

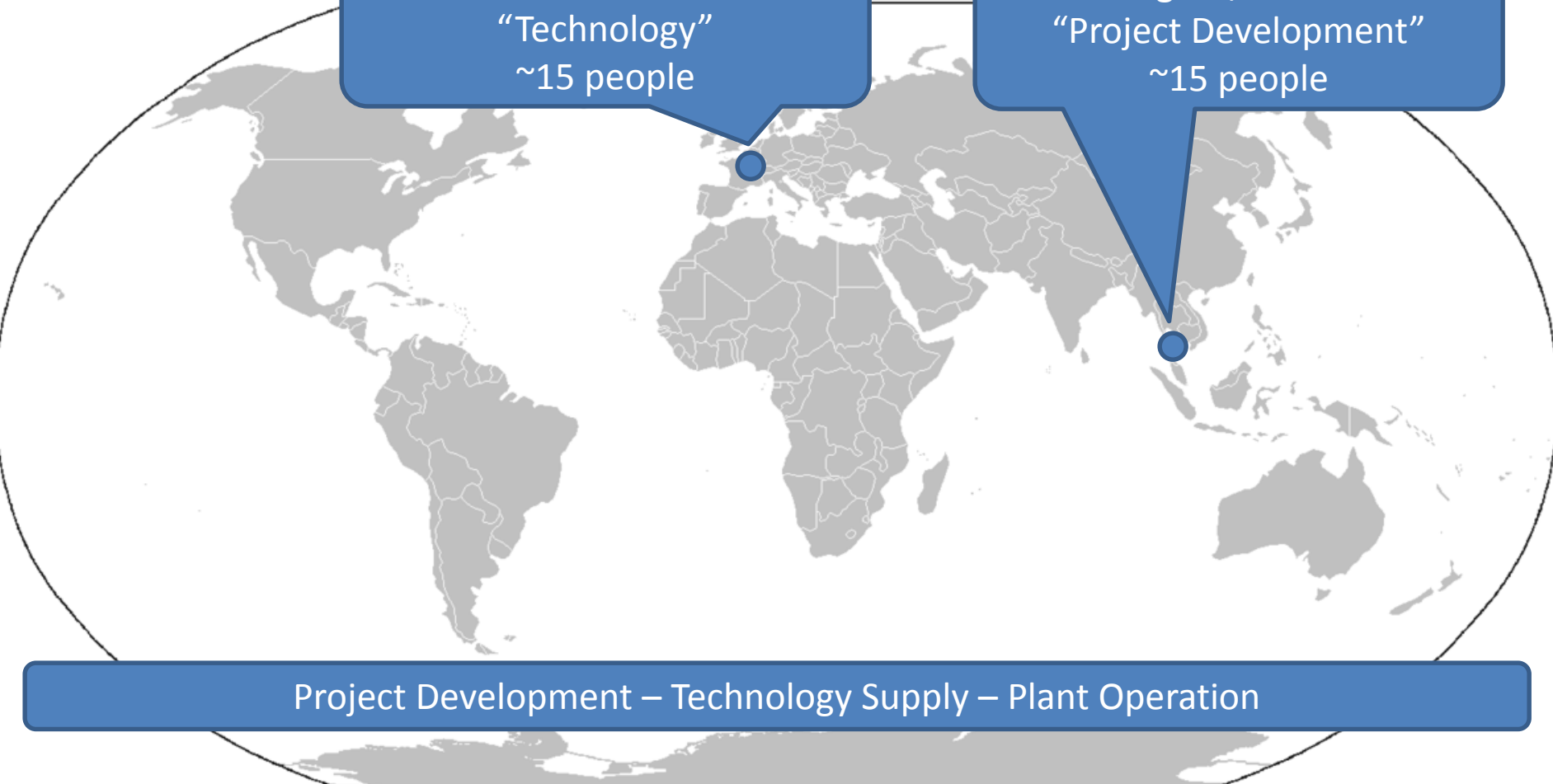
SYNOVA

Waste-to-Energy

Bram van der Drift

8 May 2018





Maassluis/Netherlands
“Technology”
~15 people

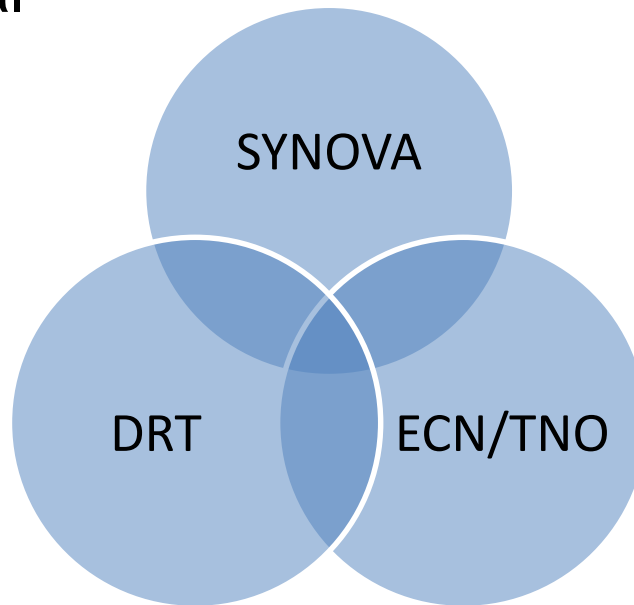
Bangkok/Thailand
“Project Development”
~15 people

Project Development – Technology Supply – Plant Operation

