

A GLOBAL SOLUTION TO REDUCE POLLUTION

October 2024 Presentation

Forward Looking Statement



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 - The requirement for significant financing to develop and market its technology;
 - The ability to establish and maintain arrangements with industry recognized strategic partners;
 - Market acceptance of the Company’s technology and products;
 - Completion in all aspects of its business;
 - The effect of general economic, credit and capital market conditions on its business;
 - The ability to complete product development milestones and progress towards commercialization of product within the contemplated timetable;
 - The ability to attract and keep highly qualified staff and management; and
 - Changes in product profit margins due to pricing changes driven by variations in customer demand, competition, or unforeseen factors.
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Highlights



Carbon Emission Reduction Technology	International Growth Strategy
Diversification in Trucking, Mining, Oil & Gas	Multiple Vertical Markets
Proprietary Know-How & Patents	Leader in Hydrogen Technology
Carbon Credit Measurement	Potential Recurring Revenue
High Barriers to Entry	Dominant Competitor Advantage
Compelling Value Proposition to Users	< 1 year payback
Strong Margins	Attractive Business Model
Verra Methodology Approval October 4 2024	Carbon Credits Possible for use of HydraGEN™

Patented Technology

HydraGEN[™]

- dynaCERT has developed & commercialized a patented proprietary electrolyser called HydraGEN[™]
- Produces measured amounts of hydrogen and oxygen gases from distilled water
- Delivers H₂ and O₂ at the air intake of internal combustion engines
- Results in:
 - >More power
 - >Better torque
 - <Less fuel consumption and
 - <Less CO₂, CO, and NO_x

Features

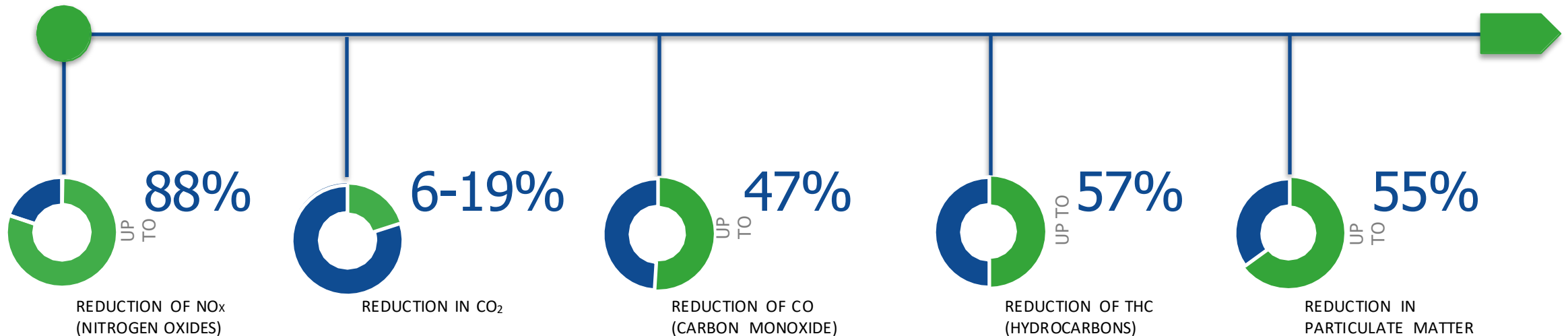
HydraGEN™

- On-demand, no H2 storage, no pressure, safer
- With a low power demand from the engine's battery
- Delivered to the air intake of internal combustion engines
- On trucks, mining equipment, generators, reefers, construction equipment
- < Particulate matter
- < Black smoke
- < Diesel Exhaust Fluid and < Diesel Particulate Filter

Emission Benefits

HydraGEN™ Lowers Emissions Substantially

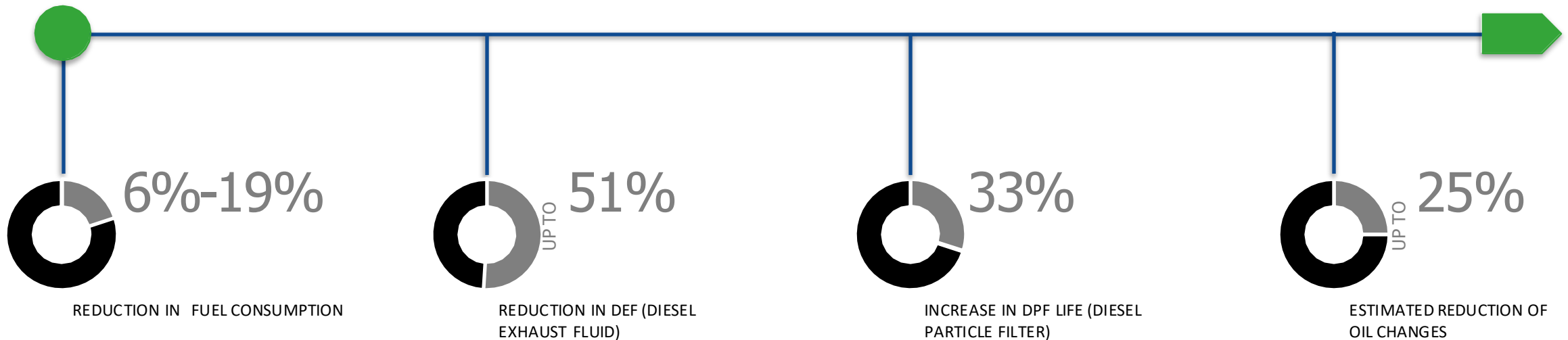
The following results have been acquired from accredited third-party verification performed by PIT Group in Montreal, Quebec, Continental EMITEC in Germany and performance testing at the UOIT ACE in Toronto, Ontario.



Economic Benefits

Lower Consumption and Maintenance

The following results have been acquired from accredited third-party verification performed by PIT Group in Montreal, Quebec, Continental EMITEC in Germany and performance testing at the UOIT ACE in Toronto, Ontario.



Independent Validations



UOIT (University of Ontario Institute of Technology)

PIT Group of Canada

Continental EMITEC

iCAT in India

Independent Testimonials by users, globally

TÜV NORD & TÜV SUD testing for ABE/KBA European
Homologation

Now: user “audit” with HydraLytica™



HydraGEN™

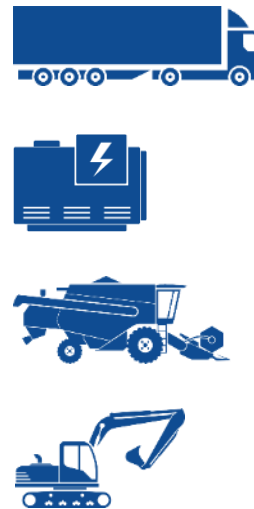
Product Line



HG2 Series
1 to 8 litre engines



HG1 Series
10 to 15 litre engines



HG-4C & HG-6C series
40 to 100 litre engines



HG1R Series

Greener Transportation

- Suitable for 10-15L Diesel Engines
- Reduces Fuel Consumption up to 10%
- Transportation, Passenger Transport, Power Generation, Construction, Agriculture, Mining
- Reduce your Carbon Footprint and meet ESG Goals

Warranty: 1Year Limited Manufacturer's



Certifications:



HG2R Series

Greener Transportation

- Suitable for 1-8L Diesel Engines
- Reduces Fuel Consumption up to 10%
- Transportation, Passenger Transport, Power Generation, Construction, Agriculture
- Reduce your Carbon Footprint and meet ESG Goals



Warranty: 1Year Limited Manufacturer's

Certifications:



Transportation & Logistics



Transport & Generation/Oil Fields



Construction Application



Transport & Logistics Application



Results – Mining Pilots

Reducing carbon emissions, improving diesel fuel economy



CAT797

1.3MM Tonnes Hauled
3,300 Cycles

13.4%
Fuel Efficiency



**Komatsu
930E**

380,000 Tonnes Hauled
700 Hours

11.8%
Fuel Efficiency

**TRIALS
Achieved
8%-13%
Diesel Fuel
Efficiency Gain**

11.0%
Fuel Efficiency

**Highway
Transport**
1,280 Hours



12.6%
Fuel Efficiency



**Dynamometer
14L MAN Truck**

3rd Party Testing
>Emitec/Contential

8.9%
Fuel Efficiency



CAT793

320,000 Tonnes Hauled
826 Hours

2022 Trials



data provided by H2Tek



Power Generation Application



HydraGEN™ HG4C unit



Fuel Tank and Containerised Generator

HG4C

Greener Mining

- Suitable for 40-60L Diesel Engines
- Reduces Fuel Consumption up to 10%
- Power Generation, Heavy Mining and Construction Agreement
- Reduce your Carbon Footprint and meet ESG Goals



Warranty: 1Year Limited Manufacturer's

Certifications:



HG6C

Greener Mining

- Suitable for 60-90L Diesel Engines
- Reduces Fuel Consumption up to 10%
- Power Generation, Heavy Mining and Construction Agreement
- Reduce your Carbon Footprint and meet ESG Goals

Warranty: 1Year Limited Manufacturer's

Certifications:



Mining Application Open Pit



Target Markets - Industries Served



CURRENT



- Buses



- Refrigerated Trailers



- Small Trucks



- Class 8 Trucks



- Power Generators



- Farming



- Construction



- Mining Equipment & Oil Drill Rigs

INITIATED



- Small Marine Vessels



- Locomotives

FUTURE



- Passenger vehicles

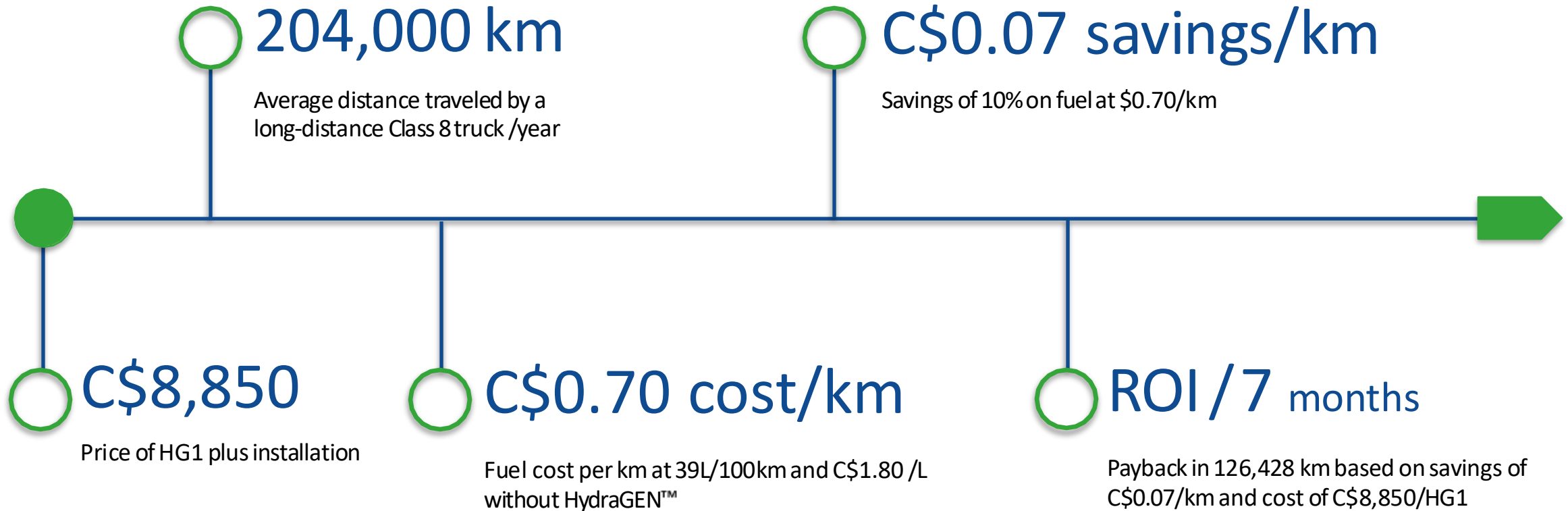


- Ocean Vessels

Diverse Applications



Value Proposition to End-User



*Payback model is only based on fuel savings. End-users of HydraGEN™ Technology may also find cost savings from other benefits such as reduction of DPF Filters used, less DEF usage and less oil changes.

Market Size

- **Total ICE Market**

- 1 Billion internal combustion engines operate world-wide
- 100 Million new internal combustion engines built world-wide every year

- **HG2 Market Estimate**

- 20 Million in North America
- 40 Million in Europe
- 55 Million in South Asia
- 20 Million in South America

Europe

- 145 million trucks

North America

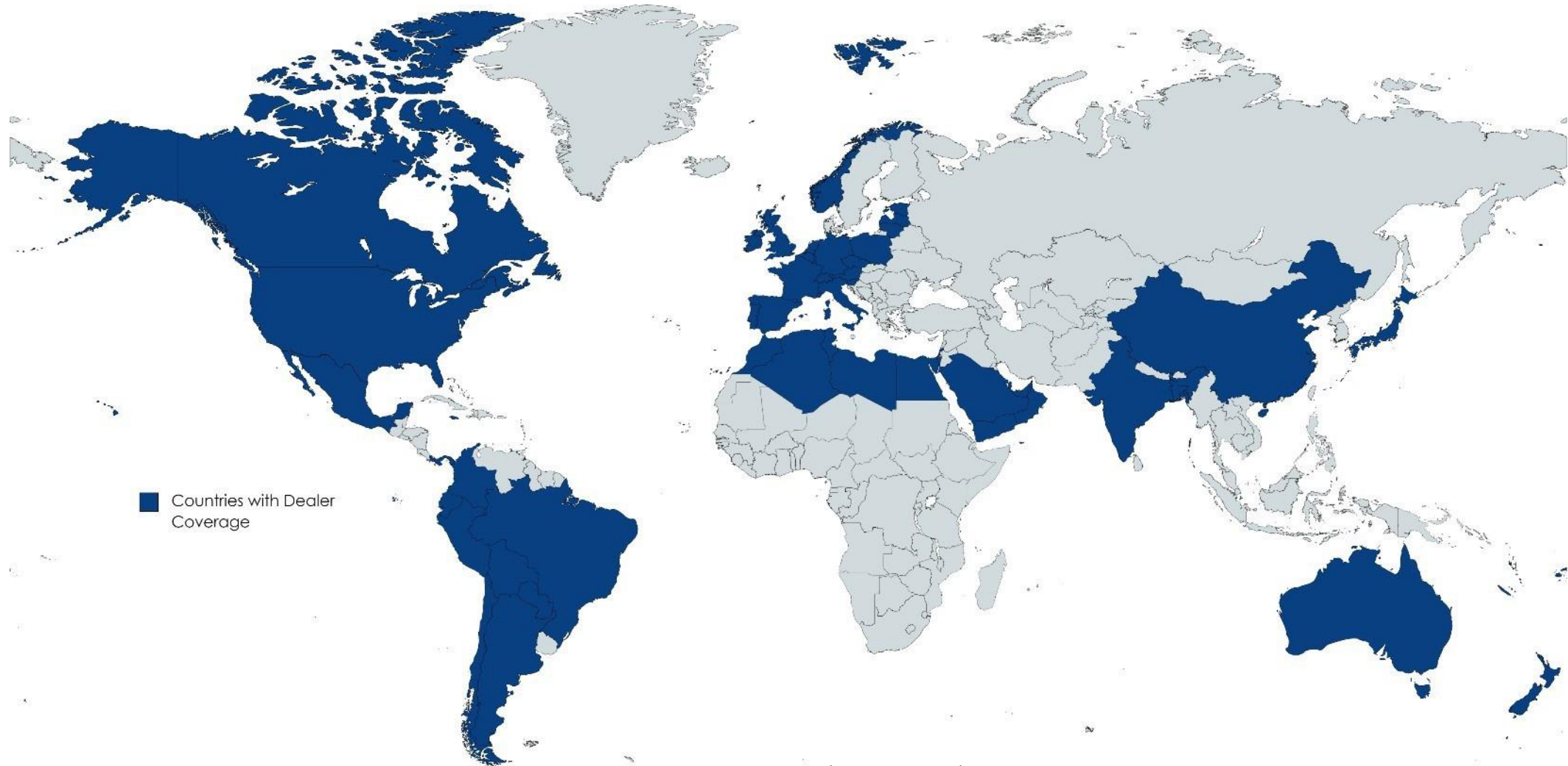
- 711,000 trucking companies relying on 3.5 million drivers
- 15.5 million class 8 trucks
- 36 million trucks registered for business

South America & India

- 210 million trucks

Dealer Network

48 Qualified Dealers & Agents Globally that Service 55 Countries:



■ Countries with Dealer Coverage

HydraLytica™ Benefits



Automated Reporting & Analytics



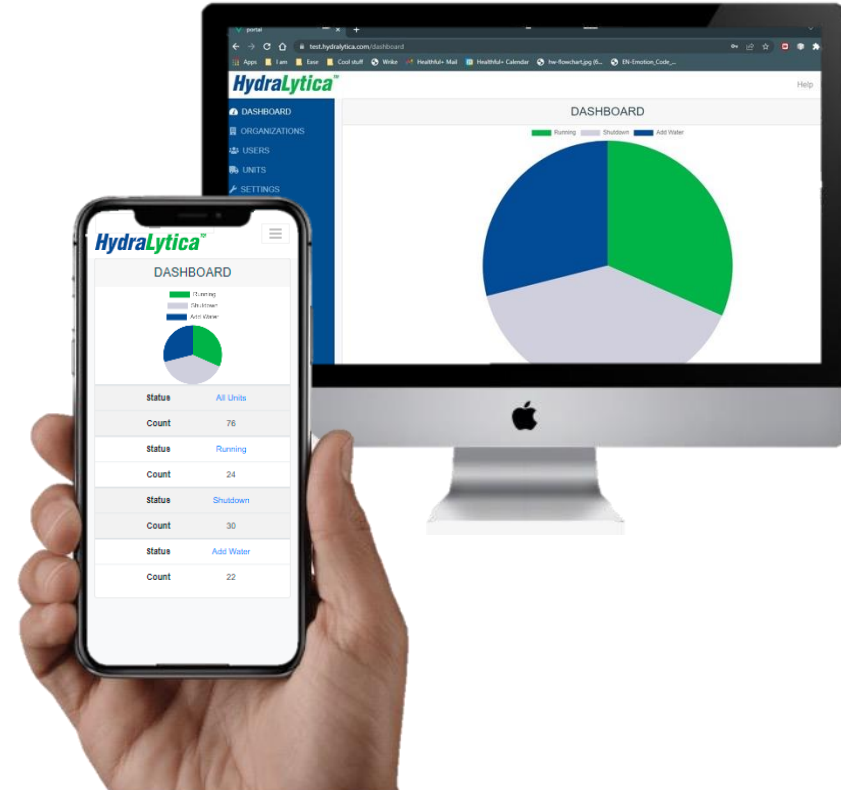
Automated fleet-wide tracking of fuel savings, emission reduction, & carbon credits generated.



Reduce Maintenance Cost



HydraLytica™ also automates fleet management for the HydraGEN™ system.



