GENCELL

NH3 POWERED BY AMMONIA

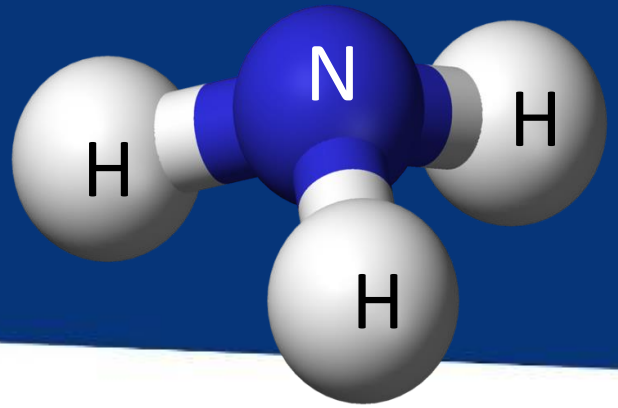
H2 POWERED BY HYDROGEN

Leveraging Novel Green Ammonia Synthesis for Totally Green Power

Gil Shavit

Co. Founder & CBDO

GenCell Energy



KEEP RUNNING.
NO MATTER WHAT.™

About GenCell

GenCell (GNCL) trades on TASE

>100 employees - 16 PhDs and veterans of NASA and MIR Space programs

24 Patents
100s of Trade Secrets
1,250 man-years R&D

Develops innovative alkaline fuel cell technology

POWERED BY AMMONIA POWERED BY HYDROGEN
Revolutionary process for hydrogen on demand from ammonia

Reliable and cost-effective backup and primary power solutions

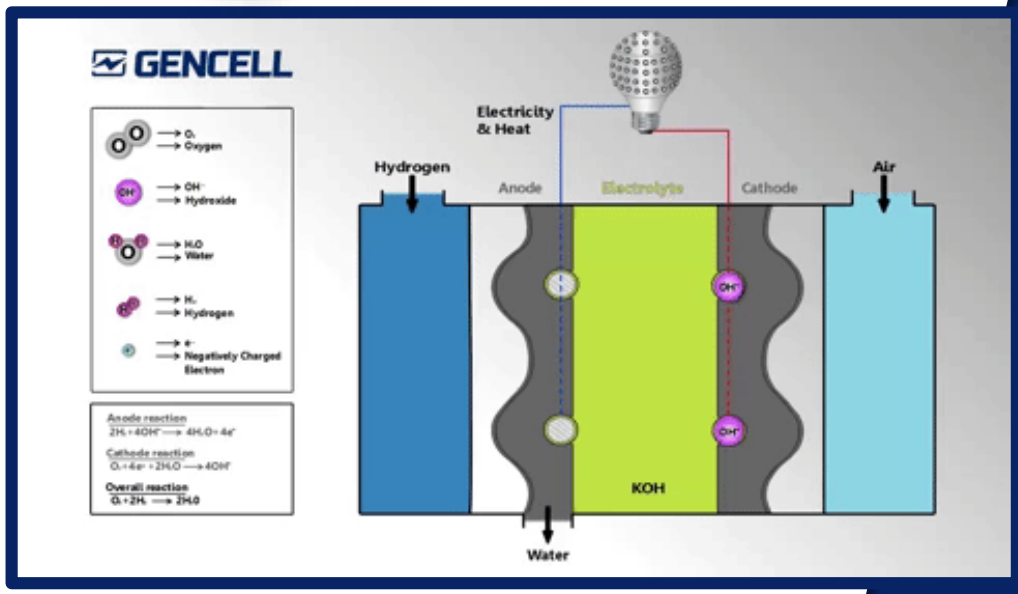
Deployed in 19 countries

Key Advantages of GenCell's Alkaline Fuel Cell Technology

- Regenerative **CO2 scrubber** technology
- **Non-noble** catalyst
- **Ammonia cracking** and **catalyst** technologies

