

WOODY BIOMASS: A SUSTAINABLE SOLUTION TO EUROPE'S ENERGY CRISIS

Today's energy security crisis is a heating crisis. Heating accounts for 50% of EU energy demand, and 42% of it is supplied by natural gas. This crisis led to huge increases in energy prices and exposed the vulnerabilities associated with the dependency on fossil fuel imports. In this perspective, the revision of the Renewable Energy Directive (RED III) has taken a new dimension: it is not only about setting the EU on track to achieve 55% carbon emission reduction by 2030, but also to accelerate the uptake of local, clean and renewable heating sources and solutions.

District heating and cooling (DHC) is part of the solution to **deliver major natural gas savings in the short-term**¹, **and a robust decarbonization pathway for heating on the road to 2050**. It harnesses both local renewable heat and sustainable excess heat from industrial and urban sources, to bring clean and affordable heat to households and industries.

Local and sustainable bioenergy accounts for 27% of Europe's DHC supply. The importance of bioenergy is not limited to the heating and cooling sector: bioenergy and in particular woody biomass is Europe's most prominent local and sustainable energy source, it represents 10% of the total energy we consume², with over 96% of biomass produced domestically. Sustainable bioenergy contributes to the decarbonization of our energy system, but it is also an important resource to guarantee Europe's energy independence considering the drastic and unprecedented energy shortage.

In the context of the trilogue negotiations on REDIII, the undersigned organizations express their strong concern over the European Parliament proposal to introduce a new definition of "primary woody biomass", and the restrictions associated to its use.³ This definition does not reflect the reality of forest management and sustainable bioenergy. Rather than promoting a sustainable and resilient framework, it threatens the future of a sector which is critical to decarbonize and guarantee the energy security of many cities and rural areas across Europe, as well as to deliver socio-economic benefits, as the largest renewable employer on the continent.⁴

REDIII should guarantee the efficient and circular use of biomass resources and avoid any waste of resources. The undersigned organizations call on the European Commission, the European Parliament and the Council of the EU to support the following aspects during their discussions:

- 1. If not valorized in efficient energy production, primary biomass residues are often crushed and left to decompose on the forest floor. These resources should not be wasted, but used to replace fossil fuels, as recently pointed out by over 550 Scientists globally. Therefore, we oppose the creation of a "primary woody biomass" definition and limitations on the use of residual and non-quality roundwood biomass.
- 2. Forest biomass should meet robust sustainability and greenhouse gas saving criteria, through the risk-based approach and based on sustainable forest management practices adapted to local context. Thus, we support the revision of the sustainability criteria in REDIII in line with the Council general approach
- 3. Since biomass residues and non-quality roundwood are also valuable resources, we support prioritizing their efficient use, via high efficiency cogeneration, for efficient district heating and industrial applications, where heat and power demand coexist.

¹ 125TWh of natural gas by 2027. Agora Energiewende, March 2022, Regaining Europe energy sovereignty

² JRC Publications Repository - Brief on biomass for energy in the European Union (europa.eu).

³ European Parliament's position on REDIII

⁴ Of the 1.5 million people employed by the renewables sector, woody biomass accounts for 314,000 jobs, IRENA, 2022.

⁵ Scientist Letter regarding the need for climate smart forest management, 2022.



Promote the circular use of woody biomass residues and non-quality roundwood in efficient energy production

Woody biomass is harvested for timber production for wood-based products (e.g. furniture) and construction materials, as well as derived from forest management activities (wildfire prevention, damaged or fallen trees due to natural disasters or pests). These two activities produce residues and non-quality roundwood: pieces that are too small for commercial use (tops, branches), misshaped, broken, or damaged by insects, mold, or rot.

These residues and non-quality roundwood – that are anyways present and cannot be used for other higher-value purposes – are and should continue to be used for energy production. The REDII sustainability criteria already require material to be left to protect biodiversity and soil quality. If excess material is not utilized for energy purposes, they are left to rot in the forest resulting in CO₂ emissions and wildfire risk.

DHC valorizes the residual and non-quality roundwood biomass that has been rejected by other industries to supply sustainable heat to buildings. This contributes to heat decarbonization while enhancing resource efficiency and circularity of wood use, as it prevents the waste of precious natural resources.

Support the sustainability criteria for woody biomass

The use of residues and non-quality roundwood should meet robust sustainability and greenhouse gas saving criteria, through the risk-based approach and based on sustainable forest management practices, to manage the biodiversity risks associated with higher bioenergy demand.

Therefore, the undersigned support the revision of the sustainability criteria in REDIII to go beyond REDII and ensure that the wood used for energy purposes follows high sustainability standards. We are opposed to the exploitation of forest biomass for energy purposes from (i) areas that have been identified as being highly biodiverse by competent national authorities, and (ii) primary forests within Europe and in third countries.

Harvesting should be carried out according to sustainable forest management principles, with the key aim of maintaining soil quality and biodiversity. We are committed to climate neutrality, we already source from sustainably managed production forests where harvest levels stay below growth such that carbon stocks in these forests increase.

Compliance with the EU sustainability criteria is ensured through voluntary and national certification schemes formally recognised by the European Commission.⁶ These systems document compliance in a transparent, reliable and legally secure manner, thus minimizing the risk of using biomass from unsustainable sources.

Prioritize the most efficient use of biomass

Woody biomass is a highly dispatchable fuel that provides flexible, sustainable heat and power. **REDIII should** ensure that the harvested biomass is used as efficiently as possible, to maximize its contribution towards decarbonisation and security of supply.

Since biomass residues and non-quality roundwood are also valuable resources, we support prioritizing their efficient use, via high efficiency cogeneration, for efficient district heating and industrial applications, where heat and power demand coexist.

⁶ European Commission Approved voluntary schemes and national certification schemes



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