# Low-Emission Hydrogen from Thermal Cracking of Natural Gas

PROPRIETARY TECHNOLOGY

Mérida Labs

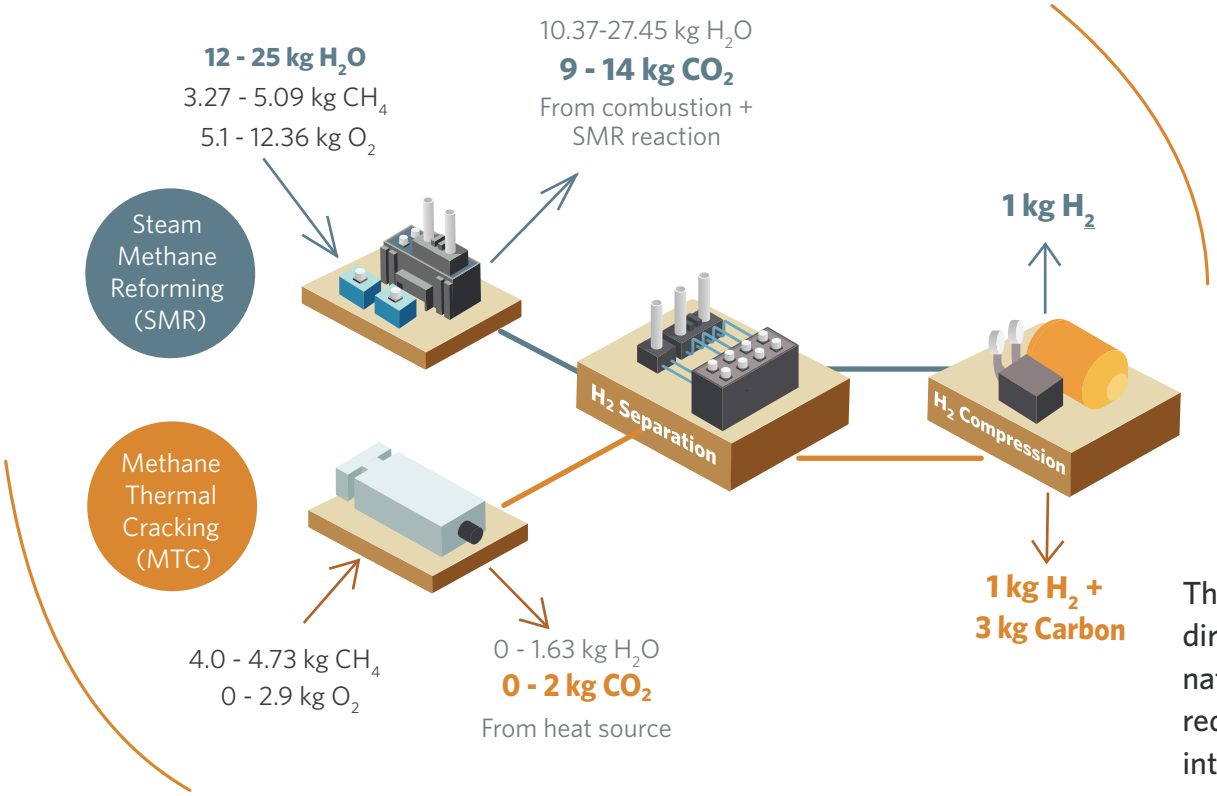
**10 -200 Tonnes/Day**

**No geographic** limitations

**75-100%** reduction in Greenhouse Gas Emissions

**No water** utilized

We have developed a proprietary technology to produce low-emission hydrogen and carbon black from natural gas. Our technology uses liquid metals in a continuous process. The low-cost and low-emission hydrogen can be used as a fuel, as a chemical feedstock (e.g., ammonia and steel) or to decarbonize the natural gas grid. Carbon black can be applied in different industries, such as tire manufacturing, lithium-ion battery electrodes, carbon-reinforced composite materials, etc.




The hydrogen can be directly injected to the natural gas grid to reduce the carbon intensity of natural gas.

