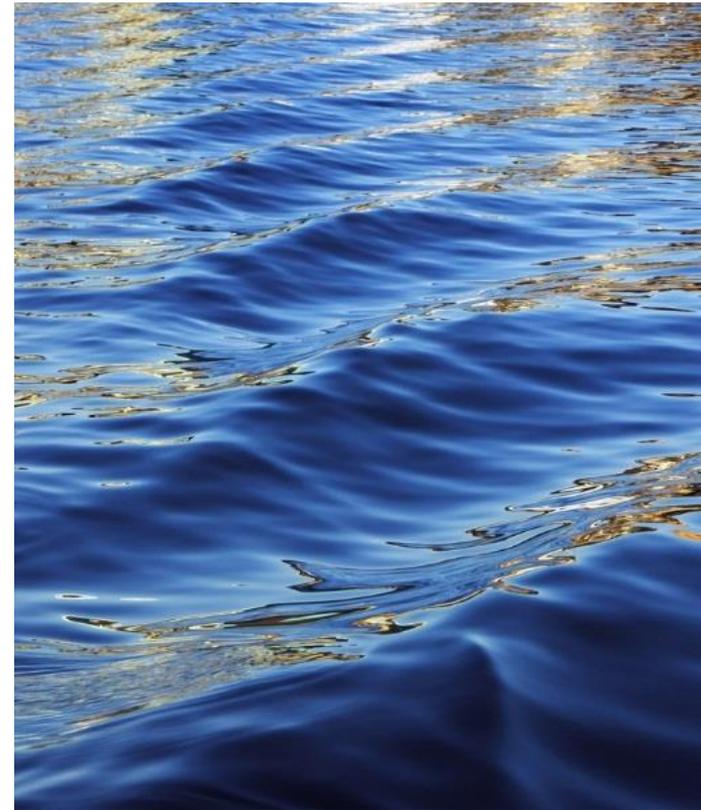


Net Zero Resilient Energy Solutions for Data Centers integrated in Urban Communities

Dr. Alberto Ravagni - InfraPrime

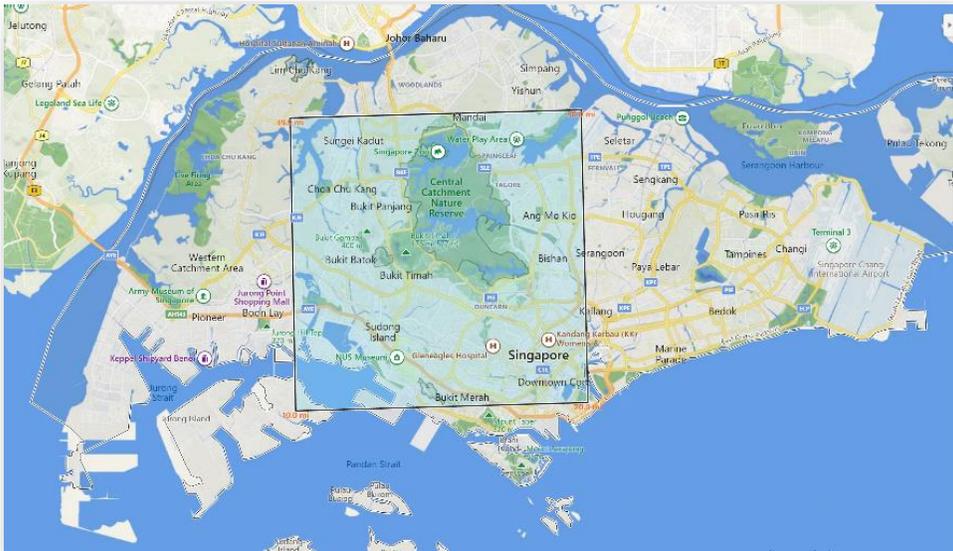


Data Centers Growth – InfraPrime Solutions

“175 zettabytes of data by 2025, up from about 40ZB in 2019”

