



ASX Announcement

23 May 2025

GreenHy2 Limited | 2025 Annual General Meeting Chairman and Managing Director's Presentation

In accordance with ASX Listing Rule 3.13.3 please find attached the Chairman and Managing Director's Presentation to be made at the 2025 Annual General Meeting of GreenHy2 Limited (ASX: H2G, "GreenHy2") to be held on Friday 23 May 2025 at 11.00 am (Sydney time).

ENDS

This announcement had been authorised for release by the board.

FOR FURTHER INFORMATION PLEASE CONTACT:

Dr Paul Dagleish

Executive Chairman and Managing Director
T +61 2 8280 7355

William Howard

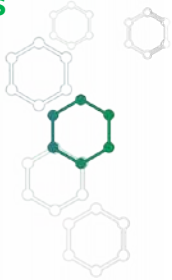
Executive Director, CFO, Company Secretary
T +61 2 8280 7355

ABOUT GREENHY2

GreenHy2 Limited (ASX:"H2G") is one of Australia's leading innovators in the delivery of engineering solutions for renewable energy. The company was established in 2011 and has specific expertise in renewable energy storage including Low Pressure and Solid State Hydrogen Storage, Supercapacitor Batteries, Electrolysers, Fuel Cells and associated equipment, digital interfaces and operation and maintenance support.



Graphene Supercapacitor Batteries
- Beyond Batteries



Highway to Green



**GreenHy2
2025**

**H2G
Highway to Green
Beyond Batteries**

www.greenhy2.com.au

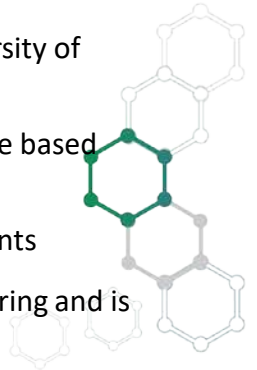


Overview – The Future of Batteries

H2G has continued to pursue the latest in technology for the long-term solution to Renewable Energy Storage

In 2024 we began negotiating a technology offering that we believe will lead the industry for the foreseeable future. In early 2025 we announced

- Broadened our technology Offering from Hydrogen to now include multiple Graphene based Hybrid Supercapacitor Battery solutions for a broad range of applications
- Initiated testing of our first Graphene based Supercapacitor Batteries in conjunction with the University of NSW
- Negotiated multiple technology agreements to ensure we have access to the worlds latest Graphene based Supercapacitor Batteries, Hybrid Batteries, Products and Battery Cells for the future
- Introduced this new technology to our leading Australian Customers and offered joint trial agreements
- Negotiated a new Hydrogen Battery technology deal that is over 50% cheaper than our original offering and is currently being implemented on our Telstra Project



Company Snapshot FY24

ASX Ticker	H2G
Shares on Issue	598M
Market Cap	\$6.5M ¹
Cash @ Bank	~\$1.0M
Debt	Nil
Orders FY24	\$1.5M ↑ 300%

Capital Raising

Share Placement Net Proceeds - \$ 1,076,570
Includes Underwriting of \$300k
Completed April 2024

R&D Tax Incentive

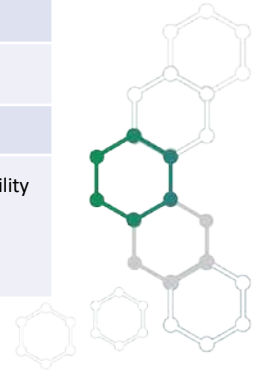
Total Received to date ~\$1,633k
FY24 Received on Account April '25 \$273k
Final Total for FY24 ~ \$342k