India
1 MWe plant
Soya residue

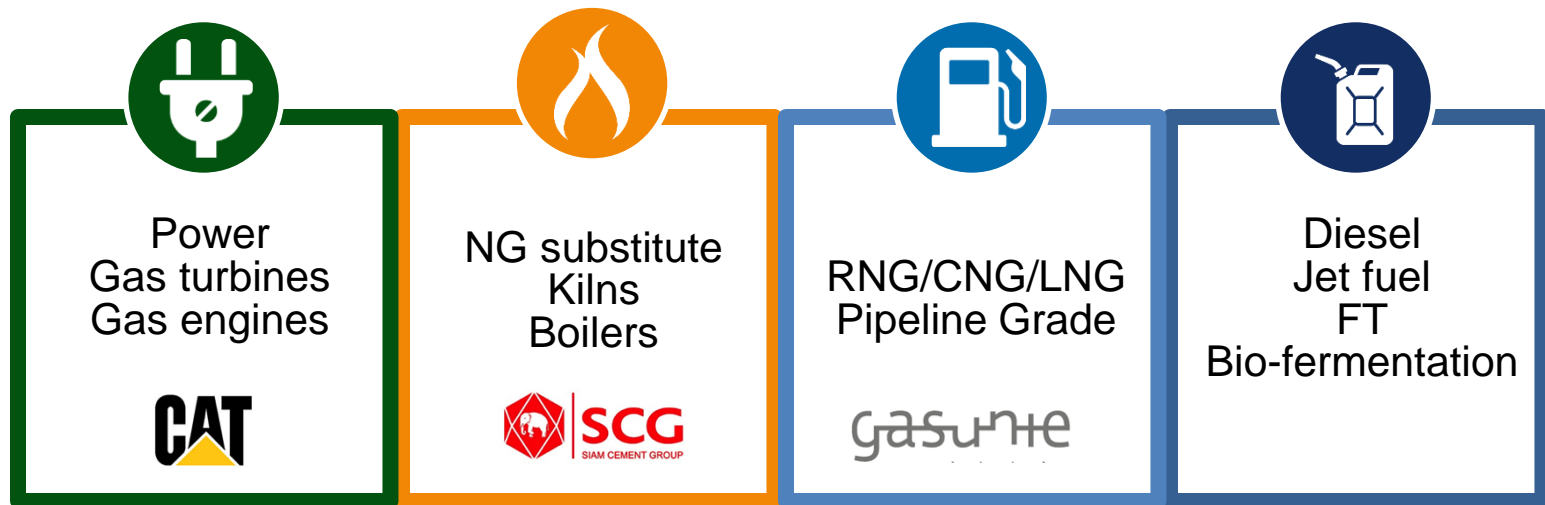


- SYNOVA acquired Dahlman Renewable Technology (DRT) in 2017
- A Joint Venture was created between SYNOVA/DRT and ECN/TNO in 2017: MILENA gasification and OLGA tar removal