Business Model



CAD 100,000,000 Expenditures to Develop and Commercialize	20 Years of R&D
dynaCERT Assembles Product in Toronto, Canada	Newly Upgraded Assembly Facilities
Cost of Production: 50% of Wholesale Price	Profit Margin: 100%
Products Sold Through Global Dealer/Agent Network	In Europe dynaCERT GmbH
Dealer Network Insures Local Sales, Marketing & Service	Reduces Sales & Marketing Overhead
Multiple Target Markets	Using Dealer Network Strategy
Multiple Product Versions	Adaptation to Client Requirements
Continuous R&D	Maintain Market & Product Leadership

Comparable Technology = Trailer Skirts

Trailer Skirts

- 90% of long-haul trucks have added skirts since their launch 9 years ago
- Skirts cost C\$3,000 can save 1% fuel

HydraGEN™ Technology

- Cost the end-user ~C \$10,000 and can save approximately 10% fuel, 1% for C\$1,000

Comparison

- HydraGEN™ is a 3 x Better Proposition



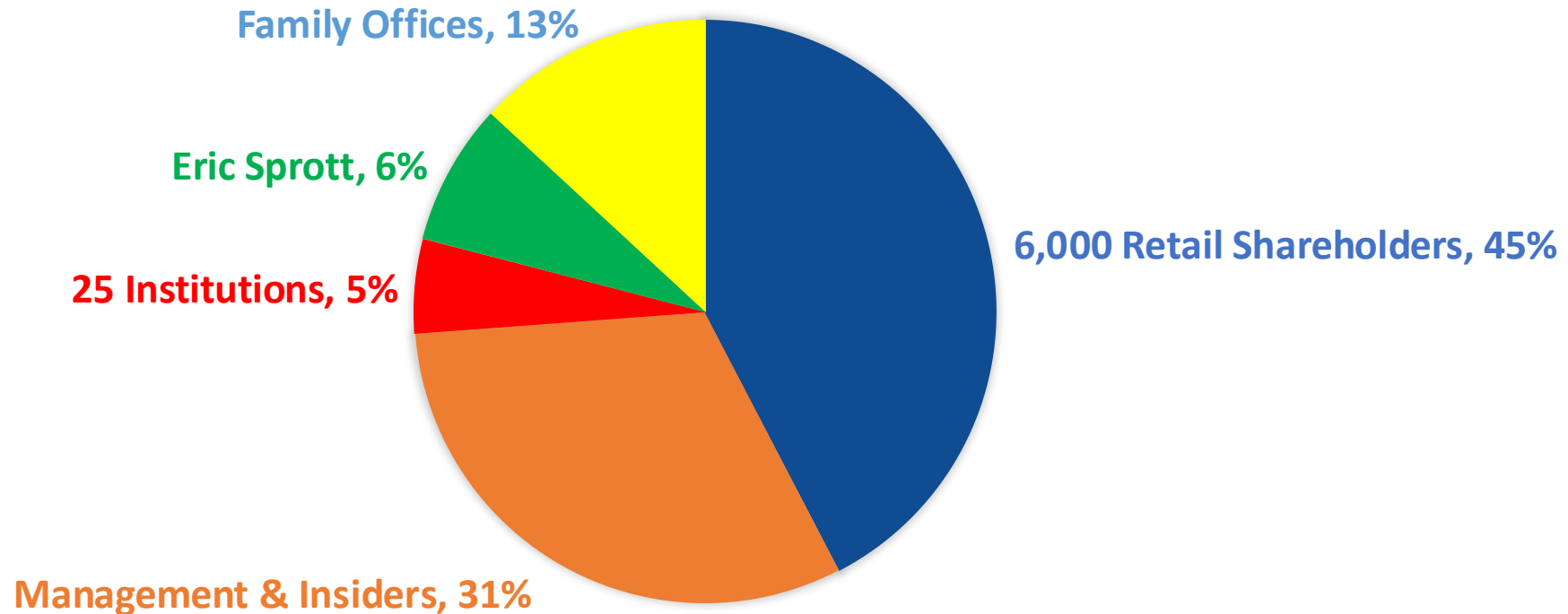
Verra Carbon Credit



Strong Shareholders



APPROXIMATE VALUES



High Barriers to Entry




- ❌ Worldwide Patents + Unique ECU (Electronic Control Unit)
- ❌ Technological advantage: e.g., weather robustness, separation method of H₂ and O₂
- ❌ Lead Time advantage: \$100 million & 20 years to develop and commercialize
- ❌ Regulatory advantage: Certification in global jurisdictions takes years
- ❌ Distribution Network advantage: e.g., 48 qualified dealers globally
- ❌ First-to-Market advantage: across many verticals, e.g., transportation, mining, oil & gas, generators, construction, and locomotive

Positioning for the Future



- dynaCERT acquired 15% of Cipher Neutron
- 20% on a fully diluted basis (with exercise of warrants)
- Positioning in the Hydrogen Economy for the long term

Cipher Neutron



Cipher is an Arabic word for zero...
Hydrogen is the only element with zero neutrons...
Hence the name Cipher Neutron

Management Presentation

September 2024

Strictly Private & Confidential

Cipher Neutron

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SECTION 1. Today's Presenters

Leadership Team

In attendance



Gurjant Randhawa, M.Eng, P.Eng

President & CEO

- Founded Ciper Neutron in 2021
- 10+ years of experience in hydrogen electrolyzers and fuel cells; previously served as head of R&D at dynaCERT Inc.



Dr. Pierre Rivard

Director

- Founder and CEO of Hydrogenics (now Cummins).
- Council member of National Research Council, Canada.
- Executive Chairman and Co-Founder of TUGLIQ Energy Corp.



Ranny Dhillon, M.Eng

Chief Scientific Officer

- 10+ years of R&D experience in hydrogen electrolyzers, fuel cells, and membrane electrode preparation techniques
- Co-invented 6+ international patents in hydrogen & fuel cell technology



Jean-Pierre Colin

Director & Corporate Secretary

- 10+ years of management experience in Hydrogen Electrolysis companies.
- 40+ years of experience in managing invest banking departments. Financed 200+ public companies.

Additional Members of Leadership Team

Dr. Bruno Pollet

Scientific Advisory Board

Dr. Mayilvelnathan

Head of Business Development

Dr. Amandeep Oberoi

Head of R&D

Dr. Xiaguo Li

Technical Advisor

Gurpreet Bhullar, M.Eng

Chief Technical Officer

Valuable Hydrogen Experience



200+ Years

Combined experience in hydrogen, clean technology, and business development



SECTION 2. Cipher Neutron Introduction

Cipher Neutron At a Glance

Formed to accelerate the global shift towards renewable energy, Cipher Neutron is a pioneering force in the clean energy transition dedicated to innovation and sustainability in green hydrogen production, power generation, and energy storage solutions

- Cipher Neutron leverages advanced technologies to develop Anion Exchange Membrane (“AEM”) electrolyzers for green hydrogen production and Reversible Fuel Cell (“RFC”) technology for power generation and energy storage solutions
- Cipher Neutron's AEM electrolyzers are highly efficient, iridium-free, and PFAS-free, offering a sustainable and cost-effective solution for green hydrogen production, meeting global targets while avoiding critical supply chain constraints
- The company’s patent-pending RFCs use graphene slurry for non-compressed hydrogen storage, functioning both as a hydrogen generator and an energy storage solution—offering a sustainable alternative to traditional battery systems
- Cipher Neutron is scaling its production capabilities to meet growing global demand, with plans to increase production capacity from 100 MW to 600 MW of AEM electrolyzers by 2025

North America’s 1st

AEM Electrolyser Manufacturer

World’s 1st Patent Pending

Reversible Fuel System with Graphene

2021
Year Founded

6
Patents Granted
and Pending

600 MW
Targeted Annual
Production
Capacity⁽¹⁾

1M+ tCO₂e
Annual Emissions
to be Mitigated⁽²⁾

\$100 M+
2027E Revenue

~25%
2027 EBITDA
Margin

Corporate Partners

STRATEGIC
RESOURCES

dynaCERT
CORPORATE RENEWABLE ENERGY

FuelPositive
FUEL FOR A MINDFUL WORLD

I: N: O: M: R
I N N O V A T I O N S

TECHNOMAK
AUTOMATION & DIGITAL SOLUTIONS

Research Partners

SFU SIMON FRASER
UNIVERSITY

UNIVERSITY
OF ALBERTA

Western

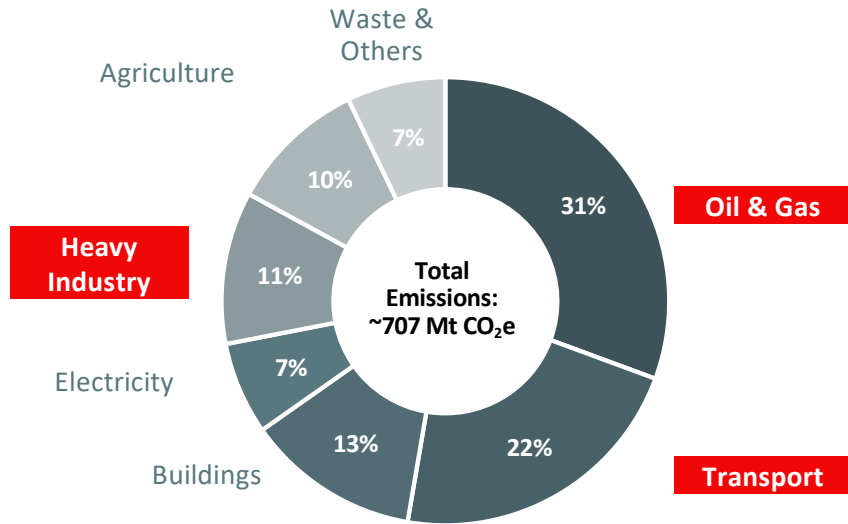
Notes: All figures in C\$ millions, unless otherwise specified.

