



Hydrogen Park Murray Valley

APGA Renewable Gas Symposium
22 February 2024



Disclaimer

The views expressed herein are not necessarily the views of the Australian Government or the Victorian Government, and neither the Australian Government nor the Victorian Government accept responsibility for any information or advice contained herein

Our Business

One of the largest gas infrastructure businesses in Australia

Diversification provides opportunities, but also adds complexity

>2.1m
customers

611PJ
gas delivered

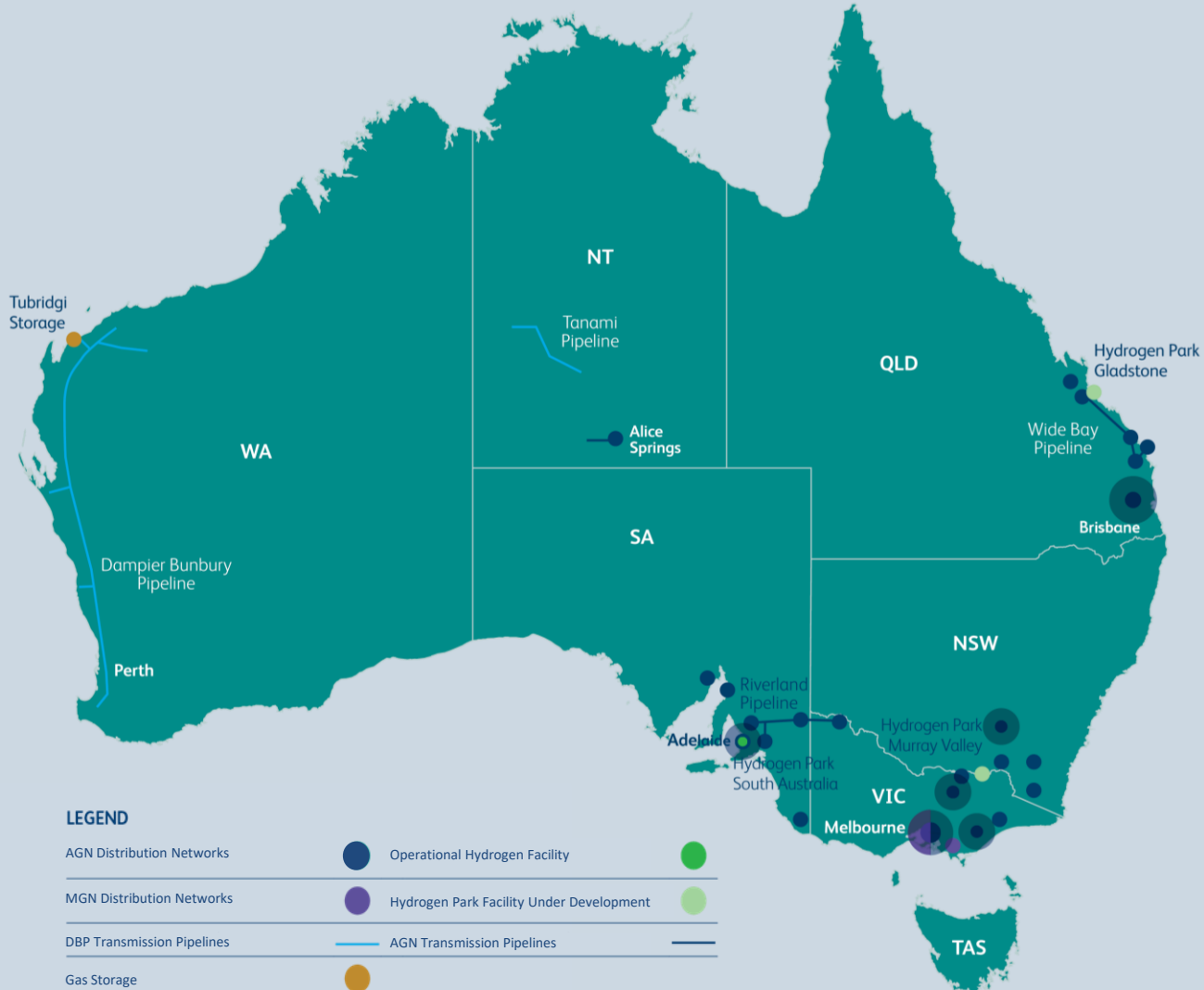
4,316km
transmission

35,785km
distribution

60PJ
gas storage

1.25MW
electrolysis

As at 31 December 2023



Our Low Carbon Vision

Delivering for customers through the transition, we publicly state our ambition to be net-zero by 2050, with interim Scope 1 and 2 emissions targets