Highway to Green



Highlights

Business Activity	Achievement	Comment
Current Enquiries and marketing	Receiving 10 Active enquiries/month	Market Momentum has significantly increased in CY24
Successful Capital Raising	\$1.1M	Partially Underwritten
Leading Edge Digital Presence	Website	Name and Brand targeted at clean energy and new technology
R&D Tax Support	~\$1350k	Secured third round of R&D Tax Incentives
Reduced Operating Costs	Now \$100k/month	Significant Reduction in operating Cost
Tenders Submitted	Over \$100M	Market is actively assessing the Battery Technology
Cutler's Cottage Demonstration Trial	>12 months of Operation	Received formal trial completion from EE with 100% Availability and Reliability In discussions regarding larger roll out



Customer		Opportunity	Status of engagement
	Telstra	<ul style="list-style-type: none"> Partnered with H2G to trial fully redundant system for telecommunications System is 48-50VDC Applicable to all Telecoms for both Mobile and Fibre Optic Repeater Stations Telecoms Diesel Replacement 	<ul style="list-style-type: none"> Committed \$1.5M to Project TDRIP Awarded \$1.5M matching Grant Project Delivery on time and under budget Using newly negotiated Hydrogen Battery Technology Discussing trialling New Supercapacitor Based Battery Technology
	Essential Energy	<ul style="list-style-type: none"> Completed 12 Month Performance Trial with 100% Availability and Reliability Provided 100% Renewable Fraction Year round No Diesel Required 	<ul style="list-style-type: none"> Successfully Completed Trial of System Working on new 10-unit project H2G have access to current SAPs program (approx. 300) SAPs Program based on price competitive 40 Year NPV
	Horizon Power	<ul style="list-style-type: none"> 57,000 Customers heavily supported by microgrids and diesel power stations Future Investment if converted to SPSs > \$20B 	<ul style="list-style-type: none"> Notified Preferred on micro grid project Project around \$15M however now not proceeding in current format following state election Proposing alternated Supercapacitor Based Battery Solution for Indigenous Communities diesel replacement
	FIJI Ministry of Energy	<ul style="list-style-type: none"> Major Diesel Replacement Programs Fiji Rural Electrification Program (FREF) for Remote Villages without Power Significant number of Exclusive Islands reliant on Diesel Interest from Islands such as Momo 	<ul style="list-style-type: none"> FREF have funding for Solar Battery Installations Failed Li Ion Projects due to thermal runaway and fire Tendered Namara Village on Kadavu Island with Supercapacitor Based Solution Large Scale Funding from EU, AusAid, ADB, WB etc.

Global Battery Market

The global Battery Market is extensive and conservatively estimated at over US\$100B annually in 2024 growing to over US\$500B by around 2030¹.

Ref1 The global battery market is experiencing significant growth, with projections indicating a substantial increase in market size. In 2023, the market was valued at \$121.94 billion, and is expected to reach \$581.35 billion by 2032, [according to Fortune Business Insights](#). GlobeNewswire Reports suggest the market was worth \$144.3 billion in 2024 and will reach \$322.2 billion by 2030. A third source estimates the market to grow from \$112 billion in 2021 to \$424 billion by 2030

Highway to Green 



Australian Battery Market

In Australia the market is currently over A\$2B annually² and is expected to grow to over A\$3B/annum by 2030, This will be amplified with the Government led **Battery Breakthrough Initiative**. In the 2024-2025 Federal Budget, the Australian Government announced the Battery Breakthrough Initiative with \$500 million of funding to promote the development of battery manufacturing capabilities in Australia.

Ref² The Australia battery market, valued at AUD 2.31 billion in 2024, has seen significant growth, driven by the role of battery storage in integrating renewable energy sources like solar and wind. The market is expected to grow at a compound annual growth rate (CAGR) of 9.70% from 2025 to 2034, potentially reaching AUD 5.83 billion by 2034. Expert Market Research, **Australia Battery Market Size, Share Analysis and Forecast Report (2025-2034)**

Highway to Green 



Australian Battery Market

The CSIRO has forecasted that Australia will need an extra 11 GW to 14 GW of energy storage capacity by 2030 to achieve its renewable energy targets. This represent around \$5.5B - \$7B in battery increased spending over current forecasts if we are to achieve our goals.

