Company Overview
Joseph Phelan, Sales Account Executive

DISCUSSION TOPICS

I. LAVO Introduction

II. Technology Overview

III. Product Portfolio

IV. Q&A

LAVO INTRODUCTION

A world-first technology & lifestyle brand powered by hydrogen

Our mission is to **change the way people live with energy.**

LAVO™ is a **green energy technology & lifestyle company** powered by Hydrogen. Our brand honors Antoine Lavoisier the scientist who named Hydrogen.

Our aim is to **challenge convention** and **enable a meaningful change** in attitudes and behaviors around **sustainability** and the **democratisation of energy** to empower communities.

FIRST LAVO PRODUCT

True zero-emission, high-capacity energy storage

THE LAVO™ ENERGY STORAGE SYSTEM IS THE FIRST PRODUCT TO MARKET

The LAVO uses innovative, patented metal hydride to produce hybrid batteries that last three times longer than lithium batteries at a similar price, while also being energy efficient, carbon neutral, safe, non-flammable, and with all components able to be recycled

DESIGNED TO ACT AS A "SOLAR SPONGE"

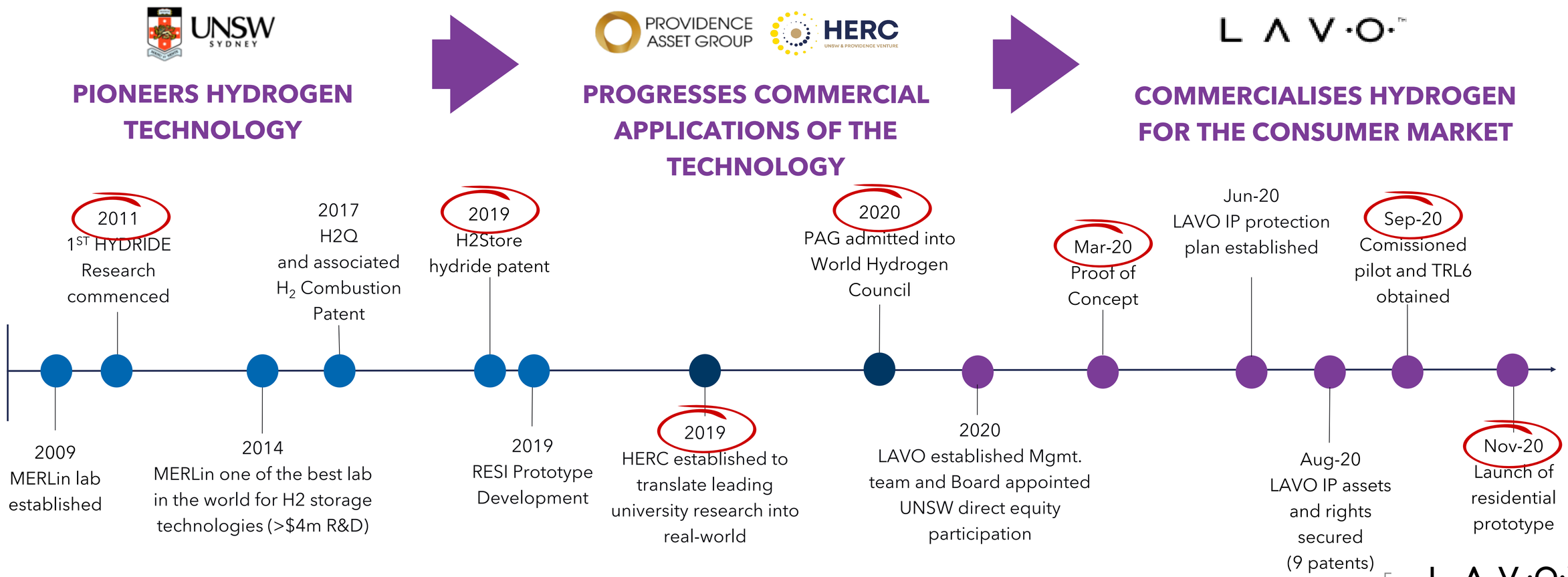
- Harnesses the energy generated from the **exponential growth in solar** installations
- **High Storage** Capacity - superior storage capacity 40kWh
- **Long Life** Span - 30 years
- **Sustainable** - lower environmental waste at the end of life
- Distills technology into **commercially feasible applications** across multiple use cases

