Production and Market of Pellets in Croatia – Latest Trends and Challenges

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Abstract: The use of biomass energy is considered the energy of the future. It is thus estimated that by 2040 the renewable energy sources will account for 80% of the total world energy production. The use of forest biomass as the carrier of energy has a positive effect on: local aspects (contributing to lower air pollution in urban areas), regional aspects (international pollution transfer, Göteborg protocol), global aspects (Croatia’s compliance with the requirements of greenhouse gases regulations). In the energy balance, many other effects of the use of biomass pellet energy have been recognized such as new job opportunities, saving of foreign currency, safe energy supply, impact on energy price. The use of biomass pellets as the energy carrier occupies a special place in the Energy Development Strategy in the Republic of Croatia (Official Gazette “NN” 130/2009), where in Chapter 2.2 the climate changes and greenhouse gases emissions have become a priority global development issue. This paper shows the features of non-industrial pellets produced in Croatia, the way of their production, economic characteristics of pellet production as well as challenges to be fulfilled by the Croatian manufacturers in order to comply with the new European norm EN 14 961-2. Croatia also has a large potential for the production of pellets by mixing wood and non-wood biomass. The research carried out at the Faculty of Forestry at the University of Zagreb showed that by mixing fir and corn residues in the ratio 70% : 30% a satisfying quality of pellets would be obtained according to EN 14 961.

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