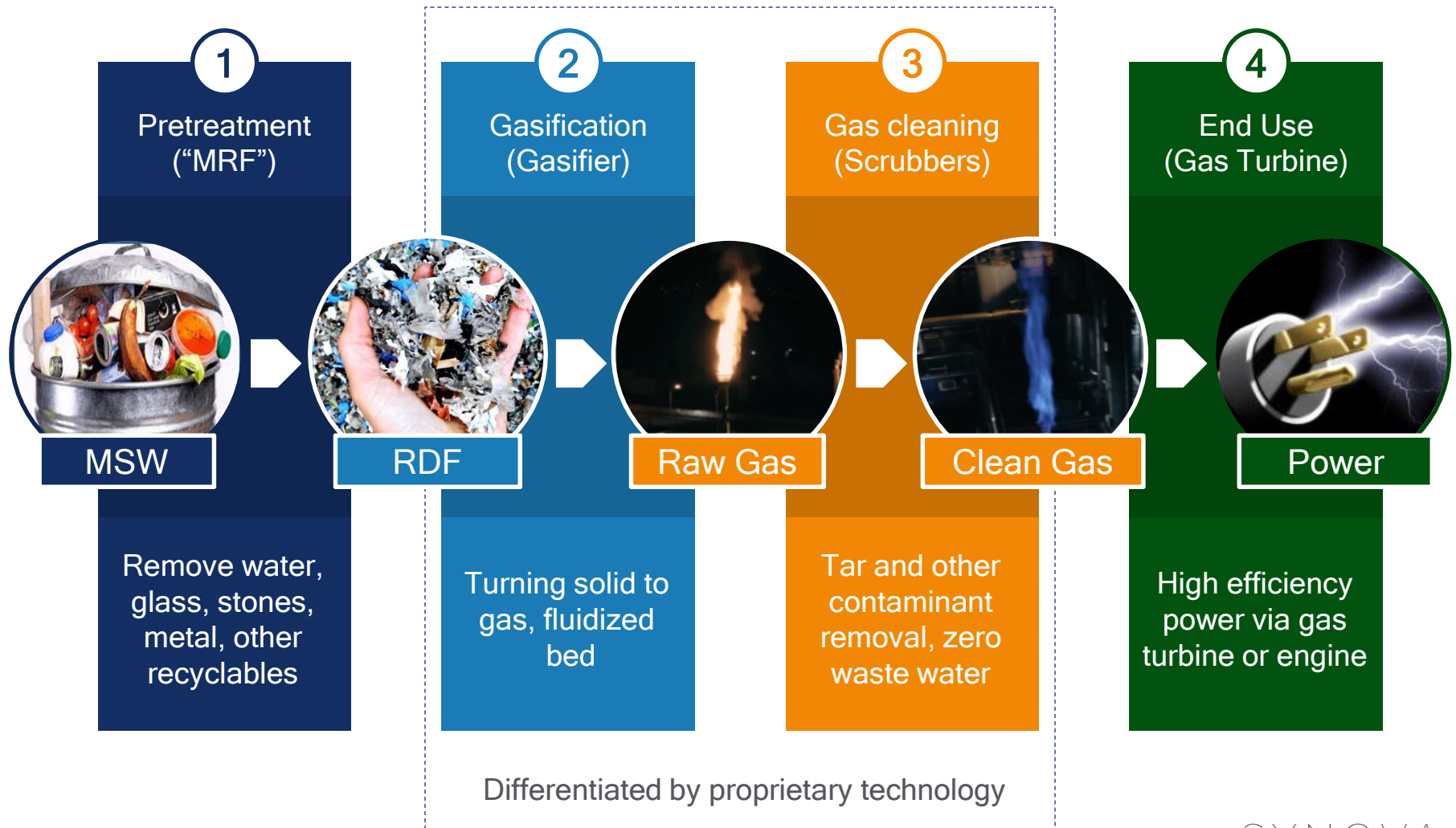


SYNOVA TECHNOLOGY

OLGA Tar Removal is the key. It opens the door to making efficient power, RNG, Fuels, and Chemicals from Waste and Biomass



FOUR STEPS to clean POWER



STEP 1: MAKING RDF

mind the differences!

	EU	Thailand
Moisture content	30-40%	50-60%
Food content	10-25%	40-60%
Plastic content	10-15%	15-25%
Recyclables (metal, paper, ...)	High	Low

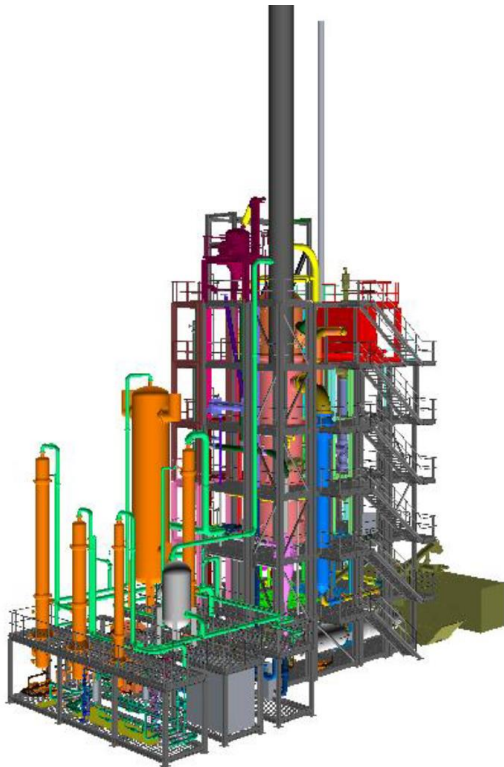
- Drying is required (or separation of food) in Thailand/Asia
- Recyclables content too low to pay for the RDF production in Thailand/Asia

