



# *Waste-to-hydrogen: the sustainable fuel of tomorrow*

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# OUR DIVISIONS

## Low Carbon Emissions

- Renewable energies
- Waste to Heat
- Water & flue gas treatment
- Nuclear SMR
- Green H<sub>2</sub>, blue H<sub>2</sub>
- Carbon Capture & Storage



## Infrastructures

- Railways & subways
- Roads & bridges
- Harbours & maritime works
- HVDC stations & OHT Lines

## Plants

- Oil & Gas
- Biopolymers & Biorefineries
- Thermal & Combined Cycle Power
- Cogeneration & Trigeneration
- Chemical & Petrochemical
- Food & Agro-industrial
- Pharmaceutical



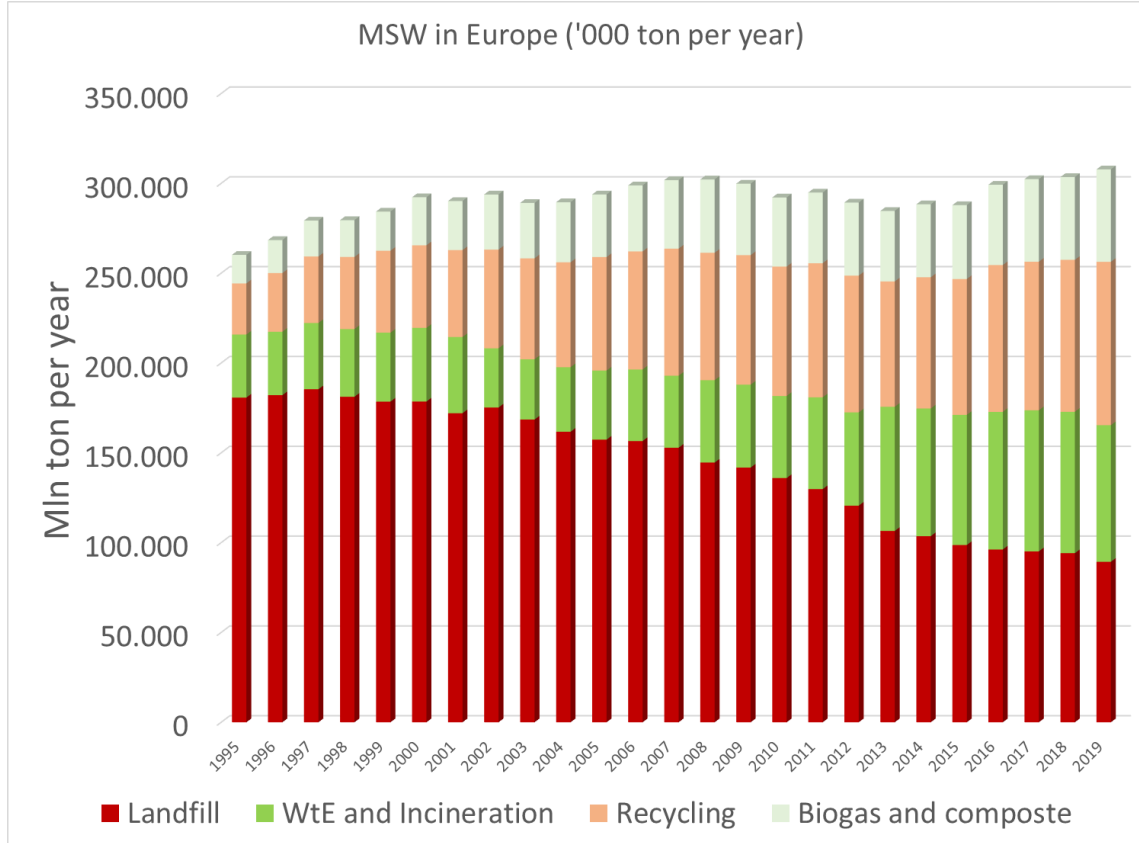
## High Tech Facilities

- Airports & facilities
- Data Centers
- Laboratories
- Hospitals

## EPCM/EPC

- Industrial revamping
- Live upgrade for critical facilities
- Brownfield & greenfield turnkey projects up to 50 M€ (EPCM) and 10 M€ (EPC)

