

Questionnaire Digestate

NEWAPP is a research project founded by the European Commission under FP7 program, aiming to develop a new valorization pathway for wet biomass waste streams, such as the organic fraction of municipal waste, sewage sludge or other industrial biodegradable waste like waste from food industry, vegetable or agricultural waste, sludge from waste or wastewater treatment through HTC technology.



The HTC process converts wet biomass waste streams into carbon. Instead of releasing carbon dioxide into the atmosphere, the carbon biomass is completely transformed into a peat-like material. This carbon can be employed for instance for energy generation, or as a secondary raw material. Desired raw materials for the HTC process are, for instance, vegetable material, wood, green pruning, compostable waste, paper, pulp, or similar lignocellulose or cellulose substrates with a water content in the range of 30 to 90%. Other contents should be limited to up to 20%. We have identified digestate from fermentation plants as a potentially interesting stream.

We seek your cooperation to characterize this waste stream at European level.

Questionnaire

General data

1) Country

2) Name of municipality / region

3) Amount of waste treated (input) (in tons/y)

Biodegradable fractions of municipal solid waste (MSW)

Commercial food waste, not collected as part of MSW, including

Waste from the food and beverage industry

Agricultural waste

Animal husbandry excrements (solid and liquid manure)

Of vegetable origin

other

Digestate quantities and characteristics

4) Generated digestate (in tons/y)

5) Other characteristics of the biodegradable waste:

a. Elementary composition (in % per dry matter)

C	O	H	N	Metals
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b. Moisture content of the digestate (in %)

c. pH value

d. Higher heating value (kcal/kg)

e. Bulk density (kg/m³)

f. Biomass density (kg/m³)

Collection scheme and quantities

6) Collection scheme

Civic amenity sites

Local waste collection schemes

Both

7) Do you observe seasonal variations?

Please indicate the seasonal distribution for collecting green waste [tons / month]

Jan / Feb / Mar / Apr / May / Jun / Jul / Aug / Sept / Oct / Nov / Dec

Current treatment system for the input (biodegradable waste)

8) Configuration

a. Influx: batch continuous

b. Temperature: mesophilic thermophilic

c. Solids content: high solids low solids

d. Complexety: single stage multistage

Current treatment system for the input

9) Current treatment system(s) of digestate

Composting

Application as fertilizer on farmland

Incineration

Landfilling

Other

10) Treatment costs per ton of treated waste for the different treatment systems

(If there are any more than one treatment system please note separately treatment cost)

11) Actual value / market price of digestate per ton respectively costs for?

12) Main problems/drawbacks of your current treatment systems

Thank you for your help.