

'Forest mobilisation:' Unlocking Europe's wood energy potential

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Credit: Andrew Coelho

Increasing the woody biomass supply sustainably, continuously and at acceptable prices is a huge challenge

It's not always easy to see the wood from trees when dealing with complex challenges in [energy](#) policy. However, Europe is increasingly finding in its forests a significant source of renewable energy that could help the region move away from fossil fuel dependency.

Known collectively as [woody biomass](#), these by-products of forest management are also useful raw materials to be crafted into wood products, turned into energy or converted into mulch and erosion control materials.

A 2010 study UN [study](#) predicted a 3.5% annual growth rate for wood energy, meaning that supply will need double by 2030 to meet demand. Currently, most wood energy harvested in the European economic community is used by the residential (39%), industrial (38%) and power and heat (20%) sectors, according to the UNECE/FAO Joint Wood Energy Enquiry.

Europe harvests the bulk of its biomass in its own forests, and there is room to increase production. "In general, in most places the level of harvest is lower than the level of annual growth," says Patrick Reumerman, Senior Consultant BTG Biomass Technology Group BV, which is collaborating with the European platform [AllThings.Bio](#) and the project [Simwood](#) to promote the use of woody biomass.

On average, Europe harvests around 60% of annual growth. If the forests are well managed, such as those in Bavaria and Sweden, for example, it should be possible to harvest up to 80% of annual growth and still be sustainable, says Reumerman.

Contrary to popular belief, says Johan Elvnert, managing director of the Forest-based Sector ETP, the big issue with wood in Europe is not deforestation but what experts call "wood mobilisation." In other words, the problem is not that there is not enough wood growing in the forest

but that there are many issues with getting it out of the forest.

One of the challenges is the increasing fragmentation of forest ownership as small parcels of land are divided up again and again, inherited by successive generations.

"Private owners have a low level of wood optimisation and it's really a challenge to get them to harvest more," says Reumerman. "They are hard to contact and because their plots are small, their potential revenue for harvesting wood is very limited."

Moreover, woody biomass is notably less valuable than the part of the tree that is harvested for solid wood and it is not alone an incentive to maintain a forest.

However, the wood turned into biomass products would in other circumstances be wasted. So even if the income for landowners is comparatively modest, "biomass can be included with other management objectives," says Francisco Aguilar of the University of Missouri School of Natural Resources. "It will not be the silver bullet, but it can help."

Woody biomass can complement earning from other activities. The end effect is that through woody biomass and solid timber [harvest](#), the project becomes viable.

Harvesting woody biomass in tandem with other objectives also helps to maintain a healthy ecosystem. "Maintaining a forest and harvesting [wood](#) is very good for the forest in general" says Reumerman. "It helps with bio diversity, it creates a nicer [forest](#) and it can create a livelihood for local communities."

More information: The Bioeconomy Awareness and Discourse Project (BioCannDo) aims to increase awareness of bio-based products

– products partly or wholly made of biomass.

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