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June 2017

Newsletter of Project LIFE No_Waste

LIFE14 ENV/PT/000369 - MANAGEMENT OF BIOMASS ASH AND ORGANIC WASTE IN THE RECOVERY OF DEGRADED SOILS: A PILOT PROJECT SET IN PORTUGAL

>>> In the Spotlight: Opportunities for biomass ash

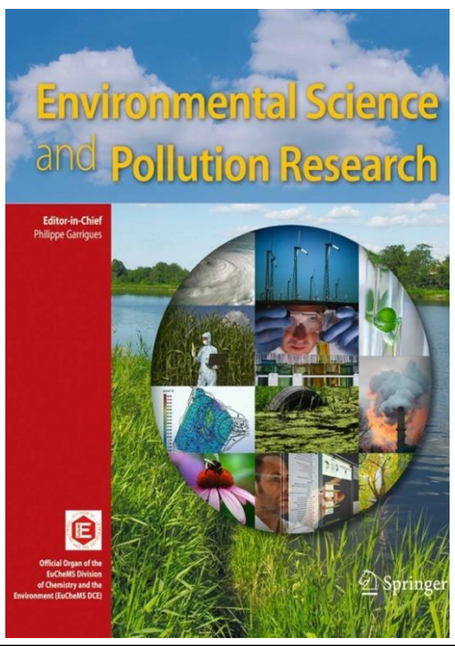
Worldwide production of ash from biomass combustion is currently over 480 million tonnes per year.[1] This massive amount derives from growing interest in using biomass for energy purposes, in order to decrease dependence on fossil fuels, create more jobs per unit of energy produced and considerably reduce the environmental impact. However, in the European Union, the ashes from biomass combustion are classified as a solid waste according the European List of Wastes. Currently about 70% of biomass ash are disposed of in landfills.[2] For this reason, ash management is now turning into a critical issue.

Biomass ash is manly produced from thermal conversion of residual forest biomass, wood, waste wood (bark, chips, etc) and liquors from pulp production. In the No_Waste project we are addressing some opportunities to use biomass ashes as a resource:

- ✓ The use of biomass for energy production is being encouraged as a carbon neutral fuel – 2 – 15% of the processed biomass results in ashes
- ✓ The European Commission is steering for circular economy approaches, nutrient recycling and the end-of-waste criteria
- ✓ Biomass ash presents soil liming capacity and contains significant amounts of valuable essential elements for plant nutrition, such as Ca, K, Mg, P and micro-nutrients
- ✓ Biomass ashes present well-studied characteristics, almost constant quality and long-term availability

[1]Liu et al. (2017). *Energy & Fuels* 31. doi: 10.1021/acs.energyfuels.7b00258
[2]Ban et al. (2014). *American Journal of Applied Sciences* 11(8). doi: 10.3844/ajassp.2014.1369.1378

>>> Project updates



Article published by No_Waste team members!

Ashes from fluidized bed combustion of residual forest biomass: recycling to soil as a viable management option

"*Soil amendments with of ash materials led to an increase in the pore water pH relative to control pots and had a clear impact on the solubilization of both macro- and micronutrients (notably Cu)*", wrote the authors.

Read more >

>>> What else is new?

No_Waste joins LIFE program to celebrate 25 years of supporting Nature, Environment and Climate action!
Read more >

Dissemination events

15-17th March 2017, Green Business Week @ Congress Centre of Lisbon | No_Waste showcase and pitch presentation by the project coordinator Sónia Rodrigues

Talk by Sónia Rodrigues and Luís Tarelho at public radio station RTP Antena 1. Listen in Portuguese>

Visit our website for more!