

Effect of industrial sewage and cofermentats on the sewage sludge fermentation process at the Henrykowo wastewater treatment plant



Event / Date

Organisation Contact







# Leszno WWTP and the investment in Project BEST

#### WhereLeszno is?



Dane mapy ©2019 Google, GeoBasis-DE/BKG (©2009), Inst. Geogr. Nacional











# Leszno WWTP and the investment in Project BEST

• Video link (Kajsa adds)



# Industrial waste and sludge market study for cofermentation

- As part of the work, the Contractor has developed a database of waste and sewage producers. The database contains identification data of approximately 100 producers of waste and sewage from the agri-food industry. Subsequently, a group of 70 entities were sent to survey the detailed recognition of the quantity and characteristics of waste generated.
- A dozen or so of the surveyed plants expressed their initial interest in establishing cooperation, 13 of which returned completed surveys and declared their readiness to participate in the research program. These companies also showed interest in transferring waste to their processing in a sludge digestion installation planned for construction at the Henrykowo wastewater treatment plant.
- The total, initially declared by the annual plants, amount of waste that could potentially reach the purification plant in Henrykowo amounts to about 56 370 Mg / year, which gives, calculated on an average value of around 155 Mg / d,











## Investment proceeding: Pilot for industrial waste and sludge co-fermentation

# Place where the installation will be built Beginning of 2019







WITH FINANCIAL SUPPORT OF THI RUSSIAN FEDERATION



## Investment proceeding: Pilot for industrial waste and sludge co-fermentation



\*construction works are not part of the project











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## Pilot for industrial waste and sludge co-fermentation

The installation will consist of:

- two anaerobic reactors with temperature control
- two mechanical agitators with adjustable drive
- assembly kits for two reactors
- digestate removal plant
- two electronic meters for the amount of biogas produced
- gas analyzer
- waste and sludge homogenizer
- pH and FOS / TAC measurement
- portable pH meter
- coolers for storing substrates

#### Example of pilot instalation Source: www.rotametr.com.pl











## Pilot for industrial waste and sludge co-fermentation

- We currently have the technical documentation completed. Tender will be announced soon.
- The installation should be delivered by the end of February 2020
- The investment will generate the greatest benefits after the completion of the project (after modernization of the treatment plant). With an anaerobic digestion installation it will be possible to attempt to isolate and ferment the previously harmful substrates.











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## Pilot for industrial waste and sludge co-fermentation

 1-st: Clean and sort at source. 2-nd: collect and deliver to us instead of poisoning the treatment plant.
This means less load dispersion and a more stable wastewater treatment process.

The goal is to change the relationship to a more partner. Mutual benefits and cooperation should be shown.











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