



6 May 2022

ASX ANNOUNCEMENT

**APA Group (ASX: APA)**

## **APA 2022 Investor Morning**

### **Responsibly Transitioning Energy**

APA Group (ASX: APA) today provides the attached presentations from APA Group's management team in relation to its 2022 Investor Morning.

The Investor Morning will be [webcast](#) live at 9:00am (Sydney time) today, Friday 6 May 2022. A replay of the webcast will be made available on APA's website to view on demand for those unable to attend the live webcast.

Further details are available on APA's website in the [investor reports and presentation section](#).

Authorised for release by Amanda Cheney

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#### **About APA Group (APA)**

APA is a leading Australian Securities Exchange (ASX) listed energy infrastructure business. We own and/or manage and operate a diverse, \$22 billion portfolio of gas, electricity, solar and wind assets. Consistent with our purpose to strengthen communities through responsible energy, we deliver approximately half of the nation's gas usage and connect Victoria with South Australia and New South Wales with Queensland through our investments in electricity transmission assets. We are also one of the largest owners and operators of renewable power generation assets in Australia, with wind and solar projects across the country.

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APA Investor Morning  
6 May 2022

Responsibly  
transitioning energy

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**Acknowledgement:** Certain icons used in the presentation were designed by Freepik, Icongreek26, Nikita Golubev, Eucalypt and Srip from Flaticon.

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# Welcome



***In the spirit of reconciliation APA acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea and community.***

***We pay our respects to their elders past and present, and extend that respect to all Aboriginal and Torres Strait Islander Peoples today.***

# Agenda: Responsibly transitioning energy

## Session 1

### 1. The energy transition (30 mins)

**Rob Wheals, Chief Executive Officer**

The energy sector must decarbonise

- Path to net zero is not clear but transition needs to be orderly
- The rise of new energy technologies creates opportunities in electricity transmission, renewable microgrids and hydrogen
- Gas has a critical role to play

### 2. Aurora (30 mins)

**Hugo Batten, Managing Director, Aurora Energy Research**

Our future electricity generation mix

### 3. Moderated Panel (30 mins)

**Kynwynn Strong, General Manager Investor Relations**

- Panel discussion  
Hugo Batten, Aurora Energy Research  
David Ogilvy, L.E.K. Consulting

## Morning Tea Break

## Session 2

### 4. APA's investment considerations (20 mins)

**Adam Watson, Chief Financial Officer**

- Capital allocation framework
- Investing for sustainable growth

### 5. ESG – Video (10 mins)

- Introduction by Rob Wheals
- Video showcasing APA's progress with its ESG ambitions

### 6. Moderated Panel (40 mins)

**Ben Pratt, General Manager Corporate Affairs**

- Panel discussion – APA Senior Leaders

### 7. Wrap up – (5 mins)

**Rob Wheals, Chief Executive Officer**

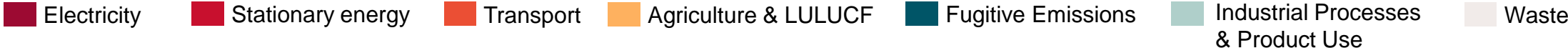
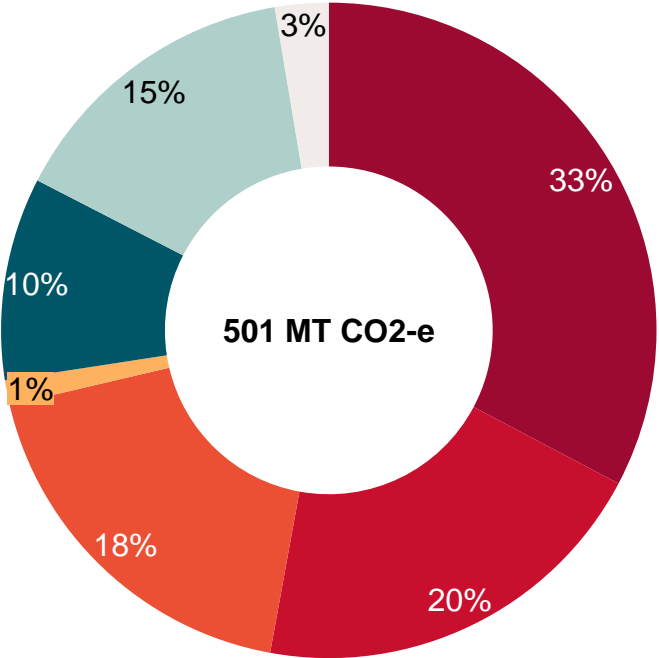
# Rob Wheals

CEO & Managing Director

## The energy transition

# Australia's energy sector must decarbonise to support its ambition to achieve net zero

Australia's emissions in 2021 by sector<sup>(1)</sup>

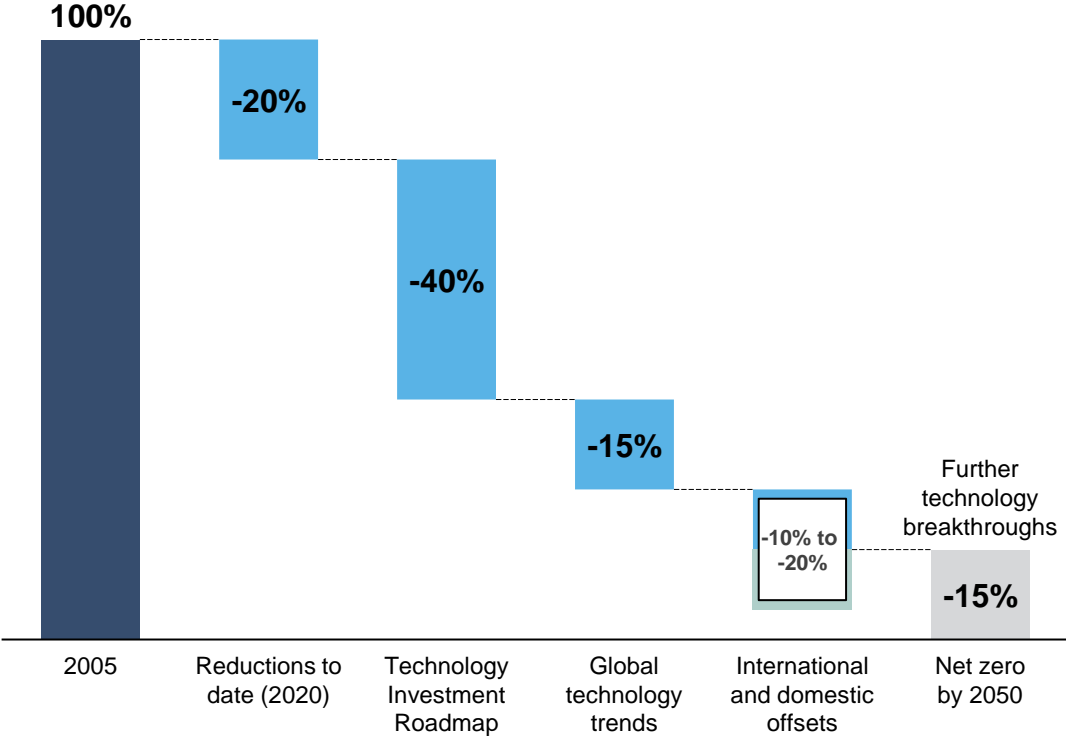


1. Source: Department of Industry, Science, Energy and Resource; Australia's emissions projections 2021.



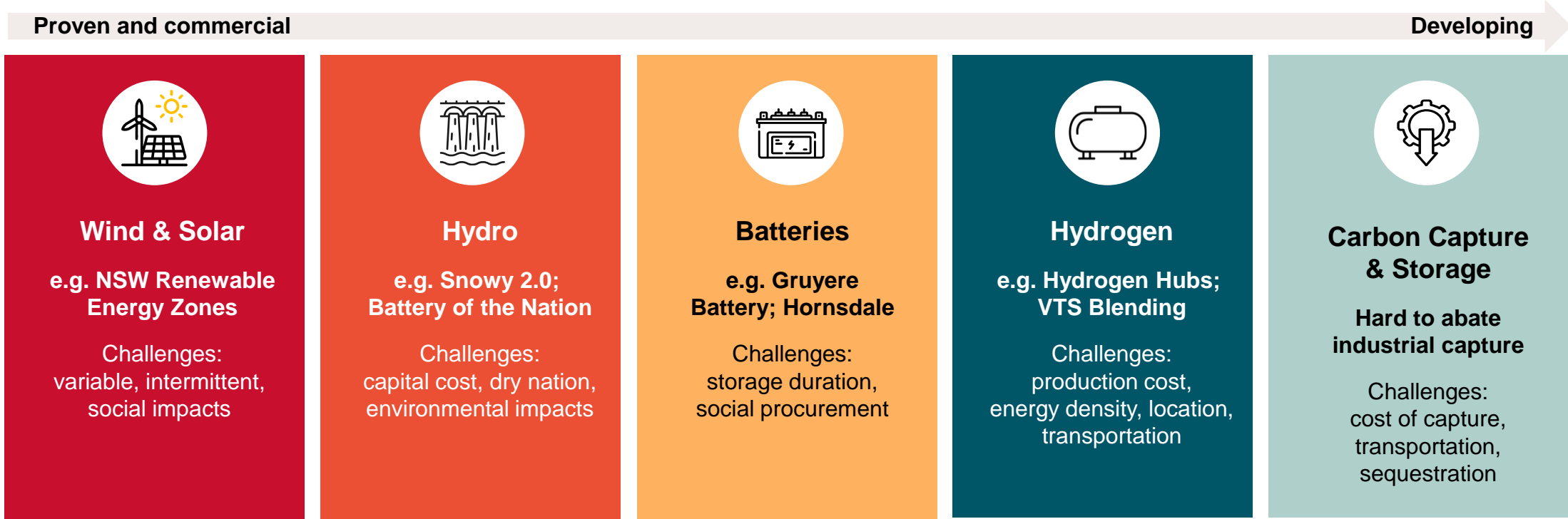
# The path to net zero is uncertain with current plans dependent on new, often unproven energy technologies

Government’s priority low emission technologies for Australia to achieve net zero emissions (by technology contribution)<sup>(1)</sup>



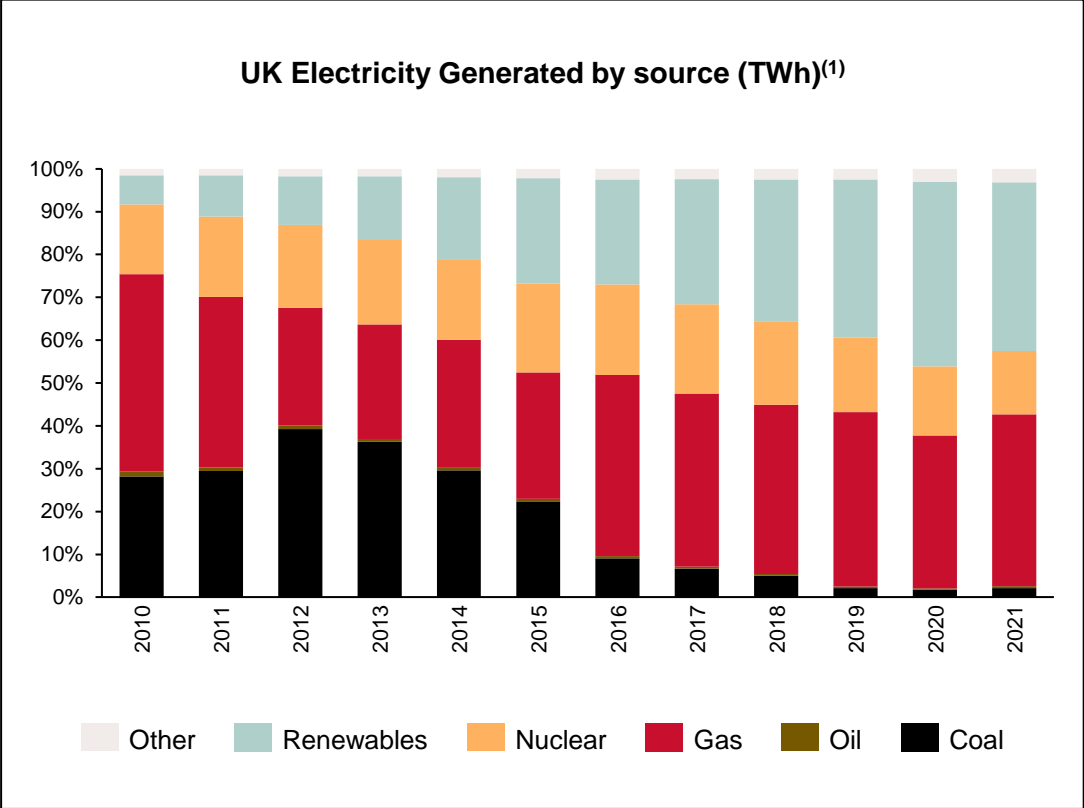
1. Source: Australian Govt, A Whole-of-economy Plan to achieve net zero emissions by 2050; Based on McKinsey and DISER analysis. \*Sources of offsets include voluntary soil carbon of up to 20% depending on cost reductions in technology and voluntary demand.

