Company presentation

PlanET Biogas Global GmbH

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PlanET company background

- Biogas plant supplier from Vreden, Germany
- Founded in 1998
- First international construction in 2005
- More than 200 employees worldwide
- Over 500 biogas plants successfully operating / 2 in Italy
- Turnover of € 53 million worldwide (2019)

Jörg Meyer zu Strohe , Co-Founder and CEO

PlanET's scope of supply

Agricultural plants

- CHP sizes from 75 kW to several MW
- Modular plant set-up for later extension
- Different concepts incl. heat use and satellite CHPs

Waste-to-Energy (W2E) plants

- Use of all kinds of organic waste
- Optional hygienisation
- Optional depacking

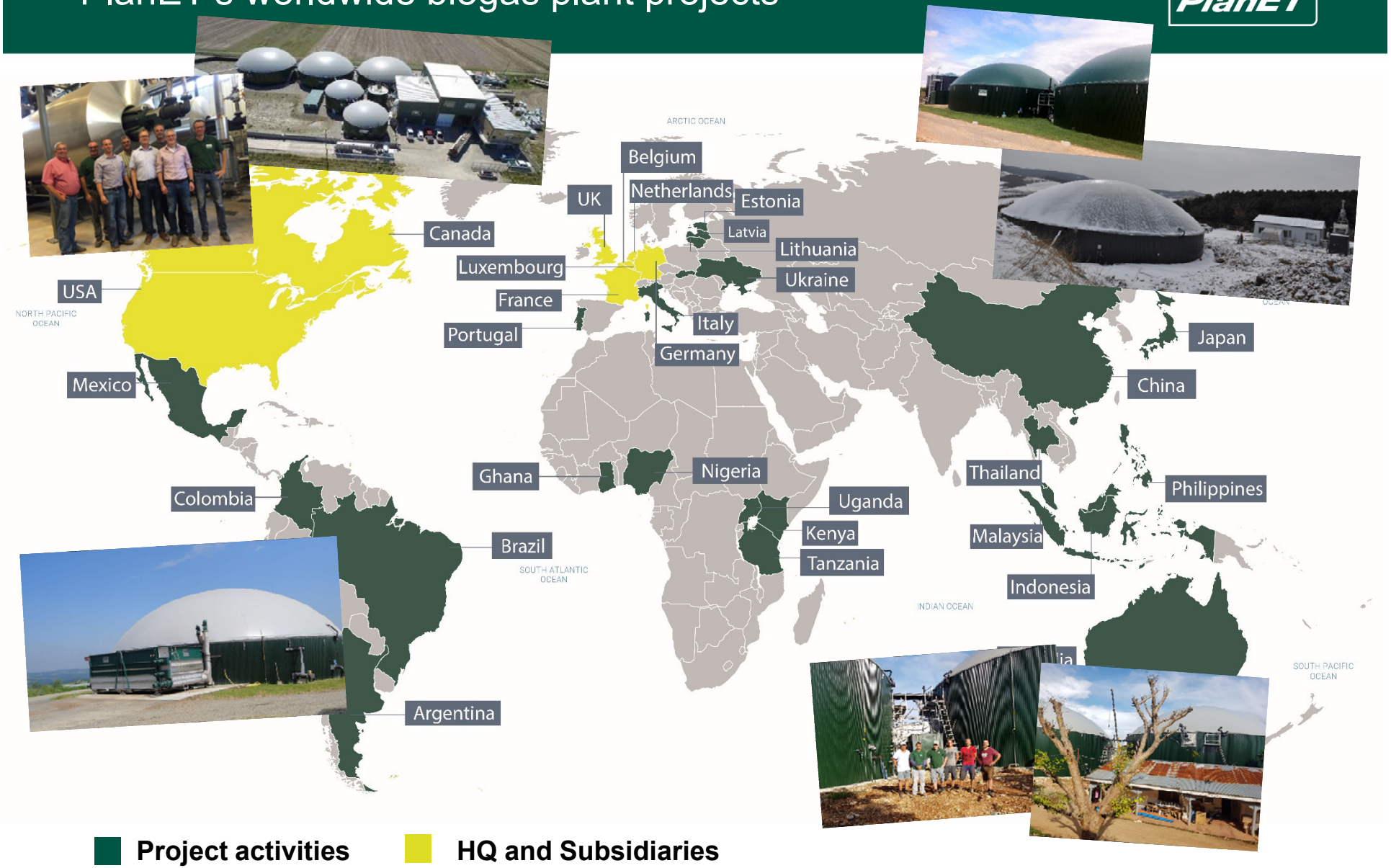
Small scale plant VALENTIN

- Easy to construct standardized digestion system
- 40-100kW system running on slurry or liquid waste

Biomethane plants

- Biogas plant and biomethane upgrading from a single source
- Possible combination with a CHP

PlanET‘s worldwide biogas plant projects



