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## INVESTOR PRESENTATION

MAY 2021

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This Presentation contains forward-looking statements that relate to SpectrumH2 Ltd. (“**SpectrumH2**” or the “**Corporation**”)) current expectations and views of future events.

In some cases, these forward-looking statements can be identified by words or phrases such as “may”, “might”, “will”, “expect”, “anticipate”, “estimate”, “intend”, “plan”, “indicate”, “seek”, “believe”, “predict” or “likely”, or the negative of these terms, or other similar expressions intended to identify forward-looking statements. The Corporation has based these forward-looking statements on its current expectations and projections about future events and financial trends that it believes might affect its financial condition, results of operations, business strategy and financial needs. These forward-looking statements may include, among other things, statements relating to the Corporation’s expectations regarding its estimated revenue; gross margin; cash operating costs; adjusted EBITDA; product cost reductions; liquidity; market size and growth projections; customer value propositions; and expected sales and product shipments. The Corporation’s expectations regarding its anticipated cash needs and its needs for additional financing; the Corporation’s intention and ability to grow the business and its operations; including its ability to complete offtake agreements; expectations regarding our growth rates, plans and strategies; and the Corporation’s expected business objectives for the next twelve months.

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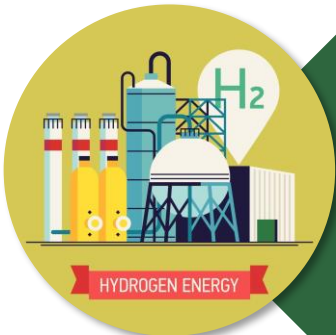
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# WHY HYDROGEN?



## ADOPTION

- HYDROGEN IS AN ENERGY SOURCE THAT EMITS ZERO CO<sub>2</sub>
- CHEAP & ABUNDANT FEEDSTOCK (NATURAL GAS, WATER, ELECTRICITY)
- DISPATCHABLE ENERGY SOURCE
- DOES NOT OVERWHELM THE ELECTRICAL GRID
- EXPEDIENT FUELING
- LEVERAGING PROVEN TECHNOLOGY FROM COUNTRIES THAT ARE EARLY ADOPTERS

