



ENERGY RECOVERY FROM SLUDGE GASES AT A MUNICIPAL SEWAGE TREATMENT PLANT FOR TRANSPORT

As of: October 2021

The project installed a pilot sewage treatment plant to capture sludge gases, upgrade them to natural-gas quality and make them available to the public vehicle fleet as biofuel (biomethane). The services rendered within the project included process selection, siting, compilation of basic data and detailed planning, construction and commissioning of the plant as well as an aftercare phase. In addition, the project conducted accompanying training activities to ensure the plant is well-operated and maintained.

State of implementation/results

- Project completed.
- The Brazilian water and waste management company owned by São Paulo state SABESP was identified as project partner, Franca in the Brazilian state of São Paulo was selected in a joint process as location of the plant.
- Declaration of intent made by project partner to replicate the project in additional locations if it is successfully implemented.
- Design of sewage treatment plant planned, all process stages specified, and plant components procured.
- Documents drafted for pre-authorisation as well as installation and construction permits.
- Gas tank and gas cleaning container shipped to Brazil and delivered at Franca.
- Project presented at numerous events to disseminate information about the approach.
- 10/2017 delegation trip: eight high-ranking representatives of the Brazilian water supplier SABESP were formed in Germany on the topics of sludge digestion and biogas treatment progress (among other things, the sewage treatment plants in Heidelberg and in Edenkoben were visited).

PROJECT DATA

Country/Countries:

Brasilien

Implementing organisation:

Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V. - Institut für Grenzflächen- und Bioverfahrenstechnik

Political partner(s):

- Brazilian Cooperation Agency (ABC)

Implementing partner(s):

- Basic Sanitation Company of the State of São Paulo S.A. (Sabesp) - Brazil
- DEDINI (Plant Construction Company) - Brazil

BMU grant:

€ 2,328,059

Duration:

02/2009 till 12/2017

Website(s):

<http://www.igb.fraunhofer.de/en/reference-projects/biomethane-as-a-fuel-from-biogas-of-sewage-plants.html>