RESIDENTIAL	TELCO TOWERS	COMMERCIAL	OFF-GRID/BACK UP DIESEL
~$500m	~$700m	~$1bn	~$350m

LAVO™

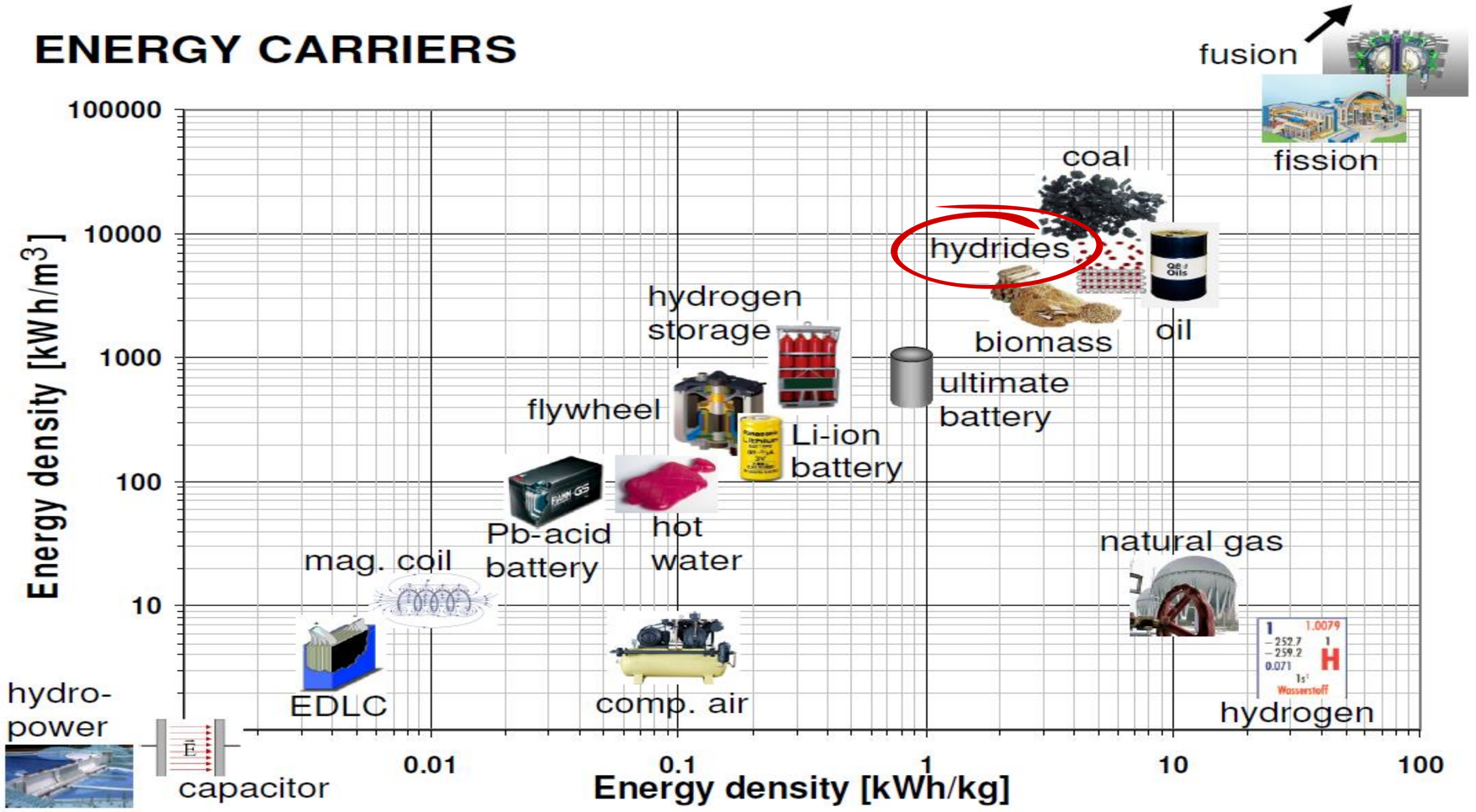
LAVO'S TECHNOLOGY – THE EVOLUTION

The world's first hydrogen energy storage system developed from Global Leading Research Pedigree