- **Highest electrochemical efficiencies** among the known fuel cell types
- Highest resiliency- resistance to **extreme weather** conditions, high **altitudes** and **humidity**
- Can tolerate economical, **industrial-grade hydrogen** fuel
- **Eliminates the logistics** issues of hydrogen by **using ammonia** as a renewable energy carrier

ALKALINE FUEL CELLS FOR BROAD USES



GenCell's Core Product Portfolio

BACKUP POWER

GenCell BOX Long-Duration Backup Solution

- Instant power with extended run-time
- Designed for extreme climates

POWERED BY HYDROGEN

Fuel – Compressed Hydrogen

1 1s¹ H Hydrogen 1,008

The BOX is delivered with a modular gas cabinet to meet any duration of backup power required:

- 4 cylinders provide over 8 hrs of 5kW power
- 20 cylinders provider over 40 hours of 5kW power

GenCell IoT Remote Manager

- Remote management software – enables easy monitoring and analysis of hundreds and thousands of units
- Option to manage hybrid energy architecture using GenCell "GEMS" software

SAY NO TO DIESEL

Modular Hydrogen EV Charging Solution






Energy Bridge

Energy Bridge

Energy Bridge

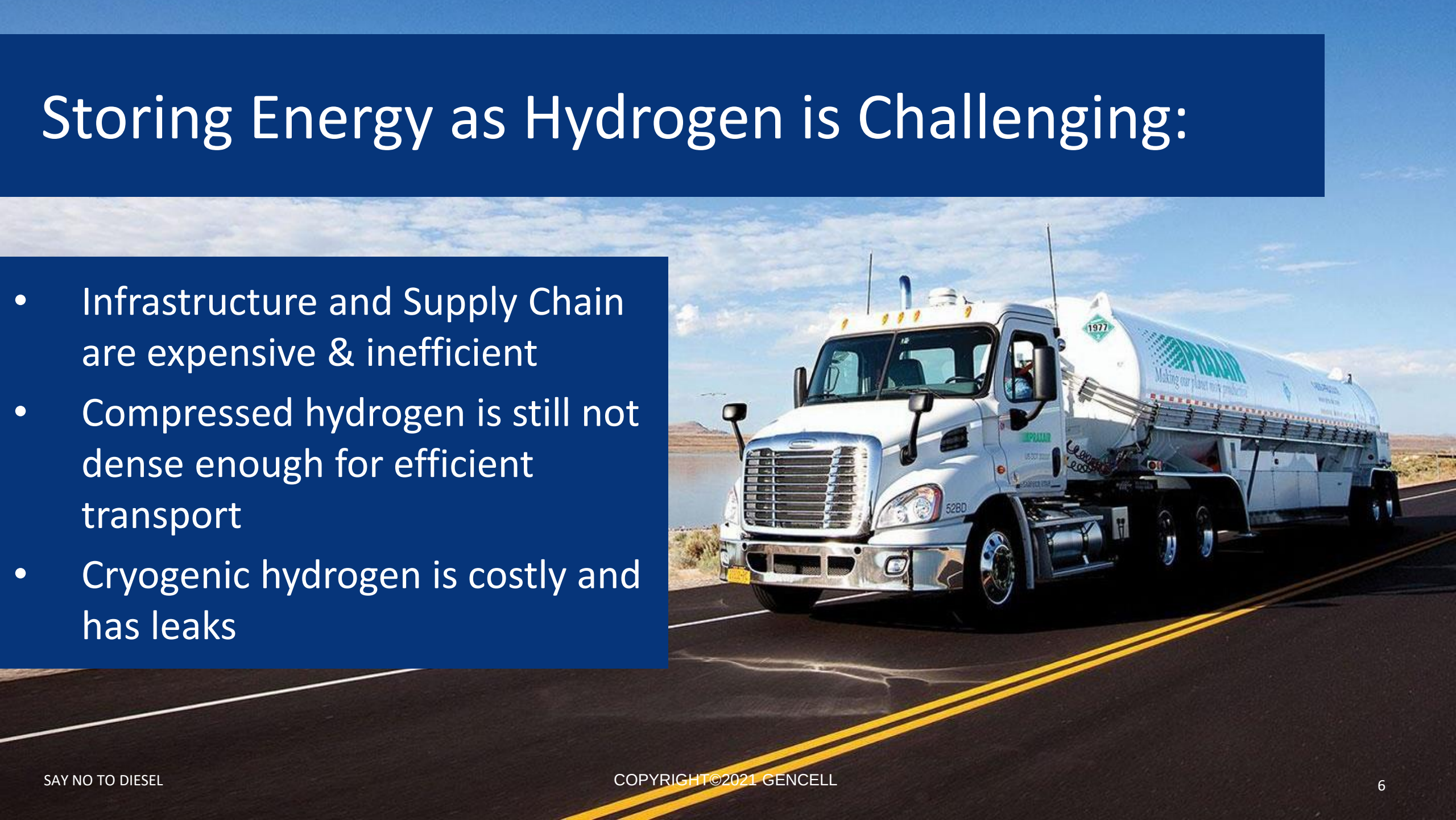






Storing Energy as Hydrogen is Challenging:

- Infrastructure and Supply Chain are expensive & inefficient
- Compressed hydrogen is still not dense enough for efficient transport
- Cryogenic hydrogen is costly and has leaks



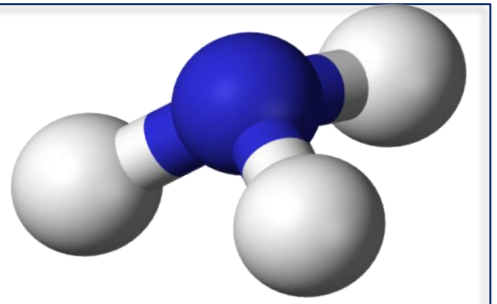
GenCell's Core Product Portfolio

PRIMARY POWER

A5 Off-Grid Power Solution

- Designed to replace diesel generators
- More affordable than diesel

Fuel - Ammonia (NH3)