- Satya Nadella, 04 nov 2019, IGNITE conference 

- =
- 260 Square Km of data storage alone
 - ..and 2 GW additional power



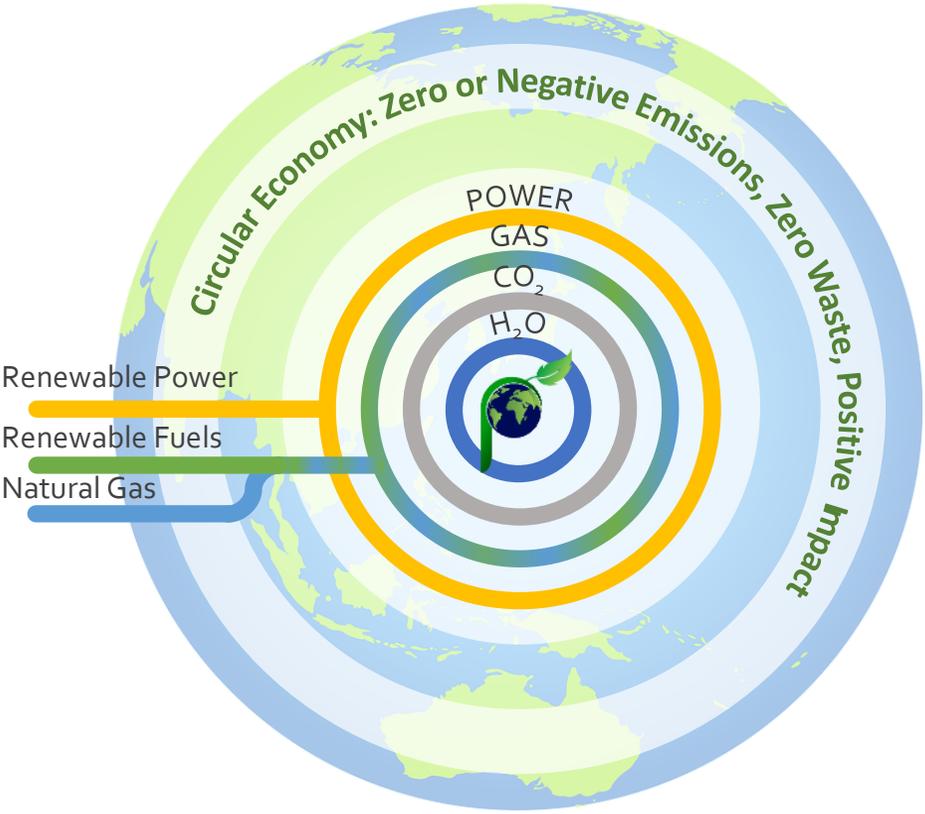
Data Centers Growth – InfraPrime Solutions

InfraPrime has developed a specific framework for data centers sustainable growth, measured following the UN-SDG goals, in compliance with the ESG requirements.

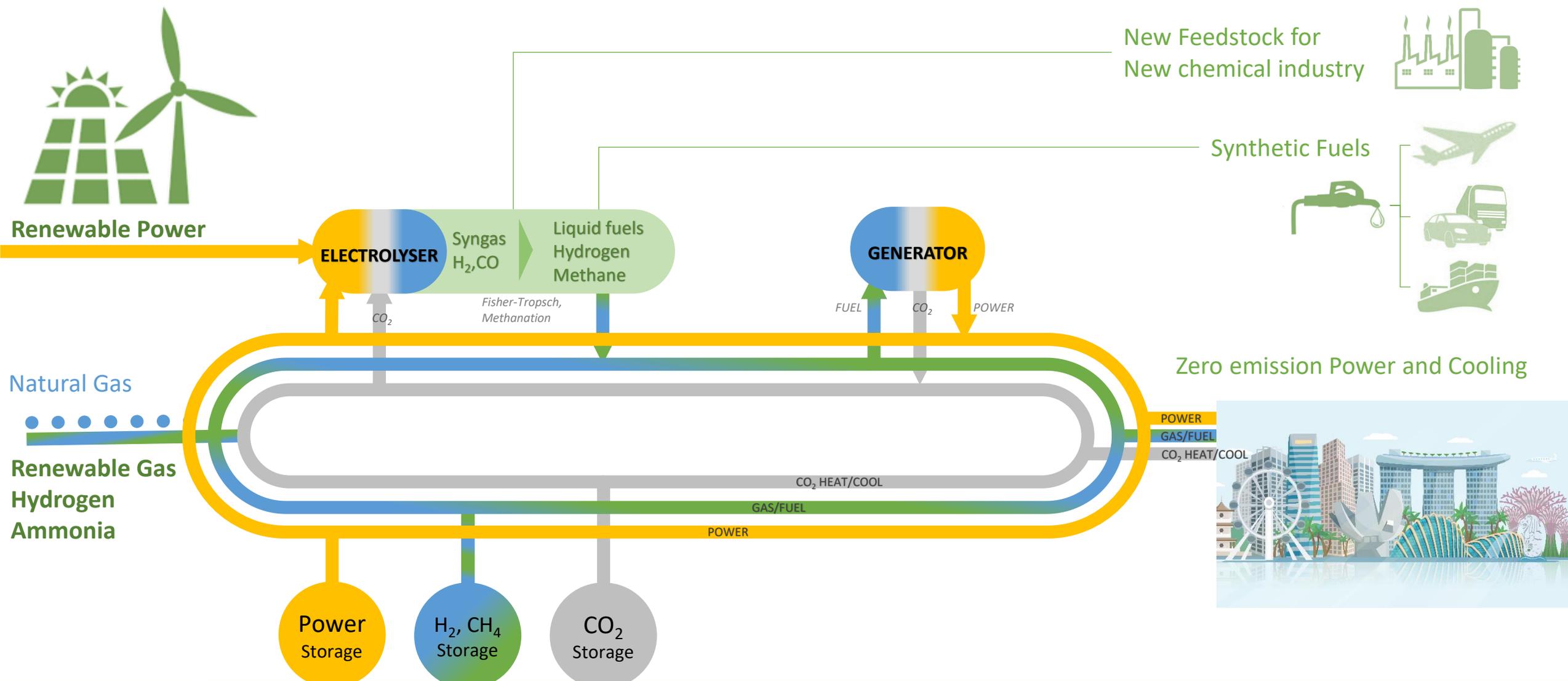


Elements of a Positive-LCA-Impact Circular Energy System Design:

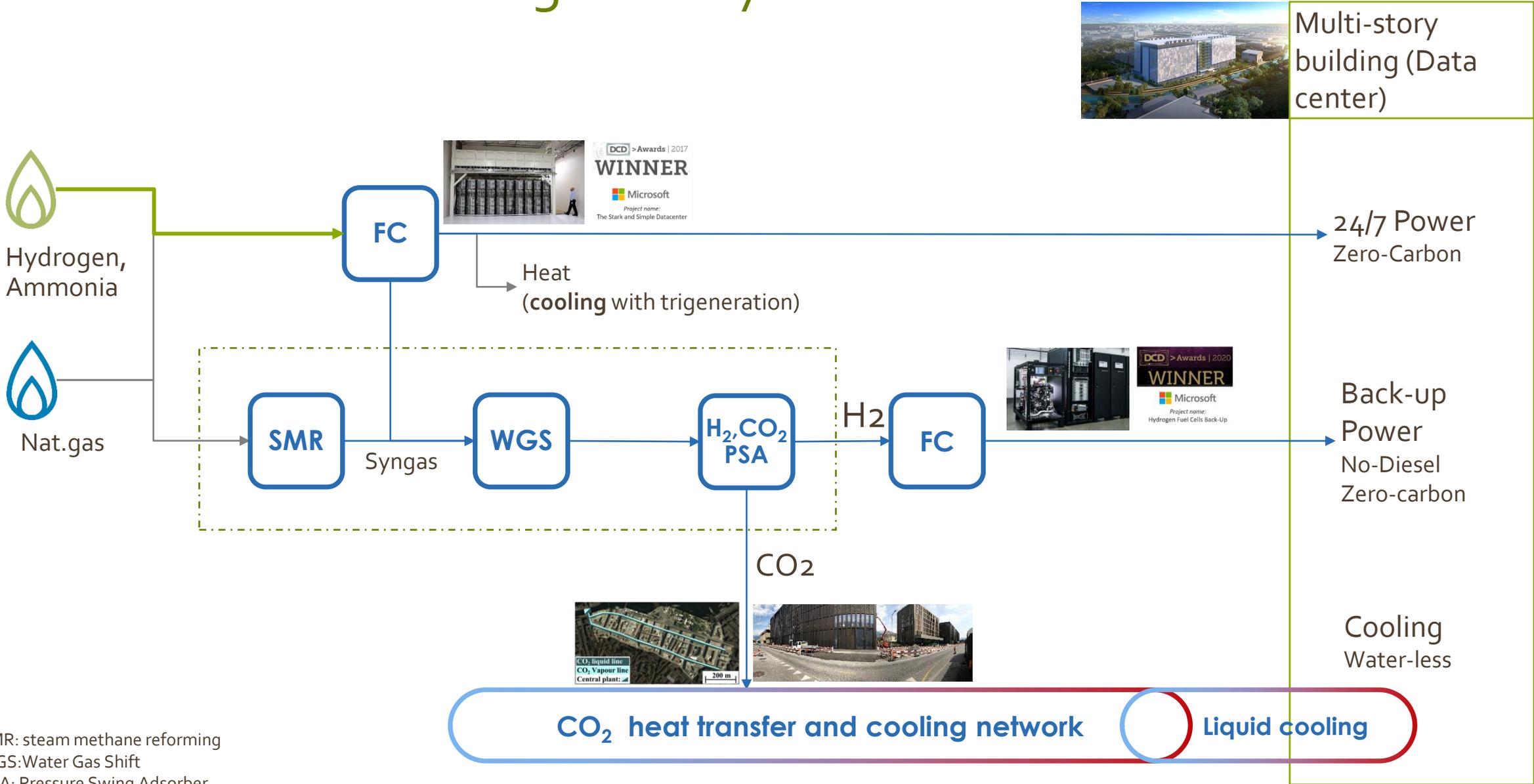
- Multiple, conventional and alternative energy sources
- Multiple, interconnected energy networks
- Connected by efficient energy conversion technologies
- Net-Zero Energy generation and distribution with fuel cells
- Net-zero efficient Hydrogen production
- Carbon Capture and Reuse
- High-performance liquid immersion cooling
- CO₂ as energy carrier for district heating and cooling



InfraPrime Net Zero Multi-Energy Integrated Infrastructure



InfraPrime Integrated System



Multi-story building (Data center)



DCD > Awards | 2017
WINNER
Microsoft
Project name: The Stark and Simple Datacenter



DCD > Awards | 2020
WINNER
Microsoft
Project name: Hydrogen Fuel Cells Back-Up



SMR: steam methane reforming
WGS: Water Gas Shift
PSA: Pressure Swing Adsorber

Net Zero Resilient Energy Solutions for Data Centers integrated in Urban Communities

Elements of a Positive-LCA-Impact Circular Energy System Design:

- Multiple, conventional and alternative energy sources
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