LAVO'S PATENTED HYDRIDE TECHNOLOGY

LAVO fills this gap between Batteries and traditional fossil fuels

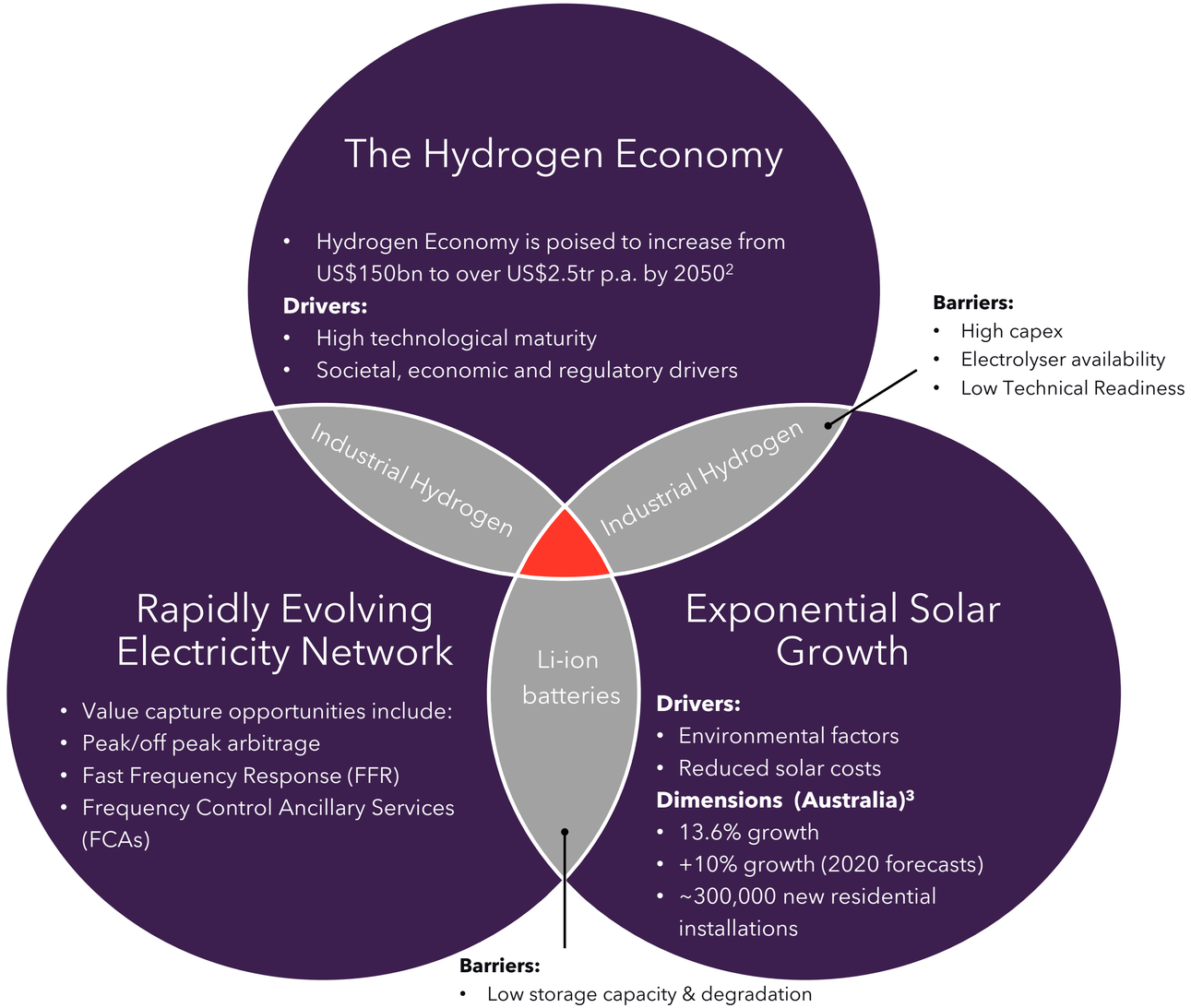


LAVO HYDRIDE COMPARED TO H^2 ALTERNATIVES

	LAVO HYDROGEN HYDRIDES	PRESSURISED HYDROGEN PATHWAY AT 700 BAR	LIQUIFIED HYDROGEN	THE AMMONIA PATHWAY	OTHER METAL HYDRIDES
SUSTAINABLE STORAGE SOLUTION	Metal alloys are non-toxic, 100% recyclable	High management and equipment cost	High management and equipment cost	Issues on generating hydrogen back	Rare metals, mass production and sustainability are issues
EFFICIENT STORAGE SOLUTION	20,000 charging/discharging cycles with very little losses in storage cycle	N/A	30% lost in transport	Low efficiency	1,000 charging/discharging cycles
ENERGY DENSITY	12.6MJ/L	5.6MJ/L	8.0MJ/L	15.6 MJ/L	Varies based on composition
LOW PRESSURE APPLICATION	30 bar	700 bar	N/A	N/A	Varies based on composition
SAFE STORAGE STATE	Metal self-regulates the rate of hydrogen release, room temperature	Extreme safety issues	Safety issues	Safety issues	Requires extra heat up to 350C to release hydrogen, e.g. for magnesium
CAPABLE OF DC SIDE INTEGRATION	Allows capture of renewable energy as DC electricity	N/A	N/A	N/A	N/A