# Multiple technologies are being progressed and explored to support a lower carbon future




**Gas as the foundation energy source**  
Underwrites energy transition: secure, reliable, affordable  
Challenges: requires offsets to get to net zero

# The transition needs to balance security, reliability and affordability as the recent experience in the UK highlights (case study)



### UK generation mix<sup>(1)</sup>

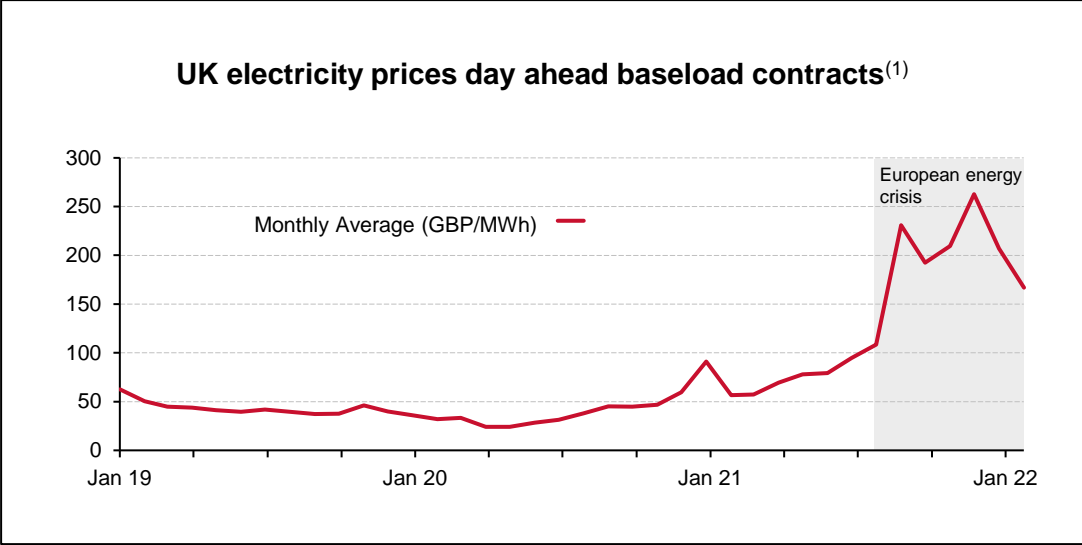
- Coal and nuclear have declined
- Renewables have increased; now ~40%

### Recent challenges<sup>(1,2,3)</sup>

- Renewable ‘drought’ with low wind and solar generation
- Nuclear plant outages
- Coal response limited as only three plants remain operational
- Gas generation increased 11% on CY20 but limited by low domestic gas production and storage and low European storage levels
- Market required significant increase in electricity and gas imports to meet demand

1. Energy Trends: UK electricity, Fuel used in electricity generation and electricity supplied (ET 5.1 Mar 22) - GOV.UK; 2021 data is provisional. 2. ofgem.gov.uk, Energy and Data Research, Data Portal, Wholesale market indicators. 3. Energy Trends: March 2022, Department of Business, Energy & Industrial Strategy – GOV.UK

# A disorderly energy transition without appropriate firming can result in significant energy price increases (case study)



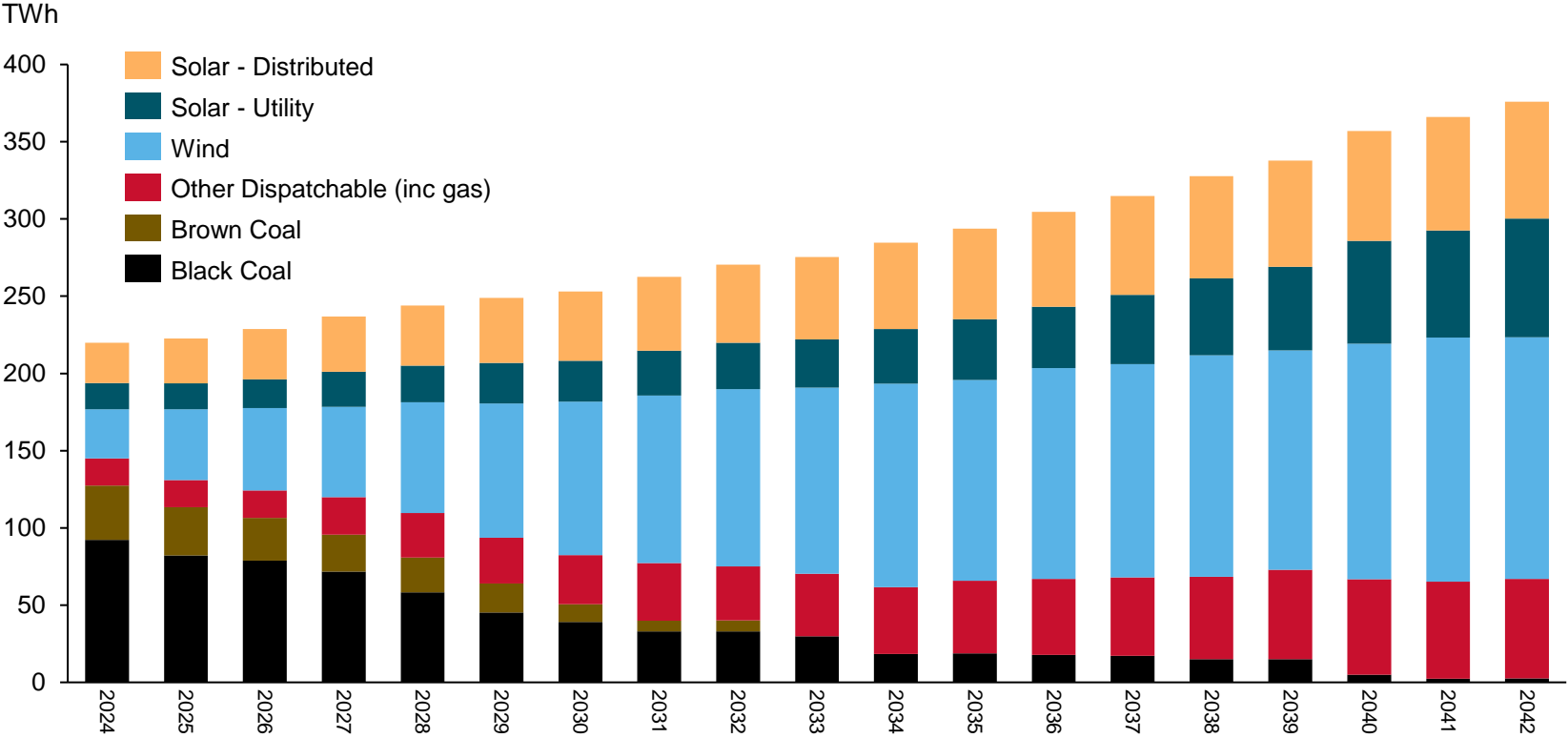
### Consequences

- Wholesale electricity and gas prices have increased by ~3x and ~4x respectively over the last 12 months<sup>(1)</sup>
- Wholesale electricity prices more than doubled in the 12 months prior to the European energy crisis
- Suppliers under significant pressure; 29 suppliers servicing 4.3m households have exited the market or been put in administration since January 2021<sup>(2)</sup>
- Households experiencing 'fuel stress' could triple<sup>(3)</sup>
- The UK is now looking to become more self sufficient in gas<sup>(4)</sup>

1. ofgem.gov.uk, Energy and Data Research, Data Portal, Wholesale market indicators. 2. ofgem.gov.uk, News and Views, Press releases, "Price cap to increase by £693 from April", 3 February 2022. 3. Resolution Foundation. "Higher and Higher, Averting a looming energy bill crisis." 17 Jan 2022. 4. Policy Paper, British energy security strategy, 7 April 2022, GOV.UK.

# Australia's energy transition is underway: coal exiting; renewable generation growing; developing gas resources to ensure affordable security of supply

National Energy Market Generation mix – ISP Step Change<sup>(1)</sup>



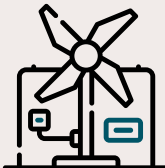
1. Source: AEMO, Draft ISP, Step Change CDP8 (dispatchable excludes DSP)

# Australia is well positioned for an orderly transition given our excellent resource base



## Gas resources

25+ years of resource at current production levels



## Wind resources

Attractive resources for both onshore and offshore wind

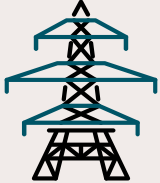


## Solar resources

Highest solar radiation per m<sup>2</sup> of any continent

Source: [https://www.industry.gov.au/sites/default/files/October%202021/document/australias\\_emissions\\_projections\\_2021\\_0.pdf](https://www.industry.gov.au/sites/default/files/October%202021/document/australias_emissions_projections_2021_0.pdf) and <https://www.cleanenergycouncil.org.au/resources/project-tracker>

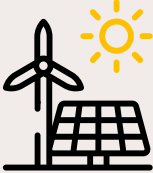
# The energy transition presents multiple opportunities for APA given our expertise and experience in operating and developing energy infrastructure



Regulated/contracted electricity Infrastructure

## Electrification

NSW Renewable Energy Zones (REZ)  
Basslink



Renewables & Firming

## Renewables

Mica Creek Solar Farm  
Gruyere Solar Farm and Battery Storage



Hydrogen

## Hydrogen

Parmelia Gas Pipeline  
Hydrogen feasibility for VTS  
Central Qld Hydrogen Project  
Mid-West Blue Hydrogen



Regulated/contracted gas infrastructure

## Gas Infrastructure

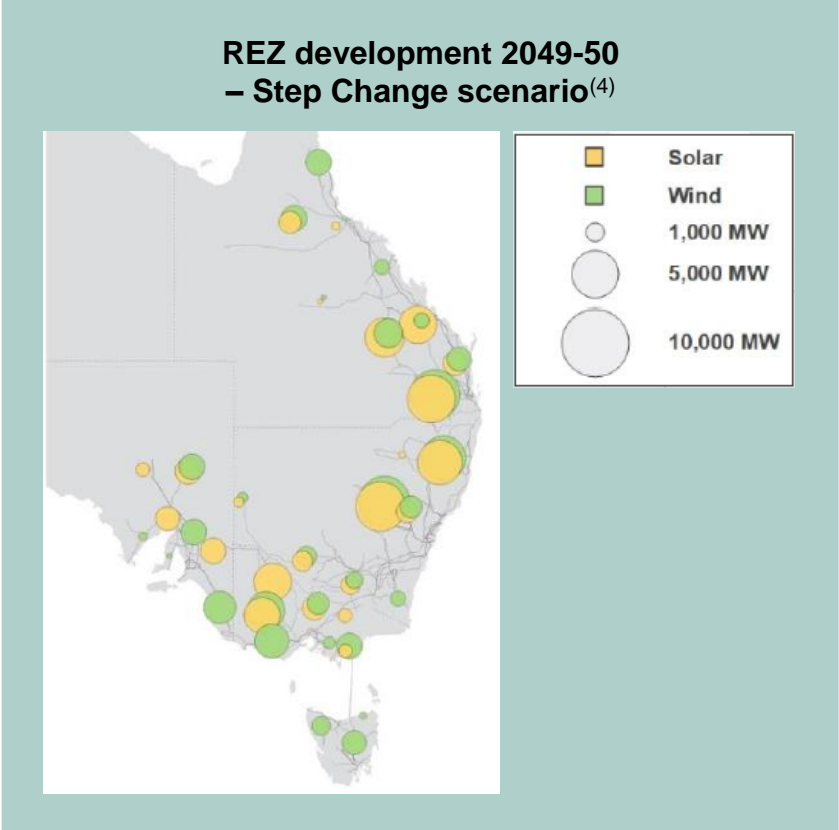
East Coast Grid expansion  
Kurri Kurri Lateral (hydrogen ready)

# Electricity transmission opportunities arising with the decarbonisation of Australia's economy via renewable energy zones

**~122 GW**  
additional VRE  
capacity by 2050<sup>(1)</sup>

**35 REZs**  
shortlisted across  
eastern Australia<sup>(2)</sup>

**\$30+ B**  
New transmission  
investment<sup>(3)</sup>



## Renewable Energy Zones (REZ)

REZ are resource areas for clusters of large-scale renewable energy projects

REZ combine generation, transmission, storage, and system strength services to ensure a secure, affordable and reliable energy system

Total REZ and renewables opportunity across the NEM currently estimated at ~\$90B<sup>(5)</sup>

NSW Government has committed to develop five REZs in Central-West Orana, New England, South-West, Hunter-Central Coast and Illawarra regions

1. VRE = Variable Renewable Capacity; Source: AEMO 2022 Draft ISP Step Change Scenario. 2. Source: AEMO 2022 Draft ISP Appendix 3. Source: AEMO 2022 Draft ISP Appendix 5. 4. Source: AEMO 2022 Draft ISP, Appendix 3, Step Change Scenario. 5. APA estimate based on 2022 LCOE estimates and total potential REZ AEMO Option 1 capacities

