GH Power

CORPORATE PRESENTATION
June 2023

GH POWER

1 Who are we?

GH Power has developed a unique renewable power technology.
We take recycled or scrap aluminum and run the metal mixed with water through our novel reactor to produce green hydrogen and power.

2 Why are we Unique

Zero Emissions

Our process has no emissions, carbon, or waste.

Circular Economy

Our scrap aluminum fuel is widely available in every market.

ESG Potential

Our tech can assist organizations with their net zero commitments..

THE PROCESS

How does the technology work?

Inputs

ALUMINUM

- Recycled metal available within local communities.
- Scrap aluminum used in industrial processes

WATER

Reaction

GH POWER

Self-sustaining, zero emission reaction

Green Outputs

THERMAL ENERGY

- Continuous green power and district heat/cooling

HYDROGEN

- Transportation and industrial applications

ALUMINA

- LED lights
- Lithium-ion battery
- Semiconductor

CARBON OFFSET

- Decarbonization

- **Use Cases**

TECH HIGHLIGHTS

Scalable/Modular: Reactors can be designed for small and large power output

Small footprint: 27MWs of green energy within a 2k sqm footprint

Remote Applications: Can provide power to remote communities.

Development Pipeline: Successful initial testing of using iron as a fuel.

AWARD WINNING TECH

- GH Power is proud to announce that we have been awarded Project Funding from a joint German and Canadian government program over **$2.2m CAD.**
- The Project is the development of high purity alumina with RWTH Aachen, Germany, as an academic partner.
- GH Power will be working with eFuel specialists from **RWTH Aachen Fuels Science Center** to develop a clean fuels program.
- Carleton University & GH Power creating a center of excellence for metal fuels