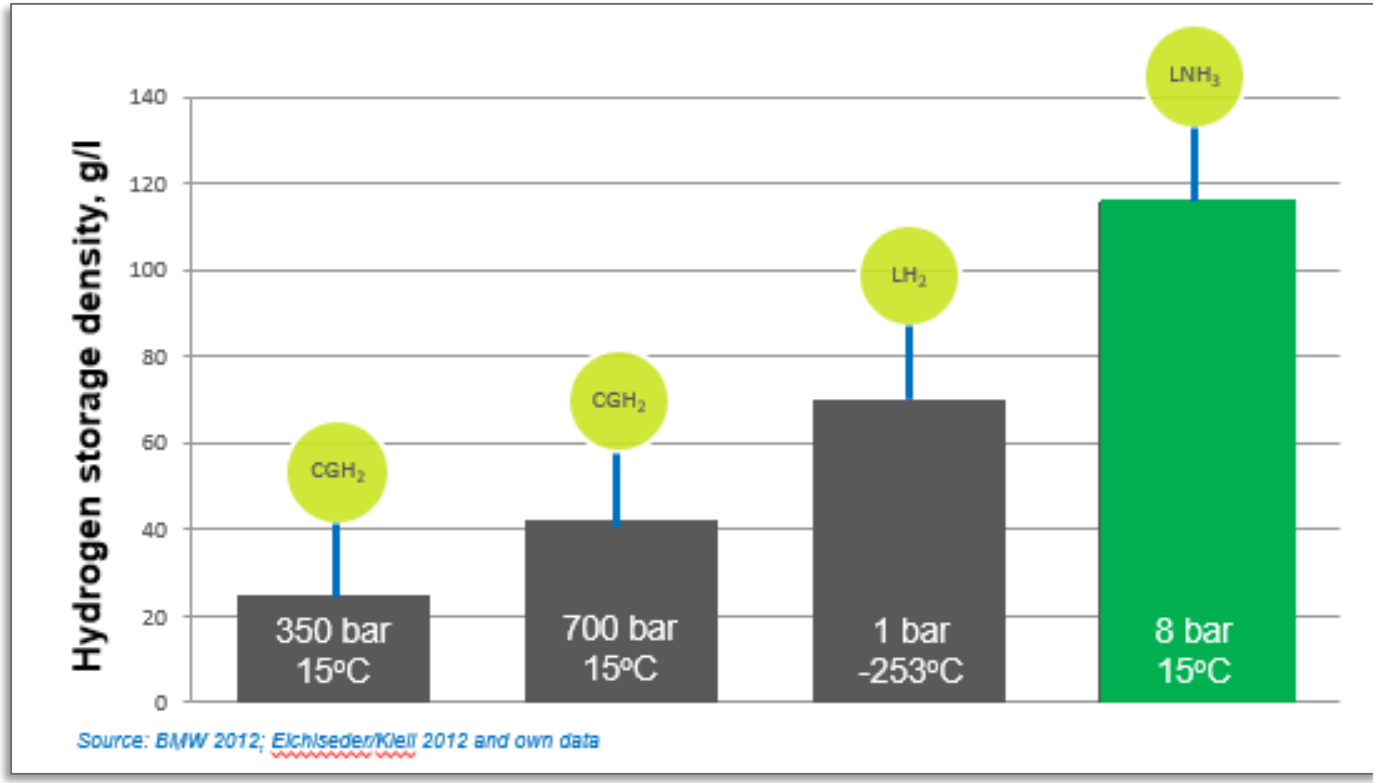
- High Availability
- Easy Transportability
- Chemical Compatibility
- Economy (priced less than diesel fuel)