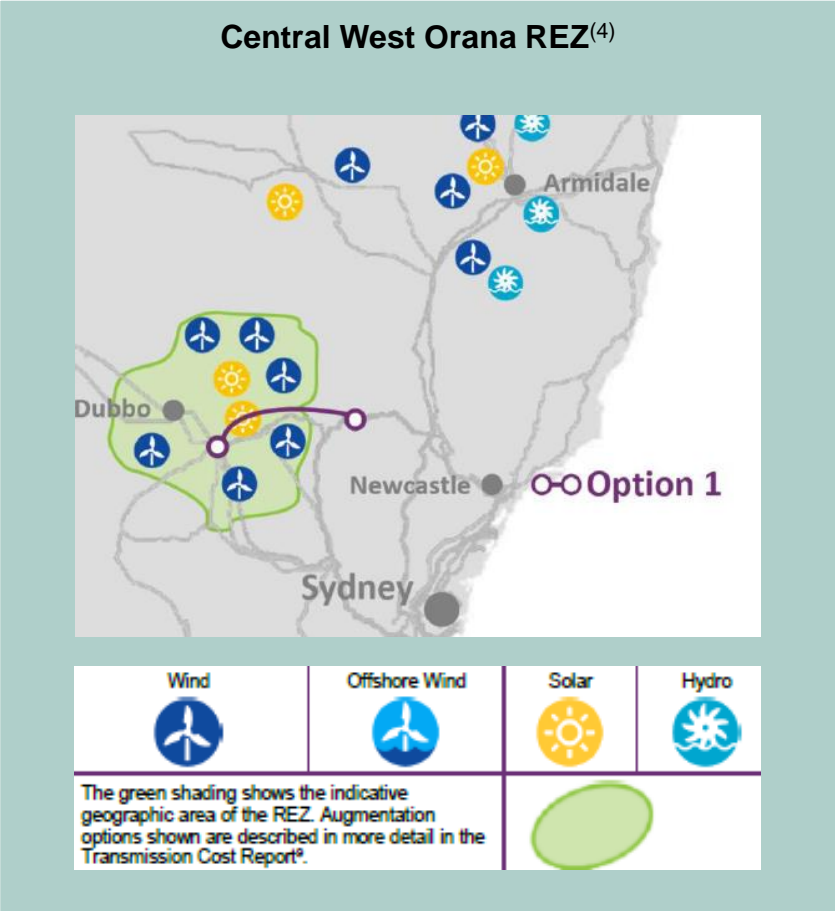


# APA consortium shortlisted to tender for Central-West Orana REZ (case study)

**\$5.2B investment<sup>(1)</sup>**

**3GW capacity<sup>(1)</sup>**

**1<sup>st</sup> REZ in NSW**



### Central West Orana - NSW first REZ

The Central West-Orana (CWO) Renewable Energy Zone is New South Wales's first REZ. Stage 1 of the REZ is targeting 3GW of capacity by the mid 2020s, enough to power 1.4 million homes. The ambition is to achieve 12GW over the long term.

CWO is expected to attract \$5.2B of private investment by 2030.

### APA consortium shortlisted to tender for CWO REZ

Network REZolution has been shortlisted to tender for the CWO REZ development. This strong consortium includes APA and CIMIC Group companies (Pacific Partnerships, UGL and CPB Contractors).

This follows an Energy Corporation of NSW (EnergyCo) competitive process to appoint a network operator to design, construct, commission, maintain and operate and finance the new transmission infrastructure.

1. <https://www.energy.nsw.gov.au/renewables/renewable-energy-zones>

# Supporting our customers with their decarbonisation efforts via renewable energy microgrids

## Energy solutions that support the North West Minerals Province (case study)

APA is developing a \$150m 88MW solar farm at Mica Creek; will be operational by mid CY23

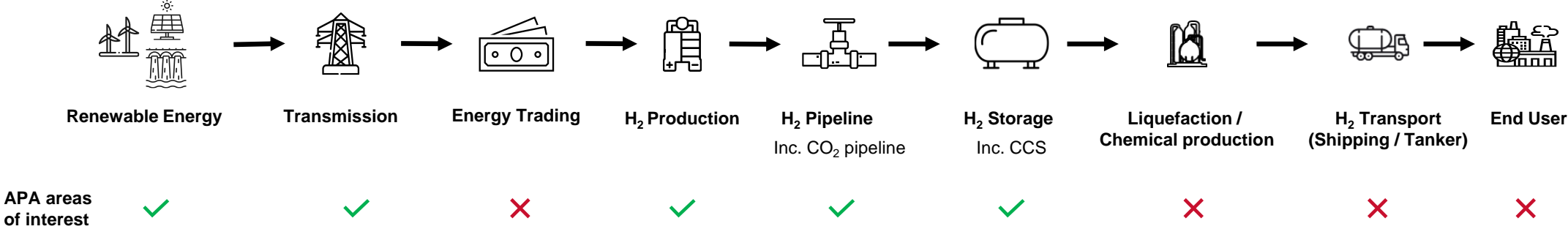
Fully contracted for 15 years with two foundation customers

Direct response to enthusiasm of our customers for integrated energy solutions that meet their energy needs (affordability and security of supply) and reduce operational emissions

The carbon intensity of APA's Mt Isa power system is expected to be less than half of the current Queensland grid average once Mica Creek solar is fully commissioned



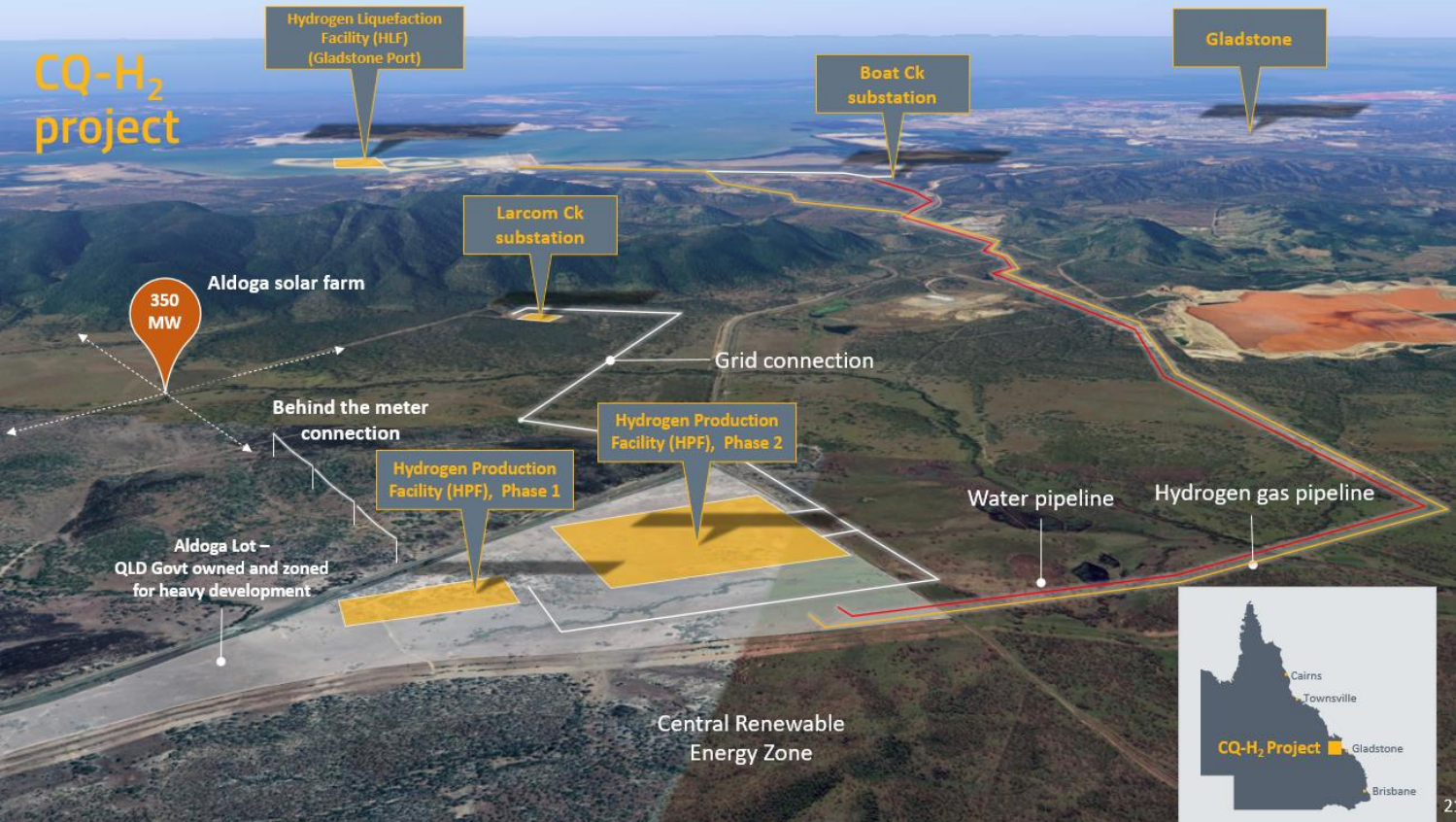
# Participating in hydrogen feasibility projects via our Pathfinder program



APA actively participating in hydrogen feasibility projects as the commercialisation of hydrogen evolves  
 Creating strategic partnerships with complementary capabilities



# Partnering to assess green hydrogen opportunities via the Central Queensland Hydrogen Consortium (case study)



**Development of hydrogen hub in central Queensland for domestic and export supply**

Highly credentialed consortium: APA; Stanwell; Iwatani Corporation; Kawasaki Heavy Industries; Kansai Electric Power Company; and Marubeni

In addition to local supply, ambition for export supply to Japan’s industrial market

APA is proudly one of the two domestic consortium partners with significant experience working with communities on greenfield projects to develop energy infrastructure

# Different drivers of gas demand and supply between the east coast and west coast of Australia

## Key themes in the east coast gas market

### Gas demand

- Stable near term outlook but gas usage becoming 'peakier' given transition to renewables (variable supply) to replace coal (secure supply)
- Longer term driven by affordability and reliability of broader energy system with a key factor being heating load requirements in colder southern states

### Gas supply

- Southern production declining as Gippsland basin matures (forecast to decline from 312 PJ in 2022 to 200 PJ in 2026<sup>(1)</sup>)
- Extensive gas resources in Queensland

### Implications for APA

- Transportation of gas from northern supply markets (e.g. Queensland) to southern demand markets (e.g. Victoria)
- Flexible services for customers managing volatile demand

## Key themes in the west coast gas market

### Gas demand

- Strong demand from resources sector, both new and expansions
- Driven by demand for commodities including new economy minerals required to grow renewable energy sector

### Gas supply

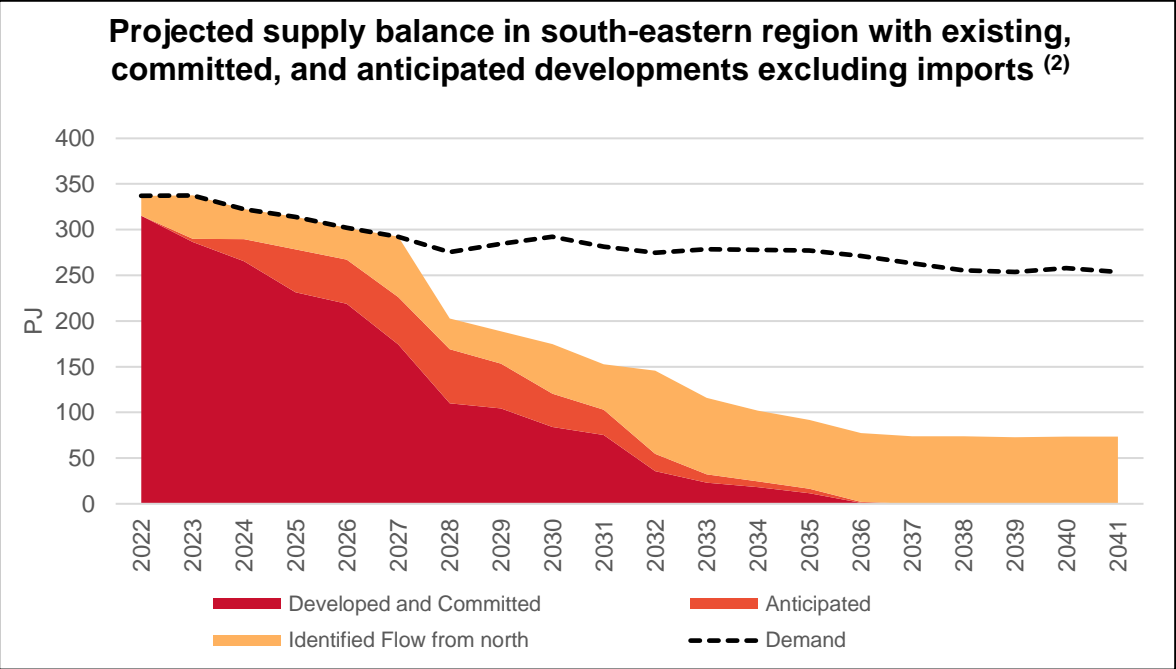
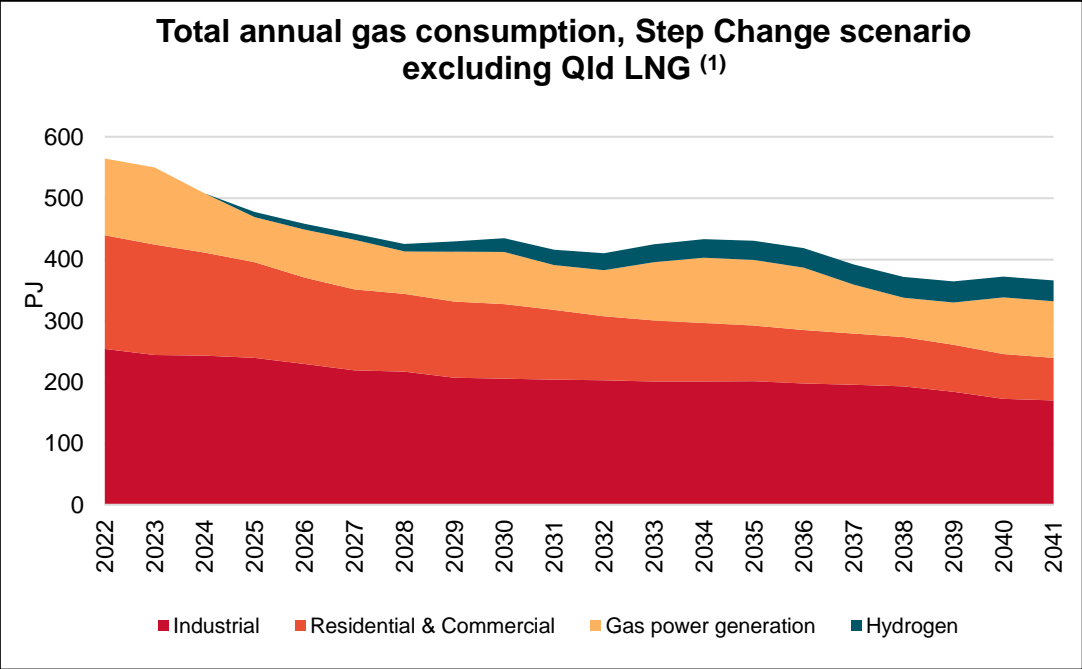
- Extensive gas resources across Carnarvon and Perth Basins
- Requires transportation to demand centres