1. Targeted annual capacity post capital raise.
2. Per 600 MW of AEM electrolyser capacity deployed.

Hydrogen to Play a Key Role in the Energy Transition

Green Hydrogen Leading the Charge Towards a Sustainable Future

CANADA'S GHG EMISSION BREAKDOWN⁽¹⁾



- Currently, over **95% of hydrogen production relies on fossil fuels**, primarily for industrial applications such as refining and chemicals, resulting in significant greenhouse gas emissions
 - Relying on grey hydrogen in its current form makes it impossible to reach global decarbonization goals
- Green hydrogen** produced from renewable energy sources **can help decarbonize hard-to-abate sectors** that lack viable alternatives such as electrification, including heavy-duty transportation, heavy industry, and natural gas blending
 - As a **molecule**, by decarbonizing existing industrial processes where hydrogen is used for refining and biofuel production, chemicals, ammonia, methanation, steel production, etc.
 - As an **energy carrier**, in applications where it competes with biomass, electricity, batteries, and energy storage (i.e., mobility and transportation, heating and power)

Green Hydrogen to Play a Meaningful Role in Decarbonizing Sectors that Account for 60%+ of GHG emissions

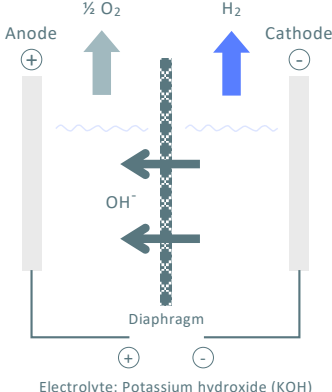
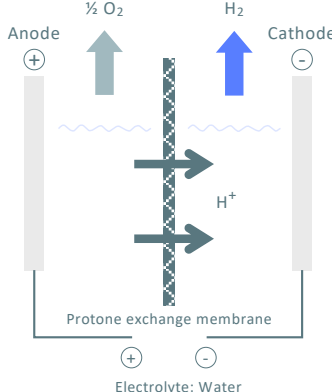
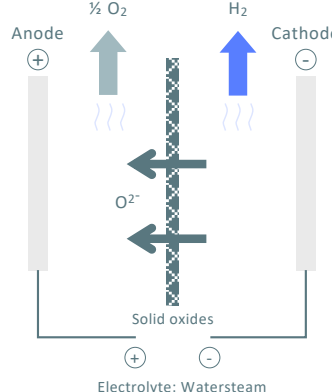
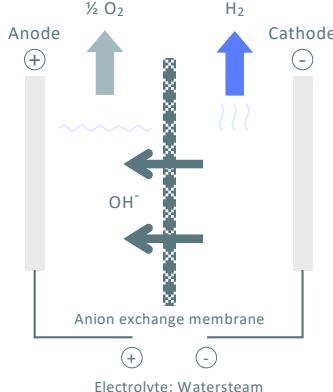
GREEN HYDROGEN IS A SUPERIOR CHOICE AMONG HYDROGEN PRODUCTION METHODS

	Grey	Blue	Turquoise	Green
GHG Emissions	High	Medium – High	Low	Zero
Production Process	Steam Methane Reforming (“SMR”)	SMR + Carbon Capture & Storage (“CCS”)	Methane Pyrolysis	Electrolysis
Production Source	Fossil Fuels	Fossil Fuels and Biomass	Natural Gas	Renewable Energy
H₂ Efficiency	~70 - 80%	~70 - 85%	~75%	~60 - 80%

Note: International Energy Agency (“IEA”), Government of Canada, and publicly available information.
 1. Data as of 2022 reported by the Government of Canada.

Electrolyser Innovations: Understanding AEL, PEM, SOEC, and AEM

AEM Offers a Unique Approach Towards Water Electrolysis

	Alkaline Electrolyser ("AEL")	Proton Exchange Membrane ("PEM") Electrolyser	Solid Oxide Electrolyser Cell ("SOEC")	AEM Electrolyser
Concept	Uses a diaphragm to separate the anode and cathode	Deploys a membrane-based technology that allows protons to pass but blocks electrons	The solid electrolyte cell consists of ceramic material that separates anode and cathode	Uses an anion exchange membrane to separate the anode and cathode
Structure	 <p>Electrolyte: Potassium hydroxide (KOH)</p>	 <p>Electrolyte: Water</p>	 <p>Electrolyte: Watersteam</p>	 <p>Electrolyte: Watersteam</p>
Process	<ul style="list-style-type: none"> At the cathode, electrons react with water, producing hydrogen (H₂) and hydroxyl ions (OH⁻) The OH⁻ can pass the diaphragm, while H₂ leaves the cell at the cathode OH⁻ react at the anode and form oxygen (O₂) and water (H₂O), releasing electrons 	<ul style="list-style-type: none"> Water is supplied at the anode, where it is split into hydrogen protons (H⁺) and O₂ The H⁺ pass through the membrane to the cathode, and produce H₂ when H⁺ reacts with electrons 	<ul style="list-style-type: none"> Water vapor is fed into the cathode and is reduced to form H₂ and oxygen ion (O²⁻) H₂ leaves the cell at the cathode, the electrolyte enables the transport of O²⁻ to the anode At the anode, oxidation takes place and O²⁻ absorb electrons and to form O₂ 	<ul style="list-style-type: none"> H₂O soaks the anion exchange membrane and migrates from the anode to the cathode, where it is split into H₂ and OH⁻ H₂ gas leaves the cell at the cathode, while OH⁻ pass through to the anode thereby resulting in water and oxygen when OH⁻ reacts with electrons
Technology Readiness	Matured	Commercialized	Demonstration	Demonstration ⁽²⁾
Global Installed Capacity ⁽¹⁾	~65% (oldest technology to date)	~35%	<1%	<1%

Source: IEA, United States Department of Energy ("DOE"), and publicly available information.

1. Based on estimates from IEA as of 2023.

2. Only two participants, including CIPHER Neutron, in the manufacturing of commercial AEM electrolyzers.

Breaking Down Key Performance Indicators Across Electrolyser Technologies

High Efficiency and Low-Cost: AEM Electrolysers Offer Best of Both Worlds

Cipher Neutron

	Alkaline Electrolyser	PEM Electrolyser	Solid Oxide Electrolyser Cell	AEM Electrolyser
Efficiency (HHV values⁽¹⁾)	~65%	~80% - ~90%	~85%	90%+ High efficiency, especially at low current densities
Current Density	0.2-0.5 A/cm ²	1.0-2.0 A/cm ²	0.3-1.0 A/cm ²	1.0 – 2.0 A/cm²
Operating Temperature	60 - 80°C	50 - 80°C	700 - 1,000°C	60 - 80°C
Operating Pressure	30 bar	70 bar	1 - 25 bar	30 bar
Cost	OpEx: High (low pressure H ₂ production) CapEx: Low (mature technology with low-cost materials)	OpEx: High (due to de-pressurization issues) CapEx: High (due to use of PGMs ⁽²⁾)	OpEx: High (due to higher operating temperatures) CapEx: High (due to use of REMs ⁽²⁾)	OpEx: Low (high pressure eliminates the need for secondary compressors) CapEx: Low (compact design requiring small footprint)
Material Usage & Supply Chain	Low supply chain constraints as they utilize abundant materials (nickel, steel, etc.) with some precious metals	Heavily depend on PGMs, thus leading to supply chain constraints as >80% PGMs are in South Africa	Dependent on REMs, leading to supply chain constraints as REMs are concentrated in few select countries	Locally sourced materials, resulting in short lead times
Environmental Impact	Low to moderate impact (use of caustic materials like KOH)	Higher environmental impact (PFAS ⁽³⁾ and precious metal usage)	High environmental impact due to high temperatures & materials used	Lower environmental impact (Iridium free and PFAS-free)
Durability	40,000 – 80,000 hours	30,000 – 60,000 hours	10,000 – 20,000 hours (Limited by high temperature)	30,000 – 50,000 hours
Lifespan	Longer life span with low maintenance	Short lifespan with high maintenance	Short lifespan with high maintenance	Longer life span with low maintenance
Start-up Time	Slow startup (Hours, depending on size)	Quick startup (Minutes)	Very slow startup (Hours to reach operating temp.)	Quick startup (Minutes)
Flexibility & Scalability	Less flexible, better for steady-state operations	Highly flexible, good for dynamic operations	Low flexibility, primarily suited for industrial-scale applications	Highly flexible , ideal for fluctuating renewable energy inputs
System Integration	Limited integration with fluctuating power sources	Excellent integration with renewable energy sources	Best integrated into industrial processes with high waste heat	Excellent integration with renewable energy sources

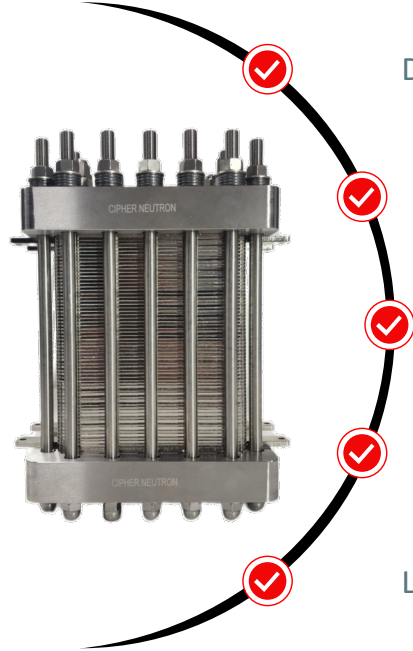
Source: IEA, United States Department of Energy (“DOE”), and publicly available information.

1. HHV refers to higher heating value.
2. PGMs refer to platinum group metals such as platinum, palladium, rhodium, ruthenium, iridium, and osmium, REMs refer to rare-earth metals such as zirconium, lanthanum, yttrium, and scandium.
3. PFAS refers to polyfluoroalkyl substances.

