

Fern's analysis of the agreement on a new EU Renewable Energy Directive for the period after 2020

Background:

The agreement on a new EU Renewable Energy Directive and a **bioenergy sustainability policy** for the period after 2020 is of paramount importance for forests in the EU and elsewhere. This policy does not get much media attention, despite the fact that woody biomass is currently **the biggest form of renewable energy in the EU**.

Key figures (from the latest EU Renewable Energy Progress Report):

- Solid biomass provides 46 per cent of the total renewable energy production in the EU (EUROSTAT, OKO Institute, 2015)
- Solid biomass provides 82 per cent of the renewable heat produced in the EU (EUROSTAT, OKO Institute, 2015)
- Solid biomass provides 17 per cent of the renewable electricity produced in the EU (EUROSTAT, OKO Institute, 2015)

The current Renewable Energy Directive (2009) includes binding renewable energy targets for Member States but doesn't define how to ensure the use of forest biomass is sustainable. Since 2009, several Member States have adopted national sustainability standards. These include Belgium, the Netherlands and the United Kingdom. Since the RED has come into force, the use of wood for energy increased by 75 million cubic metres. The use of wood that comes directly from the forest has grown more than the use of forest industry residues (24 versus 10 per cent).

The new Renewable Energy Directive will include conditions under which biomass for energy can be subsidised and count towards renewable energy targets. These requirements only apply to installations producing electricity, heating and or cooling, or fuels with a fuel capacity equal or bigger than 20 megawatts (MW).

Our analysis (see below) shows that the bioenergy sustainability policy will not stop the destruction of forests for bioenergy. It allows the continuation of Business as Usual and risks 'greenwashing' the biggest form of renewable energy today. Key parts of the policy include:

1. Risk based approach to forest biomass

The Commission has adopted a 'risk-based approach' to 'minimise the risk of using unsustainable biomass production'. In simple terms, this means operators will need to check whether a country has laws in place to ensure sustainable forest management (SFM), and to account for emissions from biomass harvests (LULUCF sector). If countries don't have rules in place, biomass can still be used if operators can show management systems are in place in the 'sourcing area' to minimise risks. The

Directive specifies which issues should be covered in these rules, including the legality of harvests, maintenance of biodiversity and soil quality.

- *The Commission will not review the effectiveness of this approach until 2026, meaning a further eight years of possible forest destruction.*

Fern analysis: The risk-based approach ignores that forests and biomass already fulfil a role as carbon stocks and sinks. Using them for energy negatively affects this role and can release more emissions than fossil fuels. This risk is higher when using specific feedstocks, such as roundwood and stumps. Rules on SFM and LULUCF cannot counter this risk. It also doesn't ensure that biomass is used in the most optimal way. You can harvest a tree from a sustainably managed forest, but that doesn't make it sustainable or climate friendly to then burn it.

2. Restricting biomass burning in large scale installations

For installations exceeding 50MW, it is required to apply 'high efficient cogeneration technology' (Combined Heat and Power, CHP). However, the final agreement includes a number of exemptions for more efficient electricity-only installations (between 50-100 MW from 33.5% net electrical efficiency and from 100 MW from 36% net electrical efficiency). This exemption will only apply in case where installations do not use fossil fuels as a main fuel. Installations are also exempt from the requirement to apply CHP if they apply BioEnergy Carbon Capture and Storage technology (BECCS).

Fern's analysis: The 2016 Commission proposal required CHP for all installations above 20 MW to 'find synergies with the circular economy'. This could have been an effective way to mitigate the risks associated with subsidising large-scale wood burning and conversions of coal plants to biomass; increasing forest harvests and reliance on wood pellet imports, as well as increasing emissions. However, the final agreement still allows the burning of biomass in large inefficient 'power-only' installations and converted plants. This means that in the worst scenario, it will still be possible to burn biomass and lose 2/3 of the energy content. This is a missed opportunity to ensure more efficient use of biomass resources, and encourage Member States to invest in efficient energy systems, such as district heating systems. A good element is the restriction on support to co-firing, and we hope this sends a clear signal to Member States and internationally that converting coal plants to biomass should be discouraged. However, we should be careful – this agreement still allows co-firing of biomass with fossil fuels in CHP plants.

3. Member States may apply additional sustainability criteria

This is a sign of hope as Member States can put in place their own rules to make up for the lack of safeguards from the EU level.

What change will the new Renewable Energy Directive make?

Overall very little has changed. The revamp of the Renewable Energy Directive was the EU's opportunity to deal with some of the most egregious examples of biomass use which have been discredited countless times by scientists. In this sense the Directive allows for Business as Usual and risks greenwashing the use of wood as the biggest form of renewable energy. Examples of destructive activities that will still be allowed include:

- Increasing harvests for bioenergy
- Using whole trees and stumps for bioenergy
- Large scale biomass burning in inefficient energy installations (as low as 33.5%)
- Keeping coal plants going by allowing for the conversion of coal boilers to biomass
- Co-firing of biomass with fossil fuels in CHP plants

Further reading:

- [A New EU Sustainable Bioenergy Policy, NGO Proposals](#)
- Fern film, [Playing with Fire: Europe's bioenergy future](#)
- Fern report, [Up in Flames; how biomass burning wrecks Europe's forests](#)
- Fern report, [Up in Smoke; Why biomass burning threatens European health](#)
- Fern report, [A dangerous solution; Debunking myths around sustainable forests and the EU's bioenergy policy](#)
- Fern briefing, [Burning trees is no solution to climate change](#)
- Forest Research, [Carbon Impacts of biomass consumed in the EU – supplementary analysis and interpretation for the European Climate Foundation](#) (Robert Matthews et al, 2018)
- ['EU must not burn the world's forests for 'renewable' energy'](#) (Guardian, 14 December 2017)
- [Scientist letter to the European Parliament regarding forest biomass](#), (Euractiv, 11 January 2018)