Newcastle Community Dialogue Group

Thursday, 29 August 2024







We are meeting today in the Hunter Region of New South Wales on the lands of the Worimi People.

We acknowledge the Worimi People as the Traditional Custodians of this land and pay our respects to their Elders past and present.

Agenda

Open and welcome, apologies, declarations, previous minutes, business arising and correspondence

Tomago Battery Project Update

Newcastle Gas Storage Facility latest news

General business, next meeting and close

3 AGL Update



NGSF Update

- No major incident, MTIs or LTIs
- Major maintenance activities in progress due to complete by mid-September
- Send-out season complete
- Tank level down to 465 TJ down from 1,450 TJ
- 1st pigging campaign since completion of the plant
- Pipe cleaned internally
- Smart Pig ILI ongoing
- Ready for Liquefaction
- Environmental activities and update in the following slides







Environment update (John M) - bushfire preparedness

Bushfire preparedness -

- o contractors have been onsite to oversee vegetation management for perimeter tracks
- o contractors will be assessing whether a burn should occur in April 2025
- o organising drone imagery to assess bushland and provide before/after comparison



Environment update – water monitoring

Latest monitoring report reviewed by AGL (Amelia/John)
AGL has kept Hunter Water (John Simpson) aware of all findings

Increasing nitrogen at MW14 (still below thresholds)

- Engaged with Ausgrid regarding concrete sewage tank at their facility nearby
- Site inspection conducted with Hunter Water, Ausgrid and AGL
- o Plumbing tests to be carried out by Ausgrid (e.g. smoke test) to confirm if any leaks

Increasing dissolved chromium at MW14 (still below thresholds for hexalent)

- Unsure of the source
- Have reviewed historical photographs and cannot ascertain source
- Further monitoring in September 2024

Environment update – water monitoring

AGL has commissioned GHD to review the historical water monitoring results (7 years of data) and provide advice on tailoring the program

Our instructions are that any changes must not increase the risk of environmental harm being caused or threatened

GHD will look at the data and determine whether any changes can be justified

- Frequency of monitoring
- o Parameters that are monitored at each bore

Any proposed changes will be socialised to the community group, esp. Hunter Water.

Environment update (John M) - priorities

Wetlands – vegetation removal has occurred to restore full functionality, large trees (Angophora) will be treated in-situ to avoid roots causing damage to liner

Weeds – no further sightings of Pampas Grass. AGL is preparing an Integrated Weed Management Plan to cover all sites including NGSF

Medowie Offset Property – all monitoring was completed for the year and a report will be produced soon

- Camera monitoring captured deer, but no cats or foxes this year
- Security upgrades have occurred (gates, fences, locks)
- Ecological monitoring completed (plots)
- Weed surveys conducted

AGL in the Community







- Donation of PS4 and additional controller to gift the youth space
- Donation of 10 redundant AGL work phones with purchase of 10 new chargers



Guparr Aboriginal Men's and Youth Shed



A space where Aboriginal elders hope to encourage participation, create opportunities and change public perception while offering young people knowledge and guidance.







Our Partnership with Hunter Region Botanic Gardens

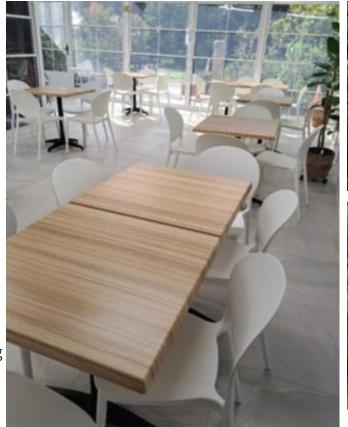
The Hunter Region Botanic Gardens is an environmental hub for the region supporting and educating many community groups, volunteers, schools and visitors from the Hunter and beyond.

Achievements from funding:

- ➤ Information and directional signage to enhance the visitor experience and to improve safety.
- ➤ Purchase of gazebos for events such as educational workshops, community activities, information booth on fair days and plant sales.
- > Purchase of modern café furniture for the new outdoor area.
- Purchase of laptop to support volunteers in learning new digital skills and support administration of the garden's activities.
- > Purchase of an urn and music equipment to support the community activities.