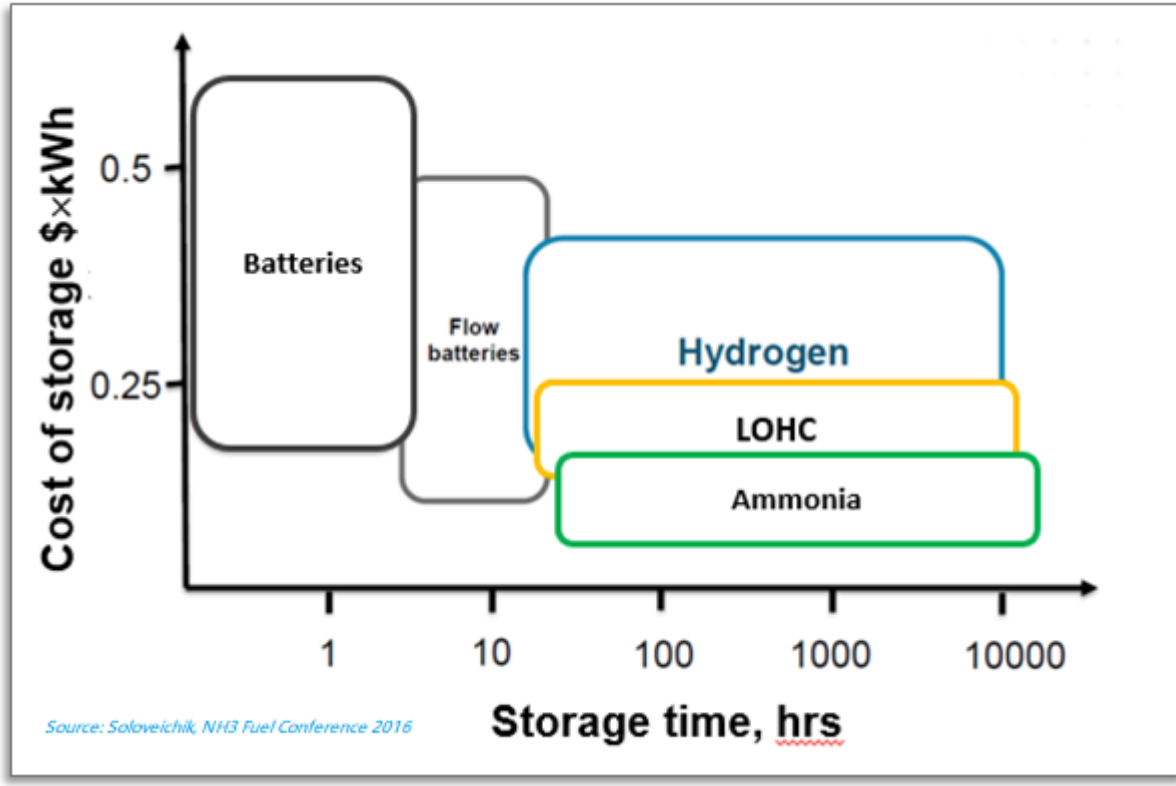
GenCell IoT Remote Manager

- Remote management software – enables easy monitoring and analysis of hundreds and thousands of units
- Option to manage hybrid energy architecture using GenCell "GEMS" software

Key Advantage of Ammonia as a Hydrogen Carrier

Liquid ammonia has **high hydrogen density** at room temperature and pressure