### Implications for APA

- Opportunity to support resources development by providing resource rich areas with reliable gas

1. Source: Victorian gas planning report update, March 2022.

# APA's east coast energy infrastructure responding to growing supply from northern Australia



**East coast grid expansion case study - linking Queensland with southern markets**

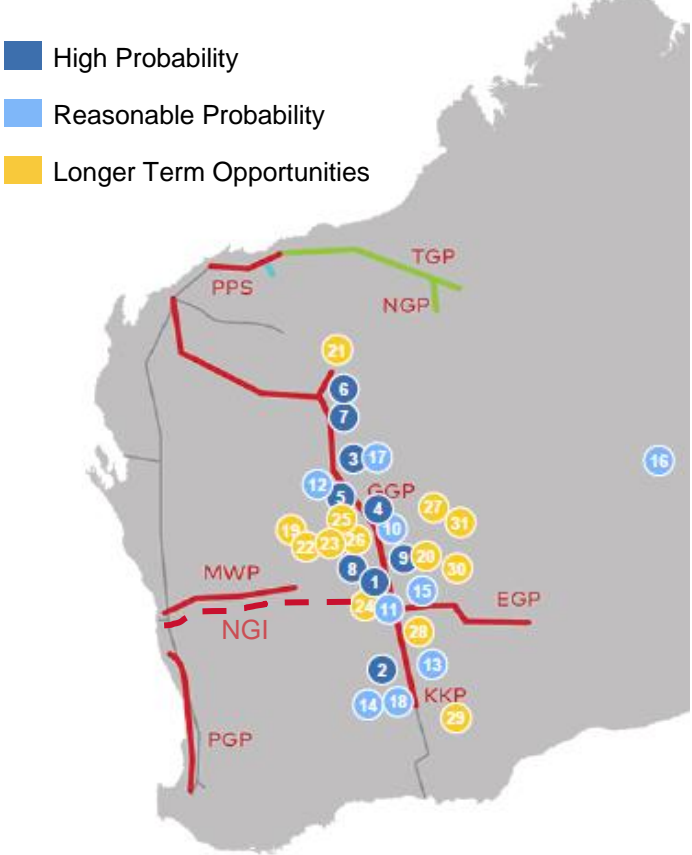
- Maturation of local supply in southern markets resulting in gas shortfalls under extreme weather conditions (current expectation winter 2023 shortfall) <sup>(1)</sup>
- Expansion of APA's East Coast Grid will increase winter capacity by 25% through additional compression and associated works on the SWQP and MSP
- Total investment of \$270m across two stages with Stage 2 subject to customer demand and final investment decision

1. Source: Gas statement of opportunities March 2022 excluding Qld LNG; 2. Source: Gas statement of opportunities March 2022 excluding LNG imports.

# Growth in demand for Australia's resources driving demand for new energy infrastructure along the west coast



## APA opportunities for WA Goldfields region <sup>(2)</sup>



### West coast case study – providing reliable energy to support resource development in the WA Goldfields region

- APA's existing Goldfields Gas Pipeline (GGP) is fully contracted
- Resources companies are seeking secure energy solutions in the Goldfields region
- APA is investing ~\$460m to build a 580km pipeline to connect the Perth Basin to the Goldfields region
- Will provide an alternative source of secure energy and double the capacity compared to the same cost of expanding the GGP
- Creates a platform for additional growth as more resources customers seek new energy solutions replacing traditional energy sources (e.g. diesel) with new technologies (e.g. renewables and battery storage underpinned by natural gas)

1. Source: Commodities demand outlook 2030; Minerals Council of Australia; 2. APA analysis

# Gas is critical to ensure secure, reliable and affordable energy for Australia's energy users

## Power Generation – 98 PJ

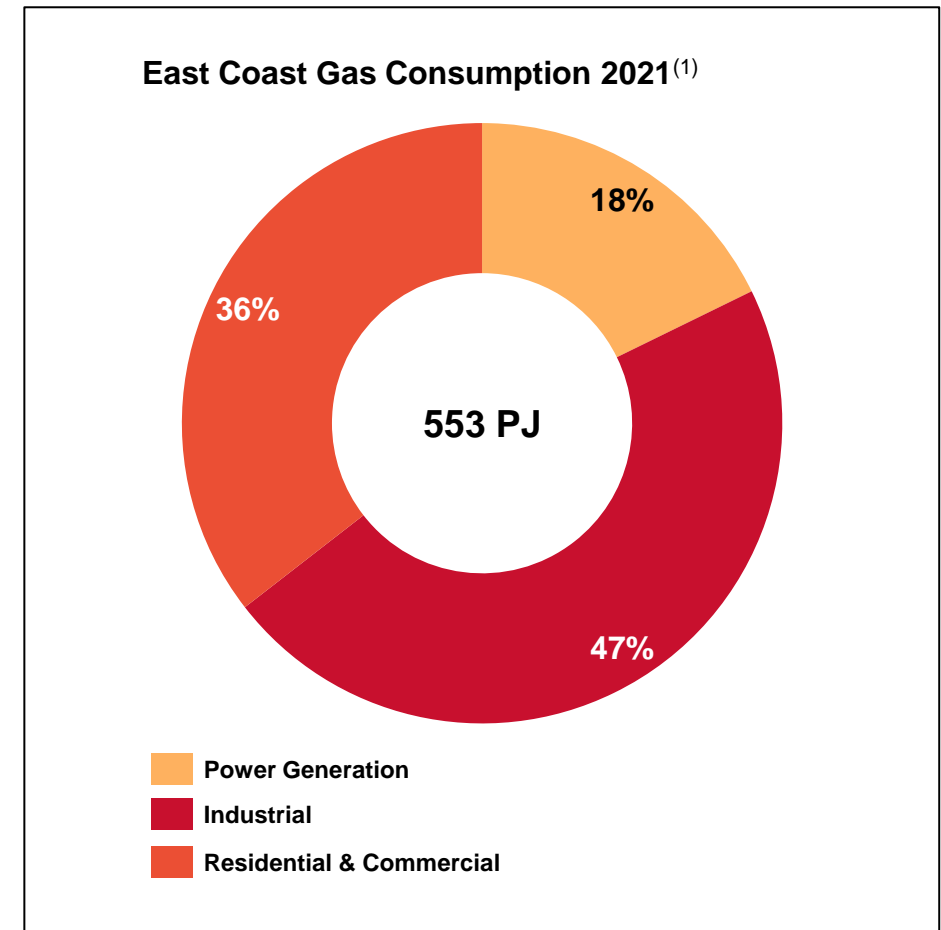
- Gas is critical for firming renewable electricity
- Supporting the transition away from coal fired power generation (eg Kurri Kurri)
- Capacity is the key

## Industrial – 259 PJ

- Currently no alternatives to most industrial processes given requirements for high heat
- High dependency from critical industry sectors such as steel, alumina, cement and ammonia production

## Residential & Commercial – 196 PJ

- Dominated by colder climates such as Victoria who use gas for space heating, as well as cooking and hot water
- Victorian winter load is up to three times higher than summer



Source: AEMO GSOO 2022; excludes gas consumed for LNG exports



# Hugo Batten

Managing Director, Aurora Energy Research



# Aurora analysis of a net-zero NEM

APA presentation

May 2022



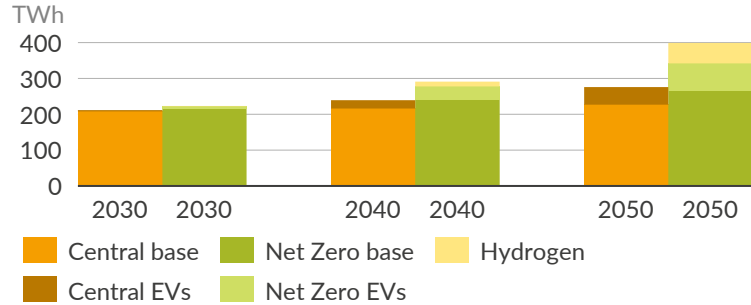
# Introducing our Net Zero scenarios: built with rapid electrification, hydrogen uptake, and grid upgrades to achieve a net zero emissions target

## Detailed input changes (continued overleaf)

### Rapid electrification

This scenario assumes an acceleration in electric vehicle adoption, deeper electrification of industry, and emergence of a hydrogen industry in Australia. In this instance, we follow the AEMO 2022 ISP Step Change underlying demand forecast.

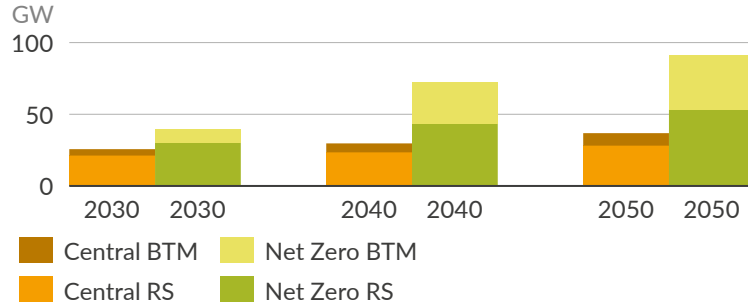
### Underlying demand



### Behind the meter capacity

Net Zero also incorporates significantly higher behind the meter capacity (BTM) uptake to shift rooftop solar (RS) generation out of the middle of the day. Both rooftop PV and battery capacity assumptions are taken from the AEMO 2022 ISP step change.

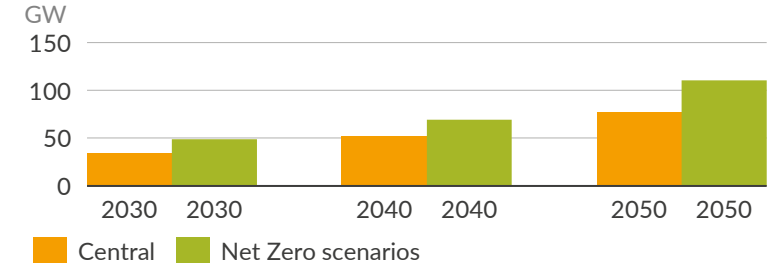
### Capacity



### Additional grid upgrades

It is estimated that ~\$14-23b of additional spending<sup>4</sup> on REZ grid upgrades is needed on top of AEMO's 2022 ISP Optimal Development Pathway spending in order to facilitate the renewable penetration required to achieve the net zero objectives.