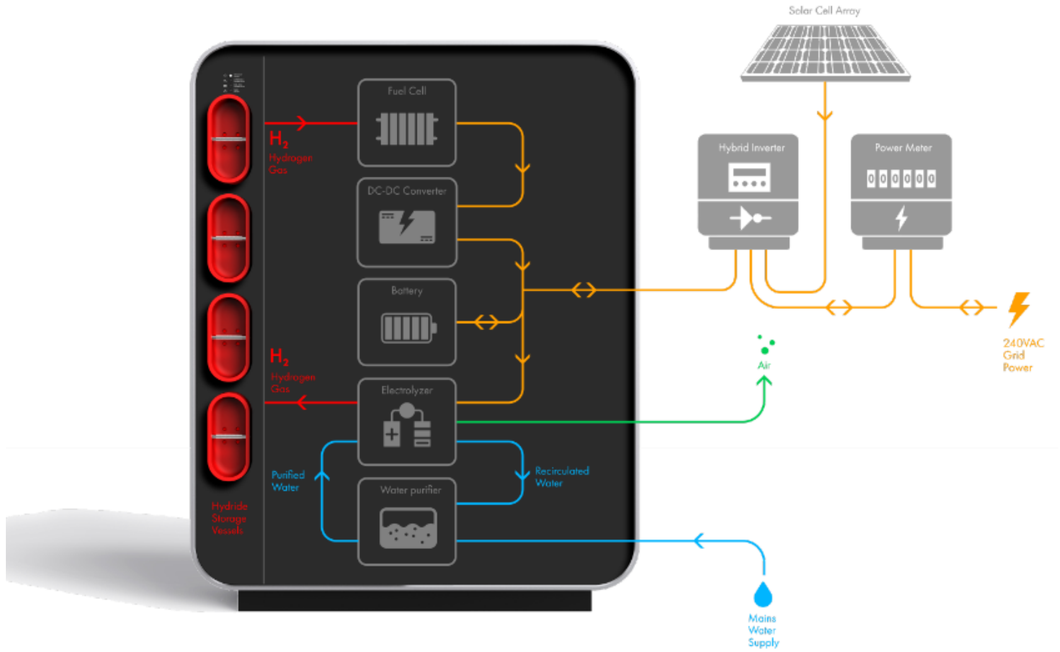
LAVO'S STRATEGIC POSITIONING

Macro Drivers



[1]See Appendix for underpinning assumptions
[2]**Source:** World Hydrogen Council "Hydrogen Scaling Up" 2017

HOW THE LAVO SYSTEM WORKS



LAVO INTEGRATES WITH STANDARD ROOFTOP SOLAR SYSTEMS.

1. **Acts as a "Solar Sponge"** to harness energy from renewable solar
2. **Convert Electrical Energy** through electrolysis
3. **Create Hydrogen** from water using an electrolyser
4. **Store Hydrogen** into a patented LAVO metal hydride
5. **Convert Hydrogen** to electricity via a fuel cell and discharges to the family home
6. **Control Safety**, operations and communications via digital control system

LAVO FUTURE PRODUCTS

With LAVO, the possibilities are endless

LAVO

World's first lifestyle and technology brand powered by hydrogen LAVO™ System, LAVO™ H2Q, LAVO™ E-Bike and any future lifestyle products, app (targeted **individuals, businesses and C+I applications**)

HEOS

Large Utility Scale - Containerized Metal Hydride Hydrogen Storage Solution as the enabler for community decarbonation & decentralized energy solution and also for future hydrogen export – target large utility and industrial users

FRANC

Intelligent **Centralised Asset Management System** as optimizer for the performance of generation and storage assets

PROTOTYPE 2 - **Large Scale Modular H_2 Energy Storage**

Suitable for integration into large scale solar and industrial installations, the LAVO | HEOS 20’ containers provide a scalable and transportable hydrogen storage solution.

