

Converte Project Evaluation of the Potential of Energy Crops in Portugal

Short introductory summary:

Energy crops are dedicated cultures directed to the production of energy in the form of biofuels, electricity or heat. However, those crops also present a dual purpose, since, due to their tolerance to contaminated soils, they are able to remediate and alleviate soil pollution derived from the disposal of polymetallic agents and other toxic elements. Moreover, as these crops are also suitable for the exploitation of other types of marginal lands (e.g. salinity soils), the risk of land use conflicts due to competition for food and feed is reduced, and they can bring additional revenue to land owners, thus contributing positively to economic growth. Therefore, in the framework of the CONVERTE project, the aim was to construct and design a georeferenced (mapping) database for mainland Portugal, to identify land availability for the implementation of energy crops and microalgae culture, and to locate agricultural and forestry production areas (including its residues) with potential for its sustainable exploitation (environmentally, socially and economically). The productivities forecast as well as bioenergy generation is presented and critically discussed.

Presenter: **Mariana ABREU, Laboratório Nacional de Energia e Geologia (LNEG), Unidade de Bioenergia (UB), Lisboa, PORTUGAL**

Presenter's biography:

Mariana Abreu, Chemical Engineer, MSc. in Energy and Bioenergy and PhD Student in Bioenergy at NOVA University Lisbon (UNL). Currently carrying out research & development (R&D) in the CONVERTE Project, at the Bioenergy Unit of the National Laboratory for Energy and Geology (LNEG) in Lisbon, Portugal

Biographies and Short introductory summaries are supplied directly by presenters and are published here unedited

Co-authors:

M. Abreu, Laboratório Nacional de Energia e Geologia - LNEG,I.P, Lisboa, PORTUGAL
A. Reis, Laboratório Nacional de Energia e Geologia - LNEG,I.P, Lisboa, PORTUGAL
P. Moura, Laboratório Nacional de Energia e Geologia - LNEG,I.P, Lisboa, PORTUGAL
A.L. Fernando, Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa (FCT NOVA), Almada, PORTUGAL
A. Luís, Laboratório Nacional de Energia e Geologia - LNEG,I.P, Lisboa, PORTUGAL
L. Quental, Laboratório Nacional de Energia e Geologia - LNEG,I.P, Lisboa, PORTUGAL
P. Patinha, Laboratório Nacional de Energia e Geologia - LNEG,I.P, Lisboa, PORTUGAL
F. Gírio, Laboratório Nacional de Energia e Geologia - LNEG,I.P, Lisboa, PORTUGAL

Session reference: 1AO.1.5

Subtopic: 1.1 Biomass potentials and biomass production models

Topic: 1. BIOMASS RESOURCES