# WASTE MARKET: SOME NUMBER



*Landfill still over 25%*

# WASTE-2-HYDROGEN MAIN BENEFITS

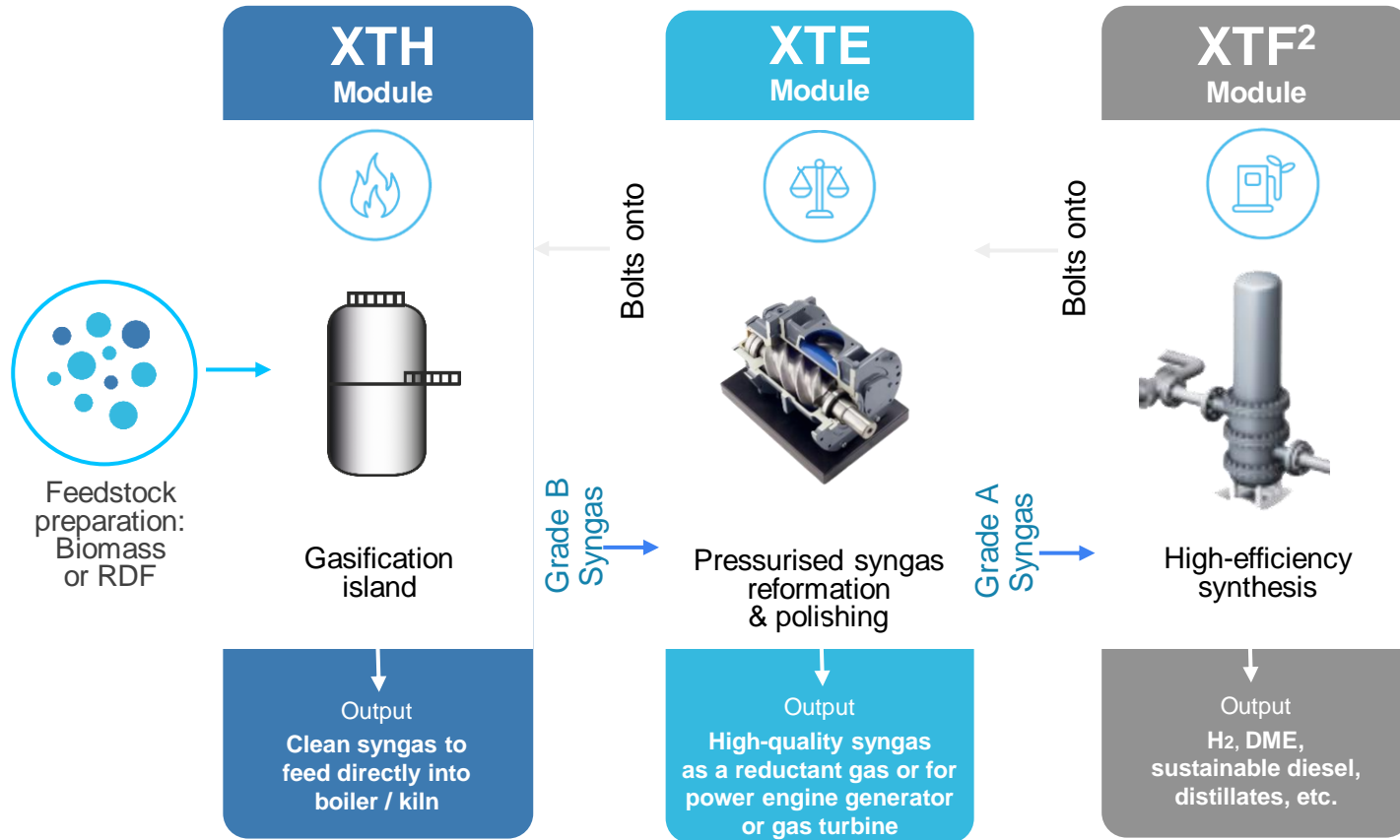
## Gasification process

- a) Overall efficiency above 50%
- b) No combustion, no stacks
- c) 'CCS' readiness

