

Commerce Committee

Tuesday, November 14, 2023
3:00 PM - 5:00 PM
Webster Hall (212 Knott)

Action Packet

ADDENDUM

Paul Renner
Speaker

Bob Rommel
Chair

FPL

FPL Cavendish NextGen Hydrogen Hub

Tim Oliver

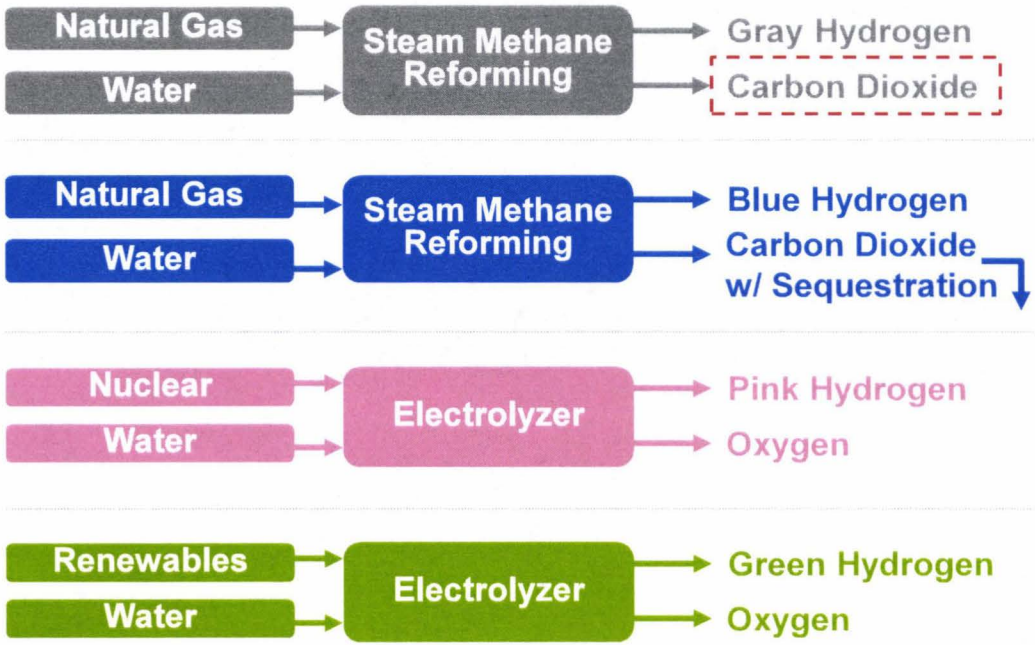
Vice President, Development

Florida Power & Light Company



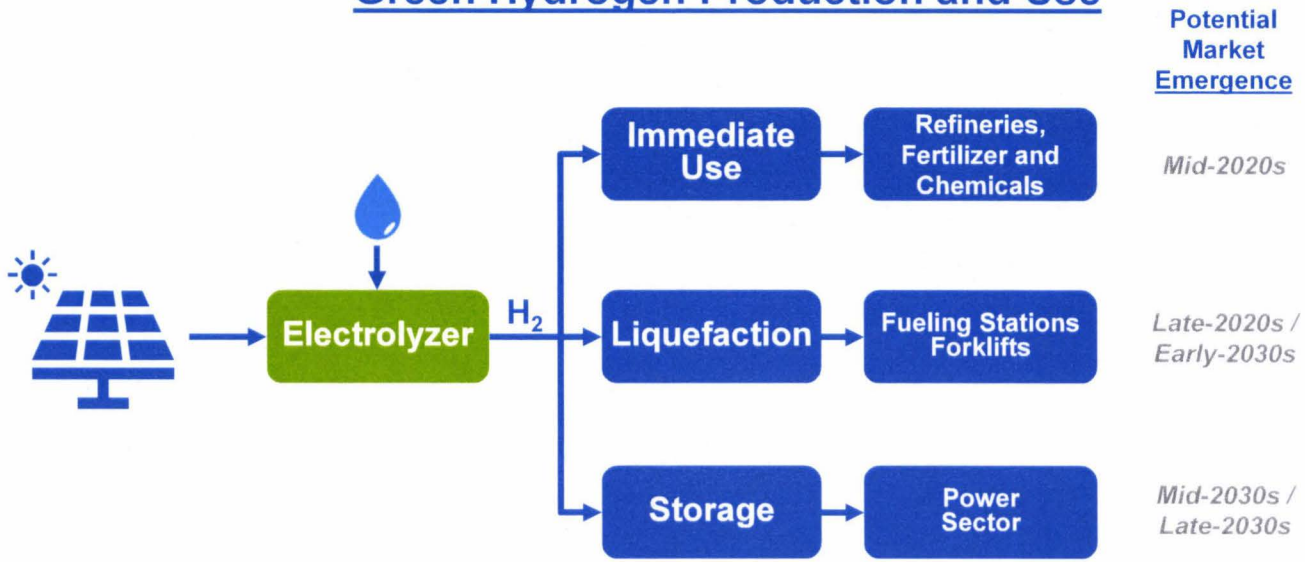

Okeechobee Clean Energy Center
Cavendish Solar Energy Center
Cavendish NextGen Hydrogen Hub

Hydrogen colors correlate to the energy source and the molecule being broken down



As the price of both renewable energy and electrolyzers decrease, green hydrogen has the greatest potential for cost savings for customers

Green Hydrogen Production and Use



Hydrogen has the potential to be used for other applications and is expected to require a combination of energy sources

