Wood pellet production contributes to local economies and the development of quality jobs across the entire value chain, particularly in rural areas. Its growth not only contributes to the achievement of the 2050 EU carbon neutrality objective but also a sustainable recovery. In 2019, the EU28 produced nearly 18 million tonnes (corresponding to about 7.6 Mtoe) of pellets, showing a growth of 5% in 2019 compared to that of 2018. Both wood pellet production and its use is evenly widespread all over Europe. The residential market (with appliances engineered and produced in Europe) is growing, creating local jobs/value and is offering a solution to mitigate air pollution in many countries through the increasing use of modern and efficient biomass appliances.

In order to support the local production of this sustainable fuel, largely consisting of wood processing residues, a stable and favourable policy framework is crucial. Promoting pellet production is particularly important right now, as climate change led natural disturbances such as forest fires and pest are widespread. In some cases, sanitizing cuttings and harvesting residues from forests can help mitigating the propagation of such natural disturbances.

A dynamic European-based sector

Pellet production has been steadily growing in the EU-28 since 2004. Across the EU, the primary source of feedstock is wood processing residues, making of pellets a true example of resource efficiency and circularity. Furthermore, in some cases pellet production could also become a viable way to promote the valorisation of wood damaged by extreme weather occurrence as well as wood infested by the bark beetle. In fact, in some EU Member States such as Czech Republic, Germany, Austria and Belgium, this already represents a solution to incentivise damaged wood removal from the forests.
Bioenergy: a reliable and a flexible solution for residential heating, derived heat, and industrial processes.

The proposed emissions reduction target of at least 55% GHG by 2030 and zero net emissions by 2050, requires a rapid phasing out of fossil fuels in all sectors of the European economy. In this regard, both heating and industry sectors are lagging behind. Pellets is one of the readily available and economically affordable solutions to phase out fossil fuels from the power sector, industrial processes, and residential heating.

Pellets provide a sustainable, efficient, and secure solution for households, and its commercial uses for larger residential buildings and small industrial processes represents a cost-effective mean to decarbonise the European heating sector. In fact, in many member states pellets are cheaper than fossil alternatives (heating oil, gas, or coal) making it a perfect ally to tackle energy poverty. With 16,4 million tonnes consumed within the EU28 in 2019, heating with pellets is increasing in popularity in many member states. Nonetheless, there is still a high share of residential heating appliances running on fossil fuel in EU28. As confirmed by the State of the Energy Union report, fossil fuels still enjoy different forms of subsidies (over EUR 50 bn in 2018, up 6% compared to 2015). Such measures undermine the competitiveness of renewable solutions, thereby weakening incentives for decarbonisation.

De-fossilization of the heating and cooling sector (which is currently responsible for 50% of our final energy consumption) must become a priority throughout the entirety of the political system; being discussed at EU, national and most importantly local levels. The European Commission Renovation Wave includes tackling heating and cooling decarbonisation among its priorities. Yet, it falls short of setting out a solid strategy to phase out fossil fuels.

**RECOMMENDATIONS**

1. Stable policy framework is essential for giving a sufficiently long-term perspective to companies to further invest in pellet production and use, helping further climate change mitigation efforts.

2. Unlock support through the Renovation wave to allow citizens to switch from fossil fuel appliances to modern and efficient pellet solutions. This will help a faster deployment of renewable solutions while limiting air pollutant emissions.

3. Tailored measures to support the upscaling of bioenergy solutions in medium scale markets such as schools, hospitals and residential buildings should be carefully designed and implemented. It is indispensable that the heating sector is included within a carbon pricing system. Along with a ban on indirect subsidies for fossil fuels.