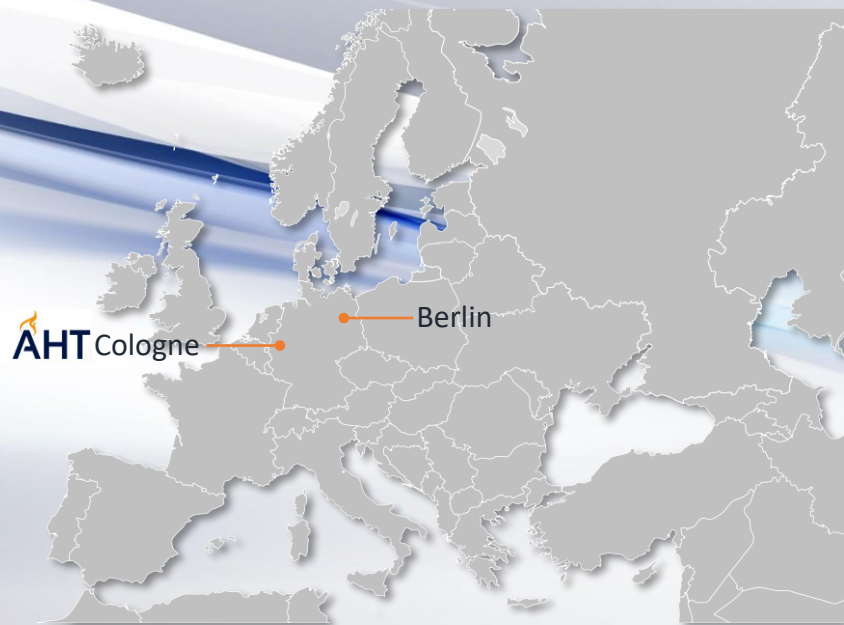




A.H.T. Syngas Technology N.V.

**Syngas
Heat
Power
Products
Generation
from
Biomass
for
Spanish Harbours' Industries
and
Beyond**



Who we are – what we do



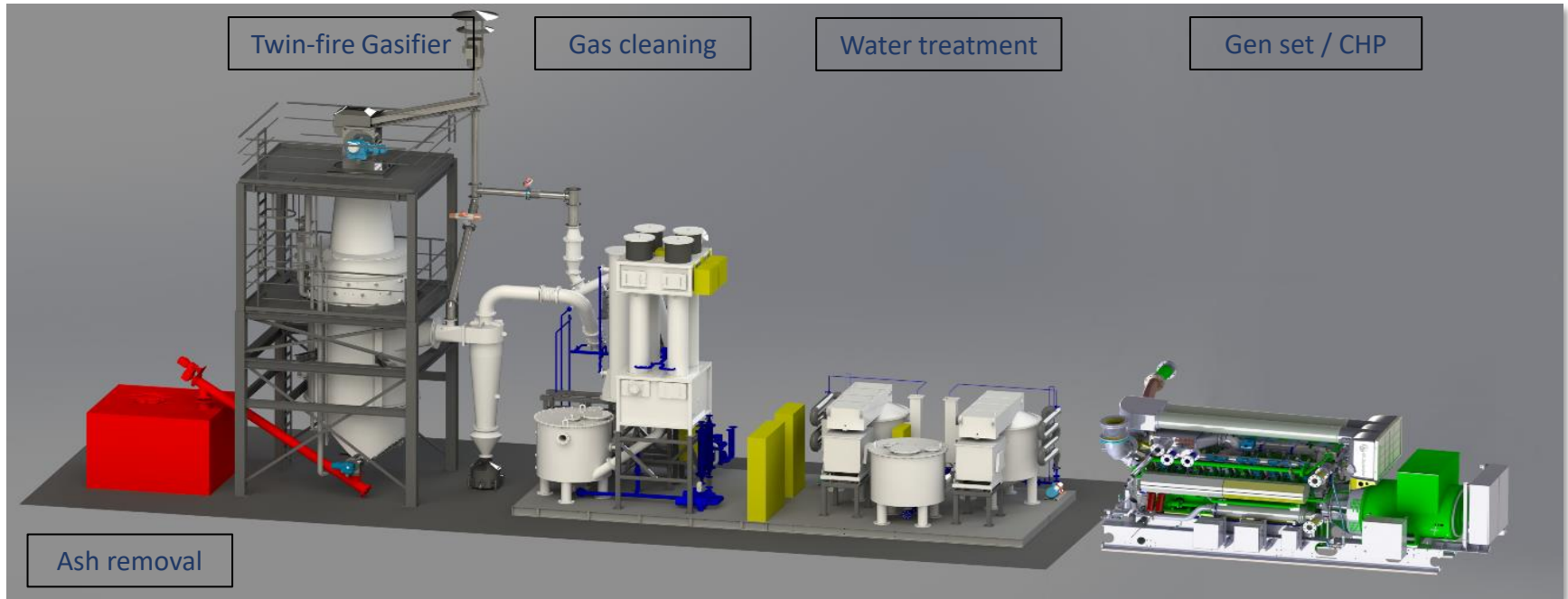
AHT provides state-of-the-art technologies for the utilisation and reduction of biomass or biogenic residues.