Gencell A5 Overcomes Challenges Of Hydrogen Infrastructure With Liquid Ammonia

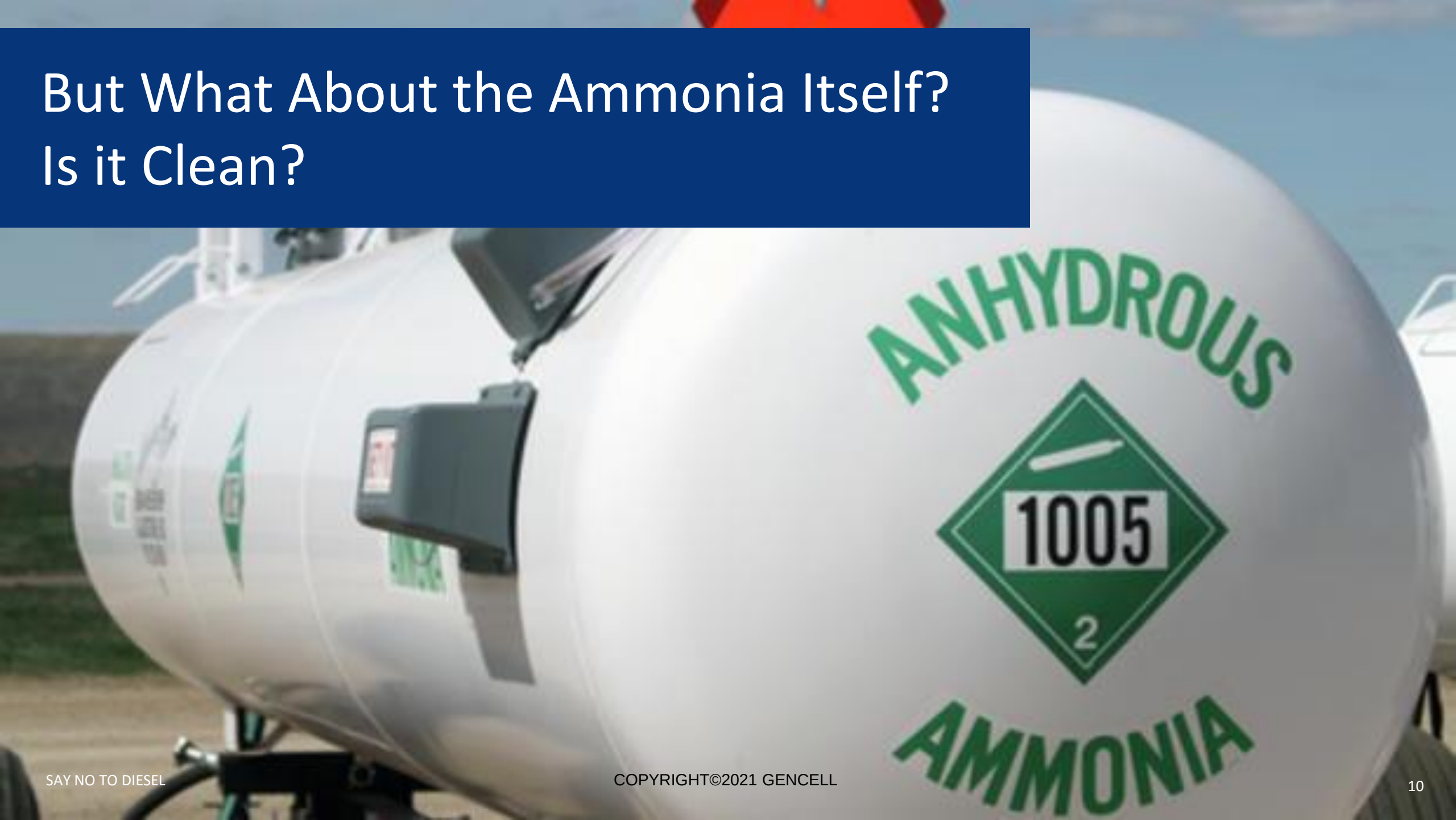
- The GenCell A5 off-grid power solution extracts hydrogen from liquid ammonia
- A single 12–15-ton tank of ammonia provides enough fuel for a year of 24/7 operation
- Ammonia makes energy solutions accessible to multiple regions and use cases in any grid conditions

