

Contribution 118 in session "Fuelwood quality and moisture content management"

Wood chips characterization for small boiler in the Italy

Authors: Grigolato Stefano; Sgarbossa Andrea; Zanetti Michela; Cosola Giulio; Cavalli Raffaele

University of Padova - TESAF Department, Italy, stefano.grigolato@unipd.it

Keywords: woodchips, fuel quality, chipping, European standard, forest biomass

The study reports the result of the quality analysis of more than 120 woodchips samples collected from wood chips producers in Italy to be used in smaller appliances, such as in households and small commercial and public sector buildings.

The aims of the study is to highlight the current quality of the wood chips produced in Italy according to the European standard specific for wood chips for non-industrial use (EN 149161-4) in relation to the biomass origin (mainly forests, plantations and other virgin wood and by-products and residues from wood processing industry) and wood chipper (type of and size of machines).

The quality analysis considers mainly the physical-mechanical standards as moisture content, bulk density, ash content, particle size distribution of the fuel and its energy content determined according to the specific European standards.