Strictly private and confidential

Developing North America's First AEM Electrolyser

Unrivalled Efficiency and Performance Across all Electrolyser Technologies



Delivers efficient and cost-effective green hydrogen production with lower operating expenses

Free of Iridium, cutting upfront costs and avoiding supply constraints

PFAS-free design supports environmentally friendly operations

Backed by 20 years of research & development, ensuring reliability and trust

Longer operational life with low maintenance needs and fewer service requirements

Highly Efficient

>90% stack efficiency versus industry standard of ~80% (HHV values)

Highly Ampacity

High current density (>1 amps/cm²) enables more H₂ production per unit area

Highly Pressure

Eliminates the need for expensive secondary compressors up to 30 bars



Steel



Mining



Chemical



Transportation

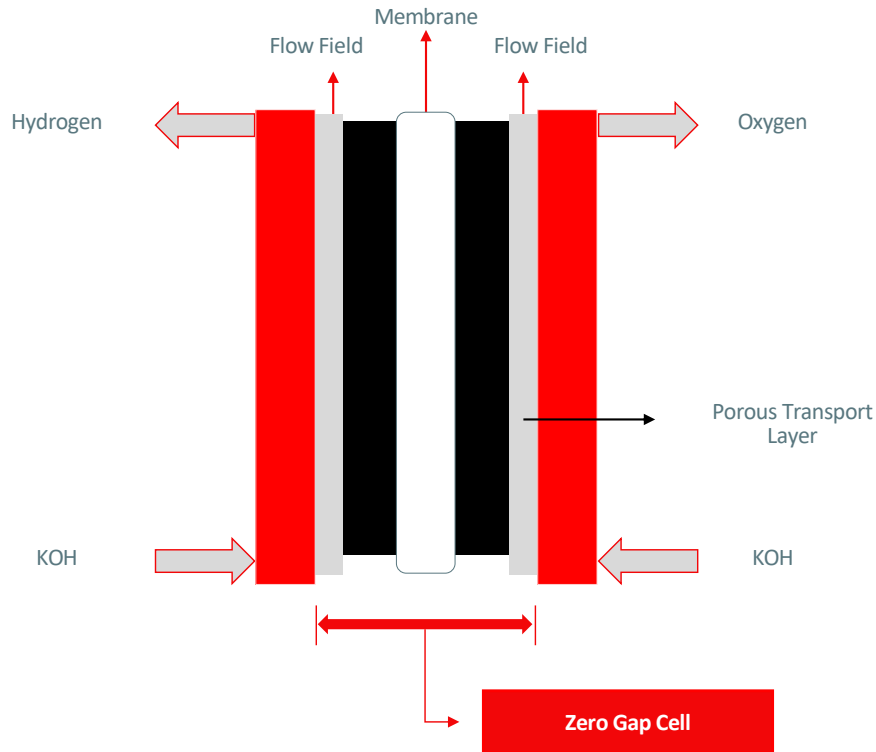


Oil & Gas

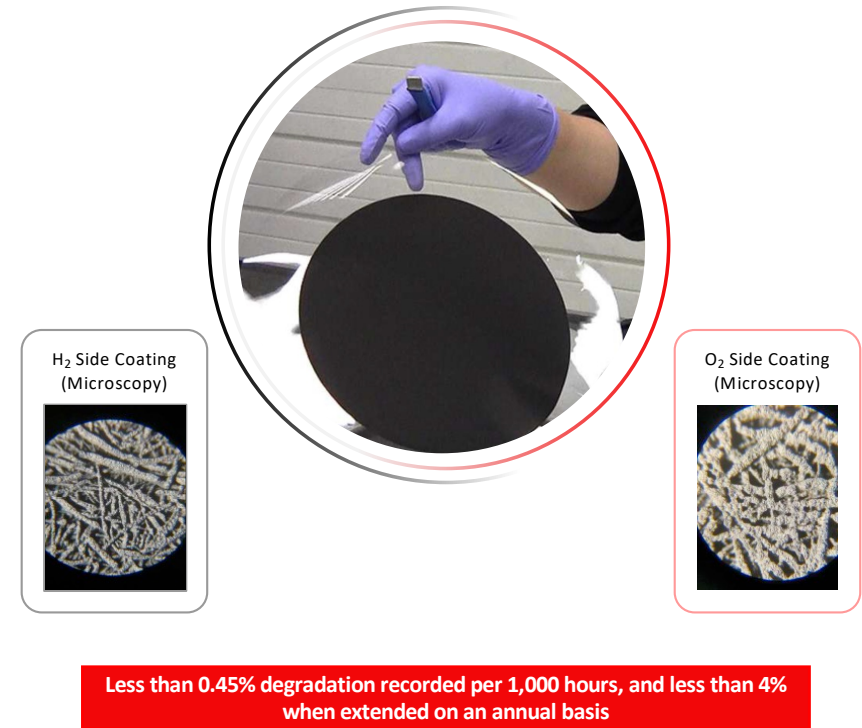
Cipher Neutron's AEM Technology Differentiation

Proprietary Technology and High-Quality Components Deliver Exceptional Performance

ZERO GAP CELL TECHNOLOGY



PROPRIETARY INK RECIPE AND COATING MECHANISM

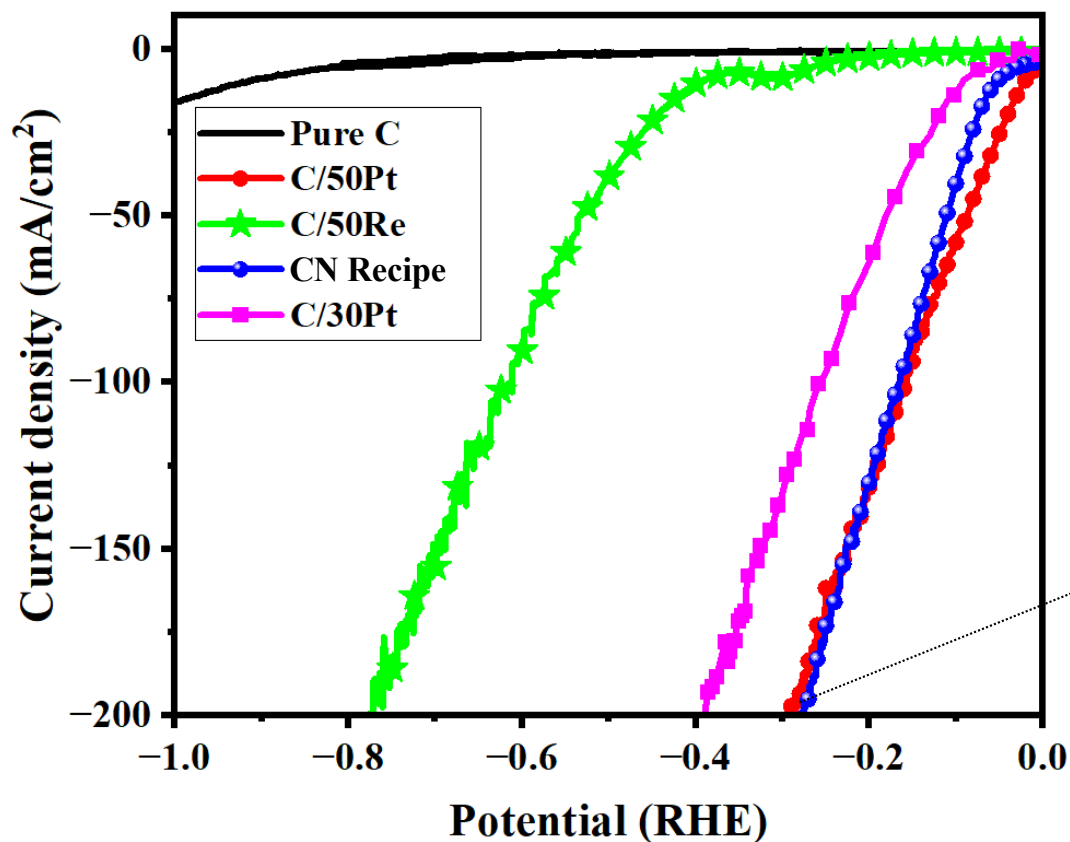


- ✓ **Enhanced Efficiency:** Reduced ion transfer resistance allows for more efficient ion conduction
- ✓ **Lower Ohmic Losses:** Shorter ion travel distance between anode and cathode improves cell performance
- ✓ **Enhanced Gas Separation:** Prevents gas mixing, improving safety and purity
- ✓ **Improved Durability:** Consistency in performance with minimized degradation

Cipher Neutron's AEM Technology Differentiation

Proprietary Catalyst Recipe and Coating Method Delivers Exceptional Performance

ELECTROCHEMICAL DATA (ROTATING DISC ELECTRODE)



Catalyst Abbreviations:
Pure C = 100% Carbon
C/50Pt = 50% Carbon 50% Platinum
C/50Re = 50% Carbon 50% Rhenium
CN Recipe = Cipher Neutron Recipe
C/30Pt = 70% Carbon 30% Platinum



Equipment: WaveVortex 10
Conditions:
Electrolyte: 1 M KOH
Rotating Speed: 1600 rpm

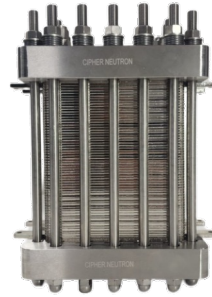
Lower Tafel Slope Indicates:

- ✓ Higher Catalytic Activity
- ✓ Faster Reaction Kinetics
- ✓ Lower Overpotential
- ✓ Improved Stability

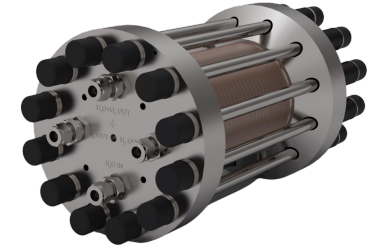
Cipher Neutron's Catalyst Recipe has shown better results than high end catalyst recipes available in the market

Why Electrolyser Efficiency Matters

Maximizing Output, Minimizing Costs: The Game-changing Impact of Superior Electrolyser Efficiency



Cipher Neutron's Stack



Traditional Stack

Stack efficiency (based on HHV values)

90%

~80.00%

Electrolyser stack capacity

100,000 kWh

100,000 kWh

Operating hours (at 100% capacity)

8,760

8,760

Energy consumption/kg H₂

43.78 kWh

49.25 kWh

Annual H₂ production (metric tons)

20,022

17,786

Illustrative 100 MW Project

×

÷

13% Output Improvement

(Additional 2,236 MT of H₂)

Cipher Neutron's AEM Technology Delivers Consistent Performance and Reliability, from Pilot Projects to Large Industrial Applications, Making it Ideal for Scaling Hydrogen Production

Levelized Cost of Hydrogen (LCOH)

Cipher Neutron provides one of the most cost-effective solutions for hydrogen production.