Project activities **HQ and Subsidiaries**

PlanET‘s experience with W2E

Building and commissioning of first biogas plant….

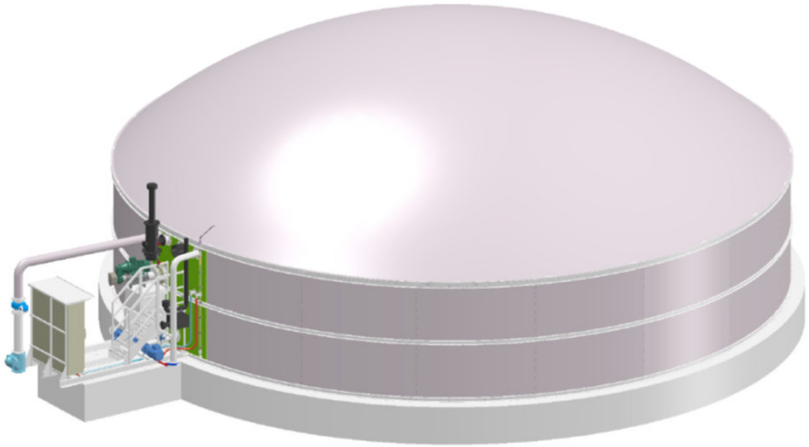
2001	2005	2007	2010	2013	2018
incl. solid feeding technology	incl. hygienization unit @ 70°C; 60min	incl. aerobic hydrolysis & belt drying process	incl. biogas upgrading plant	incl. thermal hydrolysis @ 10bar, 180°C	incl. depackaging & mechanical vapour recompression

Reference W2E: Project Lethbridge, Canada

- Commissioned: 2013
- Processing Capacity: 120,000 t/year
- Plant size: 2.85 $MW_{el.}$
- Processes <u>category I</u> material (incl. whole carcasses)
- 22,000 tons CO_2 registered offset per year
- Project volume: 35 Mio. CAD (22 Mio. EUR)

PlanET VALENTIN:

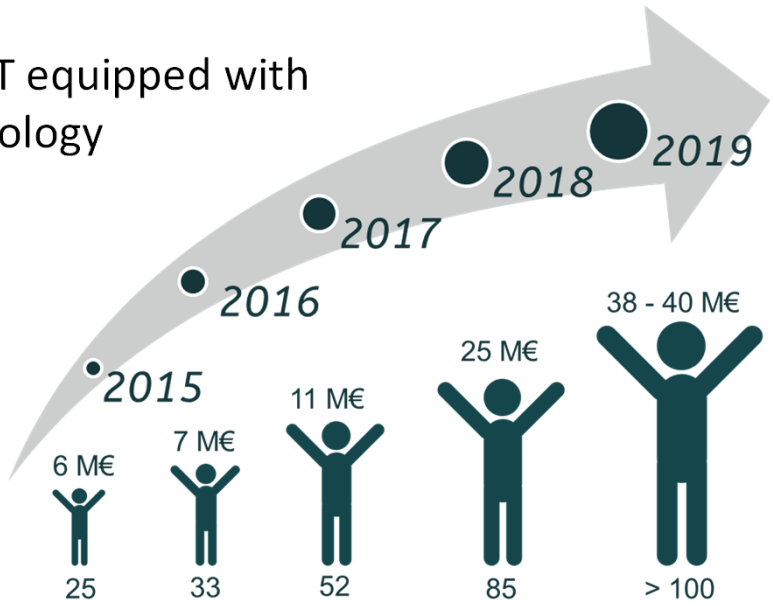
- Especially designed as small-scale plant,
- Highly standardised and engineered for an easy integration into the existing infrastructure as there is usually an existing infrastructure for slurry and manure management on site,
- Very quick installation,
- Can be operated off-grid.