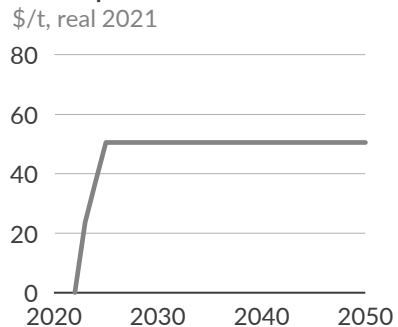
### Utility scale renewable capacity



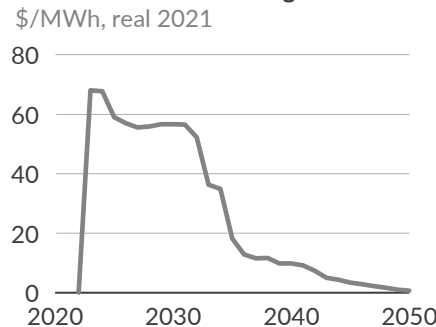
## Detailed input changes

### Net Zero with carbon price

#### Carbon price modelled



#### CfD mechanism - cost to government<sup>6</sup>



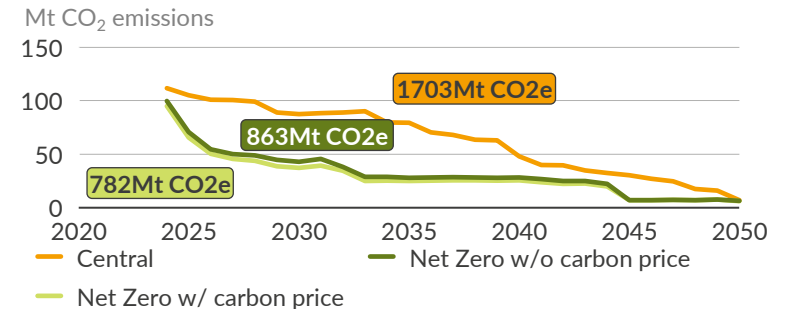
### Aurora's Net Zero scenarios:

- The 2022 ISP Step Change scenario requires a carbon budget of 891 Mt for NEM-wide emissions to achieve a net zero world, and limit temperature rises to meet the Paris Agreement. Aurora has assumed a \$50/t carbon price to achieve these objectives
- Aurora has assumed that capacity expansion in both Net Zero scenarios are equivalent
- As such, the CfD paid to new renewable projects for the first 10 years of the projects' lifetime is calculated based on the additional value renewable projects would need to build endogenously in the model
- Key contract assumptions:
  - Flat 10-year contract
  - Does not cover negative prices
  - Asset lifetime: 30 years for solar and 25 years for wind
  - Discount rate of 9%
  - Contract value varies by state, technology type and year constructed of the project

## Total emissions

The 2022 ISP suggests NEM emissions between 2024-2050 need to be under 891 Mt to limit end-of-century temperature rise to <2°C in line with the Paris Agreement. Unlike the Aurora Central, both the Aurora Net Zero scenarios achieve this target

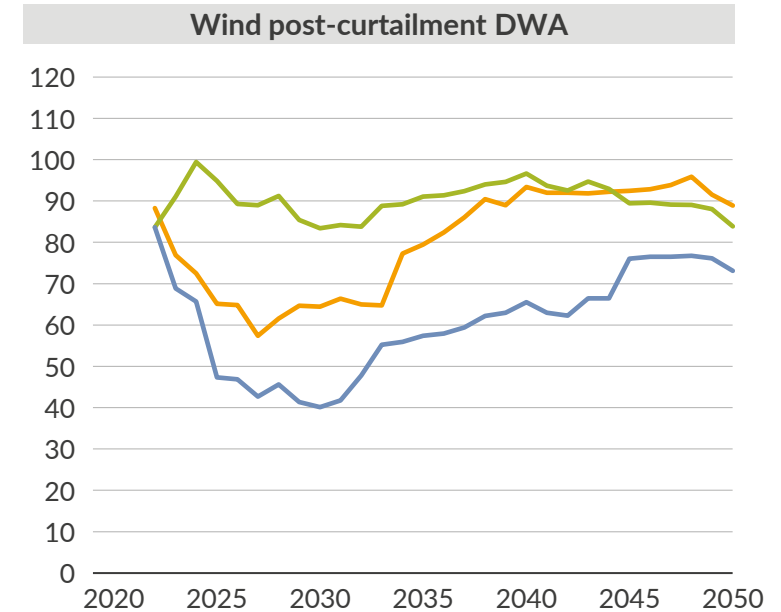
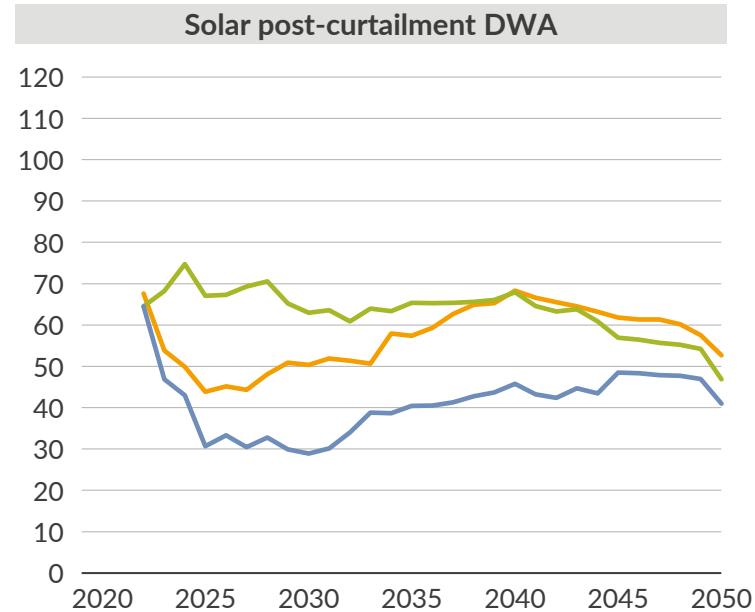
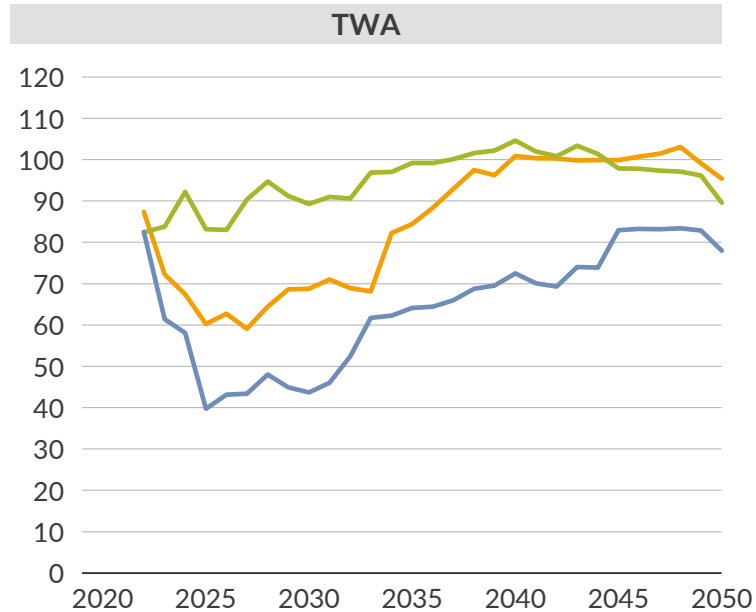
### NEM-wide emissions



1) Assumes that remaining power sector emissions can be offset elsewhere, aligning with AEMO ISP and Liberal Party "the Plan" modelling; 2) Carbon budget outlined by AEMO for the 2022 ISP Step Change scenario to achieve an end-of-century global mean temperature increase of ~1.8oC; 3) Trend in hydrogen consumption as modelled by AEMO in the 2022 ISP Step Change scenario; 4) Additional spend calculated from AEMO ISP input assumptions for indicative transmission expansion costs by REZ; 5) Capacity build out is assumed to be the same across both Net Zero scenarios; 6) This is not the strike price of the CfD contracts - as these are anticipated to vary by state and technology type. Rather this is an indicative value of the cost to governments of financing the generation of new renewable projects via the simplified CfD contract outlined.

# The policy pathway to net zero has a material impact on wholesale electricity prices

NSW wholesale prices<sup>1</sup>  
\$/MWh, real 2021



- There are multiple ways to achieve a Net Zero scenario, either through a carbon price or driving in renewables through Government styled auctions
- The policy pathway chosen dictates wholesale prices in the NEM throughout the forecast
  - A carbon price lowers emissions quickly through making thermal assets largely uneconomical, however prices rise immediately as the carbon price is added to the short-run marginal cost of thermal assets
  - CfD style auctions are an effective way of driving in new renewable and storage capacity onto the system (NSW EIR & VRET1/2). The associated cost of bringing in additional renewable capacity is seen in energy bills via levies and taxes (and additional transmission spending to unlock spare network capacity)

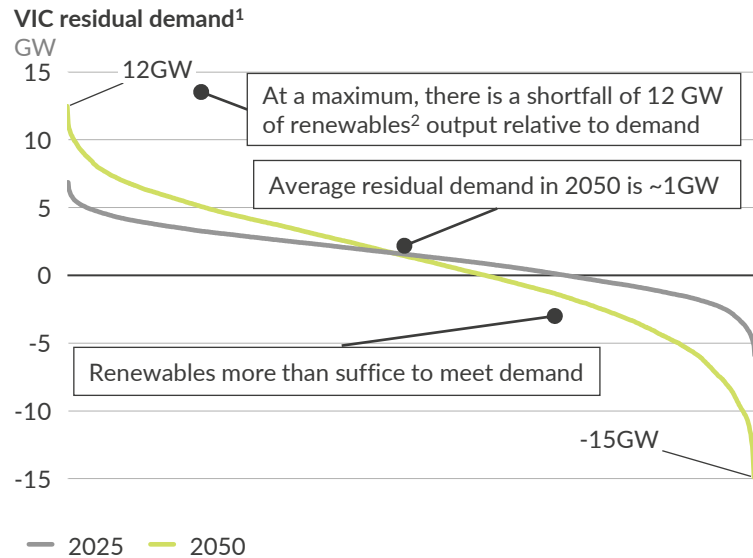
— 2022 Q1 Aurora Central — 2022 Q1 Aurora NetZero with carbon price — 2022 Q1 Aurora NetZero without carbon price

1) Prices shown are pre MLF and, where relevant, post-curtailment. Post-curtailment refers to economic curtailment, where assets are economically curtailed when prices drop below \$0/MWh.

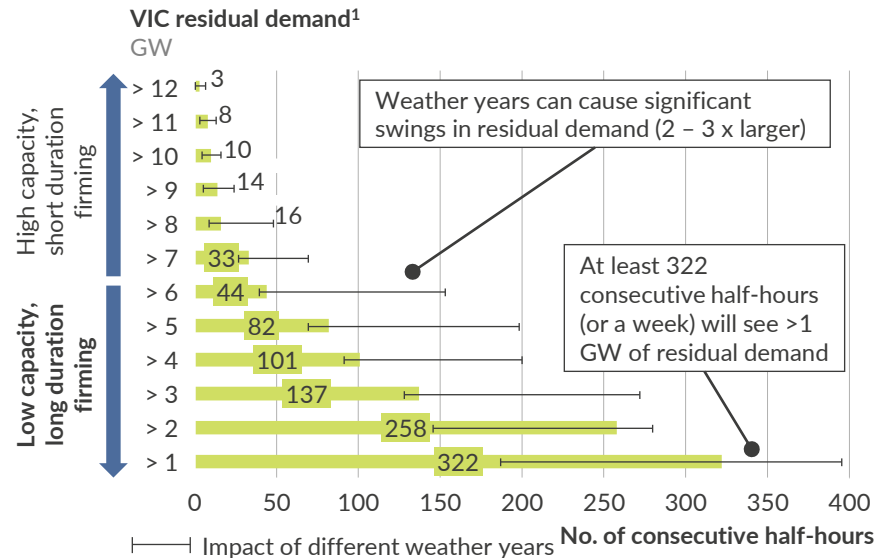
# Under net-zero, VIC will see many instances where demand cannot be fully met by renewables; both short and long duration firming is required

Example of VIC in 2050 under Aurora 2021 Q1 Net-zero scenario (with carbon price)

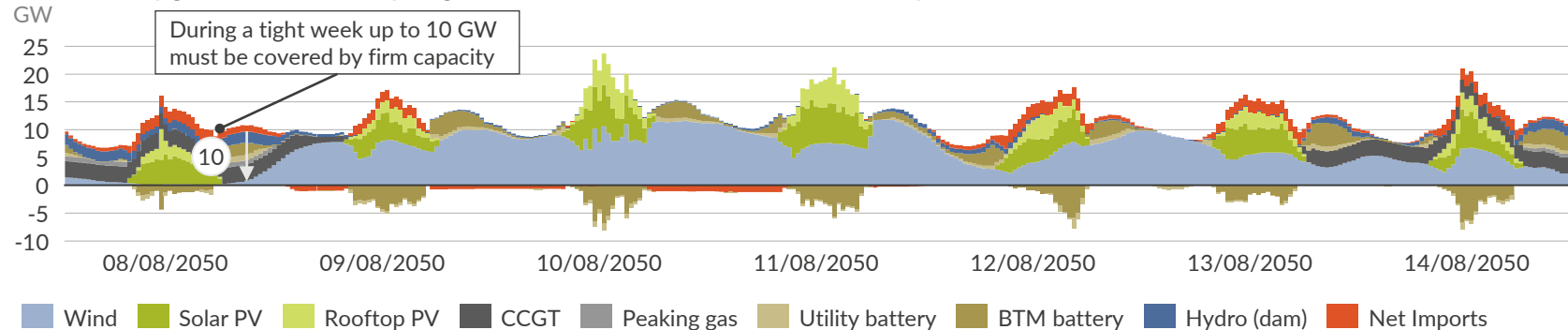
Residual demand "duration" curve - FY2016 weather year