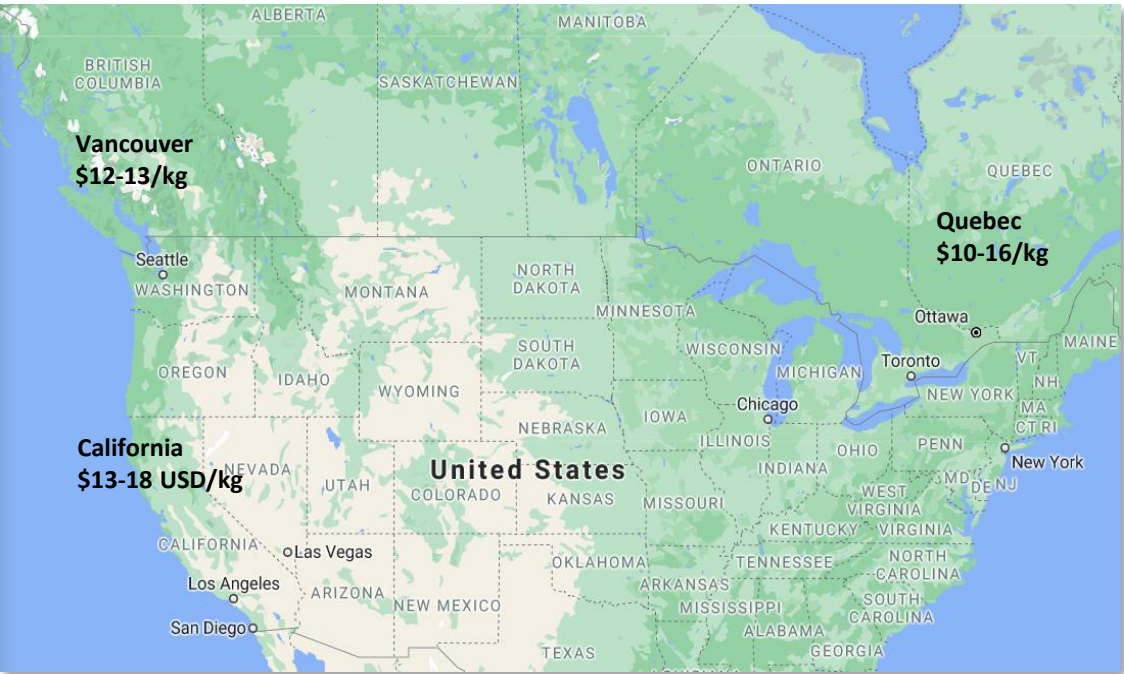
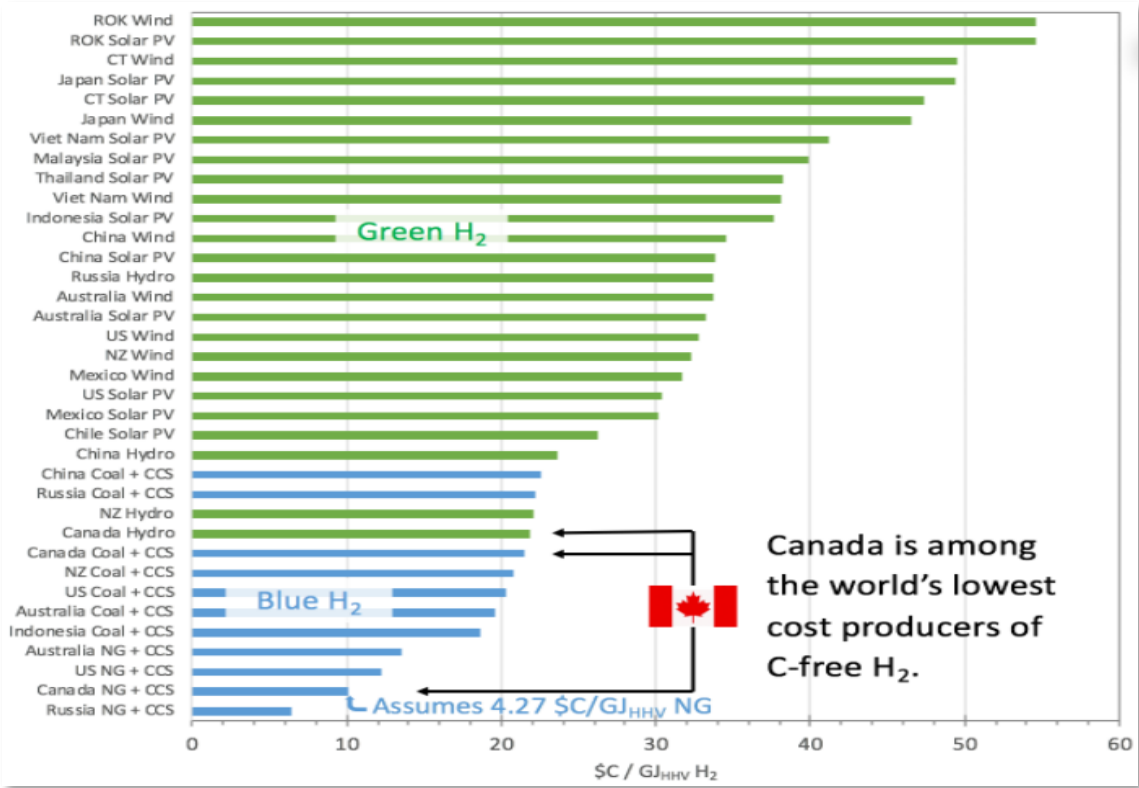


## INVESTING

- SIGNIFICANT RUNNING ROOM & MARKET GROWTH
- OPPORTUNITY TO GET IN ON THE GROUND FLOOR
- ALBERTA POSITIONED PERFECTLY TO STORE CO<sub>2</sub> ASSOCIATED WITH H<sub>2</sub> PRODUCTION
- SYNERGISTIC OPPORTUNITIES ACROSS MANY INDUSTRIES
- VERTICAL INTEGRATION MODEL IS ECONOMIC TODAY
- BLENDING OPPORTUNITIES WITH DIESEL, GASOLINE, INDUSTRIAL, RESIDENTIAL, BUILDINGS, POWER GENERATION SECTORS