## Waste-to-fuel applications

- a) Gate fee's enable low-carbon fuel competitiveness
- b) Waste valorization enhancement regulatory needs
- c) H2-BECCS one of the few carbon-negative technology

# KEW TECHNOLOGY<sup>®</sup> MODULAR APPROACH

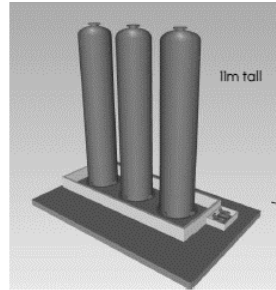
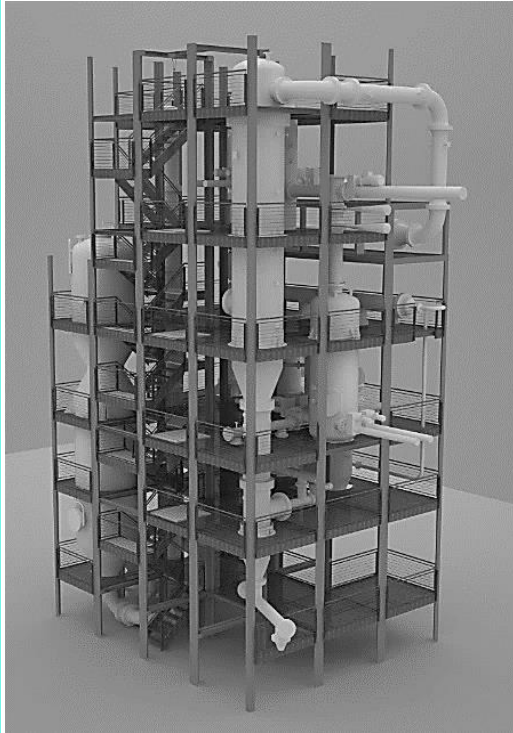


'X' – anything to heat

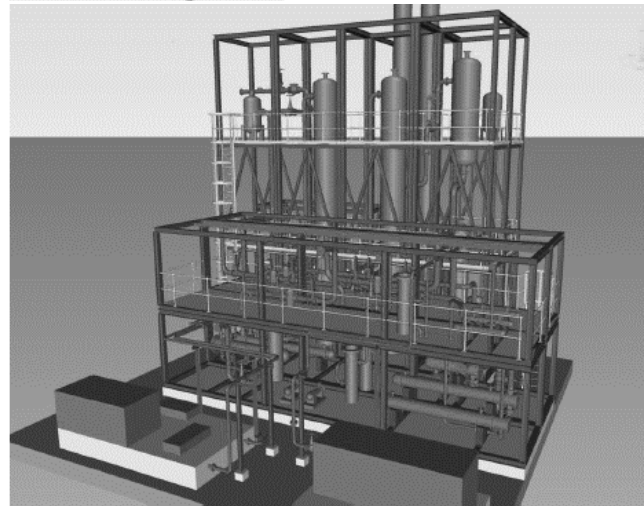
'X' – anything to equilibrium

'X' – anything to fuels

# WASTE TO HYDROGEN PLANT UNDER CONSTRUCTION



3x 50t Liquid CO<sub>2</sub> Storage Vessels  
& Offtake Pumps



## Project features

- ✓ Compact, pre-assembled module
- ✓ Easy of installation, very low site risks
- ✓ Unique sizing
  - 20'000ktpa RDF or low-grade biomasses
  - 1'150tpa Hydrogen
  - 18'000tpa CO<sub>2</sub>(l)
- ✓ Real distributed energy solution (<100k inhabitants per module)

**Commercial scale plant in place (2023) c/o SEC  
Wednesbury (West Midlands)**

- ✓ H<sub>2</sub> production w/CCS in progress (operation expected mid-2023)
- ✓ Gasification already in operation