Residual demand by consecutive HH - FY2016 weather year



VIC half-hourly generation over a sample tight week in winter 2050, Net Zero with carbon price scenario



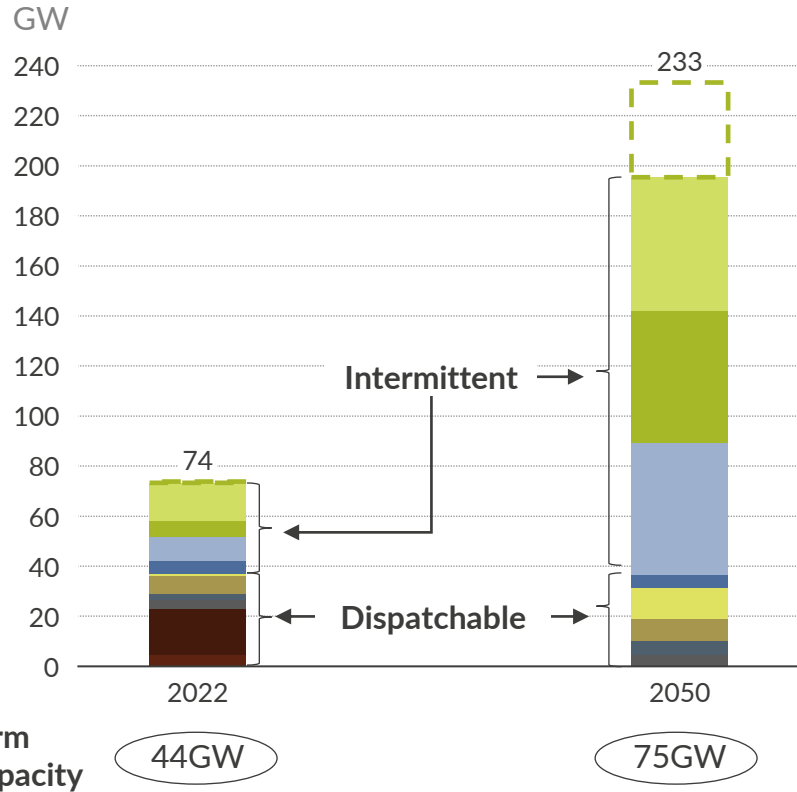
- In 2050 in a net zero system, VIC is still expected to see many periods where renewables do not suffice in meeting total demand, particularly in cold winter periods (more of this on later slides)
- On average, VIC will see insufficient renewables fulfilling demand for a majority of periods (the average residual demand is 1 GW), even though there will be increasingly instances where renewables more than exceed demand
- Ensuring system security will require a mix of technologies:
  - Shorter-duration batteries could be well-suited to meet system needs where a residual demand is large, but only for short-durations
  - Longer-duration storage/ gas peakers will also be required to cater for prolonged lulls in renewables output relative to demand.
- Firming solutions will also need to take into account weather risks – as different weather outturns could lead to notable differences in duration/ GW required for firming<sup>3</sup>
- VIC is likely to experience its peak demand periods in winter, where demand for heating is higher. In these colder periods, solar output is likely to be low (alongside variable wind)
- On the other hand, QLD is likely to experience its peak demand in summer, where cooling demand is higher. These periods typically coincide with higher solar irradiance/output

1) Residual demand is defined as operational demand not met by renewables or flows from external sources, i.e., interconnectors; 2) Interconnector flows are also included; 3) See previous analysis on weather years

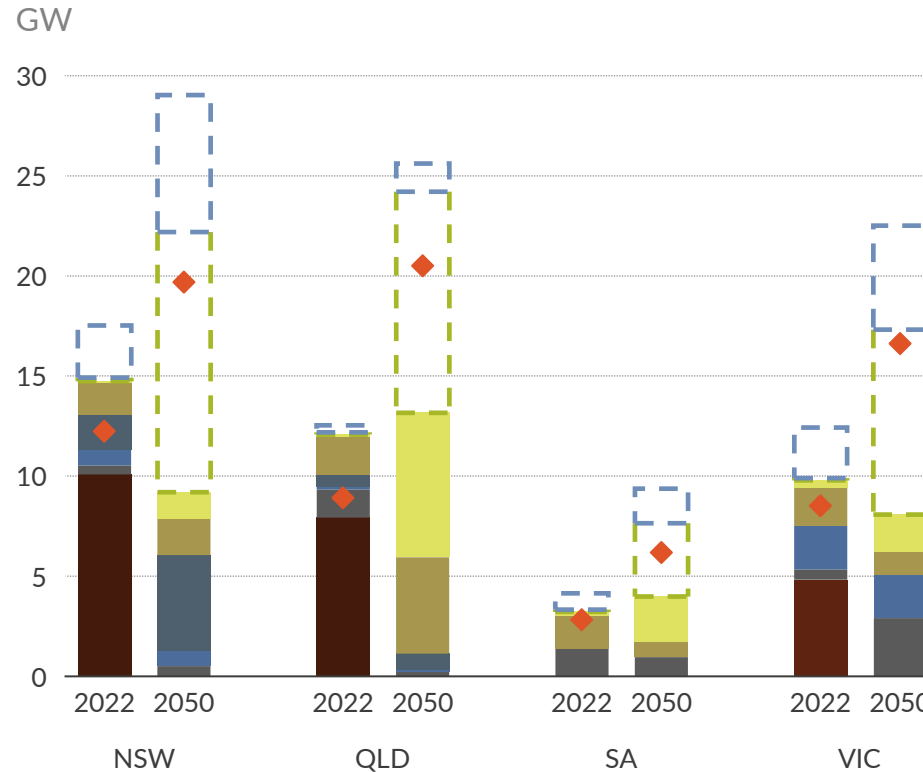
# Name-plate capacity increases materially in Aurora Net Zero scenarios, with firming coming from a variety of sources

3 Capacity mix

NEM-wide capacity, Net Zero scenario



State-wide firming capacity, Net Zero scenario<sup>1</sup>



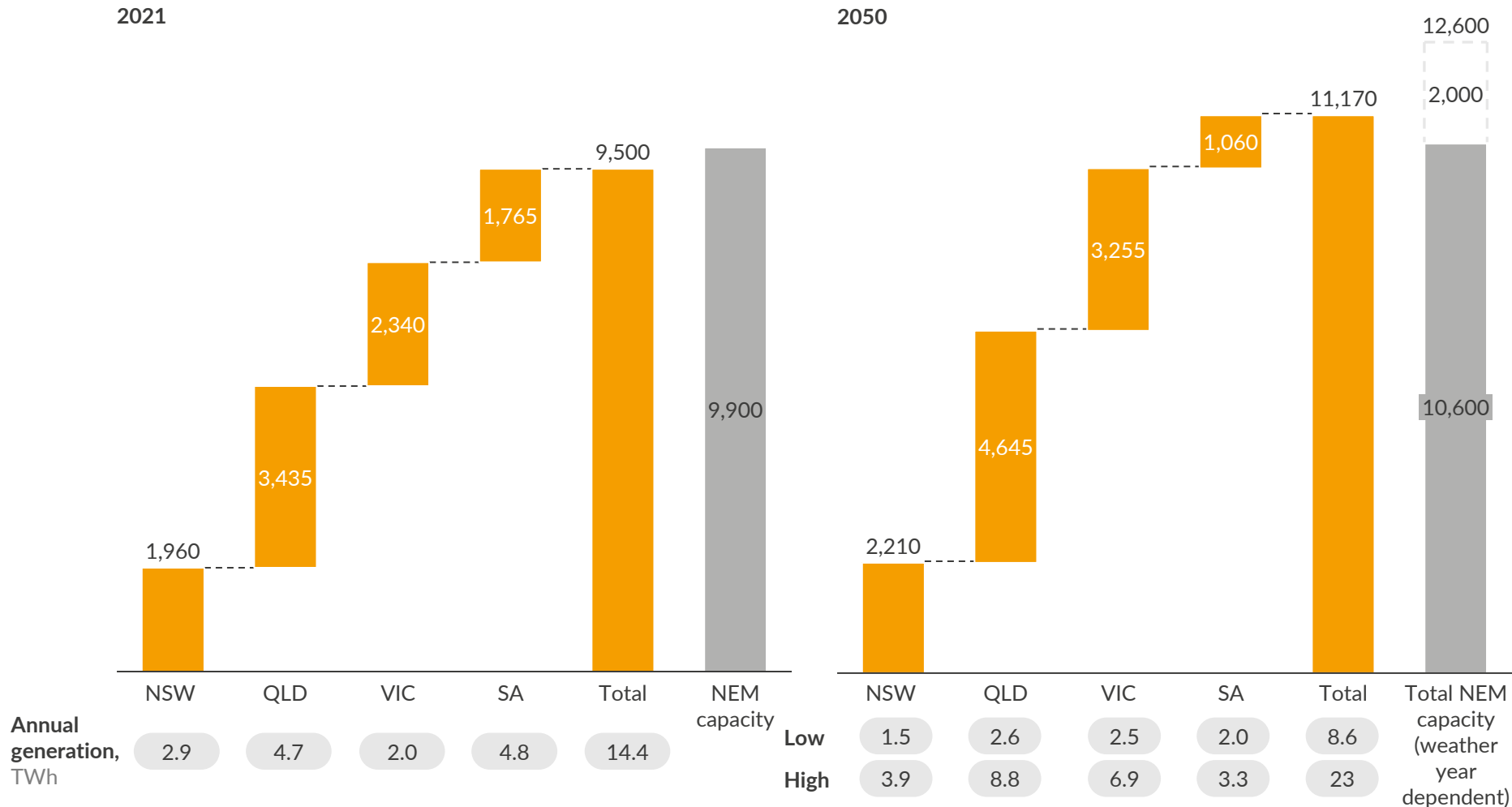
- As thermal assets exit, firming is forecast to come from a variety of sources: pumped hydro, peaking assets, grid-scale and BTM battery (coordinated via VPPs), and interconnection to other states
- Aggregation of BTM storage (both community and household level) is forecast to become an increasingly important part of the firming generation mix
- Non-correlated renewable output between states (with additional accompanying transmission) is also a feature of a net zero NEM
- The duration of storage is forecast to increase over time as ancillary markets are saturated, policy signals change to support longer duration storage (e.g., 8hrs min duration for NSW storage LTESAs), and as retailers need longer duration assets to manage their demand profiles



1) The depth of storage assets varies across each state, with utility scale battery assets ranging from 0.5-8.0 hours of duration and pumped hydro assets ranging from 6-175 hours

# Thermal assets are likely to be required in each state to ensure security of supply in 2050 in a net-zero scenario

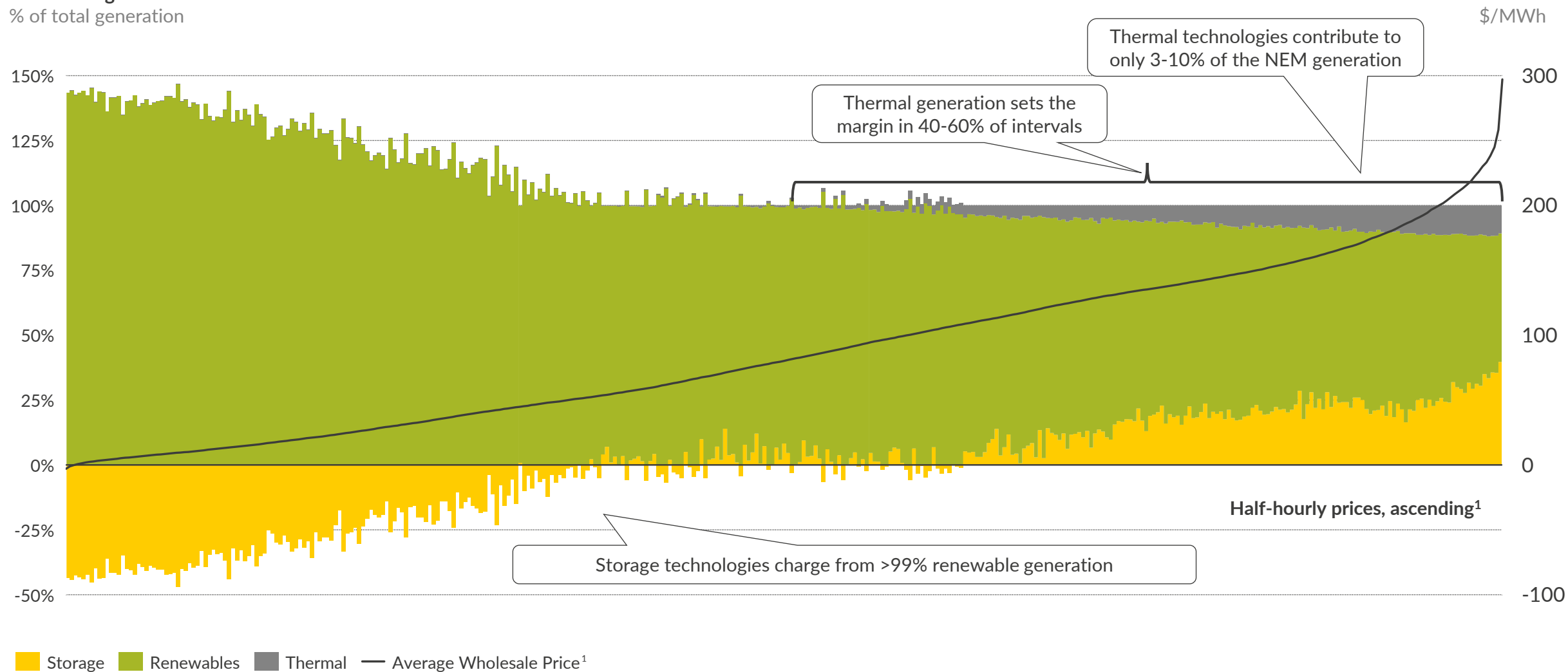
Maximum half-hour gas output in a net-zero scenario for 2021 and 2050 (in central weather year)  
MW



- Aurora’s long-term modelling indicates that there will be a role for longer-duration thermal assets that can meet demand in periods of extended low solar and wind output
- Overtime, average gas fleet capacity factors fall (from 15-20% in 2021 to 10-15% in 2050) ever as peak half-hour output remains at similar levels in average weather years. Average fleet capacity factors may be as high as 25% in low renewable output years
- Total capacity forecasts vary by scenario and weather years, but typically flexible peaking capacity is between 10.6 and 12.6 GW across all mainland NEM states

# Thermal generators contribute to 3-10% of NEM generation in 2050, but are the marginal generation source 40-60% of the time in a net zero system

NEM-wide generation in 2050  
% of total generation



1) For presentation purposes the sorted half-hourly model outputs have been grouped into 48 intervals (i.e. 24 hours).