# WHY HYDROGEN?

## SIGNIFICANT PRICING DISLOCATION



## “THE ALBERTA ADVANTAGE”

**CHEAP NATURAL GAS**  
**+ ABUNDANT CARBON STORAGE POTENTIAL**  
**= LOW-COST BLUE HYDROGEN**

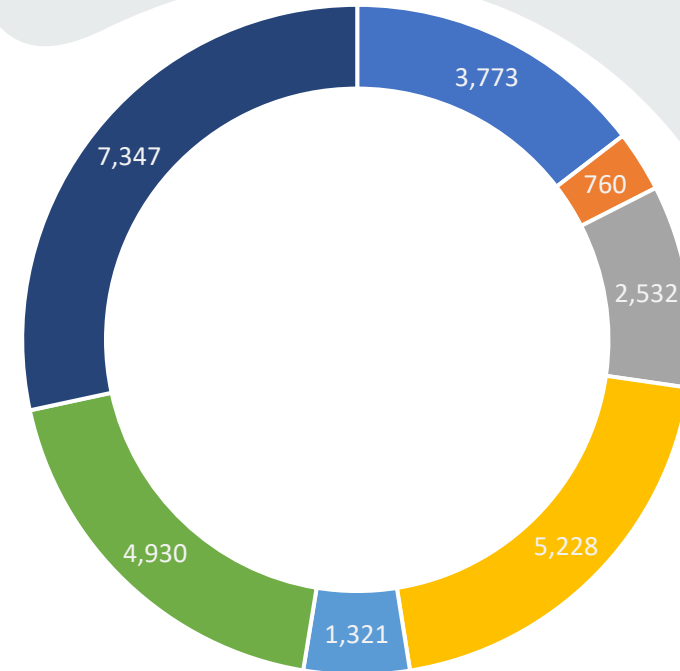
Source: Transition Accelerator Reports Volume 2 • Issue 5 • November 2020

# SIZE OF THE PRIZE – BLUE HYDROGEN IN ALBERTA

Converting existing grey hydrogen to blue hydrogen in the industrial feedstock market =  
**5,378 t H<sub>2</sub>/day**

Total new hydrogen fuel market in Alberta =  
**25,891 t H<sub>2</sub>/day**

Potential hydrogen market demand in Alberta =  
**31,269 t H<sub>2</sub>/day**



- From Diesel Market 3,773
- From Gasoline Market 760
- From Natural Gas Market: Industry 2,532
- From Natural Gas Market: Buildings 5,228
- From Natural Gas Market: Pipeline Transport 1,321
- From Natural Gas Market: Power Generation 4,930

Source: Transition Accelerator Reports Volume 2 • Issue 5 • November 2020



# WHY CARBON CAPTURE?

Carbon capture, use, & storage technologies can capture more than 90 percent of carbon dioxide (CO<sub>2</sub>) emissions from power plants & industrial facilities.

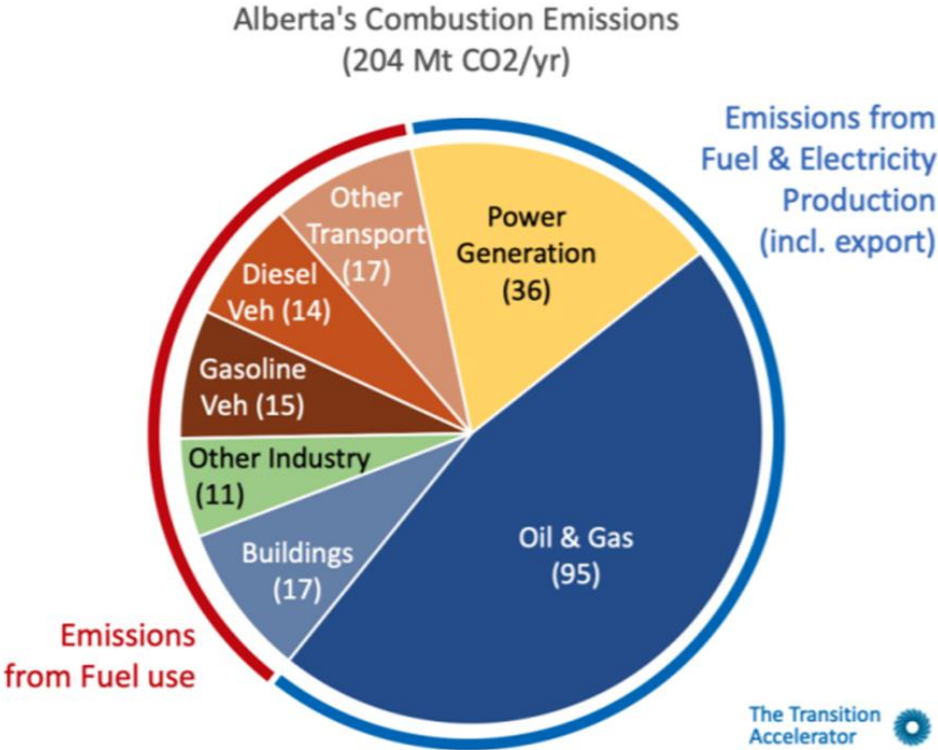
- Proven capture technologies: no technology risks
- Alberta's carbon credit trading system enables the monetization of CO<sub>2</sub>
- Base level rate of return with upside exposure
- Alignment with net-zero emission targets