Local Market includes

- Household Batteries predominately connected to rooftop solar ~\$1B/annum
- Microgrid Solar and Standalone Power Supplies ~\$40B over the next 10 years
- Data Centres ~\$1B/annum
- Transport, including boat and road, ~\$20B over five years (currently CATL, Tesla & BYD)



Battery Technology

Advances in Hybrid and Supercapacitors Batteries are outstripping those in lithium-ion and other battery chemistries and have led to improved safety, efficiency, storage capacity, and lifespan. Manufacturers are concentrating on reducing costs, increasing energy density, and extending charging and discharging cycles, which makes energy storage systems more cost-effective and efficient. Furthermore, progress in Graphene based Supercapacitors and some solid-state batteries, using next-generation technologies, has improved both performance and safety.

Highway to Green 



Advantages of new Battery Technology

Combines all the Advantages of Li Ion and Hydrogen in the one Technology

Advantages of Hybrid and Supercapacitor based batteries

- Cells have 500,000 – 1M Cycles increasing battery life >10 fold
- Significantly improved safety as no Thermal Runaway or uncontrollable fires
- 100% DoD, so 100% of battery is useable
- No charge degradation over time
- Higher round trip efficiency >99%
- Temperature range from -30 Deg C to +70 deg C, so no airconditioning required
- Low capital cost and no maintenance cost
- No mid term replacement cost as batteries last the life of the facility or solar installation
- High Power Density so very fast reacting and suitable for UPS or Data Centres
- Graphene Based Batteries use Carbon and are truly Decarbonising technology
- Graphene based Batteries are 100% recyclable



New Products – BESS for Micro Grid Solution

Battery Energy Storage System

- Standalone Micro-grid
- In-Grid Support
- Diesel Replacement
- SAPs



PACK is containerized solutions are designed for large scale storage applications. PACK systems are integrated and modular with in-built PCS, transformers and switchgear, safeties and storage. Built in IP67 rated enclosures. With no risk of thermal runaway and no cyclical degradation, no thermal management and longer life than Li Ion systems, Enpack solutions deliver the lowest LCOE in the industry.

Key Features:

100% Depth of Discharge	99.1% Round Trip Efficiency (at cell level)	500,000 Life Cycles (at cell level)
10 Years Warranty*	Remote Monitoring	-30°C to +70°C Operating Temperature
No Degradation*	No Thermal Runaway Risk	Multiple Cycles Per Day Capability
	Up to 4.2MWH in a 40ft Container	

Applications:



Emergency Backup



Industrial



Data Center



Telecom

*Conditions Apply

Highway to Green



New Products – Telecomms and Data Centres

Battery Energy Storage System

- Telecommunications
 - a) Mobile Towers
 - b) Fibre Repeater Stations
 - c) Exchanges
 - d) Diesel Replacement

- Data Centres
 - a) Short and Long Term Back-up
 - b) UPS



H2G
GreenHy2
BEYOND BATTERIES

8kWh - 48V

Specially designed for the Telecom sector, H2G's Micro storage, with its multiple cycling capability, degradation-free performance, and long cycle life, is the telecom industry's go to storage solution, delivering the best performance at the lowest cost in the industry for BTS, data centre, and fixed-line network applications.

Key Features:

100% Depth of Discharge	>95% Round Trip Efficiency (at cell level)	500,000 Life Cycles (at cell level)
10 Years Warranty*	No Degradation*	-30°C- to +70°C Operating Temperature
No Touch Screen	Safety FUSE/MCB	No thermal Runaway Risk
Remote Monitoring	Communication CANBUS (with Enclosure Device)	Multiple Cycles Per Day Capability
Applications:		
Connect in in series or Parallel		

 Telecom Backup

 Data Center

 DC Exchange

 Industrial

 Solar+Storage

*Conditions Apply

Highway to Green



New Products – Home Solar

Battery Energy Storage System

- Home Solar



BEYOND BATTERIES

WALL is the safest, smartest and most economical residential storage product on the market. It is plug-and-play, AC ready, with simplified connections to your PV panels, Grid and/ or Diesel Generator. No need to spend on "extras". It is fully programmable and can manage your energy sources to reduce your utility bill.

