

Business and Market Analysis of Hydrothermal Carbonization Process: Roadmap towards Implementation

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Supplementary Materials

Survey's questions

- *Section S1: General Information*

Company Name: _____

Please provide the location (Country, City) of the company headquarters/office: _____

Please provide the date of foundation of the company: _____

Please provide a contact person:

Name: _____

Email: _____

Phone: (Optional) _____

Website: _____

Additional Information: _____

- *Section S2: Technical Information of the Company*

Please provide the type of technology developed in your company.

* In case of specific, hybrid or multiple types, please detail in "Other"

- ☐ HTC
- ☐ VTC
- ☐ HTT
- ☐ HTC + Gasification
- ☐ Other – please specify: _____

Please provide the type(s) of service that your company focuses.

* In case of specific, please detail in "Other"

- ☐ Waste Management
- ☐ Energy
- ☐ Fertilizer
- ☐ Chemical (Platform chemicals)
- ☐ Advanced Materials
- ☐ Equipment and technology developer and supplier

- ☐ R&DI
☐ other – please specify: _____

- *Section S3: Information about process and plants*

Please provide the plant location (Country, City): _____

Please provide the date of inauguration of the plant (or expected date): _____

Type of plant (full/pilot):

- ☐ Full
☐ Demonstration
☐ Pilot

Please provide information about the processing capacity of the plant: _____

Suggestion:

- Reactor(s) Size: Number and volume of reactor(s)
- Processing capacity: e.g. in tons/day (of feedstock or products)
- Operation mode: (Batch or continuous)

Please provide the feedstock(s) processed by the plant.

* If necessary, please detail in "Other"

- ☐ Sewadge sludge
☐ Municipal Solid Waste
☐ Lignocellulosic residues (please detail)
☐ Animal residues (please detail)
☐ Food residues (please detail)
☐ Industrial residues (please detail)

Please provide information about the goal and products of the plant.

* In case of specific, different or multiple, please specify in "Other"

- ☐ Waste treatment/ Volume reduction
☐ Energy production
☐ Nutrient recovery (please detail)
☐ Chemicals (please detail)
☐ Advanced materials (please detail)
☐ Other – please specify: _____

Please provide the range of process conditions of the plant

Suggestion:

Type of reactor: _____
Temperature range: _____
Pressure range: _____
Time: _____
Catalyst: _____
Other specifications: (please detail) _____

A brief description of the technological route and process details can be provided here. In case of multiple plants, you can:

- (1) provide multiple inputs to this survey; or
- (2) send information by email.

- *Section S4: Policy section (additional section)*

New technology and its products generally have obstacles due to legislation. Business models are very linked to the policy. We would like to understand in this section how policy is influencing HTC cases.

What are the main legislation/policy obstacles the company has faced (or is facing) in order to develop and to implement hydrothermal carbonization plants/products? if you put the specific regulation number/name would help a lot. Feel free to put local, national or international regulations.

Answer: _____

What specifics do you consider the laws/ policies should change in order to have more HTC successful stories?

Answer: _____

Do you consider that current legislation favors competing technologies (pyrolysis, gasification, anaerobic digestion, etc.)? if yes, how?

Answer: _____

Is there anything else you would like to add regarding legislation/policy topic?

Answer: _____

Feel free to share your stories, your complaints, your expectations to future regulation development

Answer: _____

- *Section S5: Other (Optional)*

Any other relevant information you may judge necessary about the company or plant(s) can be detailed here.

We would appreciate any suggestion or feedback you can give us here.