A total cost of ownership of 30-50% less than diesel

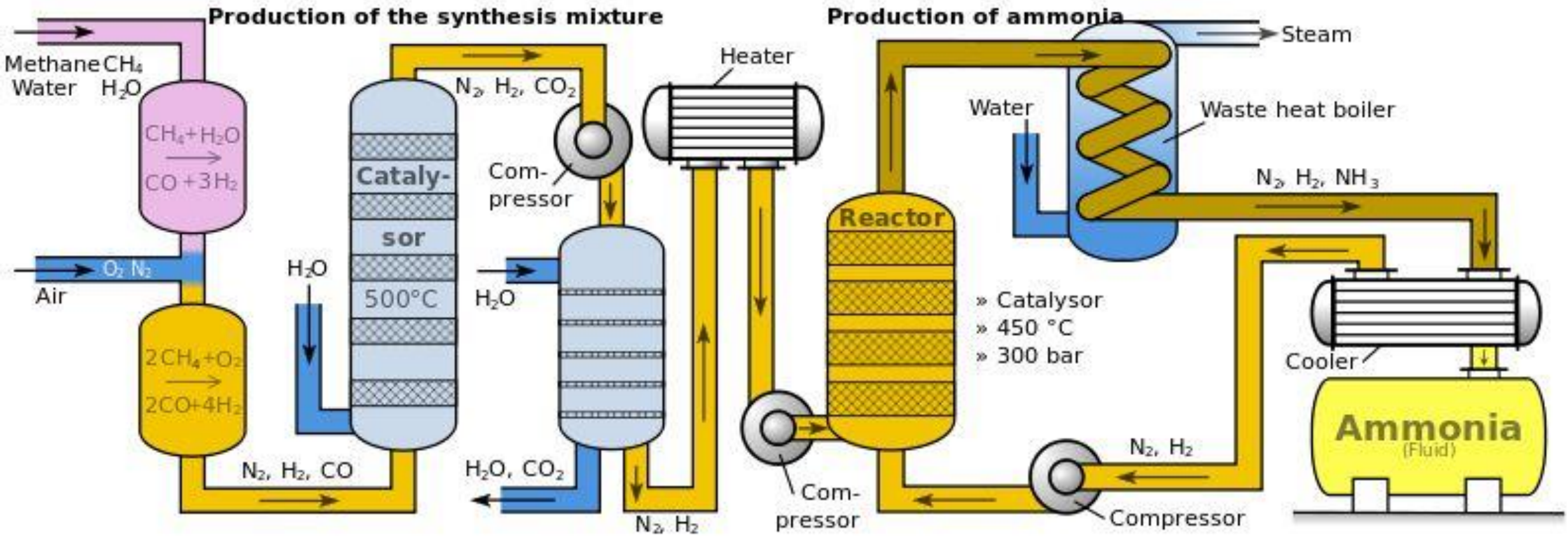
GenCell A5 is cleaner and lower cost compared to other power solutions

