



PROTON

THE LEADER IN **ON SITE** GAS GENERATION.

Sun Hydro Fueling Stations

Presented by:

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President and CEO

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From Hardwood to Hydrogen



The Leader in On-site Hydrogen Generation

Lumber Liquidators Facts:

- Over 200 Stores
- \$620.3 million revenue in 2010
- Trades on the NYSE (LL)
- Founded in 1993



Proton OnSite

- **Manufacturer of Proton Exchange Membrane (PEM) hydrogen generation products using electrolysis**
- **Founded in 1996 – changed name from Proton Energy Systems in April 2011.**
- **Headquarters in Wallingford, Connecticut.**
- **ISO 9001:2008 registered**
- **Over 1,600 systems operating in 62 different countries.**



Hydrogen Products

Commercial Products

HOGEN™ Hydrogen Generators



S Series



H Series



C Series



HPEM
High Pressure
Generators

Lab Gas Generators



GC



StableFlow™



Hydrogen Control
Systems

Future Products



Fueling



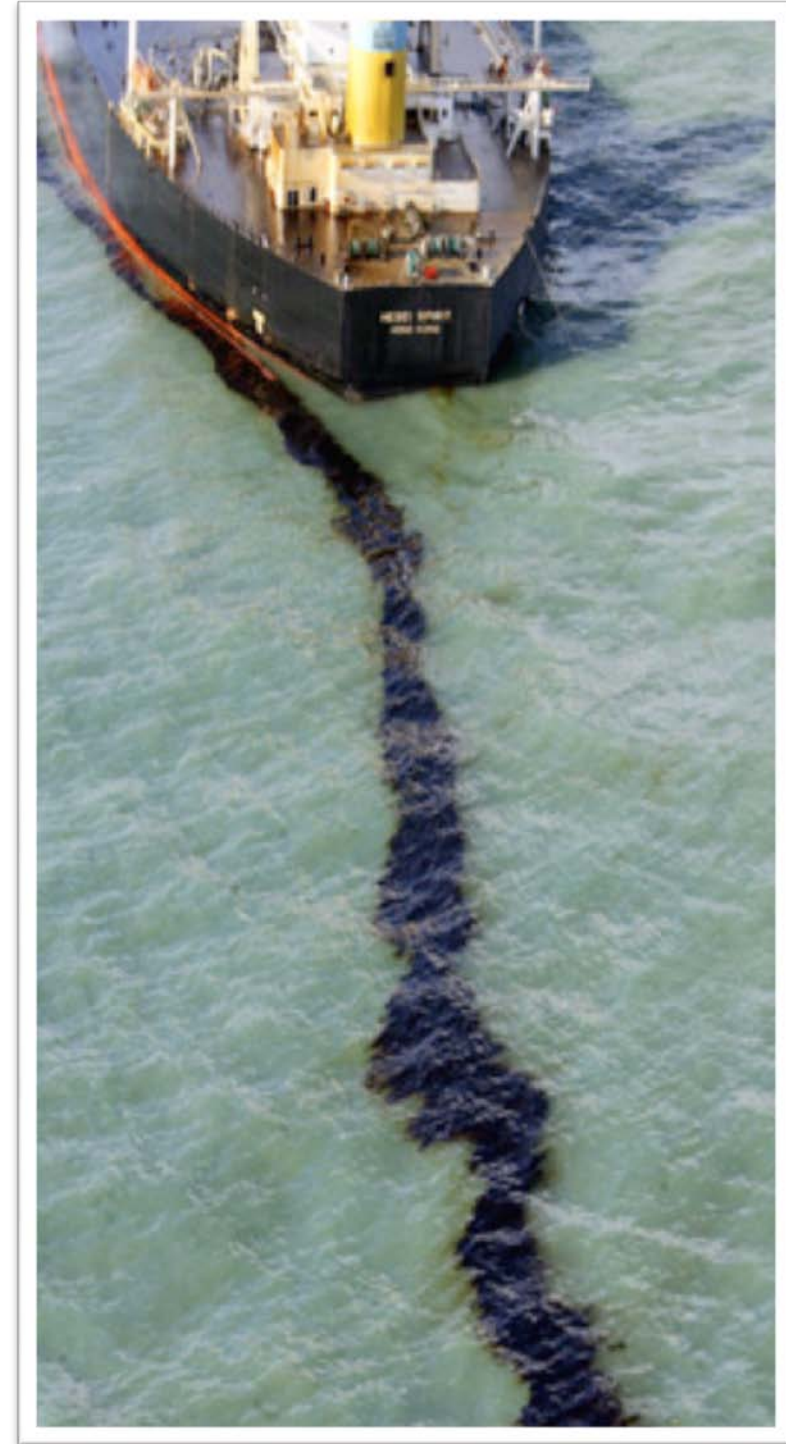
Backup Power



Renewable Energy
Storage

Enough is enough

- We can stop spending \$1 billion a day importing foreign oil.
- And begin ending pollution from cars.



Another Century of This?





