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# Technologies for Biogas valorizaiton

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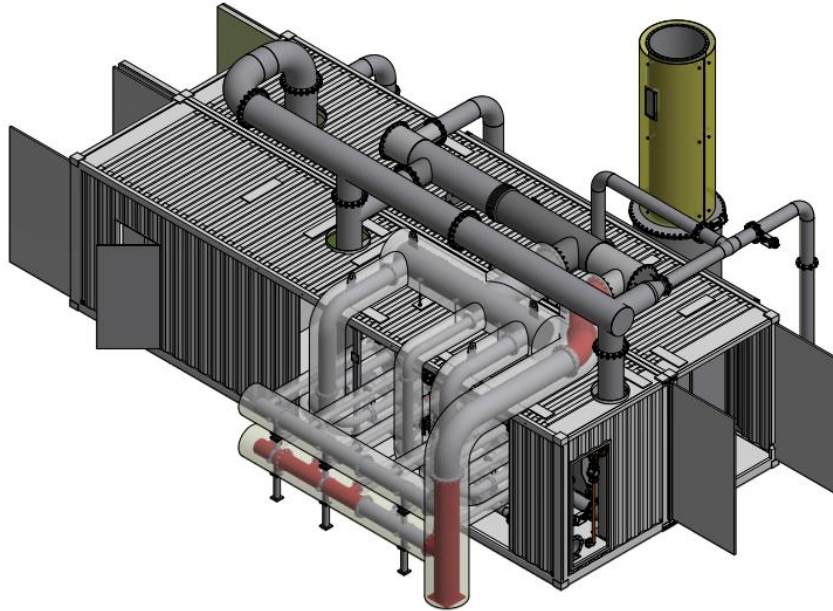
- E-flox is a partner in biogas upgrading since 20 years
- E-flox core technology is flameless oxidation
- We are your partner for upgrading Biogas to Hydrogen or Biomethane



# 1: Burning purge gas from biogas upgrading

- Each gas upgrading process produces a purge gas:
  - Landfill gas: 6-10% CH<sub>4</sub>
  - Fermenter biogas: 1-5 % CH<sub>4</sub>
- E-flox is expert to process this purge gas:
  - No methane slip
  - Optimum heat recovery

# Example: LCV combustor for Can Mata (Barcelona)



- Purge gas of landfill gas upgrading
- 1500 Nm<sup>3</sup>/h of LCV gas
- 7-13 (20) % CH<sub>4</sub> in LCV gas, 2 MW total
- Installed in 2022

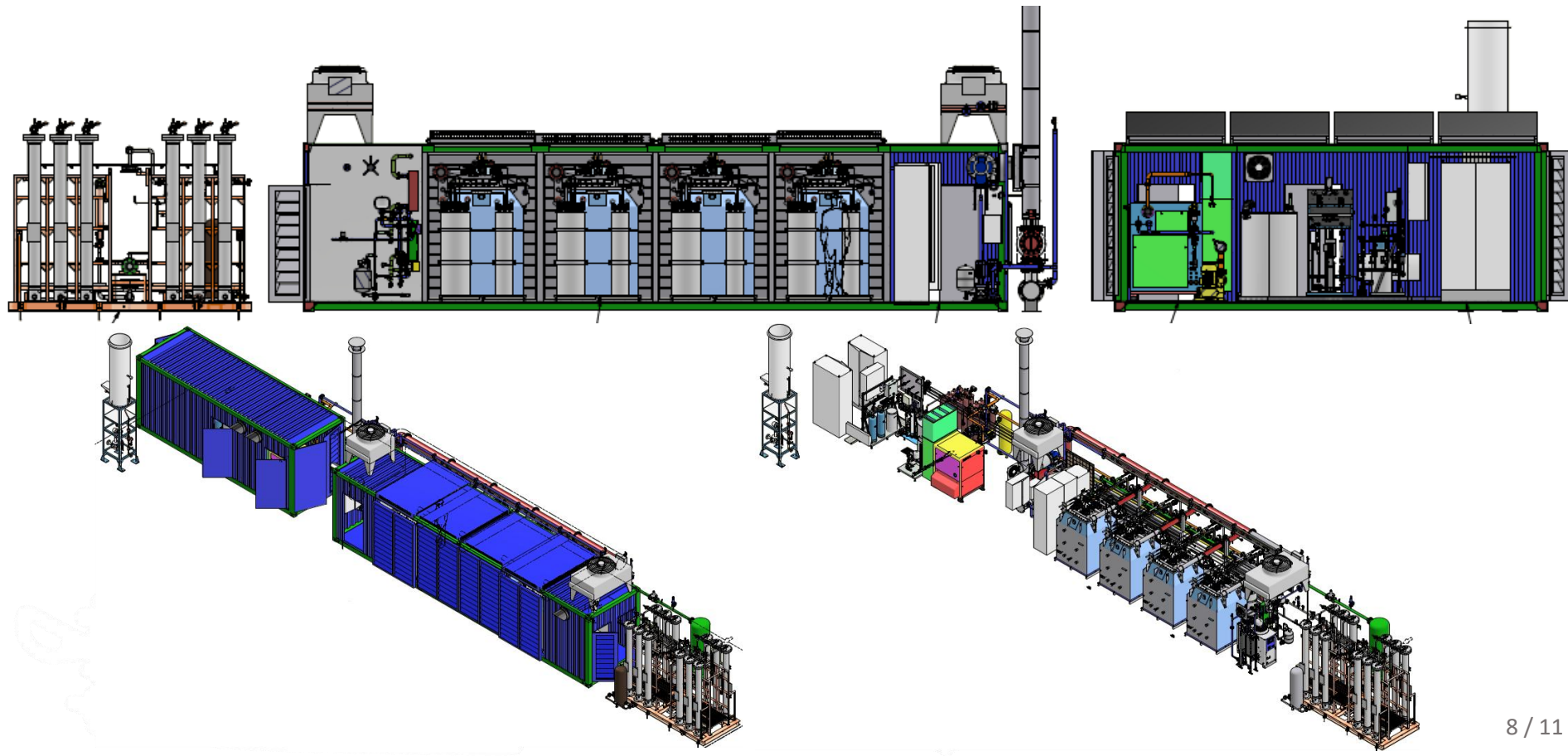
## 4 : Biogas to Hydrogen

Standard type: BTH 400 -> 400 kg H<sub>2</sub>/day

- Farmer:
  - RED3 certified fuel allows to sell  $H_2$  +  $CO_2$  credits
  - Supply of industry with  $H_2$  containers
  - Supply of local transportation companies
- Municipal  $H_2$  Projects:
  - Produce  $H_2$  from organic wastes
  - Fuel your waste collection trucks
  - Fuel local bus fleet



# BTH400 turn key system for H<sub>2</sub> 5.0





# What e-flox is looking for



- Local partners for:
  - Developing projects with our technology in Spain (Engineering)
  - Manufacturing and installation of our technology in Spain
  - Maintenance and service for our systems
- Customers interested in:
  - Biogasupgrading
  - Distributed Hydrogen production
  - Biochar-Production

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