AHT offers outstanding experience in decentralised, medium sized syngas, heat & power producing facilities.

AHT contributes to the entire value chain from project to product development contribution
- up to full turn-key solutions and after-sales services.

COMPACT POWER PLANTS (CPP)	RAW & CLEAN GAS for Industrial Applications	CLEAN GAS for Decentralised Power Plants	SERVICES
50 - 150 kW _{el/th}	600 kW _{th} - 50 MW _{th}	200 kW _{el} - 12 MW _{el}	<ul style="list-style-type: none">• Feasibility, Engineering• Delivery, Erection, Supervision• Support, spare-parts & maintenance

How we do it - Overview



Feedstock



Preparation



Gas Generation



Gas Conditioning



Syngas, Heat & Power Generation

Feedstock Types

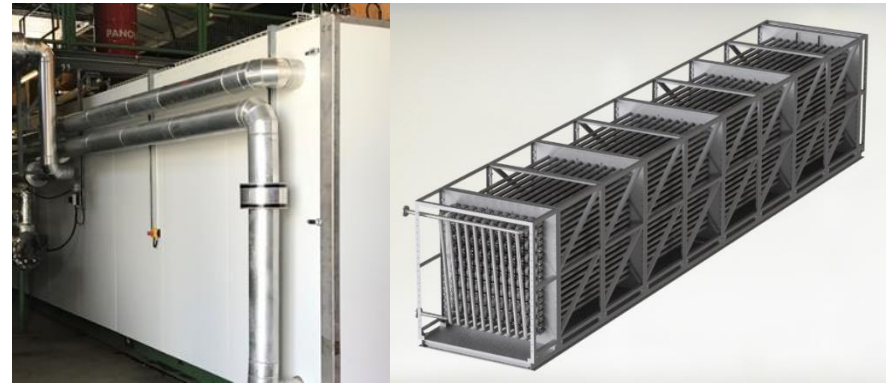


Broad range of original or briquetted feedstock: wood chips, saw dust, empty fruit bunches, straw, Miscanthus, (low grade) coal, etc.

How we do it – Up- and Downstream Solutions

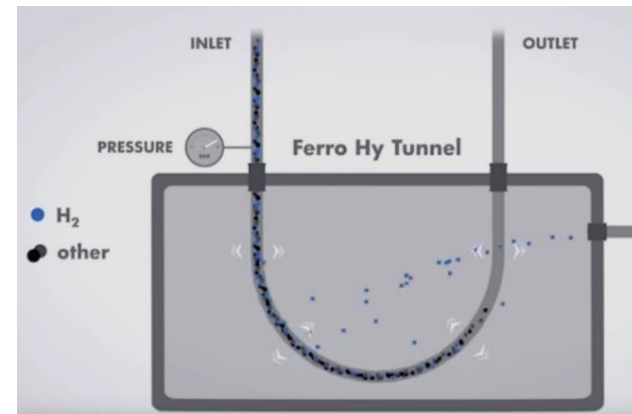
Hydrothermal Carbonisation (HTC)

- Biomass conversion into brown-coal-like HydroChar and water in a semi-closed system
- Continuous process for high-moisture and liquid/slurry biomass
- Application of temperature (220 °C), pressure (22 bar) and time (2-12 h) **above** the steam pressure curve within water

