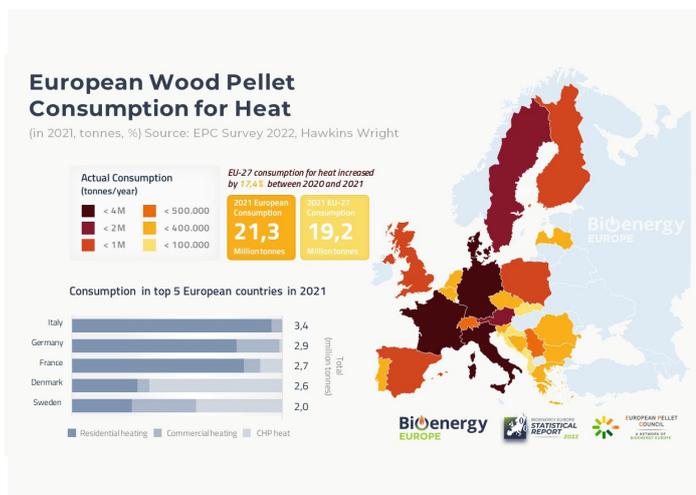
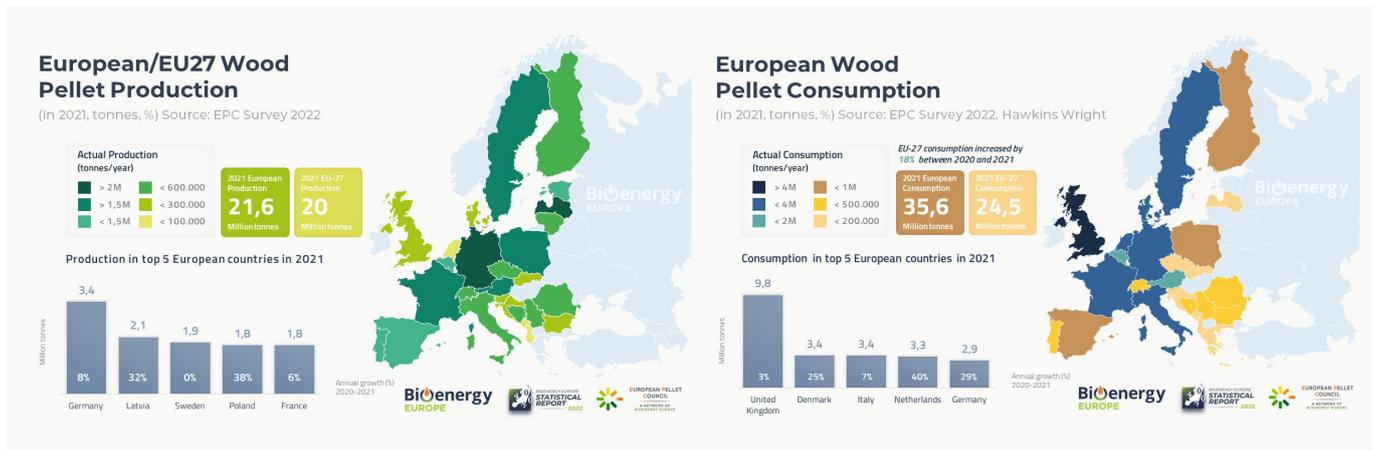


PELLETS

Wood pellets are a sustainable solution contributing to the EU’s climate and energy goals. The main feedstock for pellet production is wood residues, like sawdust, and as such they are a true example of resource efficiency and circularity. In 2021, the EU remained the global leader in wood pellet production – followed by the US and Canada – reaching an output of almost 20 million tons, representing around 48% of the global production. In 2021, European production capacity increased by 6,2 % and production by 8,9 % compared to the previous year.



Different consumers – from households to utilities – have embraced wood pellets as a sustainable energy solution. In 2021, the EU consumption of pellets reached 24,5 million tons, growing by 18% over the previous year. The residential & commercial sectors account for 66.1% of the European pellet consumption, while industry for the remaining 33.9%. The situation differs from country to country. Industrial consumption (for electricity and CHP) is the main driver for the Netherlands and Denmark. In Italy, Germany, and France, it is the residential heating sector that leads wood pellet consumption. However, it should be noted that use of pellets for heat takes place practically all over Europe and new markets – like the Polish one – exhibited tremendous growth rates in 2021.