Project Participants

GH POWER

RWTH AACHEN UNIVERSITY

ParteQ

Carleton University

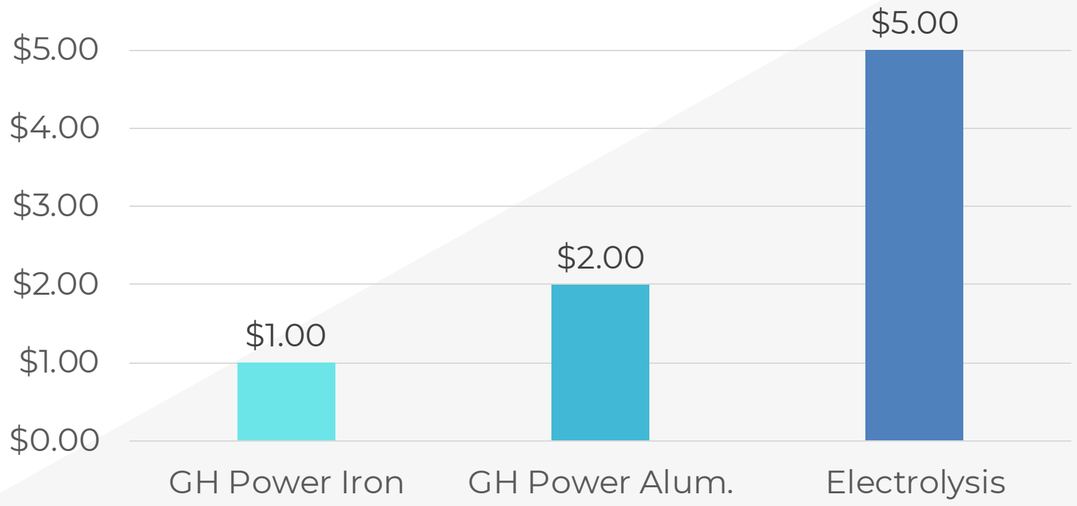
National Research Council Canada

Canada's largest federal research and development organization

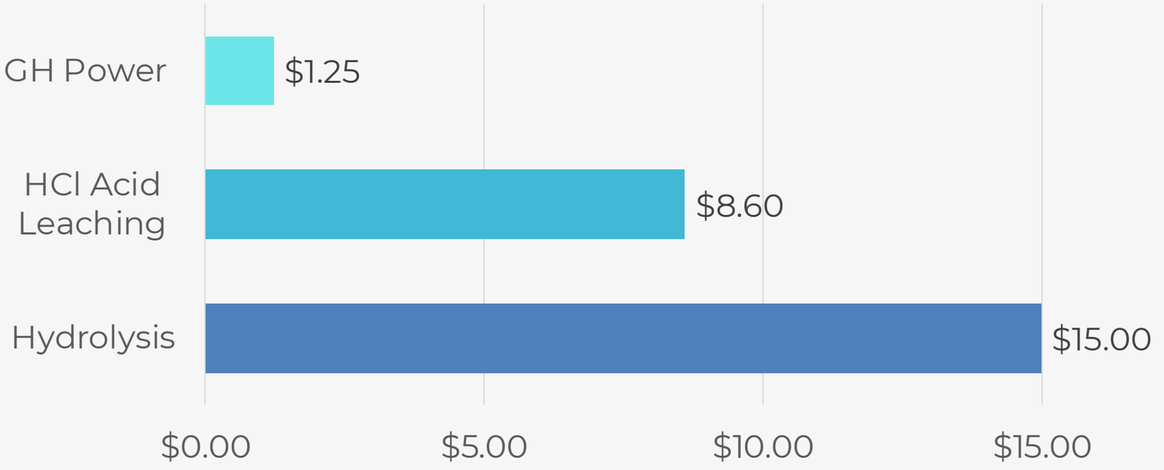
COST OF PRODUCTION

GH Power’s cost of production for hydrogen and alumina is much lower than competitive processes.

Hydrogen



Alumina



DEMONSTRATION PLANT

- 1 MW demonstration plant is built and commissioning has begun
- Reactor located in Hamilton, Ontario, Canada
- Landlord to purchase power
- Testing to commence in Jun 23
- Continuous 24/7 operations in Q4 23
- **Capex $9m[1] / IRR 60+% / Payback 1.8 years**
- Data to be used to scale to 27MW design

Notes: Based on Managements Estimates 1) USD $

GH POWER PLANT METRICS

Outputs	Annual
Hydrogen	11,700 MT
Steam	10 MW
Alumina	190,000 MT
Net Power Output	**27 MW**
Inputs:	
Aluminum	108,000 MT
Water	140,000 kL
Capex	**$100M USD**
Payback	**1.5 years**
IRR	**55%**

Notes: Based on Managements Estimates

CARBON EMISSION REDUCTION

Green Power

- GH Power's 27MW plant can run off hydrogen and steam with zero emissions offsetting **1.03m tonnes of carbon** (relative to coal)**.**

- Blending hydrogen with existing fossil fuel power generation assets offer a transition to low emissions.

Green Alumina

- GH Power can produce world's first zero carbon alumina.

- Process is under verification with VERRA (Global Carbon Credit Standard).

GH Power Carbon Offset (27MW)

	Annual Coal Offset (tonnes)
Green Energy	1,030,000
Alumina	190,000
Total	**1,223,000**

KEY PEOPLE

Ken Stewart
Chief Engineer

Ken has over 4 decades of experience in the design and management of thermal power plants. Engineer of Record for 8 power plants.

Dave White
CEO

Dave has over 30 years of experience in the construction of power generation facilities.

Gary Grahn
COO

25+ years of international experience in developing projects. Managed over $1b of electrical generating assets

Anand Patel
CFO

10+ years of real asset capital markets experience with over $4b in completed transactions. Managed a portfolio of over $10b in international assets.

Bruce Power

ONTARIO POWER GENERATION

AECL Atomic Energy of Canada Limited

SaskPower Powering the future

SUNCOR ENERGY

Brookfield

SNC·LAVALIN

中国人民银行 THE PEOPLE'S BANK OF CHINA