**“Turning Liabilities Into Opportunities”**

# SIZE OF THE PRIZE – ALBERTA COMBUSTION EMISSIONS

## ALBERTA GREENHOUSE GAS EMISSIONS BY SECTOR



Crucially, net-zero emissions can be achieved through the following decarbonization options:



### Carbon capture

Chemical absorption and the injection of CO<sub>2</sub> into depleted oil reserves



### Nuclear energy

Produces energy through nuclear reactions



### Storage & utilization

Improves electricity grid storage



### Renewable innovation, and others

Includes hydrogen, batteries, and scaling renewables

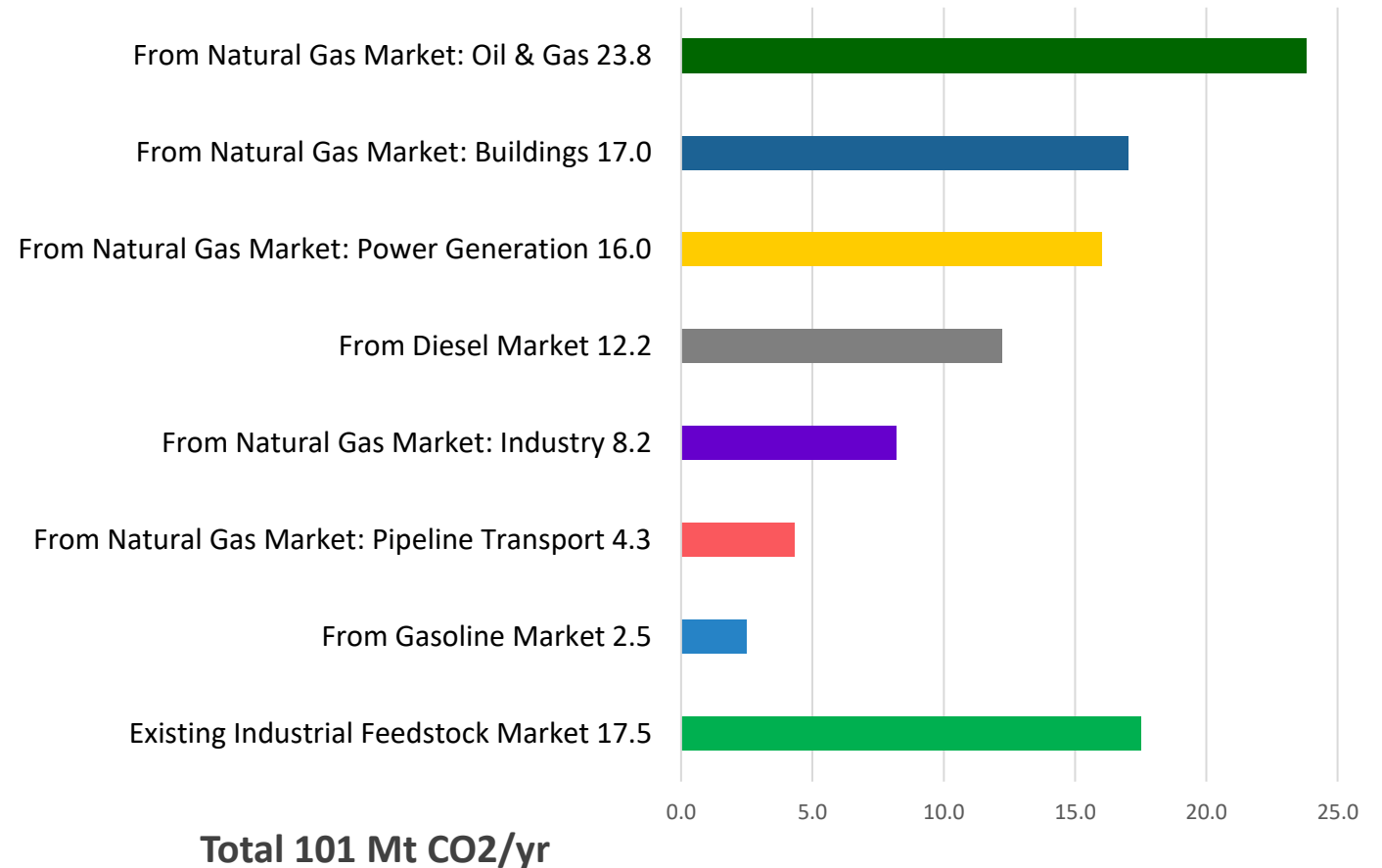


## GETTING TO NET-ZERO THROUGH CARBON CAPTURE

# SIZE OF THE PRIZE – CARBON CAPTURE & STORAGE

- Summary of carbon capture & storage (CCS) with natural gas demand in Alberta's hydrogen economy.
- If all hydrogen were produced as blue hydrogen from natural gas with CCS, the annual CCS capacity requirement would be about 101 Mt CO<sub>2</sub>/yr.
  - This is over 40 times more than the current 2.5 Mt CO<sub>2</sub>/yr capture rate that already exists from the Shell Quest & Alberta Carbon Trunk Line projects.

## MARKET POTENTIAL FOR CO<sub>2</sub> STORAGE DEMAND IN ALBERTA



Source: Transition Accelerator Reports Volume 2 • Issue 5 • November 2020



# CARBON CAPTURE IS GROWING

## KEY US POLICY

New projects were, in large part, incentivised by the **45Q tax credit** and the **California Low Carbon Fuel Standard (LCFS)**.



2020 is the year that CCS was mainstreamed into energy and climate policy discussions, with support from both **Democrats and Republicans**.



