



PROTON
TECHNOLOGIES

LOW-COST HYDROGEN WITH ZERO EMISSIONS

OUR MISSION

Proton Technologies Canada Inc. is unlocking the clean energy economy, using a patented technology to produce the lower cost hydrogen with zero carbon emissions from existing oil fields.



WHY HYDROGEN?

Clean Baseload Energy: 24/7 energy source, emitting zero carbon emissions.

Readily Available Infrastructure: Leveraging oil & gas infrastructure reduces implementation time and capital expenses.

Trickle Down Benefits: Accessible hydrogen results in lower cost byproducts like fertilizer.

Market Growth: \$165 billion/year global market value with \$12 billion/year in projected growth.

The Time is Right: Policy makers and regulatory bodies are favoring clean hydrogen initiatives.

OUR COMPETITIVE ADVANTAGE

Competitor H₂

Expensive production process
High CO₂ emissions released
Complex surface infrastructure
Unsustainable for future demand



Proton H₂

Low-cost production process
Zero CO₂ emissions released
Minimal new infrastructure
Sustainable base load supply

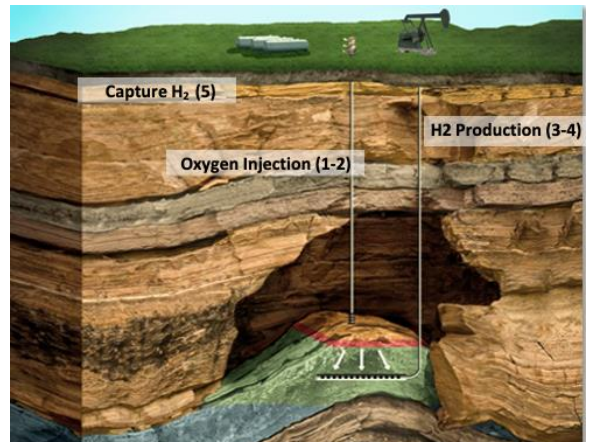
OUR VISION

- ✓ Supply abundant, clean, inexpensive & easily accessed hydrogen to meet future demand
- ✓ Provide a solution to energy producers seeking a clean alternative
- ✓ Repurpose uneconomic wells to produce clean hydrogen
- ✓ Generate electricity with residual heat from Proton Process



TECHNOLOGY & PROCESS

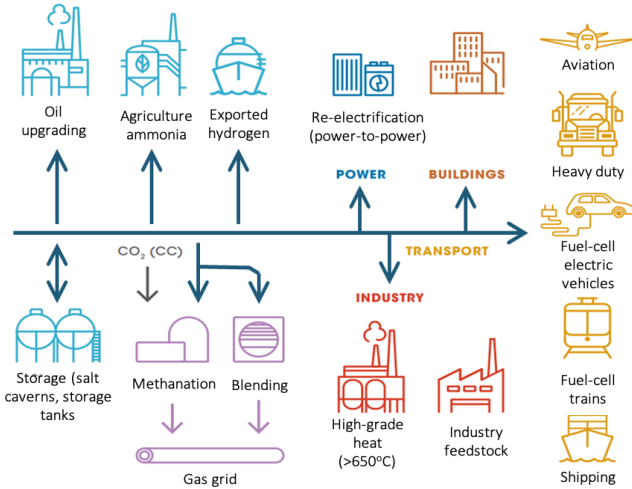
- Step 1** Utilize existing oil & gas infrastructure
- Step 2** Heat the oil reservoir through oxygen & steam injection
- Step 3** Downhole chemical reactions oxidize residual oil and generate H₂
- Step 4** Allow only H₂ to pass through patented membrane
- Step 5** Capture and transport H₂ leaving carbon emissions underground





HYDROGEN MARKET

The need for alternative fuel sources is rapidly expanding & competitive oil pricing demands lower production costs.

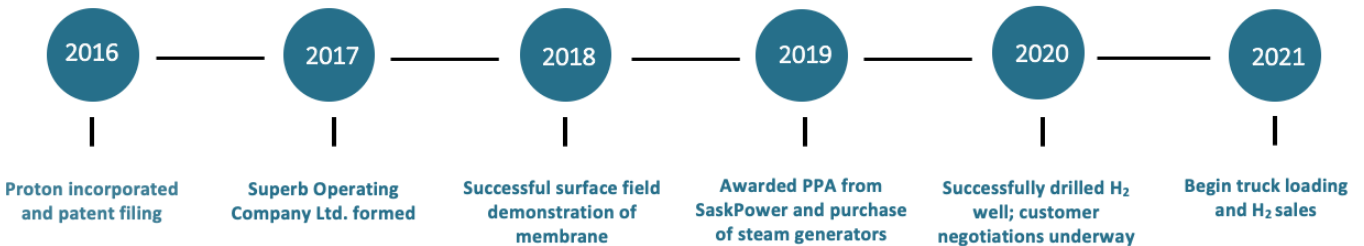


GROWTH + EXPANSION



- **ACHIEVED TO DATE:** See Our Story Timeline Below
- **PHASE 1A 2020-2022: Commercialization & Payback**
 - Scale up to commercial volumes & sale of H₂ to existing industrial customers
- **PHASE 1B 2021: Demonstration & Licensing**
 - Showcase to licensing customers, governments, investors
- **PHASE 2 2022+: Full Scale Growth & Acquisition**
 - Capitalize on 1A & 1B successes to acquire additional facilities and grow core business

OUR STORY



MANAGEMENT

- Grant Strem**
Co-Founder & Chief Executive Officer
- Setayesh Afshordi**
Chief Operating Officer
- Dale Cadieux**
Technical Director
- Mia Costigan**
Corporate Development Manager
- Calvin Johnson**
Head of Commercial

ADVISORY BOARD

- Calvin Johnson**
KE Risk Group, EX-Transalta & CIBC
- Dr. Diana Marcano**
Petrophysicist, membrane separation
- Mark Bishop**
Facility Engineer, project management
- Dr. Harrie Vredenburg**
Professor/Scholar on Governance, strategy, sustainable development
- Caralyn Bennett**
EVP & Chief Strategy Office GLJ
- John Howard**
Production VP up to 150,000 bbl/d Heavy Oil, Ex-CNRL
- Brian Harschnitz**
board member of JACOS, Ex-Imperial
- Jacky Wang (Co-Founder)**
Chemical Engineer, University of Calgary researcher
- Dr. Ian Gates (Co-Founder)**
Co-founder of Gushor, Solideum, former Dept. Head of Chemical Engineering at the University of Calgary

