



Agro-Forestry and Animal Residuals Treatment for Biomass to Energy and Environment Challenges for Albania

F. Gjyriqi^{1*}, I. Malollari¹, L. Xhagolli¹, H. Manaj¹, A. Dhroso¹, Dh. Koraj¹
P. Kotori², A. Bekteshi³

¹University of Tirana, Albania, ²University of Vlora, ³University of Shkodra, Albania

Received September 12, 2013; Accepted November 27, 2013

Abstract: The energy potential from agricultural and forestry biomass resources was calculated some 15 years ago and the energy potential from these residues was also evaluated with a trend to be increased in the future. Biomass resources and potentials assessment for Albania has been studied and evaluated within the frame of National Programs of Research and Development supported from the Albanian Ministry of Education and Science and the Agency of Research, Technology and Innovation, for the period 2010-2012. To address issues related to the assessment of future biomass production we reviewed biomass resources in Albania and studies on potentials assessment. We hope our team will benefit from the comparison of biomass supply from forestry residues, wood industry residues, agriculture residues (straw, permanent crops-field residues) and animal residues. Our aim was to screen, review and gather knowledge of ligno-cellulose biomass in Albania. The biomass potentials were estimated on the basis of exploitable forestry areas, agriculture areas as well as manures. Recently our study has been at the forefront of research and education in the closely interlinked spheres of energy, environment, technology, economy, security, and development.

Keywords: *biomass Biogas production; Energy efficiency; Pre-treatment; process design and development; Engineering software*

*Corresponding: E-Mail: fatmir_gjyriqi@hotmail.com; Tel: +49 152 54 02 37 08; Fax: +49 201 723 54 01