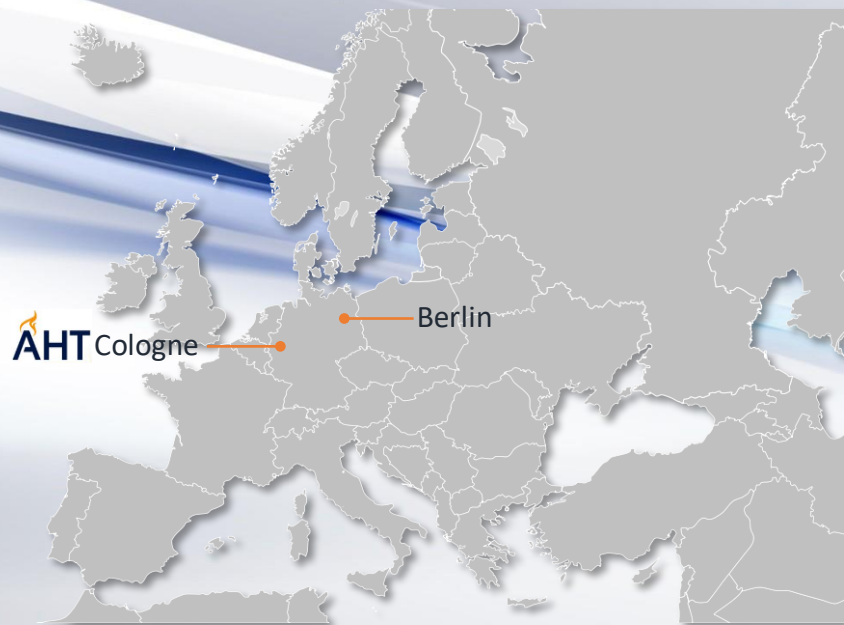




**A.H.T. Syngas Technology N.V.**

**Products**  
**Gas**  
**Heat**  
**Power**  
**Generation**  
**from**  
**Biomass**

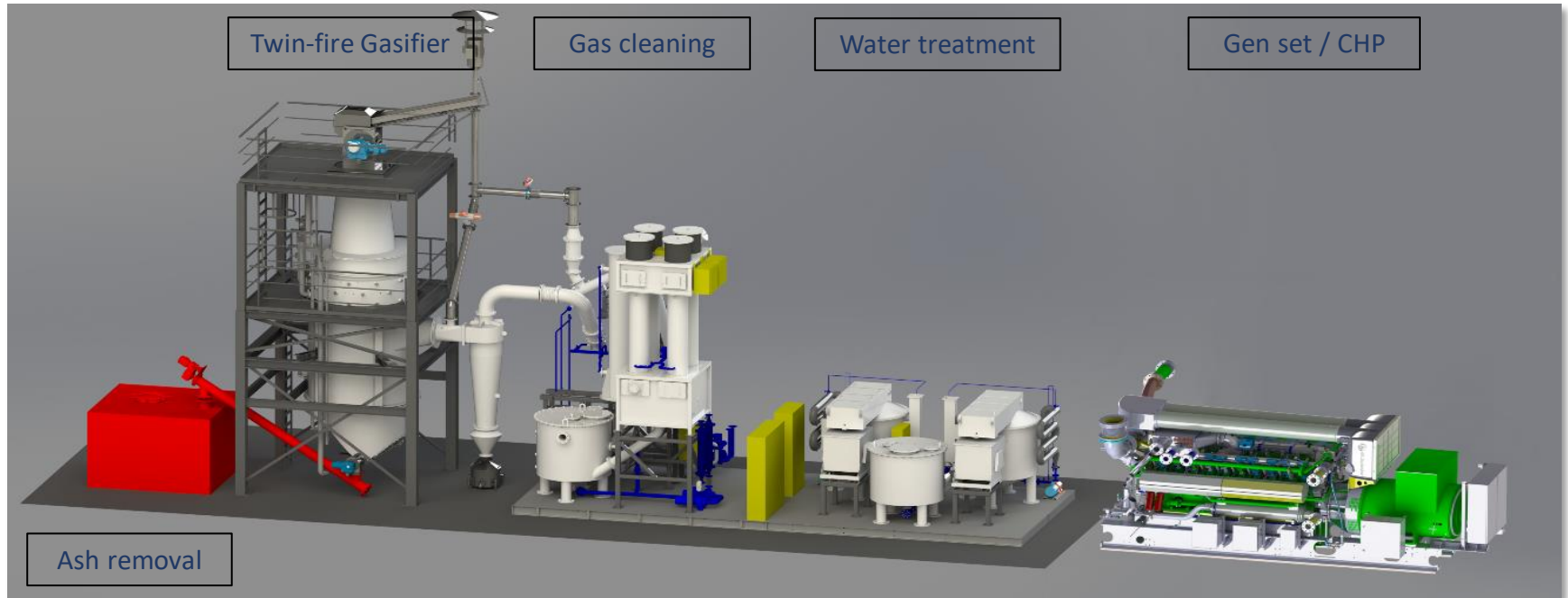


## Who we are – what we do

RAW & CLEAN GAS for Industrial Applications	CLEAN GAS for Decentralised Power Plants	SERVICES
600 kW <sub>th</sub> - 50 MW <sub>th</sub>	200 kW <sub>el</sub> - 12 MW <sub>el</sub>	<ul style="list-style-type: none"><li>• Feasibility, Engineering</li><li>• Delivery, Erection, Supervision</li><li>• Support, spare-parts &amp; maintenance</li></ul>