The future is starting now



Packaged Stations:
H₂ Generation from Sun & Water
Compression into HP Storage
H35 / H70 fast-fill Dispensing

SunHydro East Coast Hydrogen Highway



Scarborough, ME
 Braintree, MA
Wallingford, CT (open)
 Claymont, DE
 Richmond, VA
 Charlotte, NC
 Savannah, GA
 Miami, FL



How it works:

'Sun+Water = H₂ fuel'

STATIONS CAN PRODUCE FUEL ON-SITE

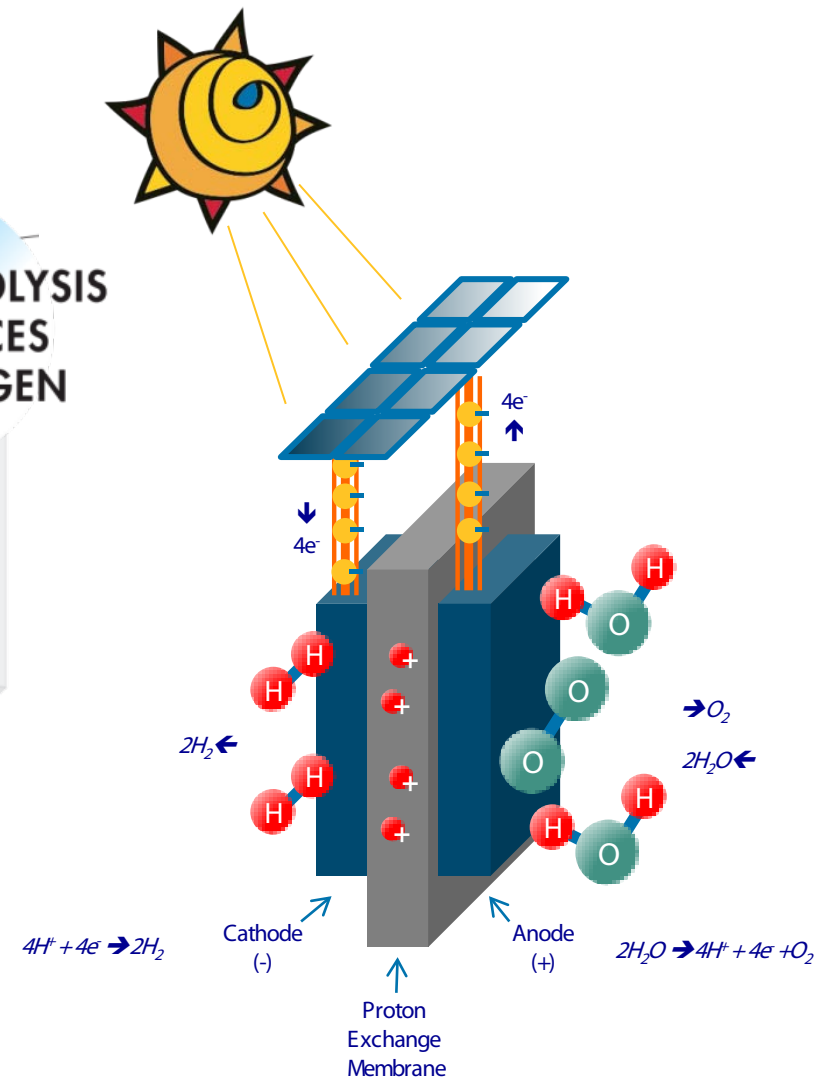
1
HYDROGEN
is produced
at the
station.

2
COMPRESSOR
compacts the
hydrogen
molecules.

3
HIGH PRESSURE TANKS
safely store hydrogen
until needed for fuel.

4
DISPENSER
regulates hydrogen
flow to vehicle tanks.

**ELECTROLYSIS
PRODUCES
HYDROGEN**



① Make pure H₂ gas from water using renewable-powered PEM electrolysis

② Compress H₂ gas to 96.5 MPa (13000 psi)

③ Store H₂ gas in station HP tanks

④ Dispense H₂ fuel to vehicle

- 70MPa or 35MPa (10000 or 5000psi)
- Fills car in 3 minutes/5 kg for 300 miles



2-year Toyota/SunHydro Program



Local Government – Media – Academia – Business

- Wallingford CT Health Director
- Broadcaster - 'Car Doctor' radio program
- President /CEO Connecticut Technology Council
- CEO, Connecticut Center for Advanced Technology
- Columnist – NY Times 'Wheels' - BNET 'Plugged In'
- Professor of Industrial Environment Management, Yale University
- Proton OnSite and SunHydro associates

Fueling Experience

- Drivers find H70 simple to use
- 3 min fast fill / 5 kg H₂
- PIN code based
 - Next stations: credit card with approved dispenser
- Toyota, GM validated



Come fill up with us!



Proton Energy Scholarship

Fueling the Next Generation

- The Proton Energy Scholarship Program awarded ten undergraduate scholarship prizes of \$100,000 to outstanding students who will pursue university-level degrees in science or technology fields in 2010.
- A \$1 million investment in tomorrow's leaders.
- Money well spent!



Four winners for 2011 were just announced yesterday!

HARDWOOD FLOORS FOR LESS!

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LIQUIDATORS\$**

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THANK YOU

