



CVT VALORISATION SUD

## Energy

# Drying of organic materials using heat recovered from biodrying

### CONTACT

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### Technology's description

In this invention, the heat generated by the composting of a first batch of waste or organic residue is captured and used to simultaneously dry a second batch of waste, compost or digestate.

It is based on the quantification of the amount of heat released in outgoing gases in the form of sensible heat, especially latent heat (hot gas with a high water vapor content), and on the potential for 80 % of that heat to be recovered through condensation of the water vapor contained in the outgoing gases. It consists of a gas-gas exchange between the gas flow released during the composting of organic waste or residue and a second, low-humidity gas flow whose increased temperature and high flow rate will heat-dry a second batch of waste materials.

This invention can be applied to organic wastes to produce "solid recovered fuel" (SRF) at lower cost.

### Advantages

- Performances : the overall heat efficiency is improved for negative pressure systems
- Energy savings
- Organic wastes recovery
- The drying process improves the compost sanitation.

### Intellectual property

Patent

### Development level

Experimental proof of concept

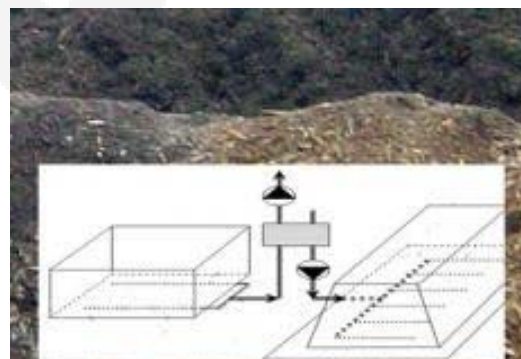
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### Applications

- Waste recycling - Heat production - Drying - Greenhouse heating - Solid recovered fuels.

### Technology transfer

- Licensing - codevelopments



Source : Iristea