Consulting & Empowering	Design & Customisation	Sales, Shipment & Implementation	Maintenance & Services	R&D / Engineering
				

## How we do it - Overview



**Feedstock**



**Preparation**



**Gas Generation**



**Gas Conditioning**



**Syngas, Heat &  
Power Generation**



## Feedstock Types

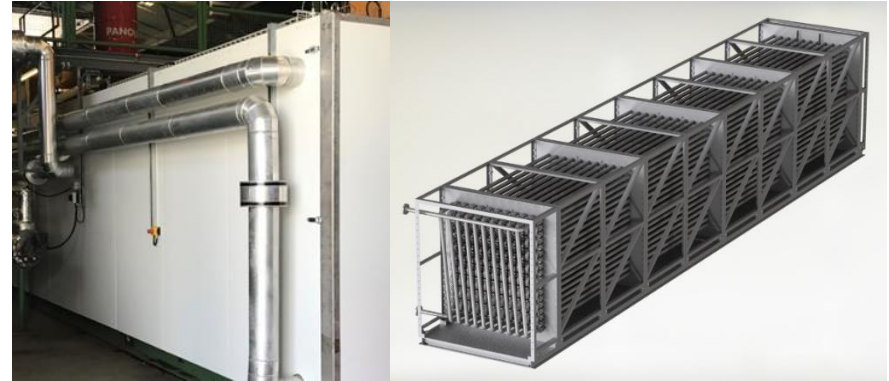


Broad range of original or briquetted feedstock: wood chips, saw dust, empty fruit bunches, straw, Miscanthus, (low grade) coal, etc.

## How we do it – Up- and Downstream Solutions

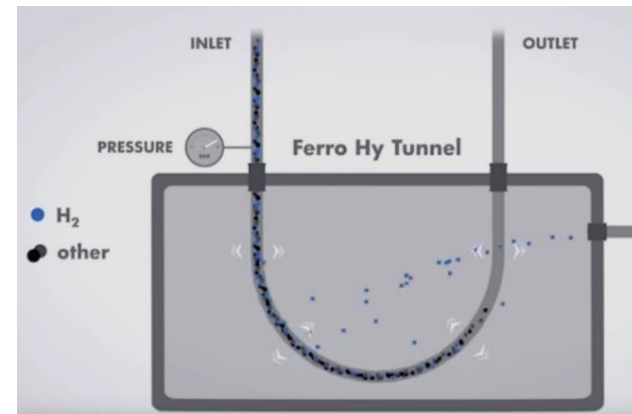
### Hydrothermal Carbonisation (HTC)