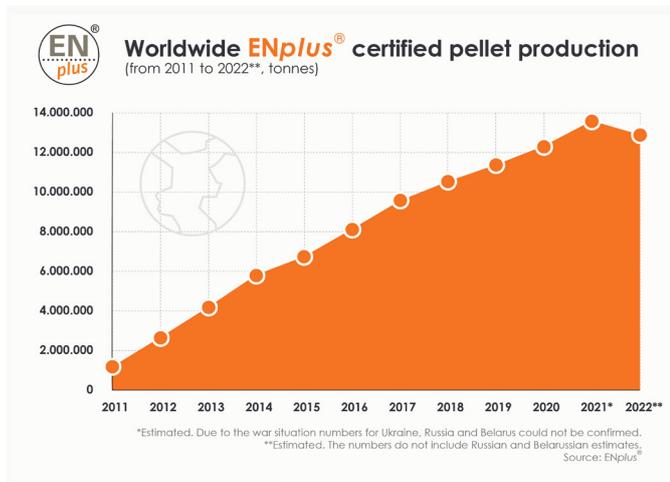
Cost Competitiveness

A key factor behind the increasing popularity of wood pellets is their cost-competitiveness compared to other energy carriers: natural gas, electricity, oil. Towards the end of 2021, industrial wood pellet prices were actually lower than coal, potentially representing a game-changer for industries that have traditionally relied on solid fossil fuels for their energy production. However, increasing energy prices are also impacting the pellet sector, affecting pellet prices, a trend which has intensified in 2022 also due to the increase in its demand.

Improved Consumer Reliability Through Fuel Certification

Residential consumers need to be sure of the quality of the pellets used in their appliances. In this regard, the ENplus® fuel quality certification scheme has been a huge success for ten years now, ensuring wood pellet quality by guaranteeing it over the entire supply chain (i.e. from production to end-user delivery). In 2021, around 14,2 million tons of pellets have been certified by the system in 47 countries all over the world.

Europe leads the certification race, having the highest number of certified producers and volume of certified pellets, with ENplus® on its way to become a global standard for the pellet industry.



New Challenges and Opportunities for the Pellet Sector

Following the crisis of COVID-19, to which the wood pellet sector demonstrated remarkable resilience, Europe has entered a turbulent time with the onset of the energy crisis in the second half of 2021. The pellet sector is negatively affected from a variety of sources: increased production costs (primarily of electricity), raw material shortages due to slowdown in the sawmilling industry and market tightness due to increased demand for pellets, but also due to lower supply following the EU sanctions over Russia and Belarus in 2022. For many years, wood pellet prices have remained much more stable compared to electricity and natural gas, but now wood pellet

prices – like those of all energy products – are reaching record levels.

Still wood pellets remain competitive compared to almost all other energy sources and could become even more attractive with a series of targeted measures (e.g. VAT reductions, in line with what applies to other energy sources). There is still significant potential for further expansion of sustainable wood pellet production, both worldwide and in Europe, but barriers on investments and logistics need to be overcome, while stable and enabling policy frameworks need to be enacted.

Wood Pellets – a Fuel for the Future

The ongoing energy crisis should not reverse the EU’s decarbonization efforts – if anything, it underscores the need for its acceleration. Heating and cooling make up for almost half of the EU’s energy consumption and the majority (around 80%) is still fossil based. Addressing the slower rate of decarbonization in the heating sector has gained fresh urgency with the energy crisis. It is essential not only to reach carbon neutrality by 2050, but also to reduce reliance on imported fossil fuels and to help households stay warm at an affordable cost. Industries are also challenged by high energy prices and closures threaten the economic growth of the continent as well as its social well-being. Wood pellets, along with other sustainable biomass sources, are already a proven and cost-effective renewable solution and can successfully contribute to the decarbonization of the heating sector. National initiatives – such as heating oil phase outs in Austria and France – and industrial success cases demonstrate how wood pellets can be a critical part of the new, emerging energy system.

Recommendations

1. A stable policy framework is essential to provide a long-term perspective to companies to further invest in pellet production capacity, fostering European pellet production and thus ensuring adequate supply along with promoting climate mitigation efforts.
2. Measures to ensure that wood pellet prices remain at acceptable levels for consumers should be implemented. VAT reductions – in line with other energy carriers – are suggested, while measures for reducing costs in pellet production (e.g. net metering for pellet producers) should be promoted.
3. Instead of subsidizing fossil fuels, EU and national funds should be directed to consumers that wish to switch from fossil fuel appliances, or older and less efficient wood fired ones, to modern and efficient wood pellet solutions. This will accelerate the deployment of renewables, reduce air pollutant emissions, improve resource efficiency all while shielding vulnerable consumers from energy poverty.
4. A progressive ban of fossil fuels for heating is also a very effective policy to consider in order to achieve a fast energy transition.