## Details and disclaimer

Australia's NEM outlook: 2022 ISP and trajectories to a net zero power system

24 March 2022

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# Moderated Panel

# Moderated panel members

Hugo Batten, Managing Director  
Aurora Energy Research



David Ogilvy, Partner  
L.E.K. Consulting



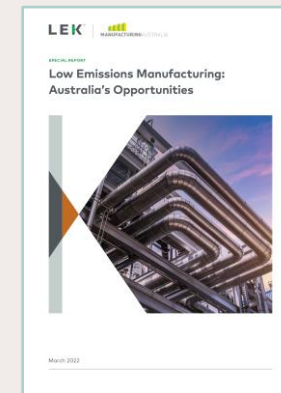
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Australia's Opportunities

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The full special report is available at:  
[www.lek.com/insights/sr/low-emissions-manufacturing-australias-opportunities](http://www.lek.com/insights/sr/low-emissions-manufacturing-australias-opportunities)

# BREAK

always  
powering  
ahead

apa

# Session 2





# Agenda

## Responsibly transitioning energy

### Session 2

#### 4. APA's investment considerations (20 mins) Adam Watson, Chief Financial Officer

- Capital allocation framework
- Investing for sustainable growth

#### 5. ESG – Video (10 mins)

- Introduction by Rob Wheals
- Video showcasing APA's progress with its ESG ambitions

#### 6. Moderated Panel (40 mins) Ben Pratt, General Manager Corporate Affairs

- Panel discussion – APA Senior Leaders

#### 7. Wrap up – (5 mins) Rob Wheals, Chief Executive Officer

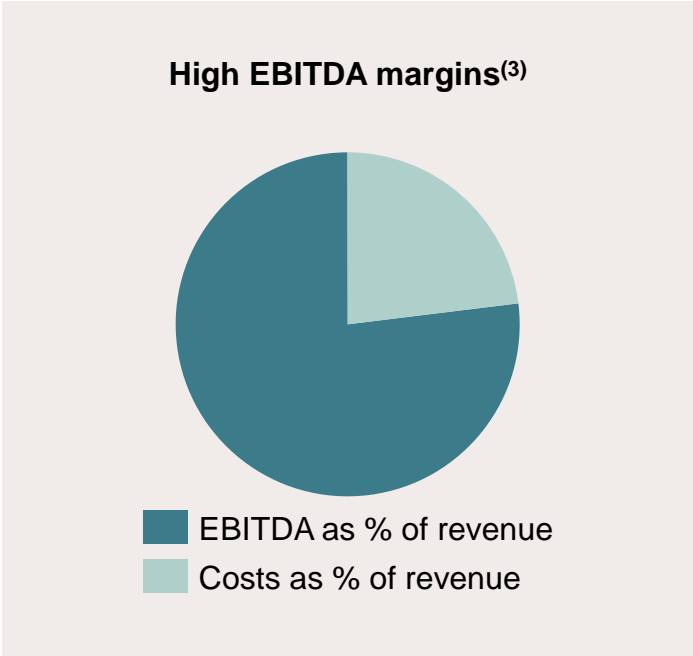
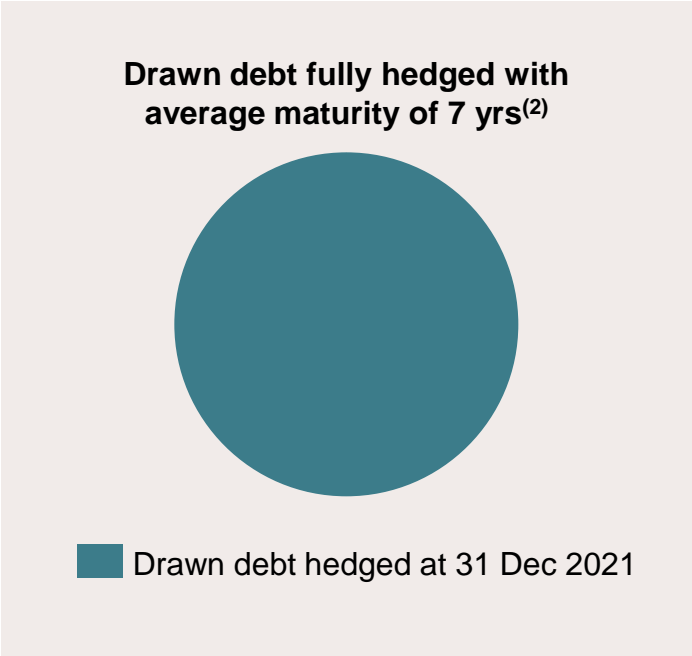
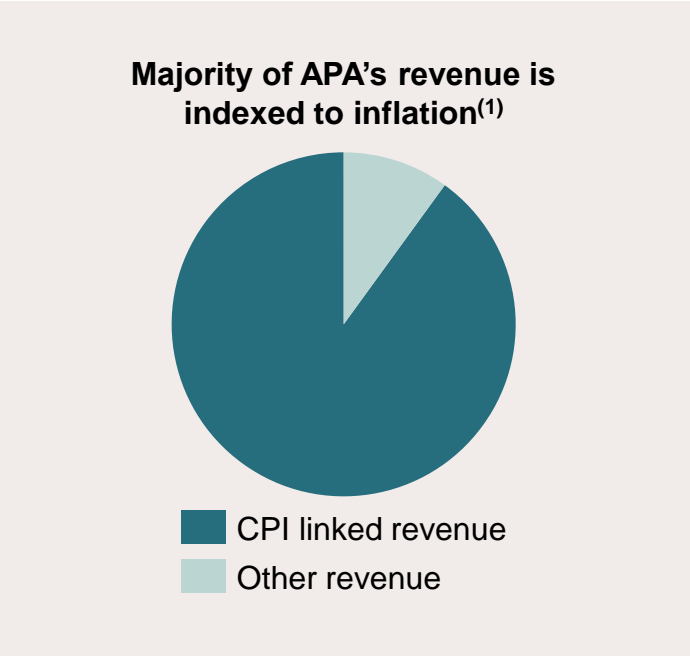


# Adam Watson

Chief Financial Officer

## APA's Investment Considerations

# APA is positively leveraged to rising inflation



1. Contracts within Australia that contain inflation linked escalations typically apply a formula based on either quarterly, bi annual or annual Australian Consumer Price Index (CPI). The Wallumbilla Gladstone Pipeline contract escalates annually, on 1 January each year, based on November US inflation. For the CY22 the increase due to US inflation will be 7.5%. 2. As at 31 December 2021. 3. For 1H22 excluding passthrough revenue and significant items.




# A strong balance sheet to support future growth



**\$1.8b of liquidity**




**BBB / Baa2 ratings  
with stable outlook**




**FFO : Debt of 11.5% providing  
headroom to fund growth and support  
capital management <sup>(1)</sup>**



**No material debt refinancing  
obligations until FY25**



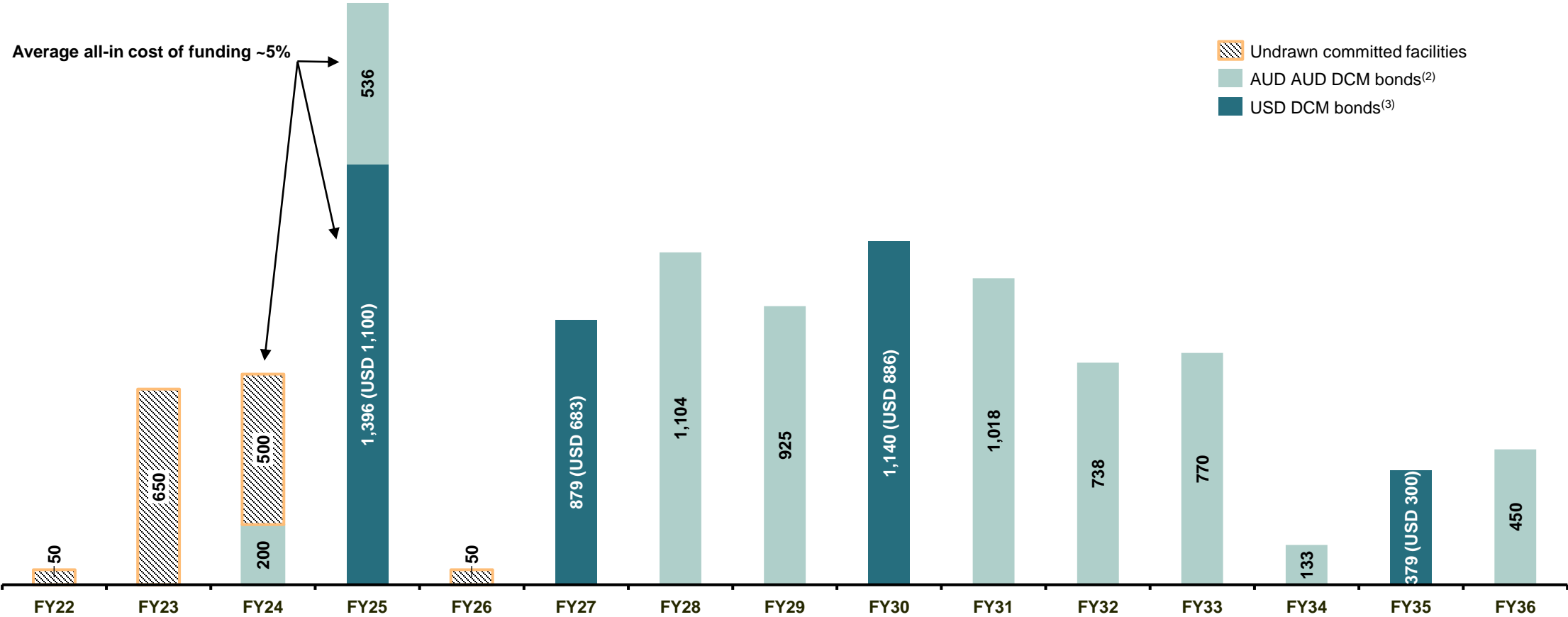
**Average cost of debt 4.6% (1H21 5.2%)  
Average maturity 7 years (1H21 6 years)**



**Drawn debt is 100% hedged**

Note: All figures at 31 December 2021 unless otherwise specified.  
We are in the process of amending our constitution to facilitate buy backs. Any assessment regarding the implementation of a buyback will be done with reference to our ability to create securityholder value.

# Attractive debt maturity profile with no material refinancing obligations until FY25



Note: APA debt maturity profile as at 31 December 2021. AUD denominated obligations debt capital market (DCM) notes. USD denominated obligations translated to AUD at the prevailing rate at inception (US144A - AUD/USD=0.7879, Euro and Sterling - AUD/USD=0.7772).