A5 Off-Grid Power Solution

But What About the Ammonia Itself? Is it Clean?



Traditional NH3 Synthesis: Haber-Bosch Process



CO_2 emissions contribute to global warming

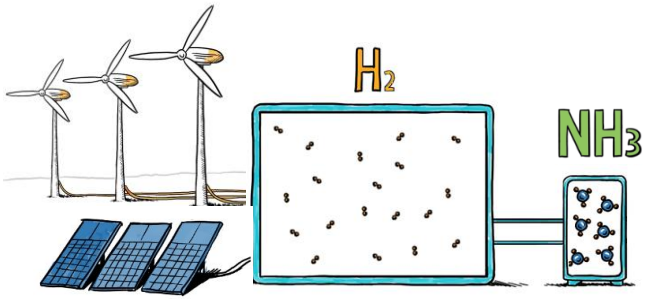
Green Ammonia for Completely Clean Power

POWERED BY AMMONIA

Problem

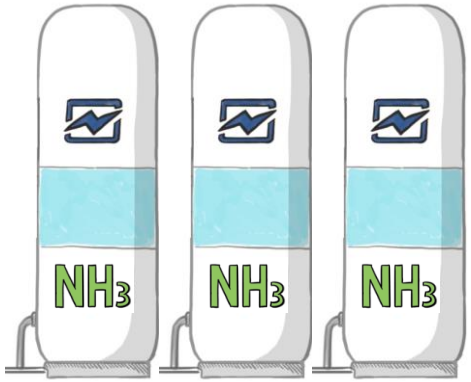
- Ammonia synthesis involves pollution.

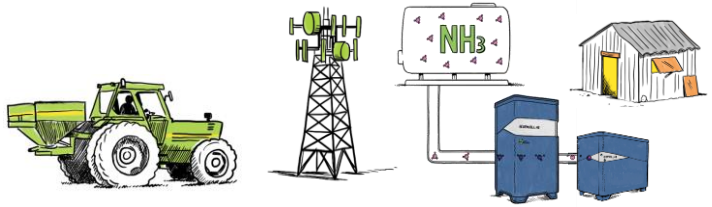
Solution



- Synthesis of green ammonia using GenCell knowhow and patents.

Markets



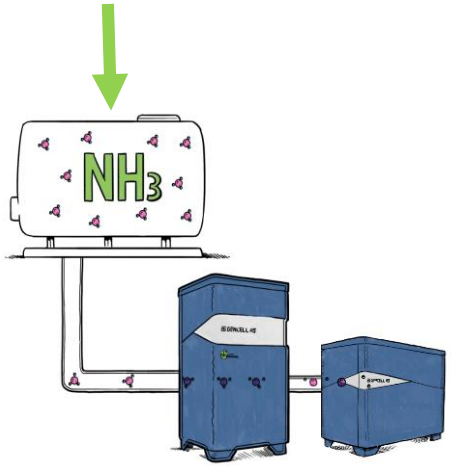


- Green ammonia can be used for a wide range of applications from fertilizer manufacture to power generation

