

Vattenfall's views on the policy framework for the use of woody biomass in energy supply

Policy Paper

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Woody biomass is part of Vattenfall's energy mix

In our operations, we use a carefully selected range of woody biomass that reflects both our environmental commitments and energy needs of the national markets. This biomass is largely used in our Swedish heating operations and include:

- **Forest Biomass Residues:** Our main sources are low-value by-products, such as tops, branches, and bark, which would otherwise decompose in the forest, as well as residues from the wood and paper industry like sawdust, pellets, and briquettes.
- **Recycled Wood and Waste-Derived Biofuels:** We utilise energy from recycled wood (e.g., construction waste, end-of-life pallets) and biogenic part of waste from households and operational waste that cannot be reused or recycled, which helps prevent these materials from ending up in landfills.

A limited part of our biofuel use may consist of trees that are damaged by insects or drought and can therefore neither be used for high-value products, nor remain in the forest.

Bioenergy plays a key role in combatting climate change

Recognised by both the IPCC¹ and under EU legislation², energy by woody biomass supports ambitious climate targets by replacing fossil fuels. Bioenergy offers a reliable, dispatchable source of heat, which is especially valuable in cold regions. It contributes to stabilising the electricity grid, thereby allowing more wind and solar power to be integrated, as well as reducing the electricity demand for heating purposes.

¹ [Working Group III contribution on Climate Change 2022: Mitigation of Climate Change](#)

² Woody biomass is recognized as a renewable energy source and zero rated under the EU Emission Trading Scheme (EU ETS), provided that sustainability and greenhouse gas reduction criteria are complied with. ([Renewable Energy Directive 2023](#); [EU Emission Trading Scheme MRR 2024](#))

In addition, to reach the Paris Agreement's goal of limiting global warming to 1.5°C, negative CO2 emissions, Carbon Dioxide Removals (CDRs), will be a necessary component in reaching the EU and national net-zero targets, and ultimately assist to revert the atmospheric concentration of greenhouse gases. In Sweden, for instance, there is a large potential to create negative emissions with the help of BECCS (Bio Energy Carbon Capture and Storage). By capturing the biogenic CO2 and storing it permanently, the district heating sector can offer an additional climate benefit at installations that have already phased out the use of fossil fuels completely.

We remain committed to ongoing transparency and best practices to meet both environmental, sustainability and stakeholder expectations

Today's ambitious and comprehensive framework of EU and national regulations, according to which we operate, ensures a responsible use of woody biomass for energy production, including biodiversity impact and responsible sourcing.

- **Responsible Sourcing Standards:** EU and UK legislation establish requirements for biomass sustainability, including provisions to protect biodiversity, maintain soil quality, and avoid deforestation. Only residues and non-economically viable timber are used in district heating, ensuring that high-value resources are preserved for other industries like sawn timber and paper.
- **Company Policy for Suppliers Evaluation:** Vattenfall also applies rigorous corporate policies to assess and verify the sustainability practices of our biomass suppliers. Quality checks are frequently carried out, ensuring compliance with our high standards.

In addition, EU forest legislation is continuously advancing, governing the responsible sourcing of forest-based products. Equally, national forest policies exist to ensure sustainable forest management. For our part, we remain committed to transparency and best practices to meet environmental, sustainability and stakeholder expectations.

To facilitate the continued responsible use of woody biomass for energy and decarbonisation of the heating sector, we support policies that ensure:

- 1. Strengthened Biomass Usage Statistics:** More detailed, EU-level statistics on biomass types, sources, and volumes are essential to track responsible woody biomass use across industries
- 2. Incentivise Bioenergy Flexibility and System Integration:** Encourage power-to-heat solutions that allow bioenergy to complement variable renewable sources, improving grid stability and reducing fossil fuel reliance.
- 3. Support Bio-Energy Carbon Capture and Storage (BECCS):** Stronger incentives are needed to support investments in BECCS and achieve the net-negative CO2 emissions which both Sweden as well as the EU depend upon for meeting their ambitious net-zero climate targets.

Vattenfall is a European energy company with approximately 21.000 employees. For more than 100 years we have electrified industries, supplied energy to people's homes and modernised our way of living through innovation and cooperation. We are committed to building a future where everyone can choose fossil-free ways to move, make and live. To succeed we must become fossil free ourselves. But that's not enough. We are looking beyond our own industry to see where we can really make a difference. Together with our partners, we are taking on the responsibility to find new and sustainable ways to electrify transportation, industries and heating

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