LCOH provides a **standardized measure** of how much it costs to produce one unit (usually 1 kg) of hydrogen over the lifetime of an electrolyser project.

$$\text{LCOH} = \frac{\sum(I+M+E+O)}{\sum H}$$

- Where:
- **I** = Initial capital cost (CapEx)
- **M** = Annual maintenance and operation costs (OpEx)
- **E** = Electricity costs for hydrogen production
- **O** = Other operational expenses
- **H** = Annual hydrogen production (kg/year)

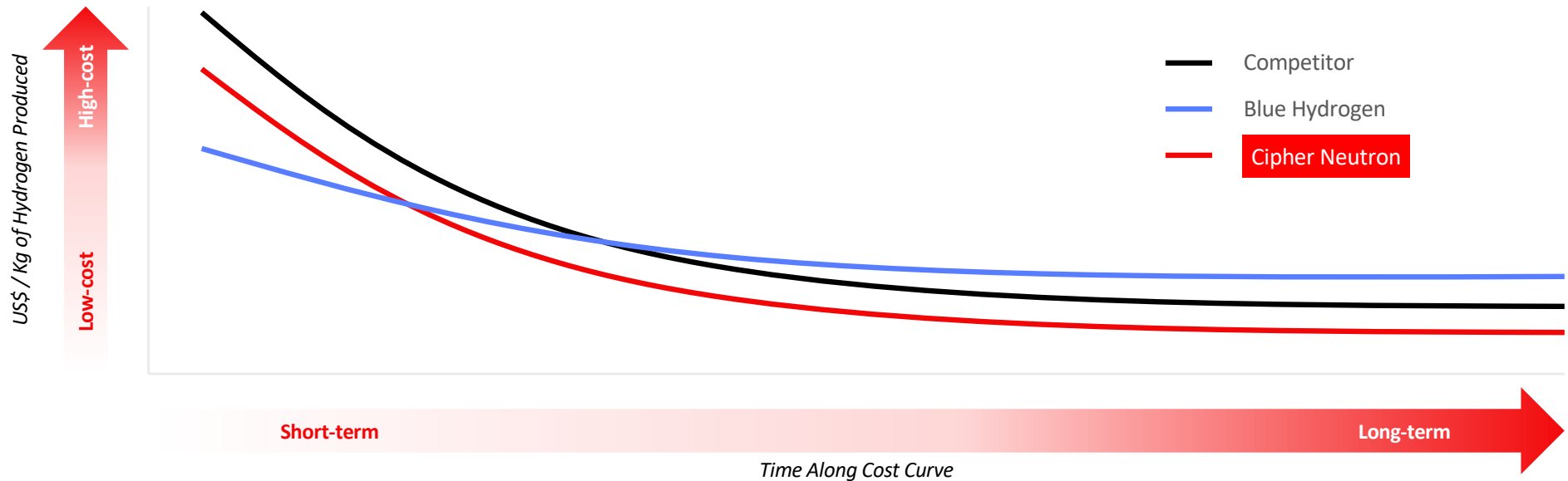
	Cipher Neutron's Electrolyser	Traditional Electrolyser
Initial capital cost (CapEx) for 1 MW	1,000,000	1,350,000 ⁽¹⁾
Average Annual maintenance/operation costs (OpEx)	3% of CAPEX	3% of CAPEX
Assumed Electricity costs for H ₂ production	\$ 0.05	\$ 0.05
Annual hydrogen production (kg)	~160,000 ⁽²⁾	~145,500 ⁽³⁾
Average Electrolyser Lifetime	5 years	5 years
Levelized Cost of Hydrogen	\$ 3.94 /kg	\$ 4.81 /kg
Over 18% Improvement in LCOH		

Note: All prices in CAD, unless mentioned otherwise.

1. Average 1 MW PEM Electrolyser Cost.
2. Annual H2 production based on 50 kwh to produce 1 kg of H2 and 8000 hours of yearly operation. This is the stack consumption plus all other auxiliaries in the Balance of Plant.
3. Annual H2 Production based on 55 kwh to produce 1 kg of H2 and 8000 hours of yearly operation. This is the stack consumption plus all other auxiliaries in the Balance of Plant.

Unlocking Value Through Superior Cost Reduction

The CIPHER Neutron Path to Affordable Green Hydrogen Through Efficiency, Scale, and Innovation



Industry-wide Drivers for Reducing Green Hydrogen Production Costs

Green hydrogen production costs are expected to significantly decrease over time due to economies of scale and the anticipated learning curve

Increased production scale and processes

Improved stack design and efficiency

Lower electricity cost and greater full-load hours

CIPHER Neutron

CIPHER Neutron has a plan to bring down the LCOH below \$2 CAD (or \$1.50 USD).

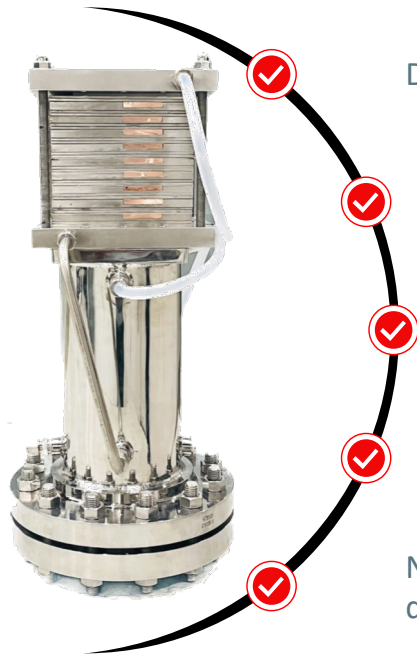
Increase stack efficiency and optimize balance of plant to further reduce the LCOH.

Further cut down electrolyzers CAPEX by utilizing affordable, sustainable materials, ensuring a streamlined and reliable supply chain

Increase product lifetime to 10 years by reducing degradation to less than $\mu\text{V/hr}$.

Introducing the World's First Patent-pending Reversible Fuel System

Innovative Solution with Graphene, Expected to Revolutionize Hydrogen Storage and Usage



Dual-function system, produces green hydrogen (electrolyser) and generates clean electricity (fuel cell)

Graphene slurry enables safe and efficient hydrogen storage, reducing risks associated with high-pressure systems

Seamless integration into both large-scale industrial applications and smaller residential energy setups

Superior energy density compared to conventional hydrogen storage, making it suitable for longer-term energy storage

Non-compressed hydrogen storage enhances safety, addressing key concerns in hydrogen infrastructure development

Targeted for Launch in Q4 2026



Clean Energy Storage



Residential Backup Power



Remote Dwellings & Communities

Cipher Neutron is Production Ready

With Plans in Place to Increase Capacity 6x to Capture Future Demand



CURRENT FACILITY

- ✓ 100 MW annual AEM electrolyser production capacity
- ✓ Semi-automated production line
- ✓ Scalable manufacturing facility in Toronto, Ontario
- ✓ Dedicated R&D facility driving innovation
- ✓ Production ready and operational today!



PLANNED FACILITY

- ✓ Capacity increase of 6x to 600 MW annually
- ✓ State-of-the-art tools and machinery
- ✓ Highly scalable facility designed for flexibility across project sizes
- ✓ Easy access to logistics and distribution infrastructure and proximity to global supply chain infrastructure
- ✓ Capable to produce non-standard, custom-designed items essential for AEM electrolyser production

Established Competitive Moat

Cipher Neutron Holds a Significant Advantage in the Electrolyser Market



Intellectual Property

Patent portfolio creates a significant competitive advantage

6
Patents Granted and Pending



Proprietary Expertise

Technical knowledge from significant investment in R&D

5+
Years of R&D Advantage



Partnerships

Exclusive partnerships and collaborations with leading industry players and universities

10+
Partnerships and Collaborations



First Mover Advantage

First Company to commercialize AEM electrolyzers in North America

1st
AEM Electrolyser in
North America

PATENT PORTFOLIO



Graphene based hydrogen storage and delivery system

- Storage of H₂ in a slurry that results in enhanced safety in H₂ storage and transportation



Anion exchange membrane electrolyser

- Unique AEM electrolyser and balance of plant design, enhancing the efficiency and CAPEX reduction



Polymer acid electrolyte-based RFC with serpentine micro flow channels

- Advancements in energy storage and electricity generation



Highly efficient anion exchange membrane electrolyser with circular end plates and flow channels

- Optimized flow rates to enhance the electrolyser efficiency



HT-PEM fuel cell with heat pipe-based cooling

- Enhanced thermal management in fuel cells



A hybrid solar chimney with wind turbine for enhanced efficiency

- Integration of renewable sources

Vast Market Opportunity

Key Regions with Supportive Regulatory Environments

- Demand for green hydrogen is projected to grow substantially as nations strive to achieve net-zero emissions by 2050
 - Electrolysers play a pivotal role in producing low-emission hydrogen using renewable or nuclear energy sources
- Global electrolysis capacity currently stands at ~1 GW with ~12 GW of capacity having reached final investment decision
 - However, to align with the net-zero emissions by 2050 goal, over 550 GW of electrolysis capacity will be required by 2030
- Governments are expanding supportive regulatory frameworks and finalizing their hydrogen strategies to scale hydrogen production and distribution globally

REGULATORY SUPPORT FOR HYDROGEN GROWTH

2023-2024 Budget

- The Government of Canada announced:
 - A Clean Hydrogen Investment Tax Credit program, available across a range of clean hydrogen pathways
 - A contract for difference program to help de-risk major hydrogen supply projects

Federal Funding

- Inflation Reduction Act (“IRA”) and U.S. Department of Energy funding
- Provides major funding across the hydrogen value chain that state governments are building upon via direct funding, low carbon fuel regulation support, and 45V hydrogen production tax credit

Source: Hydrogen Council, Equity Research, IEA, Government of Canada, and publicly available information.

Note: All figures are C\$ millions, unless otherwise specified.

