

Date

## Towards a circular, regenerative and competitive bioeconomy, including bioenergy

The Commission is correctly identified resilience, resource efficiency, self-sufficiency and energy security as essential elements within the bioeconomy. We were pleased to notice that bioenergy is recognized as a part of bioeconomy, as it provides means to ensure all these vital aspects.

- The optimal use of resources can be achieved by utilizing biomass efficiently down to the very last molecule.
- Biomass is often a highly local resource, with several areas achieving self-sufficiency locally a fact that also holds true from an EU perspective (with up to 95% being domestically sourced).
- Bioenergy plays a significant role in ensuring energy security, especially in Northern Europe. Here in the countries and regions district heating is widespread bioenergy forms the backbone of heating systems. Transition away from fossil fuels to biobased or electrified solutions has already occurred or is progressing rapidly.
- Additionally, bioenergy, especially through combined heat and power (CHP) plants, provides a
  controllable production method that contributes to the balance of electricity systems. This
  capacity could be enhanced proactively if desired.

Bioenergy does not necessarily lead to increased energy costs. The Finnish capital's energy company Helen abandoned its last coal-fired CHP plants this spring and simultaneously announced a price reduction for district heating. Heat production by biomass, waste heat, and electric boilers has proved to be an economically efficient solution. This approach ensures the affordability and accessibility of essential goods and services for all.

Efficient resource utilization does not automatically only mean that a larger share of raw materials is directed toward products. Resource efficiency can also be measured by higher energy output from raw materials: the most efficient example of this is the cogeneration of electricity and heat mentioned above. By investing in technology, it is possible to achieve an efficiency of over 100% by recovering energy from the flue gas and <u>fuel usage can be optimized</u>. Implementing BECCSU can lead to utilizing wood also on a molecule level and making negative emissions possible.

Efficient use of resources and localism can be linked. It is crucial to ensure positive synergies and efficient use of raw materials while avoiding end-use competition. Economic, social and energy security factors should be duly considered.

Due to the mentioned benefits, we hope that bioenergy will be regarded as an essential part of the bioeconomy sector, as a pillar, and not just as a "compulsory evil" on the sidelines of the bioeconomy sector. In forest-rich countries, the bioenergy sector not only plays the role of utilizing by-products but also contributes to forest management activities providing income for forest owners. The bioenergy sector can also be developed, and research can be used to improve efficiency and ensure the EU's energy independence and security.

Finnish Energy Eteläranta 10, 00130 Helsinki www.energia.fi EU transparency register number: 68861821910-84 Bioenergy, along with electrification based on carbon free electricity, is how some Member States have already moved away from imported fossil fuels and the rest can follow. However, there is no bioenergy sector without a strong EU bioeconomy, which is why we welcome the initiative. We need to find ways of using the renewable resources available in the Union for a common fossil-free future, considering the carrying capacity of nature.

The Commission identifies one of the main objectives of the strategy as ensuring the long-term competitiveness and investment security of the EU bioeconomy. The constant regulatory change in recent years, and particularly the constant state of flux in biomass sustainability, is not achieving this objective - we believe that not only the bioenergy sector but the whole bioeconomy sector needs a stable operating environment and clear regulatory direction. We hope that the Commission will also be able to strengthen this with the strategy.