US Department of Energy is another reason for the growing list of projects in development, committing or awarding more than **\$270 million in co-funding agreements in 2020**.

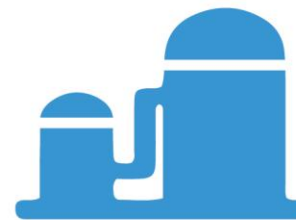


## OPERATIONAL MILESTONES

Several significant CCS operational milestones were achieved across the Americas in 2020:



Alberta Carbon Trunk Line (ACTL) in Canada **came on-line**.



**5M**  
TONNES  
CAPTURED &  
STORED

Shell Quest facility surpassed **5 million tonnes** of CO<sub>2</sub> captured and stored over 5 years of operation.



Boundary Dam 3 CCS facility in Saskatchewan surpassed over **4 million tonnes** of CO<sub>2</sub> captured and stored.



**14M**  
TONNES  
CAPTURED &  
STORED

Offshore Brazil, Petrobras Santos Basin CCS facility surpassed **14 million tonnes** of CO<sub>2</sub> captured and stored.

Source: Global CSS Institute "Global Status of CCS 2020" report

# CARBON CAPTURE IS GROWING CONTINUED

## CCS FACILITIES IN THE AMERICAS

In 2020 the Global CCS Institute added 12 new commercial projects in the Americas to our database of CCS facilities.



There are now **38 commercial facilities in operation**, or various stages of development in the region. This represents around one half of the total projects around the globe.



**38**  
COMMERCIAL  
FACILITIES

### CO<sub>2</sub> CAPTURE

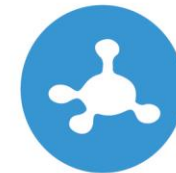
Operational commercial CCS Facilities in the region have a capture capacity of over **30 million tonnes per annum**.