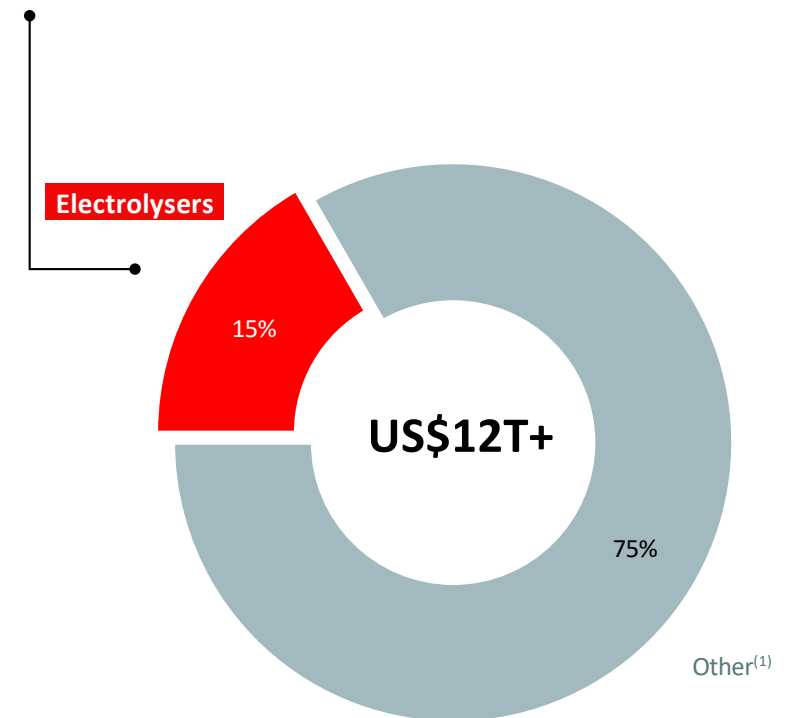
1. Includes renewables, gas infrastructure, and hydrogen power plants.

MARKET OPPORTUNITY FOR ELECTROLYSERS

US\$12T+

Total Addressable Market

Hydrogen opportunity by 2050

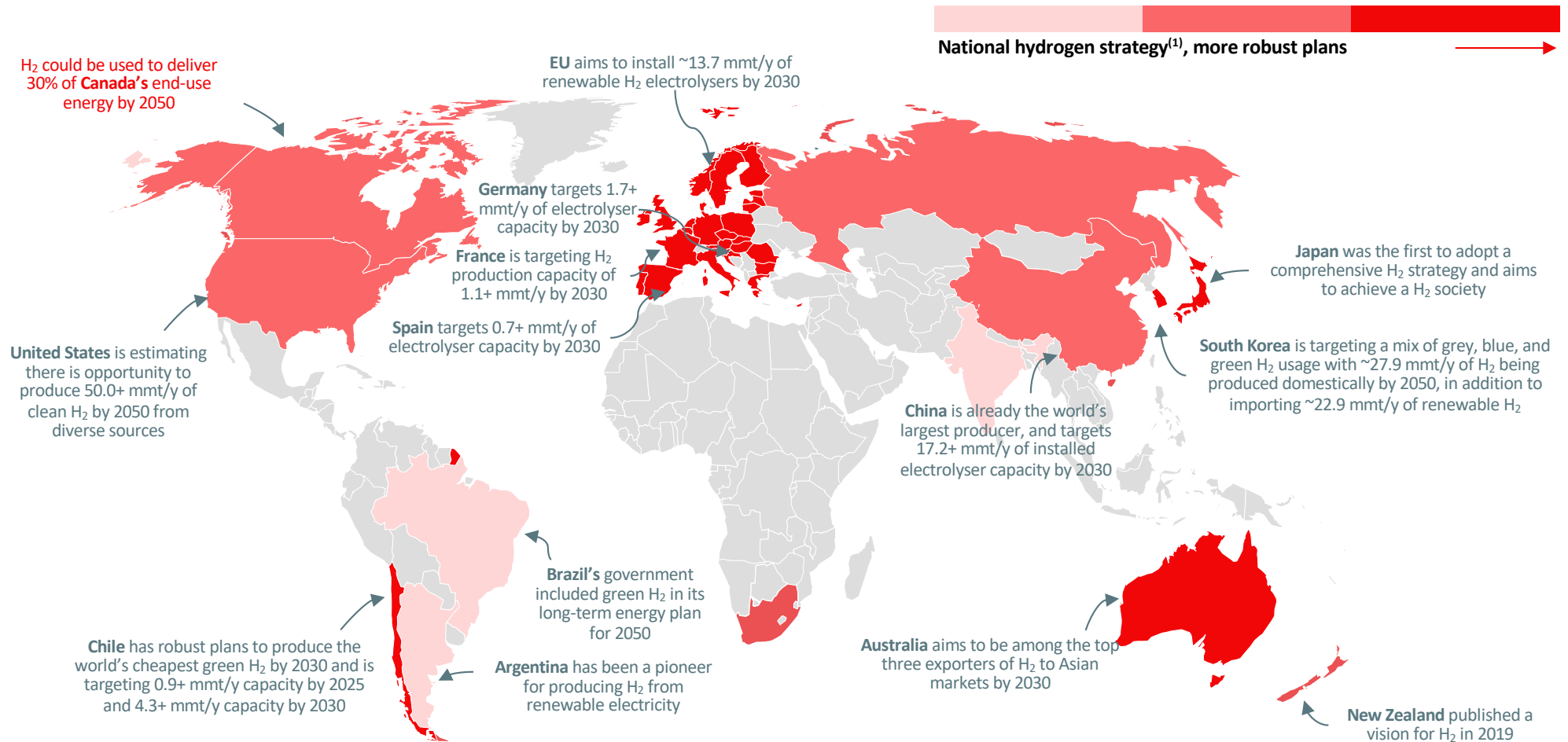


Electrolysers expected to represent
~15% of the addressable hydrogen market

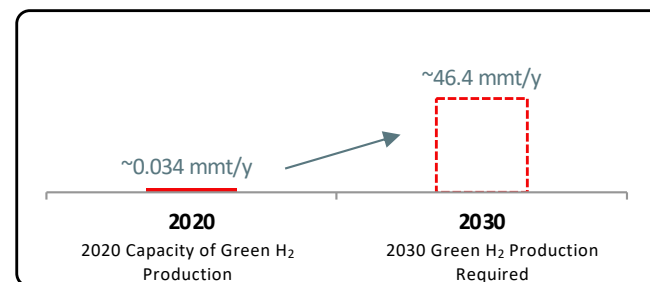
US\$1.8T+ Serviceable Addressable Market

Significant Commitment to Green Hydrogen Globally

Support for Hydrogen on a Global Scale Increases Adoption Rate and Integration



~46.4 mmt/y of H₂ will be needed by 2030 to keep the global temperature increase under 2° C



Source: Bloomberg, IERNA, Next Hydrogen, Hydrogen Council, DNV, press releases, and publicly available information.

1. Where applicable, GW to mmt/y conversion calculated using the low heating value of hydrogen (33.33 kWh per kg H₂) adjusted with a conversion efficiency of ~68% and ~98% uptime.



SECTION 3. Financial Overview

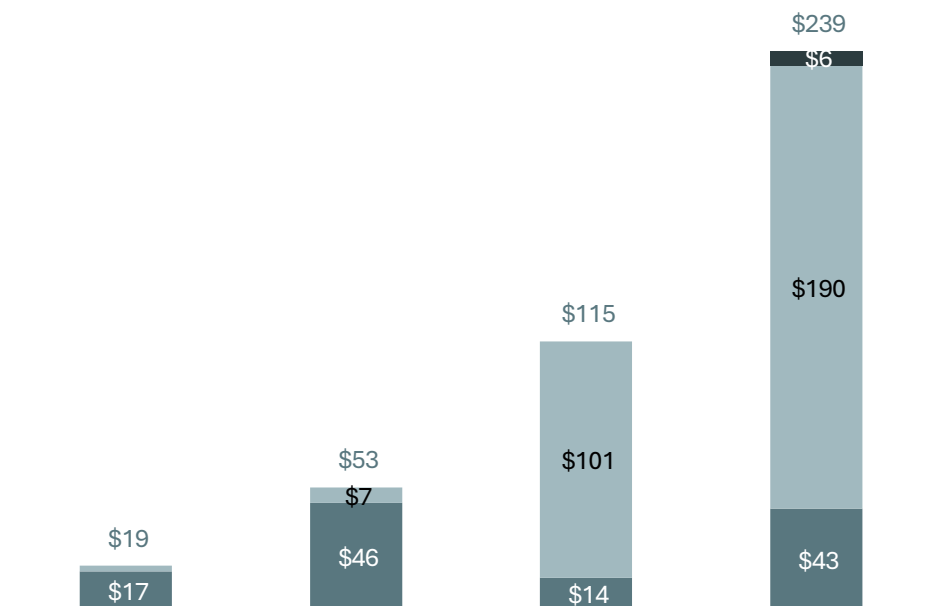
Strong Global Pipeline

Current Pipeline Supported by Ongoing Discussions for a Low-Cost Technology Solution

- Ciper Neutron has a **strong pipeline** that is underpinned by **more than 100 discussions** with current customers, select partners, and potential clients globally
- Pipeline reflects announced purchase orders, quotes, MOUs, LOIs and collaboration agreements with hydrogen industry participants

TOTAL REVENUE AND UNIT BREAKDOWN

■ Stack unit sales (\$M) ■ Electrolyser unit sales (\$M) ■ Reversible fuel cell unit sales (\$M)

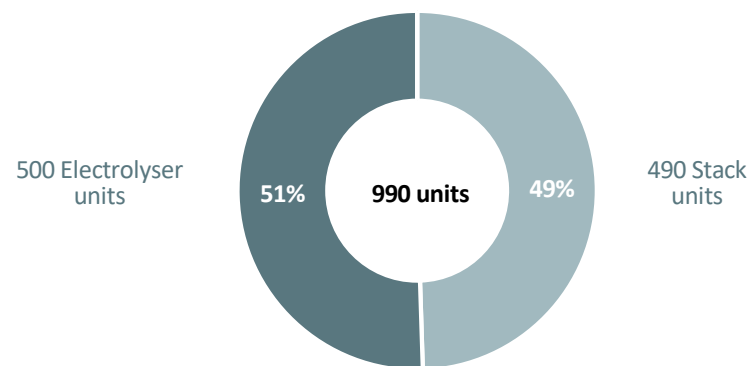


Unit Sales by Type	2025	2026	2027	2028
Stack	134	347	260	700
Electrolyser	41	122	569	1,169
Reversible Fuel Cell	-	-	-	150
Total	174	469	829	2,019