PlanET - proven cooperation with bio methane specialist

PRODEVAL
INGÉNIERIE DES SOLUTIONS GAZ

- Bio methane plants :
  - ✓ 77 built by the end of 2019
  - ✓ 10 plants in Italy
- 7 plants of PlanET equipped with PRODEVAL technology

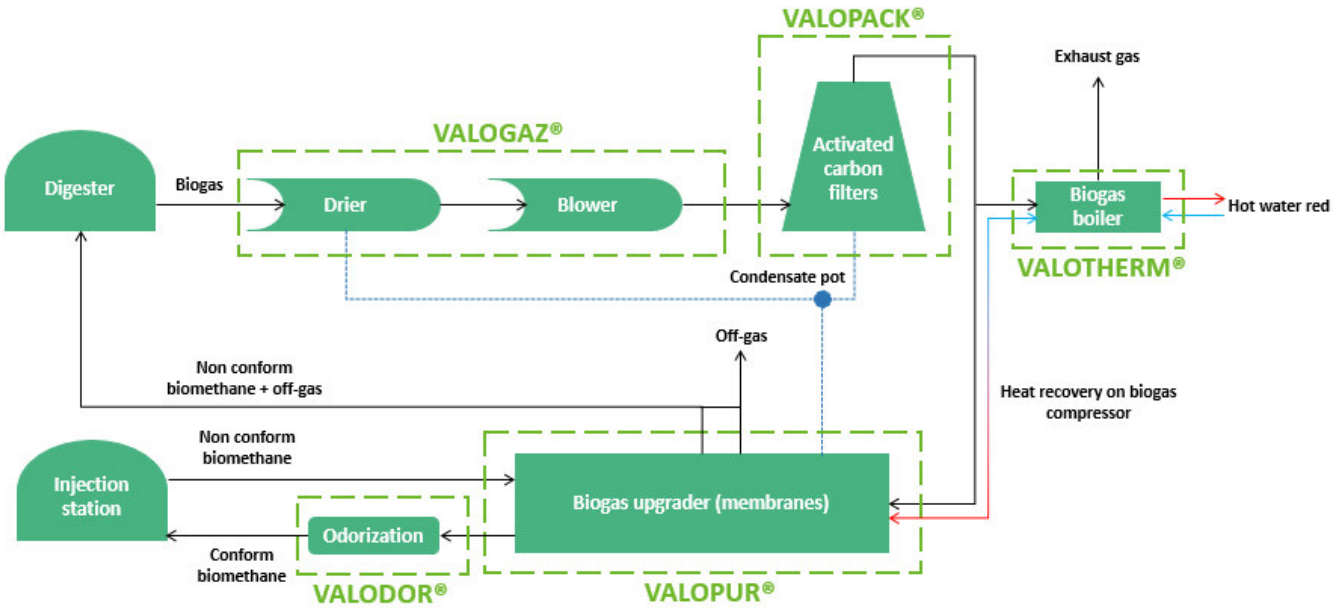


PRODEVAL ITALIA
CENTRALE SERVICE 24/24
www.prodeval.eu
Genova

Bio methane upgrading partner PRODEVAL

Solutions PRODEVAL INGÉNIERIE DES SOLUTIONS GAZ

- Biogas conditioning system (Gas drier by water condensation and gas blower)
- Biogas treatment system – removal of pollutants (H2S, VOCs, siloxanes)
- Biogas upgrading unit using EVONIK® membrane technology



PlanET‘s passion

Thank you for your attention!

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