Waste to Energy

Expected project CAPEX: 7'850'000 €

Mandating Authority: Legnica Municipality

Project Type: Waste to Energy

Summary

The project aims to implement a 800 L/H water sludge mixed with 1/3 of plastic residues valorization through Pyrogaseification system. The syngas produced will be used in cogeneration system to produce electricity. The system will include a compressed air energy storage system. The area is an important logistic zone and offer many waste to energy opportunities. Located at 60km of German border and 2 hour from Berlin and Prague Legnica represent a strategic location to promote green economical solution to waste problem.

Location and population

Legnica, Poland
101'620 inh.

Social and environmental impact

The sludge from water treatment is a huge problem due to the high yearly volume produced and the high toxicity from antibiotics, estrogen or organometallic components. The technology choose have small footprint impact and no polluting emission. Treat water sludge quickly will also reduce methane emission from sludge storage.

The area have a really good skilled manpower and the project will create opportunity to create new technician jobs for young people.

Main stakeholders

City of Legnica, sport & recreational center, SYNECOM.
**Project maturity** (IFC / World Bank Categories)

**STAGE 1 : Concept Development, Site identification**

Expected capacity *(Input-Output)*

1 MWh

Land identified

Yes

**Site access :**

☑ Adequate road  ☑ Rail access  ☐ Port facilities

**Technology :** Pyrogaseification

Waste stream data

Yes

**STAGE 2 : Pre-Feasibility Studies**

Pre-feasibility study :   Yes

**STAGE 3 : Feasibility Studies**

Feasibility study :   Yes

**STAGE 4 : Permitting / Financing / Contracts**

Land concession signed

On the existing water treatment site.

Building permits signed

In progress

Environmental impact study

In progress

Identified sources of fundings

Tbd

**STAGE 5 : Engineering / Construction / Commercial Operation**

Engineering, Procurement and Construction Contractor

SYNECOM and local enterprises

Operation and Maintenance Contractor

In discussion

Comments