**CO<sub>2</sub>**

**30 Mtpa**



The **versatility of CCS** is evident in the US in 2020. Projects were announced on: **cement manufacturing, coal-fired power plants, gas-fired power plants, waste-to-energy-plants, ethanol facilities, chemical production.**



Source: Global CCS Institute "Global Status of CCS 2020" report

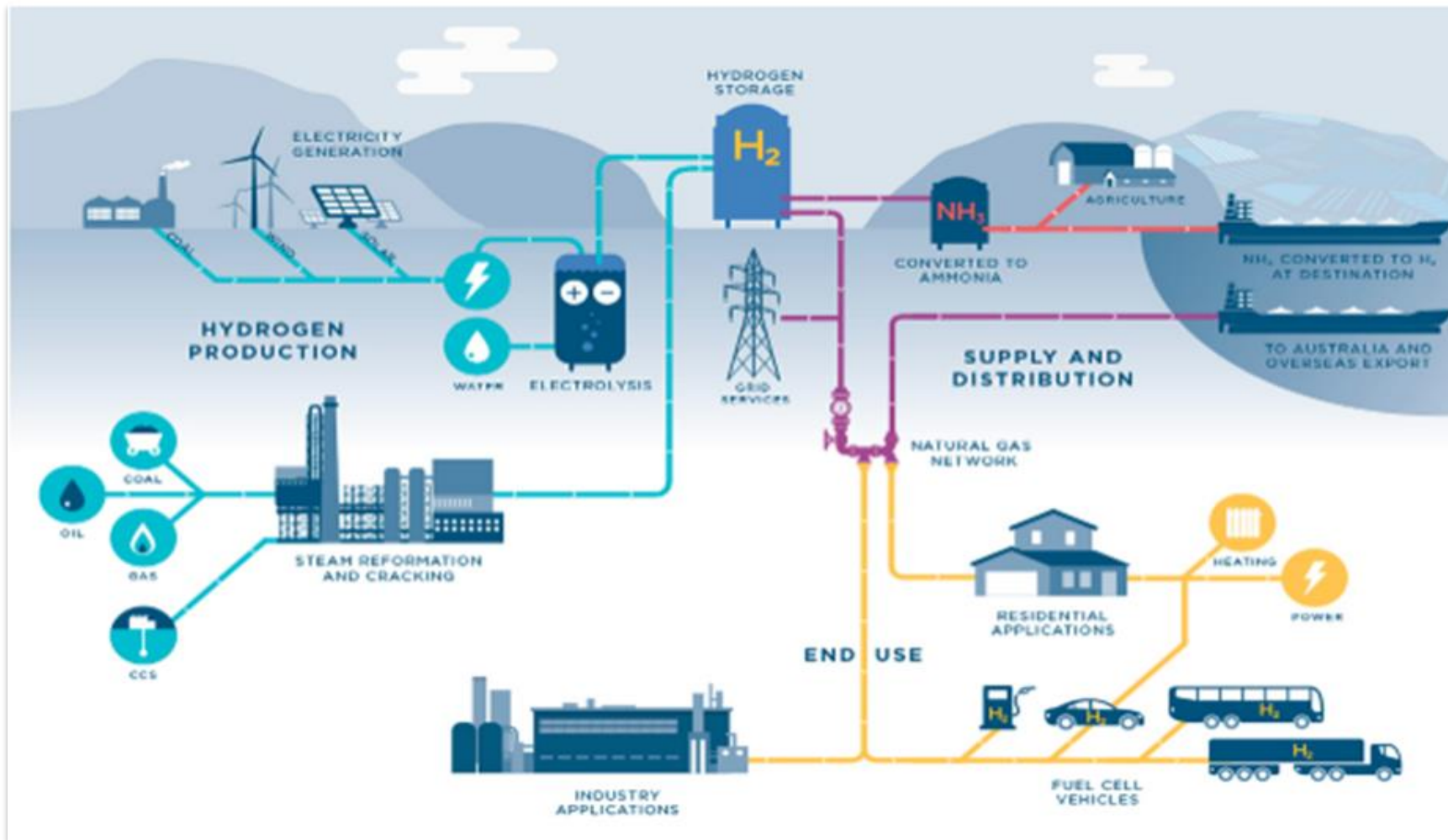
# INTEGRATING HYDROGEN & CARBON SEQUESTRATION

- Gray hydrogen production from natural gas emits CO<sub>2</sub>. SpectrumH2 will capture over 90% of our associated CO<sub>2</sub> and store it underground indefinitely, thereby producing blue hydrogen.
- By coupling carbon capture (CCS) with hydrogen production, the vast majority of CO<sub>2</sub> is diverted from the atmospheric release.
- Blue hydrogen projects can be scaled appropriately using a modular, 'fit-for-purpose' approach.
- Numerous industrial and retail consumers need a clean, zero emissions alternative.