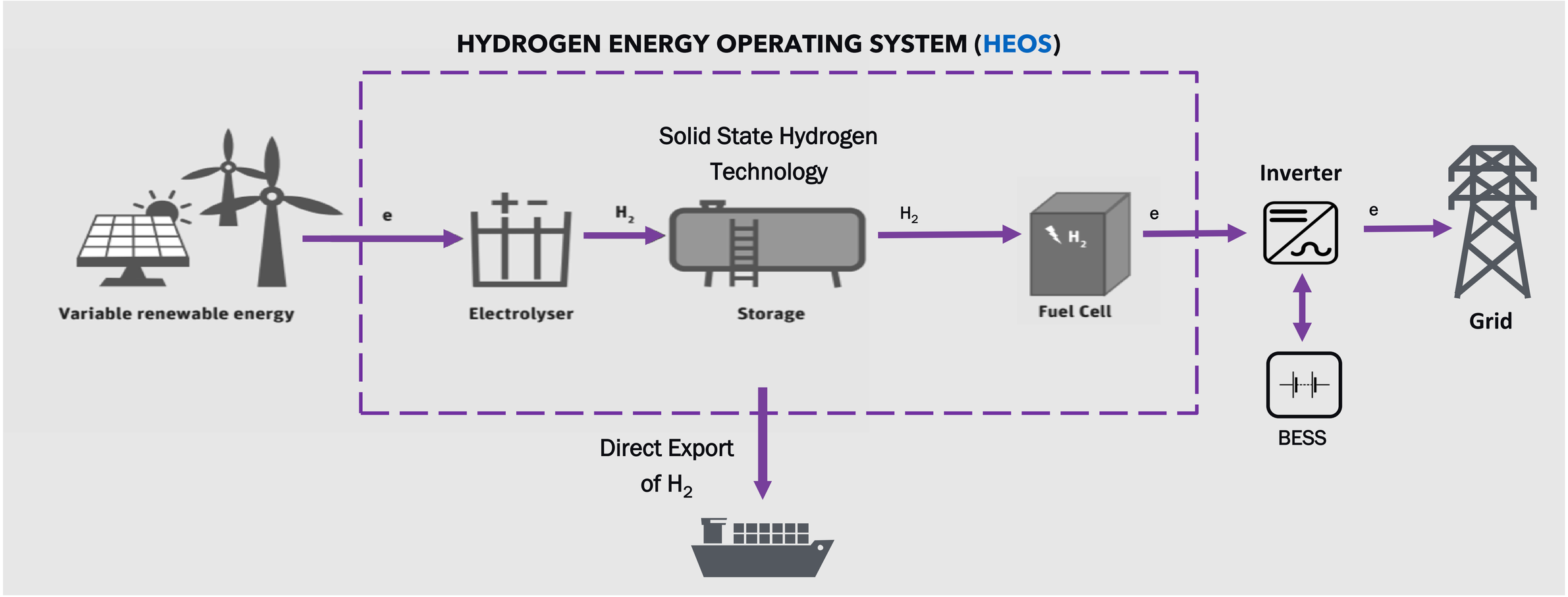
The LAVO | HEOS iso containers will integrate with 3rd party electrolyser and fuel cell modules, utilising the proprietary DC battery control system.

LAVO | HEOS 20’ CONTAINER – AN EXPORT READY STORAGE

- Full specification available
- Prototype will store 400kg, 13MWh(h)
- Operates at 30bar in room temperature range

LAVO | HEOS

The world's first green hydrogen generator and energy storage system at utility and community scale



LAVO | HEOS HYDRIDE

Summary highlights

- **Sustainable Storage Solution** – The metal alloys are non-toxic and can easily be recycled. This provides a significant sustainability solution over the likes of Li-ion.
- **Efficient Storage Solution** – Storage hydrides have 20,000 charging/discharging cycles with very little losses in storage cycle.
- **Enabler of Hydrogen Export** – H_2STORE vessels have an energy density of 12.6 MJ/L – compared to 5.6MJ/L for liquefied/compressed hydrogen – an increase over the current viable solutions.
- **Low Pressure Application** – Lower operating pressure (30bar vs 700bar). This removes technical issues such as pressure certification, testing and embrittlement.
- **Safe Storage State** – Metal self-regulates the rate of hydrogen release. This prevents a catastrophic release in the event of a vessel leak.
- **Capable of DC Side Integration** – Allows capture of renewable energy as DC electricity, including energy which would previously be lost. Provides cost reductions from duplication of inverters.
- **Pre-commercialisation costs are comparable with existing technologies** – Initial studies indication comparable life time costs with other battery technologies.

THANK YOU