# Capital allocation framework ensures the ongoing focus on maximising securityholder value

Sources	Uses	Approach
<p><b>Operating cash flow</b></p> <p><b>Liquidity</b></p> <p><b>Debt &amp; Equity funding</b></p> <p>\$1.8b of liquidity<sup>(1)</sup></p> <p>Significant credit metric headroom</p> <p>Baa2/BBB credit ratings</p> <p>FFO : Net Debt 11.5%</p>	<b>Stay In Business Capex</b>	<ul style="list-style-type: none"> <li>• SIB capex to ensure safe reliable operations</li> <li>• Consistently growing distributions; targeting 60-70% of free cash flow</li> <li>• Enhancement of systems and processes to drive long term operational efficiency and sustainability</li> <li>• Growth funding considerations:                             <ul style="list-style-type: none"> <li>• Creation of long-term value</li> <li>• Hurdle rates (IRR's) to accommodate through the cycle views on cost of funding</li> <li>• Risk adjusted hurdle rates (IRR's) for different asset classes</li> <li>• Risk adjusted cash payback (years) requirements for limited or defined life investments</li> <li>• Net Zero ambition</li> <li>• Commitment to credit ratings (FFO : Net Debt)</li> <li>• Balancing growth and the desire to consistently grow distributions</li> </ul> </li> <li>• Various capital management tools to respond to changing market conditions and enhance securityholder value                             <ul style="list-style-type: none"> <li>• Liability Management (early refinancing of debt)</li> <li>• Distribution Reinvestment Plan</li> <li>• Security Buy Backs</li> </ul> </li> </ul>
	<b>Distributions</b>	
	<b>Technology Investments</b>	
	<b>Growth Capex</b>	
	<b>M&amp;A</b>	
	<b>Capital Management</b>	

1. At 31 Dec 2021

# Investing in capability to ensure growth is responsible and sustainable

## Organic growth opportunities



- Pipelines – new and expansion
- Contracted and regulated electricity transmission
- Contracted renewable power generation
- Microgrids
- Hydrogen

## Investing in our business



- Business development
- Community and customer engagement
- Systems and processes
- Talent and leadership capability
- Risk management and governance

# Rob Wheals

CEO & Managing Director

## ESG at APA

# Our ESG framework


**Build**



**Priority issues to be built into strengths**

- Climate Change Transition & Risk
- Community & Social Performance
  - First Nations People


**Accelerate**



**Fundamental issues which require strengthening**

- Environmental management
- Heritage management

**Maintain & Evolve**



**Existing plans and processes to evolve via ESG lens**

- Safety, Health & Wellbeing
  - Diversity & Inclusion
  - People & Culture
- Governance & Risk Management

# ESG Video



# Moderated Panel

# Moderated panel members



**Ben Pratt (Moderator)**  
Corporate Affairs



**Julian Peck**  
Commercial and Strategy



**Caroline Beattie**  
Hydrogen and Future Fuels



**Darren Rogers**  
Operations and Asset Management



**Amanda Cheney**  
Legal and Company Secretariat



**Megan Saussey**  
Net Zero and Climate



**Ross Gersbach**  
North American Development



**Jane Thomas**  
People Safety and Culture



**Kevin Lester**  
Infrastructure Development



**Adam Watson**  
Finance

# Rob Wheals

CEO & Managing Director

## Wrap-up

# APA is playing a key role in the transition of Australia's energy system

## Infrastructure in place to deliver reliable, secure and affordable energy

- Reliable delivery of gas to residential and commercial users, gas generators and industrial customers
- Expanding the East Coast Grid to bring gas into southern markets and alleviate risk of supply shortages
- Building energy solutions such as the NGI to support resources and industrial growth along the west coast

## Agnostic to the energy transition pathways given exposure to major new energy technologies

- Supporting electrification by investing in electricity transmission
- Decarbonising the economy with renewable energy zones
- Supporting customers with their decarbonisation ambitions with renewable energy and battery storage microgrids
- Participating in hydrogen projects via our Pathfinder program

**Australia's leading Australian owned energy infrastructure business**

**Strong balance sheet, investment grade credit metrics and low cost of capital**

**Deep experience in developing, building and operating energy infrastructure**

**Proven capabilities in environmental management and community engagement**

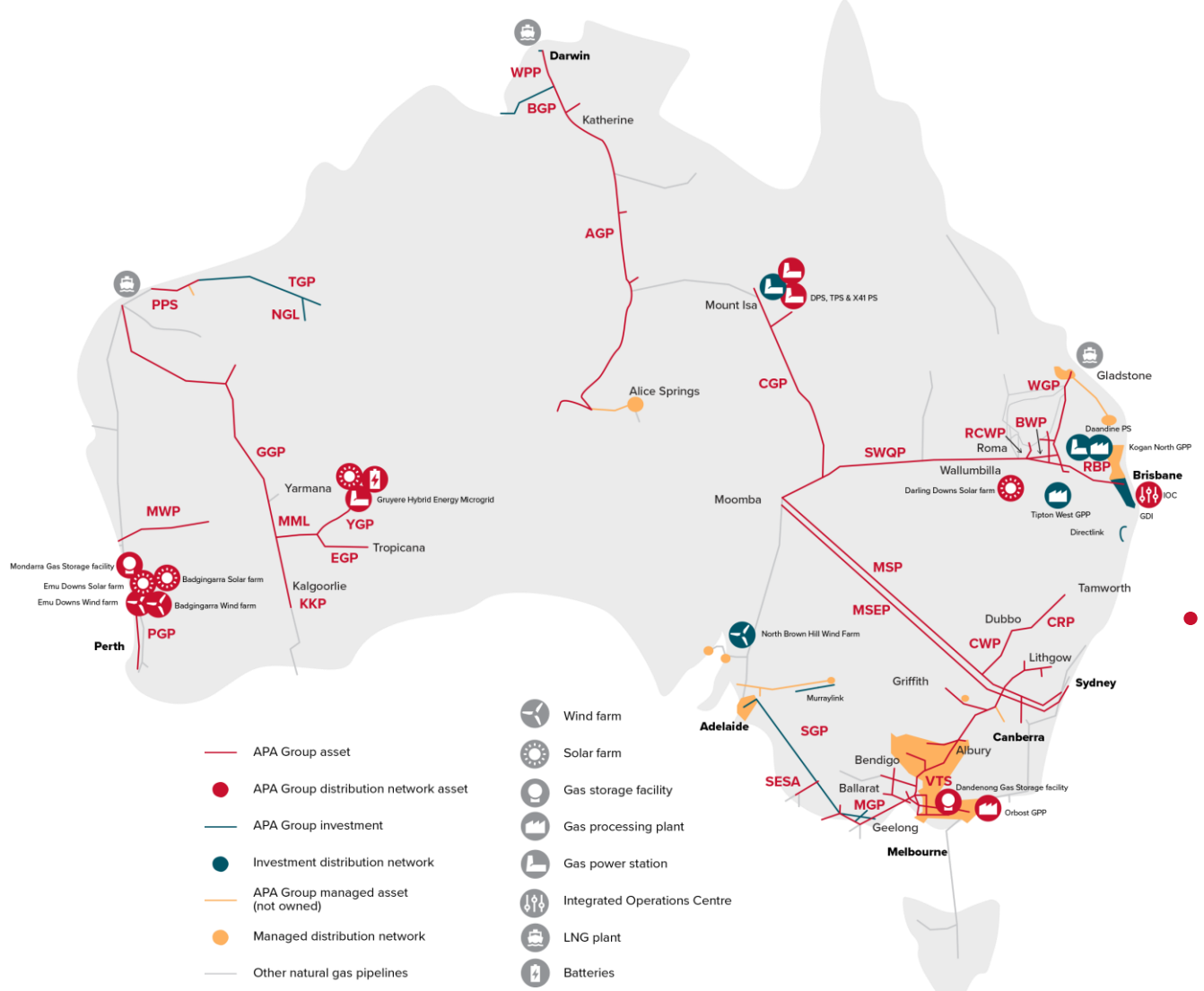
**Delivering our purpose to strengthen communities through responsible energy**

# Appendix

# Existing APA operational footprint diversified across a range of energy infrastructure assets

Assets and Investments Glossary	
<b>AGP</b>	Amadeus Gas Pipeline
<b>BGP</b>	Bonaparte Gas Pipeline
<b>BWSF</b>	Badgingarra Wind and Solar Farms
<b>BWP</b>	Berwyndale Wallumbilla Pipeline
<b>CGP</b>	Carpentaria Gas Pipeline
<b>CRP</b>	Central Ranges Pipeline and network
<b>CWP</b>	Central West Pipeline
<b>DDSF</b>	Darling Downs Solar Farm
<b>DPS &amp; LPS</b>	Diamantina & Leichhardt Power Stations
<b>EGP</b>	Eastern Goldfields Pipeline
<b>EDWSF</b>	Emu Downs Wind and Solar Farms
<b>EP</b>	Ethane Pipeline
<b>GGP</b>	Goldfields Gas Pipeline
<b>GHEM</b>	Gruyere Hybrid Energy Microgrid (Microgrid under construction)
<b>IOC</b>	Integrated Operations Centre
<b>KKP</b>	Kalgoorlie Kambalda Pipeline
<b>MWP</b>	Mid West Pipeline
<b>MGP</b>	Mortlake Gas Pipeline
<b>MGPSF</b>	Mondarra Gas Storage and Processing Facility
<b>MSP</b>	Moomba Sydney Pipeline
<b>NGP</b>	Nifty Gas Pipeline
<b>NGI</b>	Northern Goldfields Interconnect
<b>OGPP</b>	Orbost Gas Processing Plant (under commissioning)
<b>PGP</b>	Parmelia Gas Pipeline
<b>PPS</b>	Pilbara Pipeline System
<b>RBP</b>	Roma Brisbane Pipeline
<b>RCWP</b>	Reedy Creek Wallumbilla Pipeline
<b>SESA</b>	South East South Australia Pipeline
<b>SGP</b>	SEA Gas Pipeline
<b>SWQP</b>	South West Queensland Pipeline
<b>TGP</b>	Telfer Gas Pipeline
<b>VTS</b>	Victorian Transmission System
<b>WGP</b>	Wallumbilla Gladstone Pipeline
<b>WPP</b>	Wickham Point Pipeline
<b>X41</b>	X41 Power Station
<b>YGP</b>	Yamarna Gas Pipeline

Note: Agreement in place to sell MWP



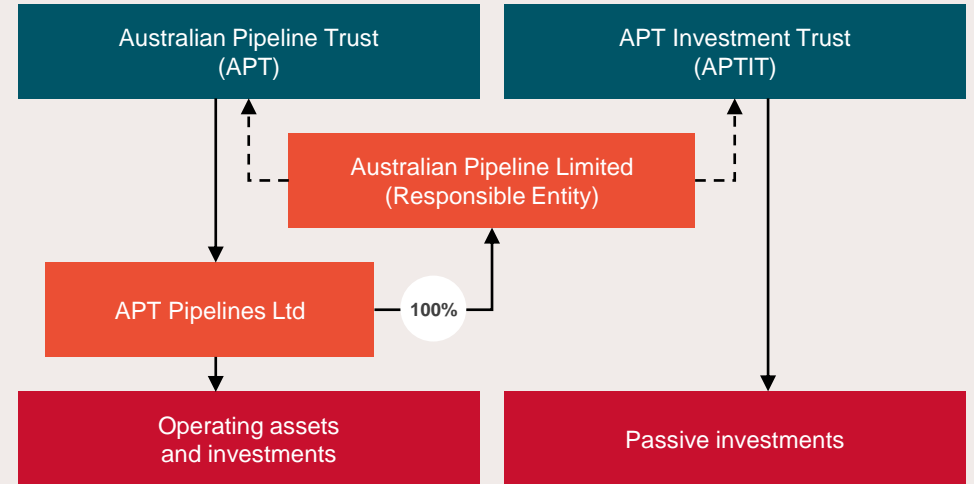
# Group structure

- APA Group is **listed** as a **stapled structure** on the **Australian Securities Exchange** (ASX:APA)
- APA is comprised of two registered managed investment schemes:
  - Australian Pipeline Trust (ARSN 091 678 778)
  - APT Investment Trust (ARSN 115 585 441) is a pass-through trust
- Australian Pipeline Limited (ACN 091 344 704) is the responsible entity of APT and APTIT
- The units of APT and APTIT are stapled and must trade and otherwise be dealt with together
- APT Pipelines Limited (ABN 89 009 666 700), a company wholly owned by APT, is APA's borrowing entity and the owner of the majority of APA's operating assets and investments

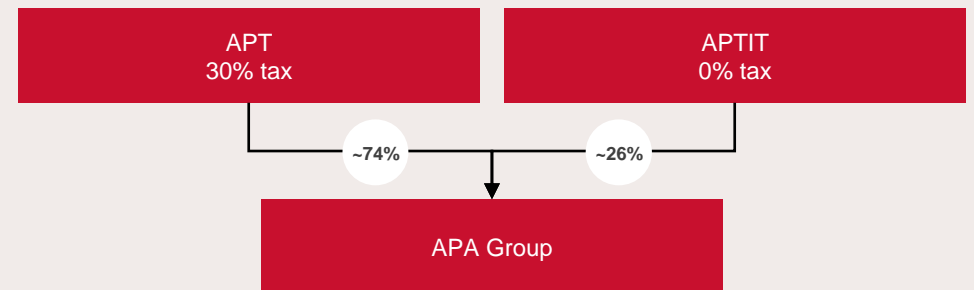
## Financial reporting segments within APT

- Energy Infrastructure: APA's wholly or majority owned energy infrastructure assets
- Asset Management: provision of asset management and operating services for the majority of APA's investments
- Energy Investments: interests in energy infrastructure investments

## Group Structure



## Tax Structure





always  
powering  
ahead

apa

Thank you



## For further information

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