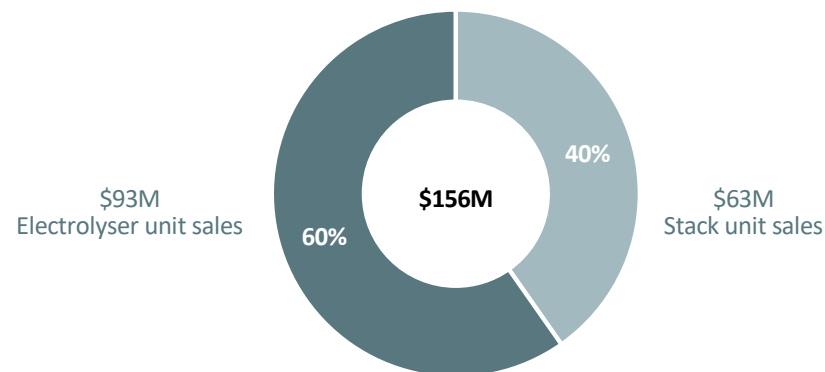
CURRENT SALES PIPELINE BREAKDOWN

■ Stack ■ Electrolyser

UNIT BREAKDOWN (2024-2028)



REVENUE BREAKDOWN (2024-2028)

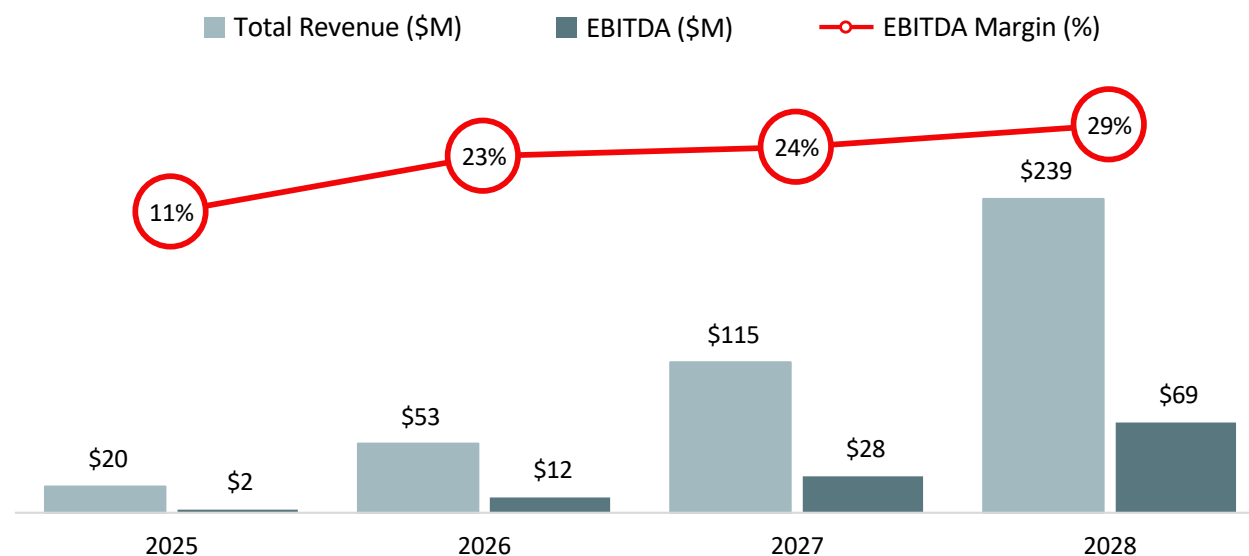


Robust Financial Profile

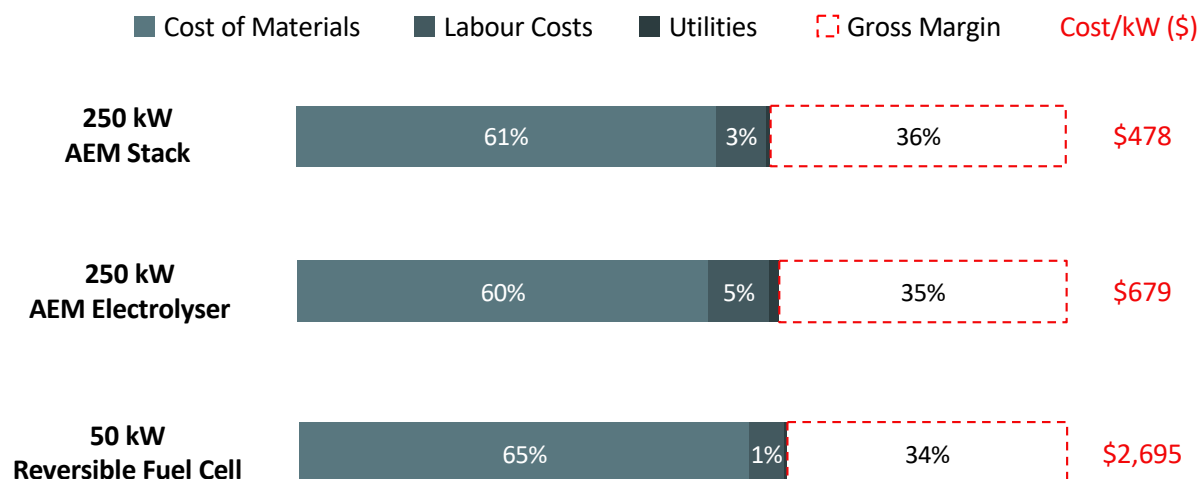
Cipher Neutron is Already a Revenue Generating Company

- Forecast is based on the Company's sales pipeline, assessing client requirements on a case-by-case basis
- Accelerating sales growth** largely driven by discussions with over 100 Multi-megawatt and Gigawatt green hydrogen project developers, each indicating their plans to accelerate the ramp up of electrolyser installations in the near term
 - Favourable pricing, ~30% discount to competitive PEM electrolyser units, supporting product demand
- Margin expansion largely driven by **superior product gross margin (30+%)** resulting from:
 - Innovative Precious Metal-Free Technology:** Eliminates reliance on costly platinum and iridium
 - Efficient and Compact Design:** Streamlined system minimizes complexity and materials required for manufacture
- General cost inflation of 3% is applied throughout the forecast with 4% applied to salaries

TOTAL REVENUE AND EBITDA MARGIN



UNIT ECONOMICS



Attractive Financial Profile Supported by an Innovative Product Offering that's Simple, Sustainable, and Precious Metal-Free Resulting in Significant Cost Savings for the End User



SECTION 4. Appendix

Recent Partnership

Building Out SFU's Clean Hydrogen Hub

- In July 2024, Cipher Neutron was awarded an advanced contract award notification to design and construct 2 electrolyser stacks with a capacity of 250 kW for Simon Fraser University ("SFU")
- The project is expected to begin in Q4 2024
- The project will investigate and validate the AEM technology at the 250 kW - 1 MW scale
- As part of the partnership, Cipher Neutron and SFU intend to explore advanced AEM electrolyser technologies to enable scaling of low-cost green hydrogen production













“As a leading research university and trusted innovation partner, Simon Fraser University is excited to collaborate with Cipher Neutron to advance the scalability of AEM electrolyzers with this innovative 250 kW single-stack project. This initiative will help us advance the Canadian innovation ecosystem while developing the capacity needed to reach net-zero target”

- Laura Sloboda, Operations Director, Clean Hydrogen Hub of SFU

Status of Current Funding Applications

Cipher Neutron Secures Government Non-Dilutive Funding to Maximize Strategic Opportunities with Government Support

Funding Program	Partner	Funding Amount (\$M)	Status
 ALBERTA INNOVATES	 UNIVERSITY OF ALBERTA	\$0.5	Approved
Hydrogen Innovation Fund	 Western	\$0.5	Approved
Total Approved		~\$1.0	
 FedDev Ontario	<i>n.a</i>	\$2.0	In Progress
New York Congress Direct Funding	 Ally Power	\$13.5	In Progress <i>(Approved by the Senator of New York, currently moved to the next stage)</i>
 DAIR	 UNIVERSITY OF ALBERTA	\$0.1	In Progress
 NGIF ACCELERATOR	  UNIVERSITY OF ALBERTA THE CITY OF Edmonton	\$2.0	Application Pending
Total Pending		~\$17.6	

Disclaimer

Forward-Looking Statements:

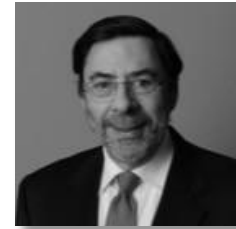
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Management



Jim Payne
Chairman, CEO, &
Director

- CEO of dynaCERT since 2013
- Previously CEO of privately held consulting, project management and real-estate development company
- Successfully built and managed his own private companies for more than 38 years providing experience in accounting, business leadership, and the legal aspects of governance



Jean-Pierre Colin
Executive Vice
President & CFO &
Director



Khoa Tran
Director of Finance



Bernd Krueper
President & Director

- 6.5 Years CEO at Hatz Group
- 18 years leadership experience at Rolls-Royce Power Systems AG
- 6 years at Daimler Group
- MBA from Eberhard-Karls-University



Enrico Schlaepfer
VP of Global Sales



Ed Cordeiro
Director Sales
Americas

Contact



JIM PAYNE, Chairman, & CEO

Phone: +1416 766 9691 ext. 2

Email: jpayne@dynacert.com

JEAN-PIERRE COLIN, CFO, Executive VP & Director

Phone: +1416 573 4300

Email: jpcolin@dynacert.com

NANCY MASSICOTTE, Investor Relations

Phone: +1416 766 9691 ext. 1

Email: nmassicotte@dynacert.com

CORPORATE OFFICE

101-501 Alliance Avenue

Toronto, ON M6N 2J1

Canada