# THE HYDROGEN AND SEQUESTRATION ECOSYSTEM



Leverage the value chain by sourcing natural gas to produce hydrogen while capturing and sequestering its CO<sub>2</sub> emissions.

Take advantage of favorable price and demand conditions for ammonia markets as opportunities are presented (blue hydrogen is the basic feedstock for blue ammonia).

Supply blue hydrogen to end users for various uses including fleet transportation, industrial use and residential/ commercial natural gas substitution.

# OUR TEAM ATTRIBUTES

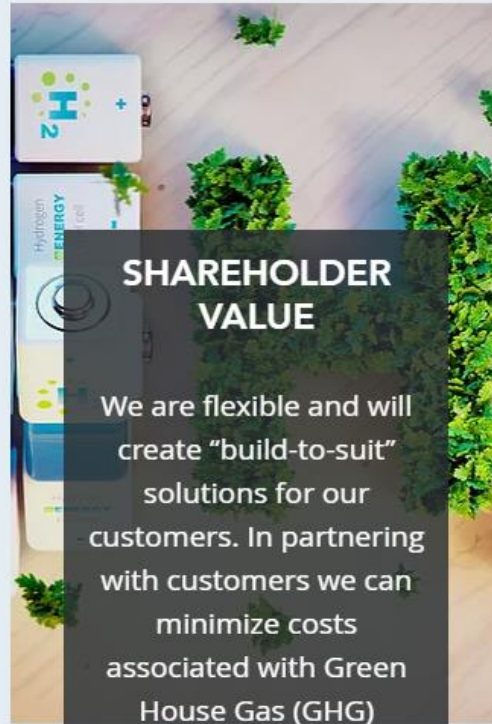


# VALUES & APPROACH



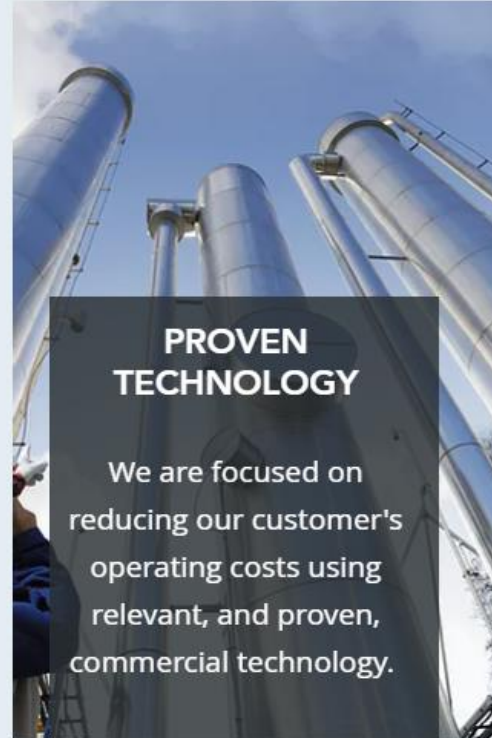
## CUSTOMER FOCUS & ENGAGEMENT

We focus on customers needs, providing innovative and practical solutions. We seek to engage and retain customers through collaboration.



## SHAREHOLDER VALUE

We are flexible and will create “build-to-suit” solutions for our customers. In partnering with customers we can minimize costs associated with Green House Gas (GHG) emissions.



## PROVEN TECHNOLOGY

We are focused on reducing our customer's operating costs using relevant, and proven, commercial technology.