- 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

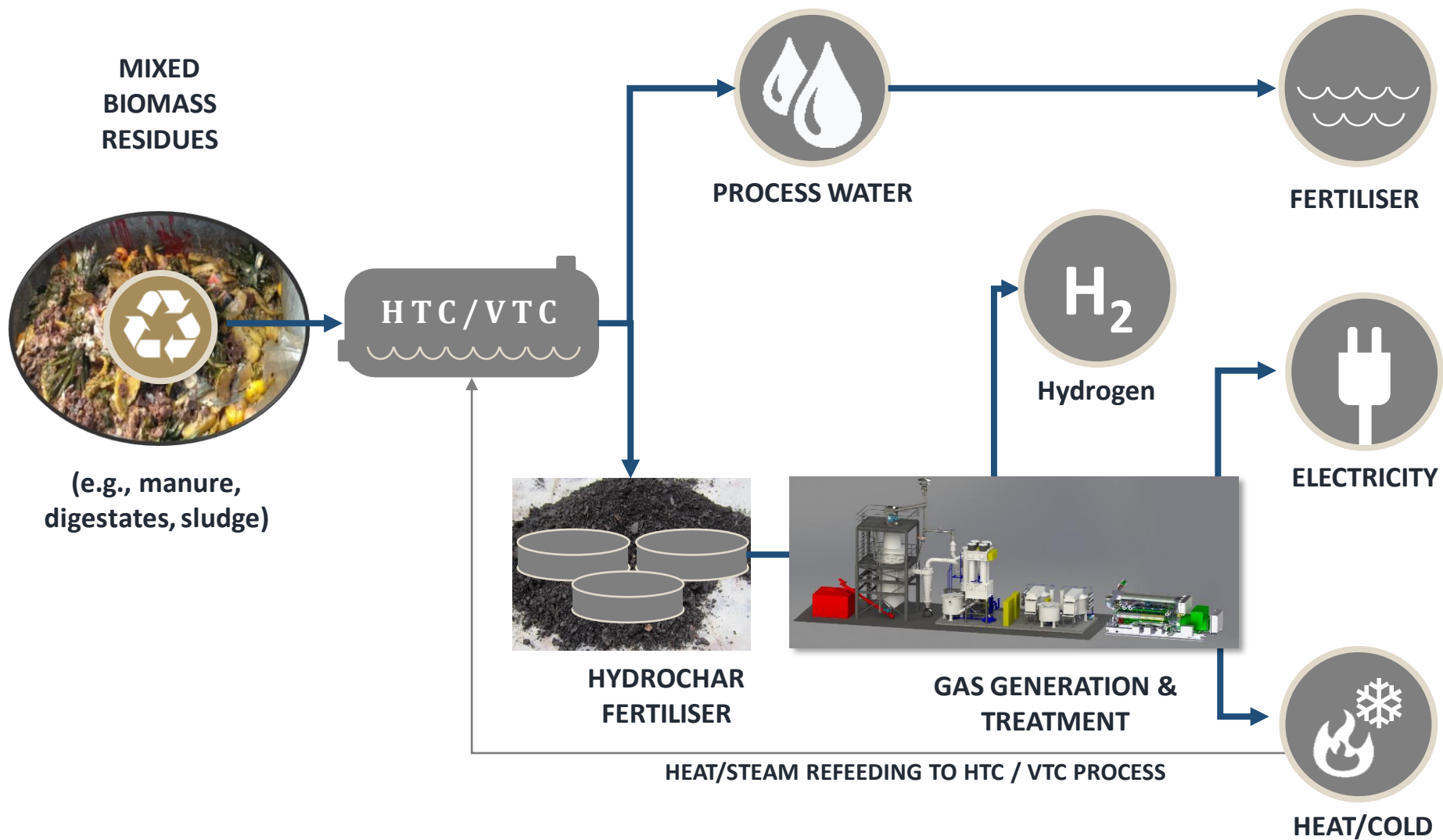


### Hydrogen Separation (FHT)

- 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





# To Whom do We Offer?



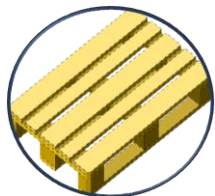
Chemical



Biogas Plants



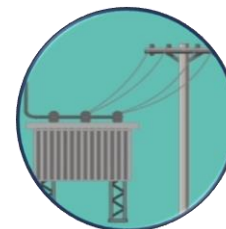
Sewage Plants



Wood Processing



Smart Cities



Power Producers



Farmers & Cooperatives



Production & Manufacturing



Food & Beverage

## References

Location:

***Basantpur, Odisha / INDIA***

Application:

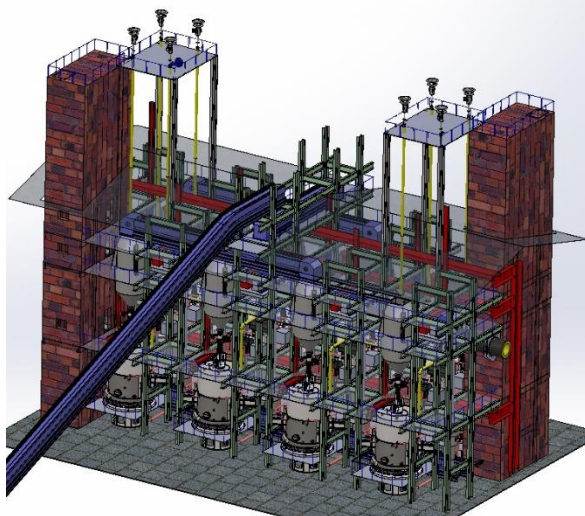
***Hot gas for iron ore  
production***

Feedstock:

***Coal***

Output:

***40 MW<sub>th</sub>***





## References

Location:

***Chur / SWITZERLAND***

Application:

***Clean gas, heat & power***

Feedstock:

***Hydrochar from sludge***

Output:

***200 kW<sub>el</sub> / 185 kW<sub>th</sub>***

- Commissioning
- Can be used for trials



## References

Location:

***Kesennuma / JAPAN***

Application:

***Clean gas, heat and power***

Feedstock:

***Woodchips***

Output:

***800 kW<sub>el</sub>***





## Contact



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