Thermo-Catalytic Conversion - Technology Overview

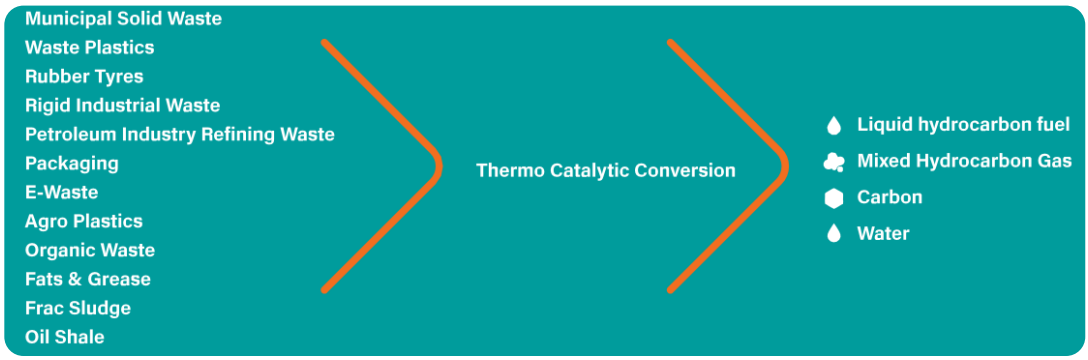
ENECOVERY
we recover energy

About

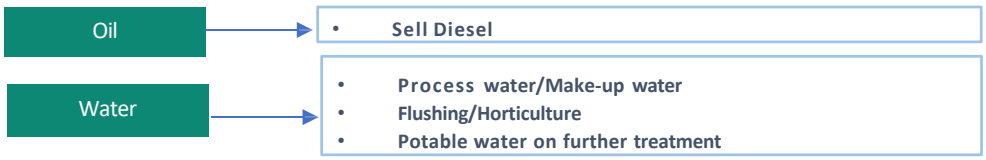
- Waste-to-Energy (WtE) is rapidly evolving from conventional power generation into an integrated, carbon-neutral ecosystem that maximizes value recovery from waste.
- Among emerging solutions, **thermo-catalytic conversion stands out as the most promising technology, capable of transforming unsegregated municipal solid waste (MSW), plastics, rubber, and industrial residues - often with up to 50% moisture - into clean hydrocarbons (gas and oil), bio-carbon, and water**

Process Overview & Output Streams

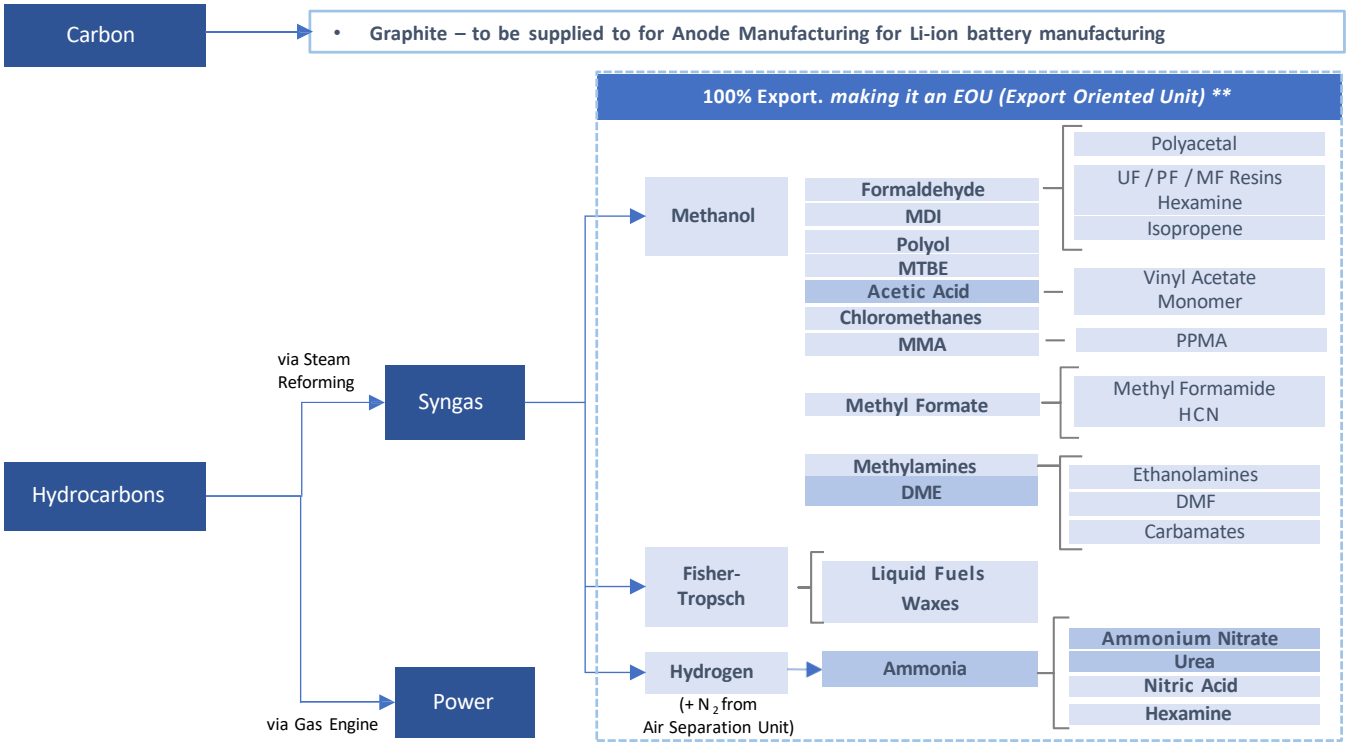
- Operating at moderate temperatures of about 450–600°C, **thermo-catalytic conversion** requires no pre-treatment, segregation, or drying, enabling same-day waste-to-resource conversion that prevents biological decomposition, methane emissions, and landfill dependence
- Its compact, modular system design allows community-scale deployment, reducing transportation needs and emissions while strengthening the circular economy at source. With a negative carbon footprint of –2.5 to –4.5 kg CO_2 per kg of waste processed, this approach not only offsets disposal and fossil fuel costs but also contributes to decarbonization.



- Recovered oil and water streams are market-ready and can be monetized directly.



- High Potential Downstream Derivatives of mixed Hydrocarbon and Carbon can be harnessed as -



- In addition to downstream, operating as an Export Oriented Unit (EOU) also enables exemption against upstream components, further driving down cost of financing s Capex investment

A technology leader in green chemicals and circular waste solutions, ideal for ESG and impact investors.