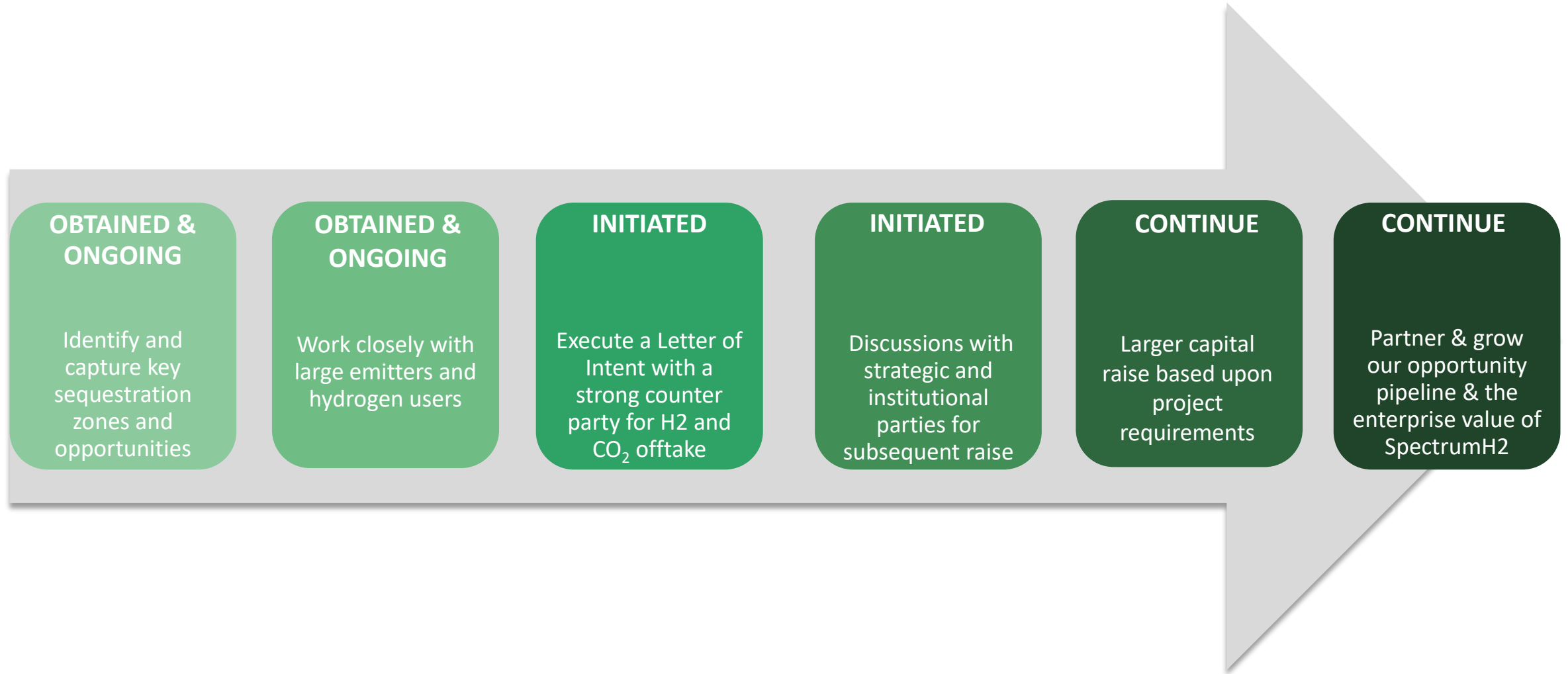


## GROWTH

HUB (Hydrogen Utilization Belt) approach enables SpectrumH2 to produce and sell at commercial demand sites and grow our distribution network. We currently have interest from groups across Canada.



# TIMELINE & PROGRESS



# CURRENT EQUITY STRUCTURE

SpectrumH2 plans to initiate the Mezzanine round in the coming months. There has been both strategic and institutional investment interest.

SPECTRUMH2 CAPITALIZATION TABLE	
Issued and Outstanding @ \$.045	12,200,000 sh
Issued and Outstanding Pre-Mezzanine*	12,200,000 sh
Mezzanine Financing @TBD	TBD
Issued and Outstanding Post-Mezzanine	TBD
Post Money Valuation on Mezzanine Financing	TBD
*PROCEEDS OF THE MEZZANINE FINANCING WILL BE USED PRIMARILY FOR ENGINEERING AND PROFESSIONAL FEES	

# THANK YOU!



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