Available Configuration: Single and Three Phase; Storage - 5kWh, 10kWh, 20kWh;
Inverter - 3kW, 5kW, 10kW

Key Features:

100% Depth of Discharge	99.1% Round Trip Efficiency (at cell level)	500,000 Life Cycles (at cell level)
10 Years Warranty*	Zero Degradation*	-30°C~ to +70°C Operating Temperature
Monitor and Control Through Mobile	Sleek and Compact Design	OLED Touch Screen

Applications:



Highway to Green



*Conditions Apply

New Products – Industrial and Commercial

Battery Energy Storage System

- Industrial Storage
- Data Centres



H2GRACK
BEYOND BATTERIES

H2G's rack system is a structured arrangement designed to securely hold and organize multiple energy storage module (Rack Mount System) in a specific configuration. It provides a framework or support structure for storing energy storage, typically used in various applications such as power backup systems, renewable energy storage, data center, and industrial settings. Primary purpose of H2G's rack system is to ensure safe storage, easy access, and efficient utilization of energy storage while optimizing space and facilitating maintenance and monitoring.

Available Configuration: Capacity: 20kWh, 30kWh, 40kWh, 80kWh, 100kWh, 200kWh, +More
Voltage: 48V, 96V, 192V, 240V, 384V, 2000V, +More

Key Features:

100%
Depth of Discharge

10
Years Warranty*

No
Degradation*

99.1%
Round Trip Efficiency (at cell level)

Fast
Charging

No Thermal
Runaway Risk

500,000
Life Cycles (at cell level)

-30°C to +70°C
Operating Temperature

Multiple Cycles
Per Day Capability

Applications:



Emergency
Backup



Industrial



Data Center



Telecom

Highway to Green



New Products – Car Charging

Battery Energy Storage System

- Car Charging



H2G CHARGE

Our new ultra super-fast DC Charger, H2G Charge provides hassle free and cost-efficient charging with modular, upgradeable storage and smart charging features. H2G Charge helps you optimize cost by storing energy from the grid at off peak hours, upgrade options, multiple EV to charge at the same time. 'Trickle' charge from the grid or any source at any speed.

Available Configuration: 120kW, 180kW, 360kW

Key Features:

IP64 Water Proof	OLED Touch Screen	0 - 200Ah Output Current
200V - 1000V DC Output Voltage	3 Phase 380 + 15%	Two Charging Nozzle
4G / Wi-Fi Communication	Mobile Application	RFID / Password Start Charging
-30°C to 60°C Operating temperature	Auto Short Circuit Protection	Hybrid Charging Mode Options
Scalable Reservoir	Smart Charging Features	Standalone Separate Dispensers

*Conditions Apply

Highway to Green



H2G
GreenHy2



Digital Control and Battery Management System

Battery Energy Storage System

- Digital Control
- Battery Management System



H2GControl is a monitoring and Control device designed to work alongside all Products

H2GControl Connects Via Canbus and has the option of communicating externally via Wifi or Bluetooth. With Encontrol you can Monitor Streetlights down to call level, state of charge, round tip amongst others and also adjust settings and activate alarms.

Key Features:

3.5 Inch LCD Screen Size	USB Wired Technology	4MB Flash Memory
3.3V, 5V Voltage	LED Touch Screen	8MB External Ram
USB-C Connector	Bluetooth, WIFI Wireless Technology	-20 to + 85°C Operating Temperature

Applications:



*Conditions Apply

Highway to Green





Contact

Dr Paul Dalglish
Executive Chairman and Managing

Director

Email: shareholders@greenhy2.com.au

Highway to **Green**



QUESTIONS & ANSWERS

www.greenhy2.com.au