GenCell Stores Renewable Energy as Green Ammonia

Green Ammonia Storage

1 TON NH_3 = 2.3 MWh



Green Ammonia Generation

GREEN NH3 AMMONIA

Electrochemical Cell

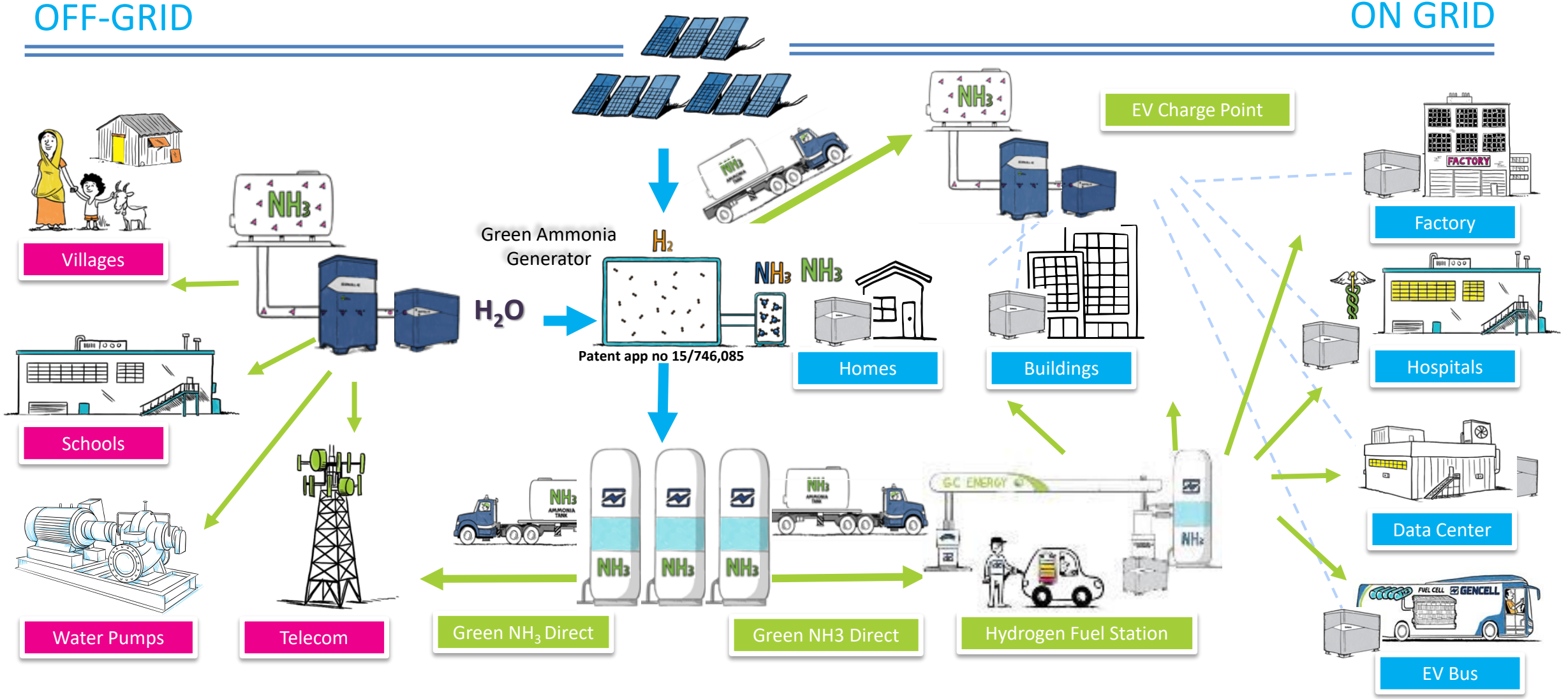
Patent app no 15/746,085

GenCell Proprietary Technology: 1 Ton of Green Ammonia Stores over 2MWh of Electrical Energy

GENCELL'S VISION FOR CLEAN DISTRIBUTED ENERGY STORAGE

OFF-GRID

ON GRID



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