Fact sheet (2016): Woody energy market in Serbia

Framework conditions

In Serbia, wood (energy wood, pulpwood, wood residues) is consumed in households for heating and for the production of wood pellets and chipboard. The woody biomass market for energy purposes in Serbia is still in early stages of development and the main barriers for further development are:

- Lack of favorable national policies;
- Lack of incentive schemes and subsidies;
- Lack of medium and large scale applications of bioenergy production, such as district heating, combined heat and power generation (CHP) utilities;
- Lack of interest of state forest managers to develop bioenergy projects
- Insufficient organizational setting of private forest associations;

Forest area	2.252.400 ha	29% of total land area
Forest Ownership	1.194.000 ha state forests	52% is state owned
	1.058.400 ha private forests	48% is private owned
	900.000 forest owners with an average forest-holding of 1,2 hectares Data presented are official data from National Forest Inventory, published in 2009. Area of private forests is increasing due to ongoing restitution process and natural occupation of former agricultural land with forest vegetation.	

State forests in Serbia are managed by two state forest management companies: Srbijasume and Vojvodinasume. Additionally, the five National Park Management Companies Djerdap, Tara, Fruska Gora, Kopaonik and Sar Planina as well as several other institutions such as Faculty of Forestry or Serbian Army are also managing state forests within their jurisdiction. Privately owned forests are managed by their owners, however state forest managers are organizing services for private forest owners, including forest management planning, tree marking, licenses for harvests, etc.

The forest administration has so far not provided sufficient support and there are few opportunities for private forest owners to choose service providers and to develop strong private forest associations. Existing private forest owners associations only have a role as civil societies, without real effects on forest management and the wood market. On the other hand, due to the restitution process in Serbia, there are large private forest owners such as the Serbian Orthodox Church, which in recent years developed very competitive forest management organizations. Due to increasing demand, markets for wood from private

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forests, especially for firewood developed and is supplied to major consumers in Serbia and some neighboring countries, through firewood traders and harvesting companies. In general, private forests have higher share of coppice origin, thus wood produced in private forests is considered of lower quality. However, this very much depends on the region and varies in terms of management tradition. The majority of sawmills and furniture factories either use their wood residues for own energy production or produce wood pellets or briquettes.

Market and supply chain development

There are no operational woody biomass district heating plants in Serbia, while several cities and municipalities are in various phases of realization of such projects. The wood market both for logs and firewood (including pulpwood, wood for chipboard) is developed in Serbia.

Serbian woody biomass is mostly used for production of pellets and chipboard in the country. Firewood is exported to Greece and Macedonia and wood chips to Croatia, Slovenia, Austria, Montenegro and Italy. Wood chips are produced with mobile wood chippers at the forest, at sawmill sites or in pellet and chipboard factories.

Wood pellet consumption for household heating is significantly increasing every year, while lower increase of wood chips consumption is recorded in the industry. Serbia has more than 60 wood pellet factories with a total capacity of around 450 k capacity and 250 k production (European Pellet Council Statistics 2014). Pellet production is experiencing considerable growth even though Serbian producers have been affected by the crisis on the Italian wood pellet market in 2014-2015. Production of wood pellets started in 2007 as a result of increased demand for pellets in the EU market. Until 2015, approximately 70% of produced pellets were exported mostly to Italy, Slovenia, Greece, Macedonia, Albania and Kosovo, however share of wood pellet export to Italy is reducing. There is no exact data of the share of illegally harvested wood. Several biomass district heating plants in cities and municipalities are in planning, preparation or implementation phase. At the moment in Serbia there are no operating biomass trade and logistic centers (BLTC) for the domestic market in place as of yet, although one in Majdanpek is developed with support from the Austrian Development Agency.

Sustainability and quality assurance schemes

The Serbian state forests managed by Srbijasume and Vojvodinasume are FSC certified which is very important for the export of wood products to EU member states. Around 40% of forest area is certified which is around 897 000 ha. Quality control and quality assurance standards for processed firewood are not used except in cases of export. At the moment fuel standards and quality certification are most advanced for wood pellets due to their mainly industrial production, predominantly for export to other EU states. For now, seven Serbian pellet producers have obtained quality labels (EN*plus*) addressing needs for quality assurance on the European export markets.

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