

SUSTAINABLE BIOMASS: CLARIFYING THE “WHOLE TREES” CONCEPT

A number of strategic documents recently published by the European Commission have stigmatised the practice of using “whole trees” for bioenergy, calling instead for a “transformative approach” aimed at minimising their use. Organisations representing the bioenergy value chain and the supply of biomass argue that such an arbitrary physical criterion will not help to ensure the sustainability of the biomass feedstock but, on the contrary, risks disrupting supply chains, with adverse effects on the efficient use of available wood resources and, ultimately, on all forest benefits: economic, social and environmental.

The term “whole trees” was first used by the European Commission in the context of the *Biodiversity Strategy for 2030*, and more recently in the *2030 Climate Target Plan Communication* alongside several public consultations. The term is non-technical and largely used emotively.

The archetype of a forest product supply chain is constituted of complex flows of materials through a myriad of players. High exchange rates between waste products and raw materials have become highly efficient over time, with market-based systems optimising the allocation of these resources. Markets have been developed to distribute the full quality-spectrum of wood and wood fibres which, in turn, stimulates productive and sustainable forest management. Not only do these specialized systems provide forest-based employment and income for rural areas, they also support a large sector of the European bioeconomy. The role of forests extends beyond this, however, providing communities with numerous services, including the promotion of biodiversity and climate change mitigation.

Sustainable forest management is embedded in individual Member States’ national forest legislation. At EU level, the RED II sustainability criteria for forest biomass ensure the sustainability of this raw material. Market mechanisms and supply chains follow due diligence and use this resource in the most efficient way possible.

What is a “whole tree” and why should this definition not become a driving principle in defining sustainable biomass feedstock?

While the bioenergy industry largely utilises residues and side streams, low-value timber assortments resulting, among others, from thinning, maintenance and sanitary cuttings can also be utilised, while continuing to ensure that the sustainability of the value chain is fully respected.

The term “whole trees” cannot be used to define the quality of sawlogs and timber used for added value purposes. Furthermore, the idea that, in order to guarantee its sustainability, bioenergy should be prevented from using certain categories of feedstock is based on a misconception.

1. TREE DIAMETER IS NOT A PRESCRIPTION FOR ITS END USE

A sawlog (i.e. a log suitable for being processed in a sawmill and sawed into lumber) is not chosen solely based on its size and diameter but also on its quality, determined by the absence of faults. The term

“whole tree” can describe a log with a large diameter and of good quality, but it can also describe logs with a too small diameter or a low-grade tree of poor quality. Pest-damaged wood, for example, does not usually meet the necessary mechanical characteristics for use in the construction sector or the required humidity to be processed as fibre. Rather, it needs to be removed from the forest for sanitary reasons and to limit infestations. Endowing an economic purpose to this damaged wood supports this process.

2. ENHANCING ECONOMIC VIABILITY WHILE INCREASING FOREST RESILIENCE

Early thinnings are part of a long-term investment to produce high-quality timber. Contrary to decreasing forest stock, these operations support the higher carbon uptake and quality of the stand as a whole. In addition, in areas which are prone to forest fires, these early thinnings are among the key preventive actions aimed at reducing the risk of disaster and increasing forest resilience.

It therefore follows that markets which use lower grade products, such as those which result from thinnings, allow forest owners to offset the cost of these necessary management operations. This aspect is especially important in order to support the sustainable forest management of both small-scale forest owners as well as large-scale forest management organisations.

Both the Circular Economy Action Plan and the Renovation Wave count on embedding carbon in the construction sector and using renewable materials such as wood. Forest management operations which enhance the production of high-quality timber must, therefore, be supported in order to accomplish Europe’s decarbonisation goals.

3. MARKET DYNAMICS RESULT IN THE MOST EFFICIENT USE OF WOOD RESOURCES

Following decades of development, markets have become reliable and efficient mechanisms for allocating wood resources. They ensure that high-quality logs are reserved for those items which demand the most longevity - such as timber for construction and furniture. Conversely, the lowest quality woody biomass can sometimes only be used for bioenergy. This well-established market system should not be tampered with by ill-advised policymaking.

Introducing diameter-related restrictions as additional sustainability criteria for bioenergy could impede the flow of raw materials to the marketplace, making it impossible to sell certain large low-quality logs due to administrative barriers. Similarly, prohibiting the use of “whole trees” could have a perverse effect on forestry practices and result in negative implications for forest productivity in general. Furthermore, reducing income opportunities for forest owners and managers would subsequently be reflected in increased prices for downstream producers and consumers, not to mention those individuals that rely heavily on biomass for energy.



Legislation minimising the use of “whole trees” would ultimately increase the burden on operators and trigger a number of unintended and undesirable results. European and national authorities should focus on the implementation and enforcement of the sustainability criteria as defined in the Renewable Energy Directive recast. The potential revision of these criteria should be based on a substantial consultation process that takes direct stock from practices in the field post-implementation (starting in July 2021).

Bioenergy Europe is the voice of European bioenergy sector. The association aims at developing a sustainable bioenergy market based on fair business conditions. Founded in 1990, Bioenergy Europe is a non-profit, Brussels-based organisation bringing together more than 160 members from across Europe.

CEPF The Confederation of European Forest Owners (CEPF) is the umbrella association of private forest owner organisations in Europe. At EU level, CEPF promotes the values of sustainable forest management, private property ownership and forest sectors economic viability.

COPA-COGECA are the united voice of farmers and agri-cooperatives in the EU. Together, they ensure that EU agriculture is sustainable, innovative and competitive, guaranteeing food security to half a billion people throughout Europe. Copa represents over 22 million farmers and their families whilst Cogeca represents the interests of 22,000 agricultural cooperatives. They are one of the biggest and most active lobbying organisations in Brussels.

EOS European Organisation of the Sawmill Industry, is a Brussels-based non-profit association representing the interests of the European sawmilling sector on European and International level. Through its member federations and associated members, EOS represents some 35,000 sawmills in 12 countries across Europe. Together they represent around 80% of the total European sawn wood output in a sector that has a turnover of around 35 billion EUR and employs about 250,000 people in the EU.

EUSTAfor, the European State Forest Association, represents the voice of European state forest management organizations who have sustainable forest management and the production of wood as major concerns.