

**Policy document of the BSHD (federal association of the German sawmilling and wood industries) on the European energy policy.**

It is the declared objective of the European Union, to substantially increase the percentage of renewable energy sources for the generation of power.

The German sawmilling industry, with its biomass power plants with combined heat and power generation, is contributing considerably to that already today: approx. 150 MW of electrical power corresponding to approx. 12% of the total electricity generated by solid biomass in Germany (1.200 MW electrical).

The sawmilling industry is enormously important for climate policy. Its main product – sawn timber for construction and living – is acting on one hand as a reservoir for CO<sub>2</sub>. Thus, 25 million tons of CO<sub>2</sub> are taken out of circulation for ex. in Germany each year and are „built into“ wooden houses. On the other hand, this timber is substituting other materials, which would have to be produced with a significantly higher energy input. Therefore, by using wood, CO<sub>2</sub> emissions are avoided. Using wood is dual climate protection: storing CO<sub>2</sub> and avoiding CO<sub>2</sub>.

A third approach to further improve the exemplary carbon footprint of the sawmilling industry is the generation of electricity in biomass power plants. In the process, the sawmilling industry is ideally suited to support the objective of the EU further by building additional combined heat and power plants (CHP). On one hand, the sawmilling industry is directly producing biomass as a byproduct (scrap wood resulting from the different steps of production), and on the other hand, it needs a considerable amount of process heat (for kiln drying). The immediate proximity of available raw material and use of thermal energy guarantees shortest distances for transporting the fuel as well as short piping for the process heat and thus avoids waste of energy.

The potential within the sawmilling industry for additional biomass power plants with combined heat and power generation is remarkable: in Germany, more than 200 companies are operating pure biomass heat generating plants in order to produce process heat for kiln-drying their products, however without producing electricity by means of combining power and heat. There, a potential for combined generation of heat and power of similar dimensions as the existing capacities (150 MW electrical) is lying idle, which is not exploited due to real or assumed uncertainties for the sawmilling industry caused by the German „Erneuerbare Energien Gesetz (EEG)“ (Renewable Energy Law).

The German „Erneuerbare Energien Gesetz (EEG)“ (Renewable Energy Law) amended in 2009 is creating the following problems for the German sawmilling industry:

- The legislator has intended that the so-called „Nawaro-Bonus“ (bonus for using renewable raw materials) is granted for the bark accumulating in sawmills. The wording of the legal text, however, leaves some room for interpretation resulting in different opinions of energy providers, consultants and experts. Thus, the sawmilling industry is lacking the legal certainty, to plan and finance more power plants based on the „Nawaro-Bonus“ for bark.  
Since bark is the most important fuel in the sawmilling industry, clarification of this issue is of utmost importance.
- The „KWK-Bonus“ (bonus for combining power and heat generation in a plant) is not readily granted to the sawmilling industry if they use the generated heat for kiln-drying. Kiln-drying, in turn, is absolutely essential in the sawmilling industry for finishing and further processing the wood products. During subsequent logistic processes, it also has energy saving and CO<sub>2</sub> reducing effects due to the resulting weight loss.
- The principle of exclusivity in the „EEG“ (Renewable Energy Law) turns into being a critical obstacle for investments in combined heat and power plants by the German sawmilling industry. Whenever a biomass heat and power plant is burning material funded by the „Nawaro-Bonus“, it is not allowed to use any fuel without that bonus or else the bonus is forfeited permanently. This regulation is impeding the necessary flexibility especially of smaller biomass heat and power plants, for ex. when they have to compensate shortages of „Nawaro-Material“ on short notice with wood chips from the sawmill.

European energy policy should implement the following:

- Thermal exploitation of bark without limiting its origin should be fostered by granting the „Nawaro-Bonus“ in order to provide an incentive for investing in biomass heat and power plants, especially of smaller and mid-sized dimensions.
- The principle of exclusivity in granting the „Nawaro-Bonus“ has to be omitted. Burning additional fuels in subsidized biomass heat and power plants has to be possible without restrictions, while considering that when the amount of the bonus is determined. In other European countries this principle has proven very successful (keyword harmonization).
- Kiln-drying the wood, as practised in the sawmilling and wood industry, is an ideal heat sink for combined heat power plants. With regard to the objective of increasing energy efficiency, investments in combined heat power plants with this heat sink are to be supported without restrictions
- When subsidizing energy saving measures in buildings, in addition to the structural-physical characteristics (for ex. heat conductivity index) also the carbon footprint of building materials should be taken into consideration, from production to disposal.