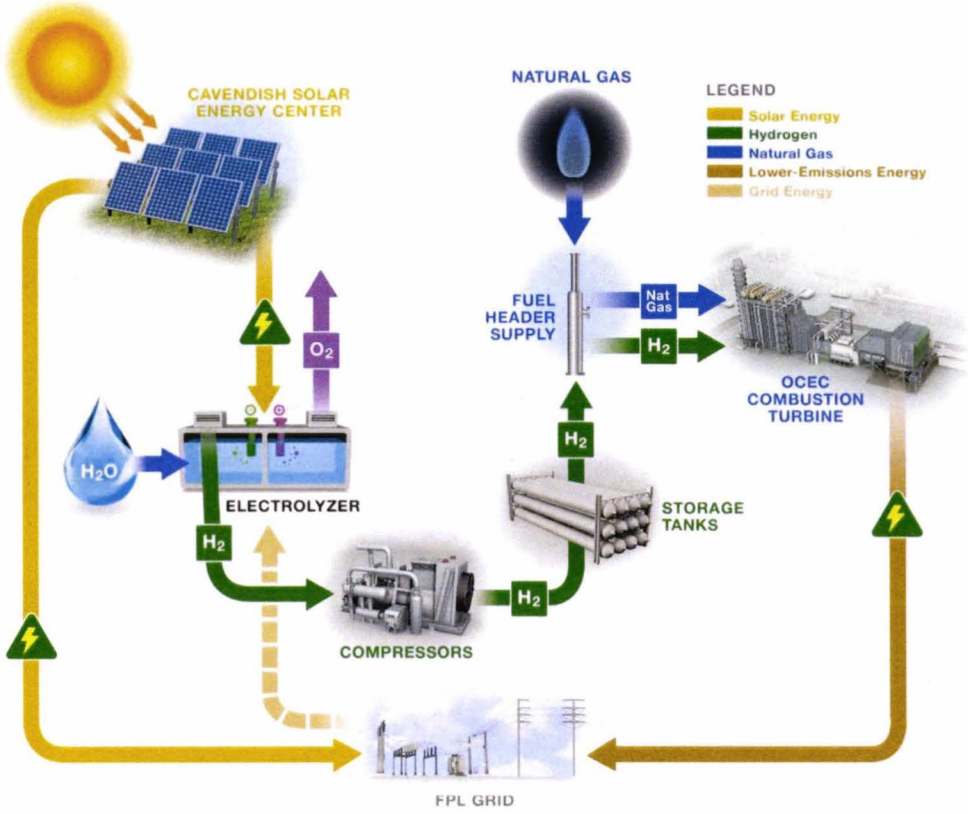
Transportation Sector



Heavy Duty	Medium Duty	Commuter / Light Duty
Hydrogen & Electro-Fuels	*Renewable Natural Gas*	*Electricity*
• Most cost-effective for heavy, long-haul trucks • Provide high torque for heavy loads • Light weight enables long-range	• Low-cost fuel attractive for commercial fleets • Fleets host 'behind-the-fence' fuel infrastructure • Proven engines, with increasing adoption	• EVs becoming readily available and affordable • Electric 'fuel' is accessible everywhere • Acceptable battery weight for small vehicles

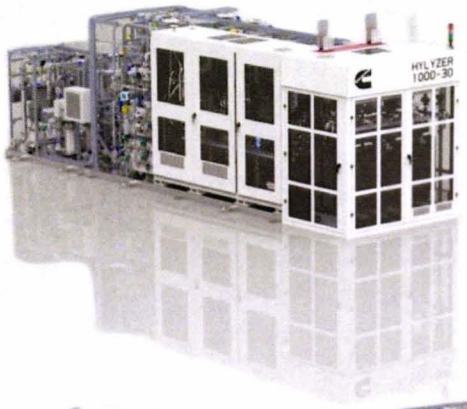
How clean hydrogen works

Clean hydrogen will be produced, compressed and then stored on-site

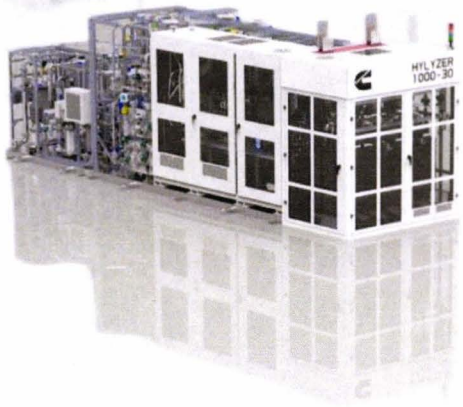


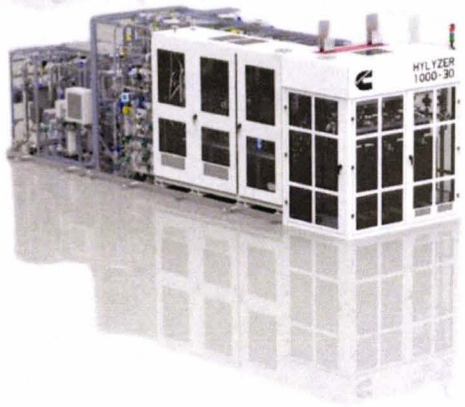
FPL's clean hydrogen pilot consists of five electrolyzers, a hydrogen storage facility and piping infrastructure











Testing 5% blend in one of three combustion turbines

5 electrolyzers with 25-MW capacity

First 10 years of operations aim to maximize operational and technology knowledge and support NextEra Energy's industry leadership



- **Pilot project will:**
  - Help us learn about the resources used and electrolyzer performance.
  - Be complementary to FPL's existing portfolio of natural gas, solar, nuclear and battery storage.
  - Be good for our customers and good for Florida.
- **The FPL Cavendish NextGen Hydrogen Hub is expected to be operational by the end of this year.**


FPL®