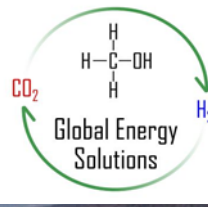


# GLOBAL ENERGY SOLUTIONS



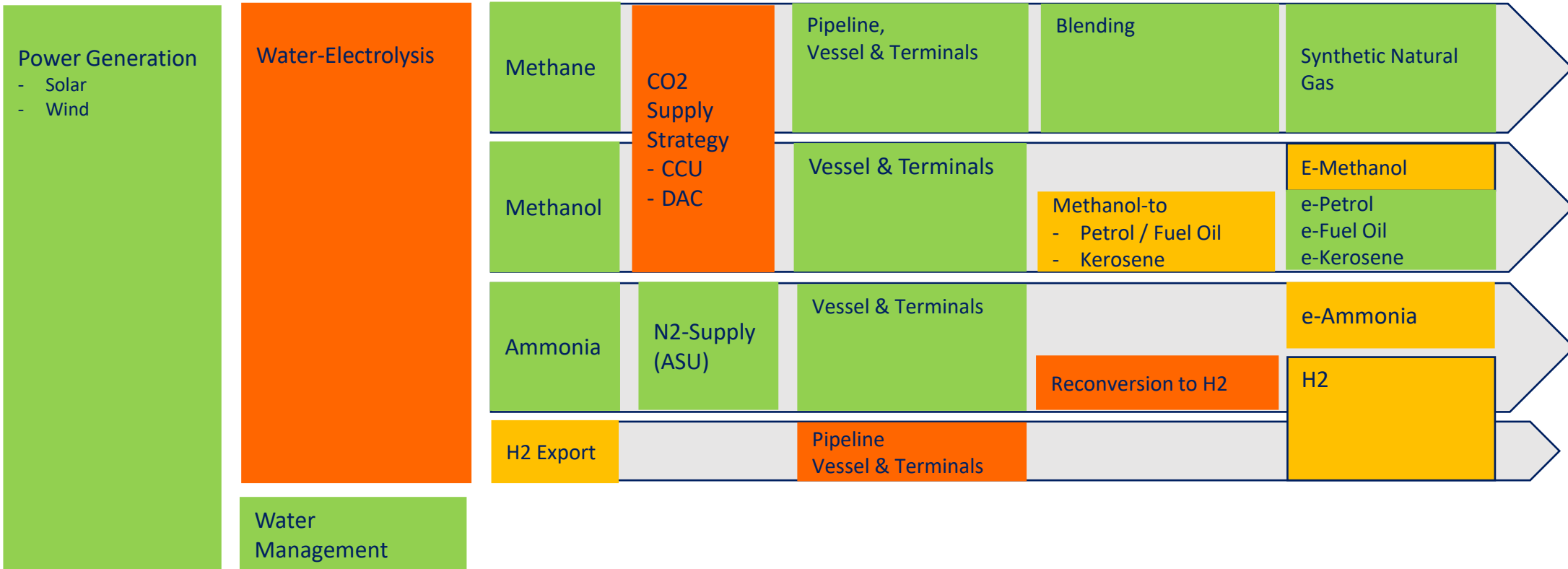
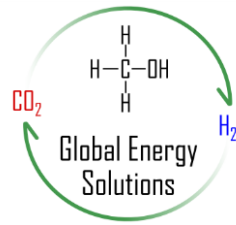
**Towards a Zero Emission Synfuel Value Chain:**

**Circular CO2 Economy**

Dubai, November 10th, 2021

Christof von Branconi

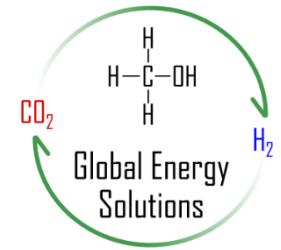
# Circular CO<sub>2</sub>-Economy: the Synfuel Value Chain



Level of Business Maturity:



# The path to synfuels: conclusions



- Green Power can be made available at very attractive rates =>  $\ll 2$  ct/kWh
- The ramp-up of green hydrogen from electrolysis appears the first bottleneck to a large scale use of e-fuels => multi-GW facilities necessary
- CO<sub>2</sub>-capture from point sources should be progressed in order to support the availability of necessary carbon, DAC is too costly an option in the foreseeable future => 30 – 60 €/t CO<sub>2</sub> with CCS achievable
- The value chain of ammonia is technologically most mature, but product markets need to be developed
- Global CO<sub>2</sub>-pricing and supportive regulations indispensable