)
26. Save Estonia's Forests
27. Transport & Environment
28. Zero (Associação Sistema Terrestre Sustentável)

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Designed by Constantin Nimigean