

CETP Pitching & Matchmaking Event for Integrated Industrial Energy Systems

ReBio – Recirculated Biocrude

Circular Economy Rejects to Valuable Biocrude via HTL

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Pitch for the <name of presenter> 1/5

Name of the project idea (and acronym if you already have one)

Recirculated Biocrude

REBIO

Consortium partners

- Coordinating organisation: Tampere University of Applied Sciences
- Main contact person: Tero Joronen
- List of consortium partners: Based on VOILA EU proposal
- TEA, Circular feedstock suppliers, Research partner for the pre-treatment, Biocrude users

Pitch for the ReBio project 3/5

Solutions proposed

Solutions proposed and how are the research questions being tackled?

Hydrothermal Liquefaction: Unlocking the potential of wet and complex biomass



Wet organic and contaminated residues unsuitable for pyrolysis can be processed via HTL



Directly processes wet feedstocks – no drying required



Black liquor & bark: underutilized, energy-rich forest industry side streams



Complements pyrolysis and gasification – expands feedstock and value



Produces drop-in compatible bio-oil with high energy density

Pitch for the ReBio project 4/5

Our next step activities for proposal submission to CETP JC2025

Benefits/Challenges

- Good yield, flexible wet feedstock
- Good quality, refinable product
- Recirculated feedstocks requires pretreatment?
- Special contaminants removing reactor

Feedstocks and projects at Tampere

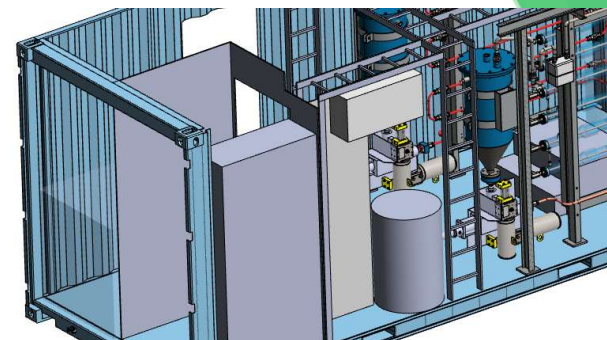
- | | | |
|--------------------------|---|---|
| 1. Biomass | } | 6Aika ILPO, ERDF
EHTA pilot-equipment
BL2F, EU H2020
Bio4All, BF Co-Innov. |
| 2. Municipal solid waste | | |
| 3. Textile waste | | |
| 4. Plastic waste | | |
| 5. Black Liquor | | |
| 6. Pretreated biomass | | |

13.2 l/h

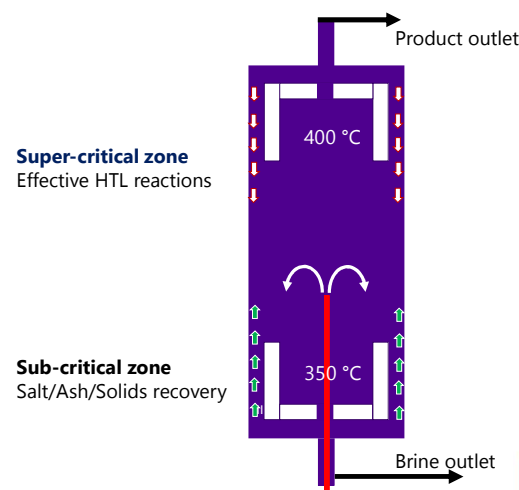
X10

400 °C

30 MPa



Dual-zone IHTL Reactor for ash removal (BL2F, TRL4-5)



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Thank you & contact information

Thank you for your interest

For more information contact:

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