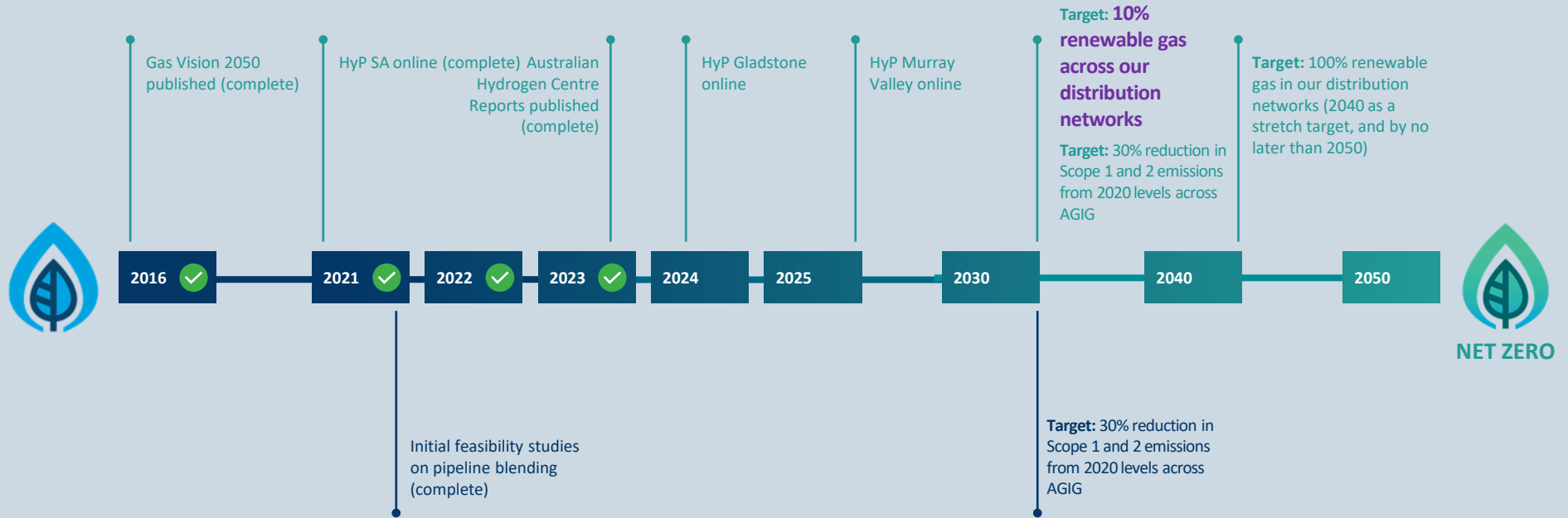
Distribution Assets

100% renewable gas by no later than 2050, and by 2040 as a stretch

Signatories to the:



Reporting performance through our ESG Report:



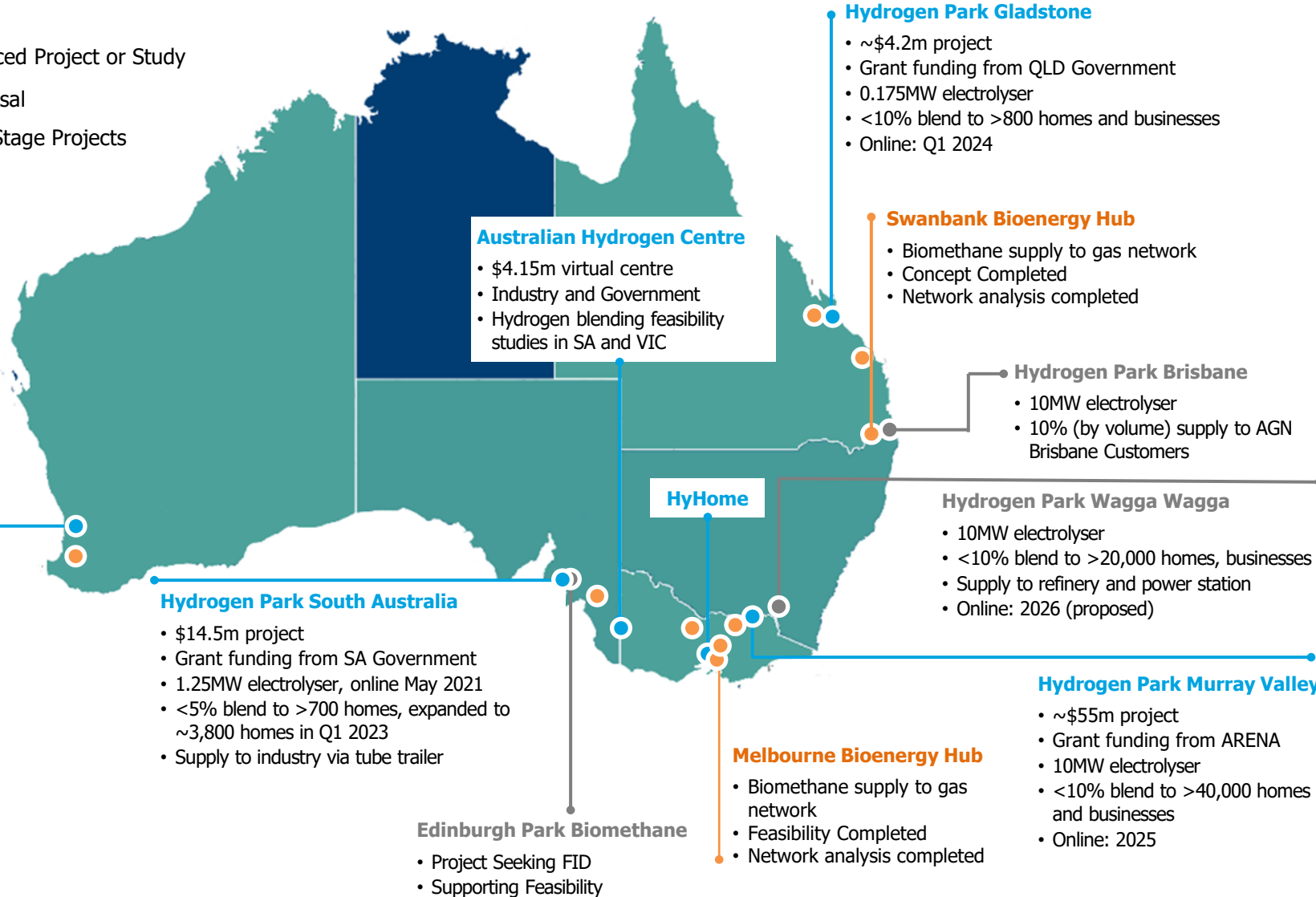
Transmission and Midstream Assets

We will continue developing infrastructure solutions for our customers, targeting net-zero by 2050

Delivering our Low Carbon Vision

A snapshot of our most advanced projects

- Operational/Advanced Project or Study
- Earlier Stage Proposal
- Biomethane Early Stage Projects



- Industry memberships:**
- Hydrogen Council
 - Bioenergy Australia
 - Future Fuels Cooperative Research Centre
 - SA H2H Hydrogen Cluster
 - Clean Energy Council
 - Energy Transition Initiative
 - Australian Pipeline and Gas Association
 - Energy Networks Australia
 - Australian Hydrogen Council

Hydrogen Park South Australia | We are Delivering

Delivered a platform for scaling up




 Online May 2021, 1.25 megawatt (Australia's largest electrolyser)

 100% renewable H₂ supply to industry via tube trailer

 Refuelling opportunities

 Up to 5% renewable H₂ blend to >700 homes*

 Expanded to ~3,800 homes, schools and businesses in 2023 (10% blend)

