



## Gijón - Spain



### Selected BTA References

- Final Client:**
- COGERSA
- Partner:**
- VALORIZA SERVICIOS MEDIOAMBIENTALES S.A.
- Type of Waste:**
- FORM (Spanish biowaste with a high content of impurities) and/or dewatered sewage sludge
- Capacity:**
- 25.000 ton/year into hydromechanical pre-treatment
- Start up:**
- 2013
- Plant sections:**
- Sewage sludge reception
  - Reception and mechanical pre-treatment FORM
  - BTA® Hydromechanical Pre-Treatment
  - One-step wet anaerobic digestion
  - Sanitation
  - Solid-Liquid-Separation
  - Composting
  - Biogas treatment
  - Internal Process water management



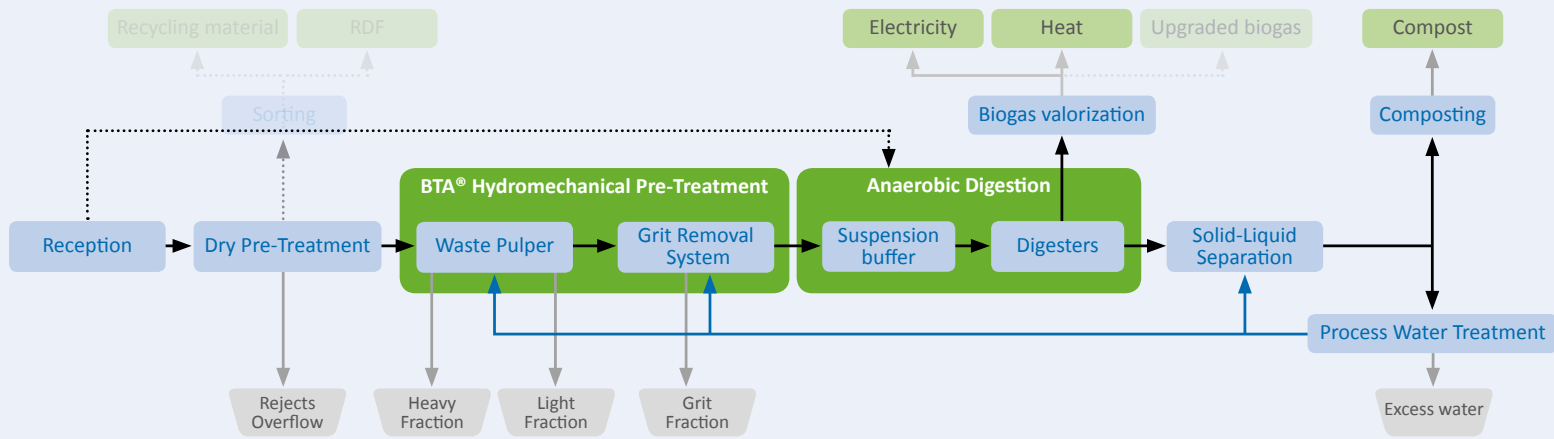
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### Description

The planned **co-digestion facility** shall be able to process up to 25.000 ton/year of the Spanish biowaste (**FORM**) and/or dewatered **sewage sludge**. Thus, the concept must take into consideration two waste streams with very different characteristics (e.g. TS-content or amount of impurities).

The sewage sludge can both be mashed and pumped directly to the anaerobic digestion (suspension buffer) or it is previously processed in the BTA® Hydromechanical Pre-Treatment for the **removal of fine sand particles**.

The FORM is first fed to a bag opener and to a trommel sieve. In the **BTA® Hydromechanical Pre-Treatment** the enriched organic fraction in the sieve underflow is efficiently freed from impurities before the cleaned organic suspension is pumped to a **one-step, mesophilic wet anaerobic digestion**. The produced biogas is cleaned and made available for its valorization in existing CHP units (for landfill gas) from the final Client COGERSA.

The digestate is subjected during one hour to a temperature of 70°C for **sanitation** before it is dewatered with centrifuges. The dewatered digestate is further **composted**, while the liquid phase widely is recirculated to the process within the **internal process water management**.

This is already the third plant which BTA International builds with Valoriza (formerly SUFI). Similar than in Granollers and Mataró, BTA International is responsible as **technological partner** for the **process engineering**, further engineering services, the planning and supervision of the start-up and the **supply of key components of the hydromechanical pre-treatment** and the **SCADA** of the installation.