LITTLE RECYCLABLES in the MSW



SYNOVA PLANTS

- 1 - 1.5 MWe power production
- 30 tpd waste input
- Modular design



- 8 MWe power production
- 160 tpd waste input





SYNOVA M30 PROJECT

BEFORE



AFTER



STATUS

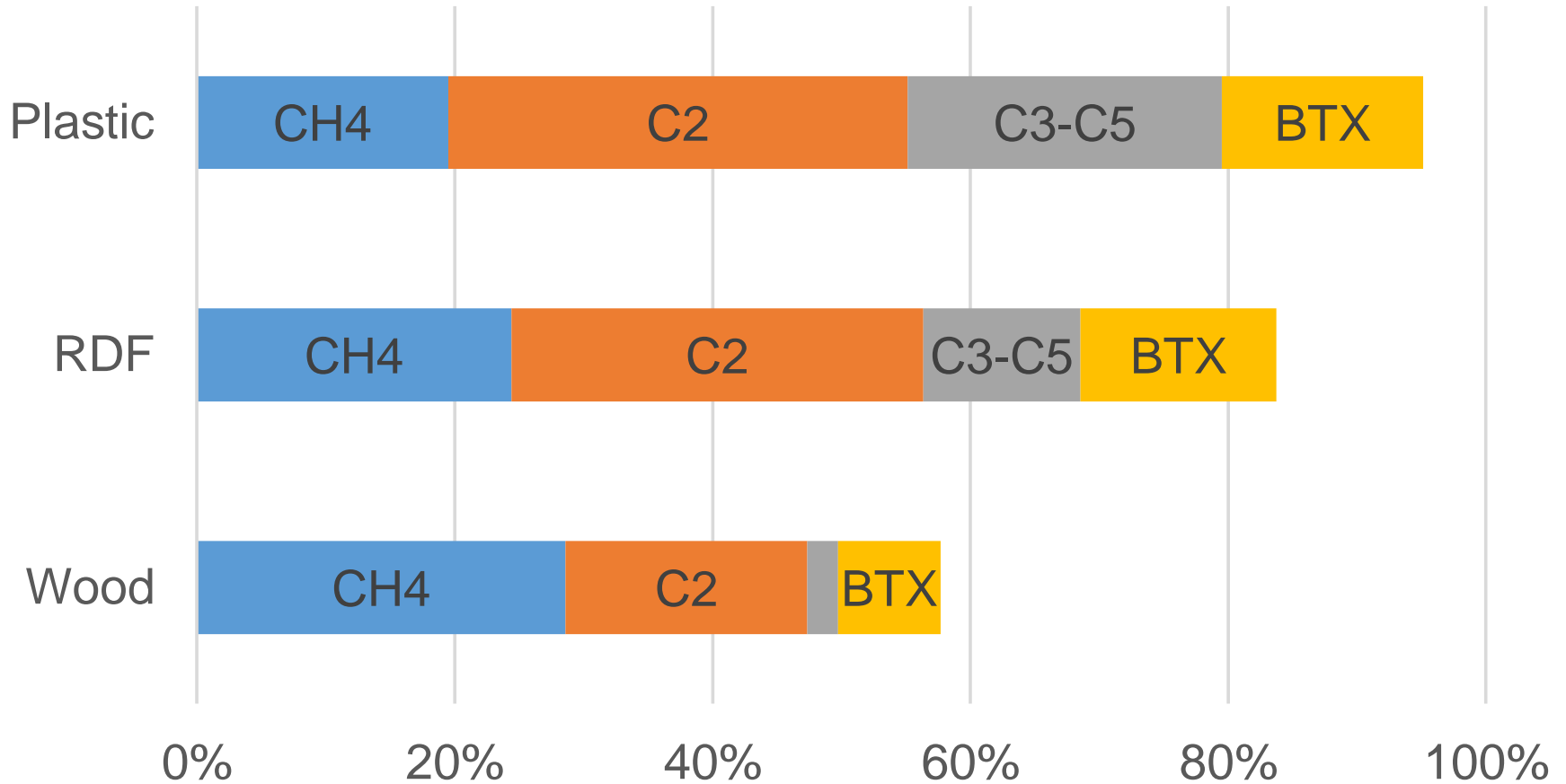
- Fully permitted
- Committed debt and equity
- 25 year waste concessions
- PPA expected soon

DATA

- Thailand
- Materials Recycling Facility for 350 tonne/day MSW to RDF
- 8 MWe net output

GAS COMPOSITION

all the hydrocarbons make a rich gas



More plastic: less to clean, less to compress, more to sell

THANK YOU

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