 Significant engagement, >3,000 visitors to site

More information on [HyP SA](#)



A \$14.5m project enabled by a \$4.9m grant from the South Australian Government Renewable Technology Fund

* AGIG purchases GreenPower Large Scale Generation Certificates which are surrendered as required to ensure the electricity used to produce hydrogen is renewable

Hydrogen Park Murray Valley | Overview



Achieved a positive FID in March 2023, with Financial Close 9 June 2023

Commercial operations in 2025



10 MW renewable hydrogen production facility, ~950 kg, 200 bar storage



Co-location with North East Water's wastewater treatment facility – assessing synergy options



Refuelling opportunities: Melbourne to Sydney



Up to 10% renewable H₂ blend to >40,000 homes and businesses



Supporting industry to decarbonise (Mars Petcare as foundation customer)



Highly engaged and supportive community

More information on [HyP Murray Valley](#)

Hydrogen Park Murray Valley | What it took to achieve FID

Navigated project development through the unprecedented energy market turmoil (mid-2022)

Location	<p>It's all about the location – picked the right location – “location location location”</p> <p>Access to water, gas network, electricity grid, favourable development overlay, transport routes</p>
Gas Market	<p>Pursued significant rule/market changes to enable distributed gas injections into the DWGM</p>
End-use Appliances/ Applications	<p>Extensive testing on Type A appliances (with FFCRC and University of Adelaide). Consultation with all large customers (Type B applications)</p> <p>Extensive engagement with technical / safety regulators</p>
Customer for Renewable Gas	<p>Mars Petcare (factory in Wodonga) as first customer for Renewable Gas Guarantee of Origin Certificates</p>
Customer, Community and Stakeholders	<p>Extensive, but fit for purpose community and stakeholder consultation</p>

HyP Murray Valley | Stakeholder and Community Engagement

Community and stakeholder engagement has been a key focus area

- Project was launched to the broader community in November 2021 (letterbox drop to all 40,000 customers)
- Engaged extensively with key stakeholders
 - North East Water
 - Technical regulators (ESV, DPIE)
 - Council
 - Government (local, state and federal)
 - Cross Border Commissioners
 - Landowners
 - Community groups (Rotary, Probus, Lions Club, knitting nannas, etc)
 - Vic Roads
 - AusNet
 - Type B appliance owners
 - Business Groups: Albury Business Connect, Business Wodonga
 - Focus Groups with the community from October 2021

Extensive
community
engagement over
the two year
development period

Hydrogen Park Murray Valley | What it Took to Achieve FID

Navigated project development through the unprecedented energy market turmoil (mid-2022)

Offtake Agreement	The first renewable hydrogen sales and purchase agreement
Electrolyser Supplier	Danced with more than four electrolyser suppliers over three years – extremely painful Now with LONGi Hydrogen – good collaboration and compliance with Australian Standards
Procuring Renewable Power and Optimising Cost	Almost derailed the project (remember the energy crises), but managed to contract Developed operating protocol to manage risk and lower cost
Grid Connection	It's never easy – always hard and slow and expensive – overhead across the Hume Highway But contracts in place
Development Approvals	Secured DA from Wodonga Council - extensive consultation and transparent process

Key Takeaways

- Committed leadership – CEO sponsorship
- Requires resilience – financial capacity to stay the course
- Innovation is key to success – lots of market, policy and customer barriers to overcome
- Deep understanding of the renewable electricity sector and players
- Choose the right technology partner – do your due diligence (not rely on presentations)
- Clear pathway to revenue and customer value
- Ability to take measured risk – this is not a “regulated investment”
- Understanding of “long lead items” – electricity connection, market / policy changes
- Don’t go too big too fast – from 10MW to 500MW in measured steps
- Right team – must have fun along the way

You can either
watch it happen or
be part of it



Australian Gas
Infrastructure Group

Back Cover Image: Hydrogen Park South Australia

Front Cover Image: Community artwork in Mitchell Park, commemorating their place in the energy transition and being the first in Australia to receive a 5% renewable hydrogen blend