# Low-Emission Hydrogen
# from Thermal Cracking of Natural Gas

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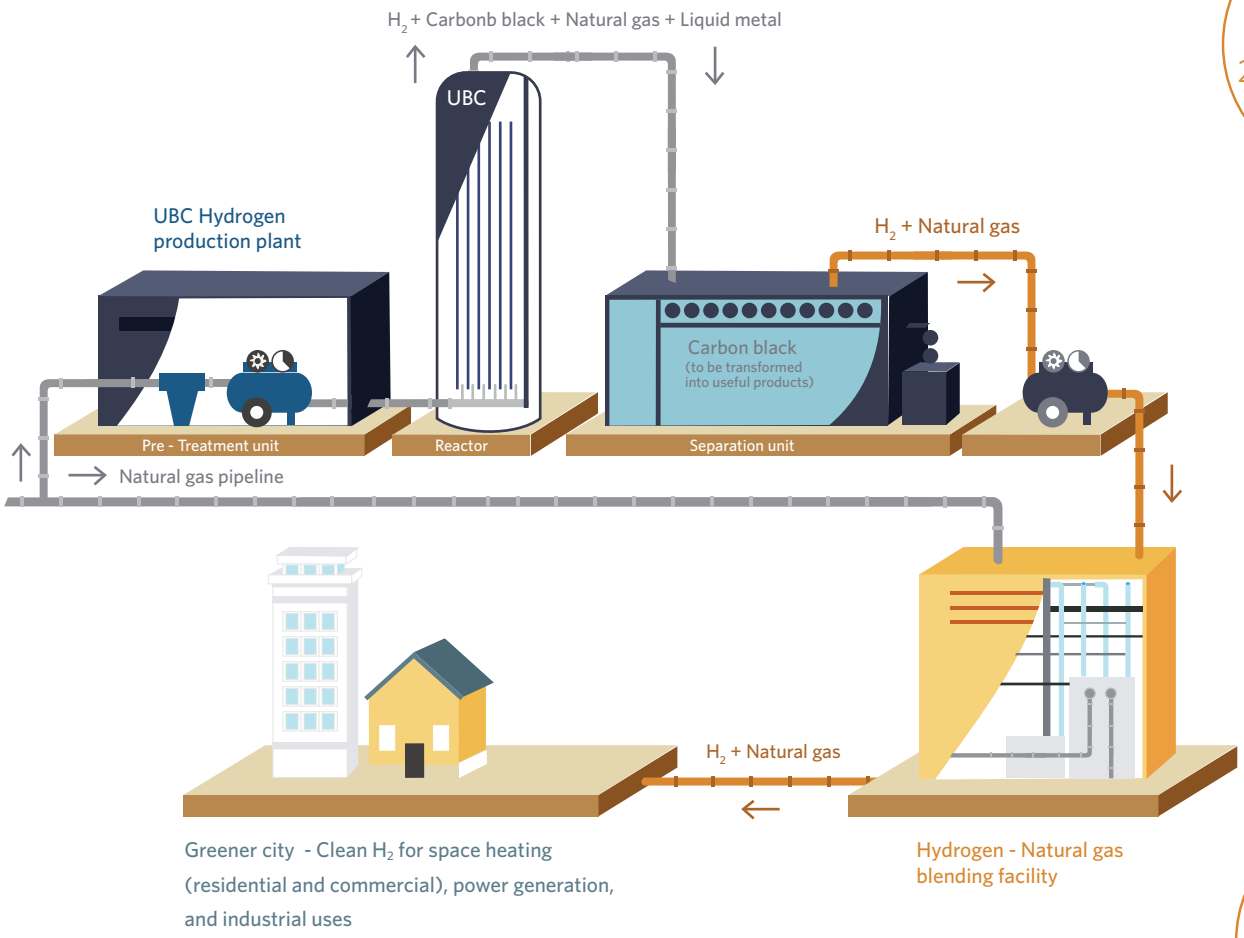
## PROPRIETARY TECHNOLOGY

Our technology has no geographic limitations on deployment. It can be installed at or near the point of use. We have received funding from Alberta Innovates to deploy a 200 kg/day plant in Alberta. The hydrogen produced will be used to reduce the carbon content in the natural gas grid.

**Prototype**

200 kg/day of $H_2$
2021-2023




**Scale-up**

10 tonnes/day of $H_2$
2023-2025

## HYDROGEN AND CARBON BLACK CAN BE MONETIZED

The hydrogen market has quadrupled during the last four decades and reached 73 million tonnes in 2018. Market research analysts predict that the hydrogen market will grow at an average CAGR of 6% by 2025 and 28% by 2050. Low-cost and zero-emission hydrogen could take over a large market share.

The byproduct carbon black can be sold separately. The global demand for carbon black is predicted to increase from 12 Mt in 2014 to 16 Mt by 2022. The carbon black price ranges between $0.4-2+/kg. Our carbon black would be zero-emissions.


CONTACT

Dr. Walter Mérida
E: walter.merida@ubc.ca
T: +1 604 822 4189