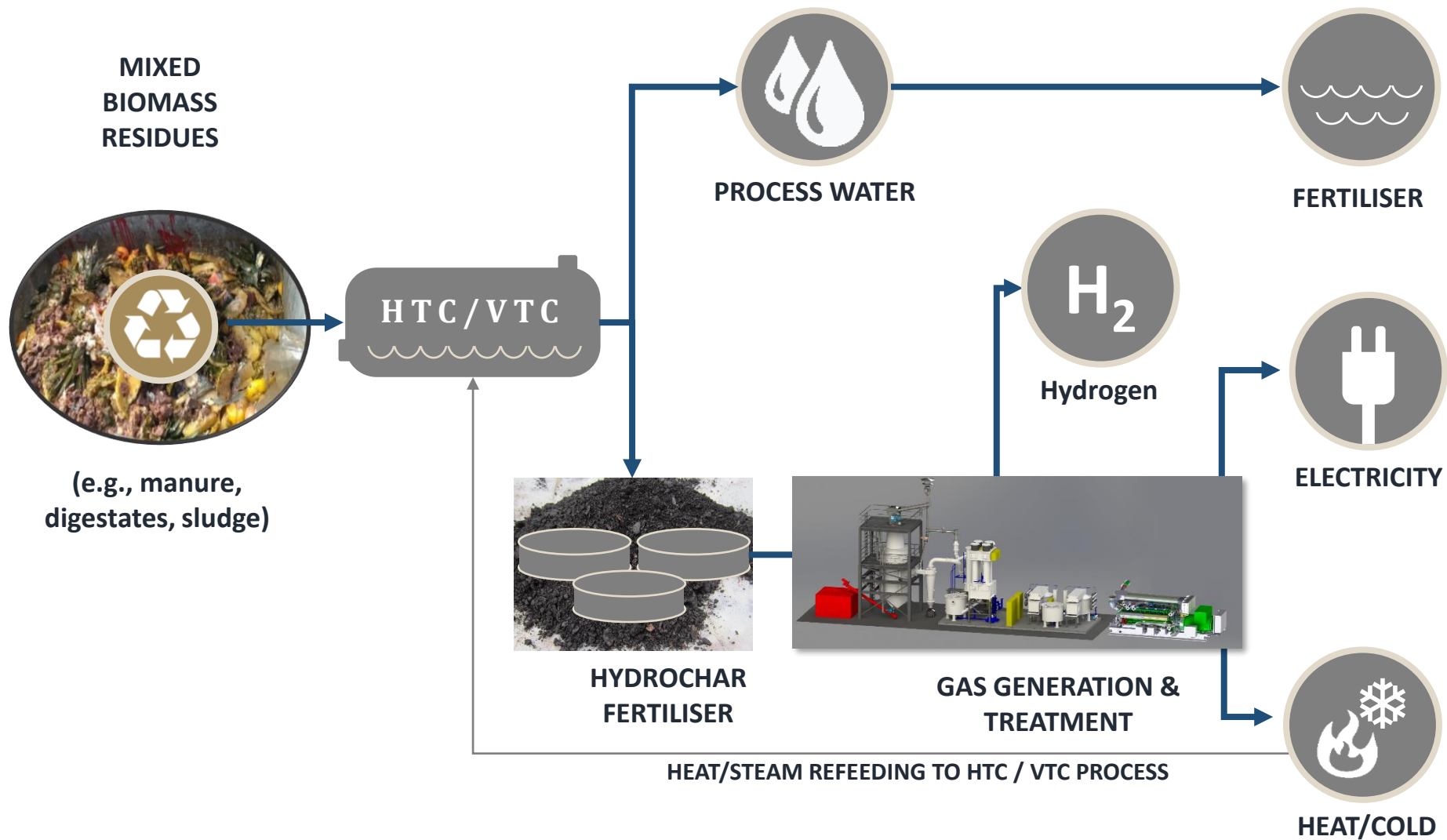


Hydrogen Separation (FHT)

- Patented low-energy, low-pressure technology to separate hydrogen from syngas
- Absolutely pure hydrogen for industrial applications, fuel cells and mobility
- Hydrogen from biogenic residues can be produced directly where it is needed



Process Chains & Products



References

Location:

Chur / SWITZERLAND

Application:

Clean gas, heat & power

Feedstock:

Hydrochar from sludge

Output:

200 kW_{el} / 185 kW_{th}

- Commissioning
- Can be used for trials



References

Location:

Basantpur, Odisha / INDIA

Application:

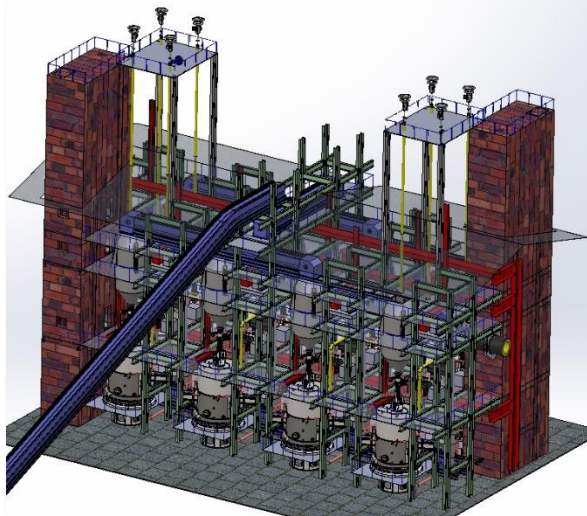
***Hot gas for iron ore
production***

Feedstock:

Coal

Output:

40 MW_{th}



References

Location:

Kesennuma / JAPAN

Application:

Clean gas, heat and power

Feedstock:

Woodchips

Output:

800 kW_{el}



Contact



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