Projects planned for FY25:

- Utility Project purchase of a large storage tank and timing device for distribution of treated wastewater outside of peak visiting times.
- ➤ Shade Shelter to build a community shelter in the palm garden for people to gather and enjoy the palms and rainforest setting with distant views to the wetlands











AGL Update









Strong earnings underpins investment in the energy transition and returns to shareholders



- Underlying EBITDA up 63% to \$2,216 million; Underlying NPAT up 189% to \$812 million
 - Significantly improved fleet availability and portfolio flexibility, including a solid earnings
 contribution from the Torrens Island Battery, more stable market conditions coupled with the
 impact of higher wholesale electricity pricing from prior periods being reflected in pricing
 outcomes and contract positions, and strong Customer Markets performance
- Operating free cash flow up 169% to \$1,355 million¹, driven by higher earnings
- Final dividend of 35 cents per share (unfranked), Total dividend of FY24 of 61 cents per share (unfranked), equating to a total payout ratio of 50% of Underlying NPAT for FY24



- FY25 guidance:
 - Underlying EBITDA between \$1,870 million and \$2,170 million
 - Underlying NPAT between \$530 million and \$730 million

Embracing ESG – strong progress on our ESG focus areas



Decarbonisation and portfolio transition

- Annual operated Scope 1 and 2 greenhouse gas emissions down 23% in FY24 against FY19 baseline, versus CTAP target of 17%
- Development pipeline grown to 6.2 GW*
- Decentralised assets under orchestration increased to 1.25 GW



- To prevent injuries occurring and improve TIFR, increased focus on leadership training, and site specific safety awareness programs
- Continued focus on physical and psychosocial education and awareness programs
- Investment in operational engineered solutions and asset integrity



Gender equality and representation

- Met target for proportion of women in our Senior Leadership Pipeline
- Median gender pay gap for total remuneration down 3.9 percentage points from 2023
- Respect@AGL **training** delivered to over 3,000 employees



Reconciliation Reconciliation (procurement and recruitment)

- Over \$5.9 million of goods and services purchased from First Nations owned businesses, exceeding RAP target
- Launched **Employee Value Proposition** for First Nations employees
- Self-identifying First **Nation employees** increased from 19 to 39



Community acceptance and social value

- Invested \$6.0 million in the communities in which we operate
- Supporting organisations that deliver help to those in need (The Salvation Army, OzHarvest. Singleton Neighbourhood Centre and the **Upper Hunter** Homeless Support)



Affordability

- Two-year **Customer Support** Package increased by \$20m to \$90m
- Delivered >\$56m in **payment** matching and debt relief
- Supported around **17,000** customers moving off our Staying Connected hardship program

AGL Energy FY24 Full-Year Results | 14 August 2024

^{*} As at 14 August 2024.

Transitioning our energy portfolio

Almost doubled our development pipeline to 6.2 GW¹, with continued focus on increasing optionality



Delivering against targets

~1 GW projects in operation, under construction or contracted



Torrens Island Battery (250 MW / 1 hr): In operation Broken Hill Battery (50 MW / 1 hr): In operation Liddell Battery (500 MW / 2 hr): Under construction Rye Park Wind Farm (178 MW): PPA signed

Demonstrated progress

Development pipeline accelerated, new options added

Key milestones achieved

- ✓ Planning approvals received for Bowmans Creek Wind Farm (Stage 1)
- ✓ Muswellbrook Pumped Hydro project has received CSSI³ declaration from NSW Department of Planning, providing an acceleration pathway
- ✓ Feasibility licence awarded for 2.5 GW Gippsland Skies Offshore Wind⁴
- ✓ AGL entered into a Joint Venture with Someva to develop Pottinger Energy Park (1,200 MW wind, 500 MW / 4 hr battery, 300 MW solar)
- ✓ Development applications submitted for Barn Hill Wind Farm and Pottinger Wind Farm
- >400 MW fast start gas options added to the development pipeline (Barker Inlet Power Station 2 +250 MW, Kwinana Swift Gas 2 +180 MW) highlighting the role of gas to firm new renewable generation, whilst continuing to develop hydro and other long-duration projects

- 1) As at 14 August 2024; AGL's development pipeline was disclosed as 3.2 GW in its inaugural Climate Transition Action Plan (CTAP), released in September 2022.
- 2) Nameplate and contracted capacity.

- 3) CSSI Critical State Significant Infrastructure.
- 4) Gippsland Skies Offshore Wind is a consortium comprised of Mainstream Renewable Power, Reventus Power, DIRECT Infrastructure and AGL Energy, in which AGL has a 20% interest.

AGL Energy FY24 Full-Year Results | 14 August 2024

Transitioning our energy portfolio

The development pipeline is accelerating, with new firming options added

- AGL continues to build a strong development pipeline that is diversified by technology and geography, enabling AGL to prioritise and sequence developments to respond to market signals
- Targeting earlier FID dates across the development pipeline to provide AGL with more energy procurement options
- AGL expects majority of firming capacity to be funded on balance sheet and majority of renewable generation capacity via joint ventures, partnerships and offtakes
- A portion or all of capital used to build wind projects is expected to be recycled

PROJECT	TYPE	STATUS	CAPACITY/DURATION	FID TARGET			
IN OPERATION: 300 MW							
Torrens Island Battery (SA)	Firming	In operation	250 MW / 1 hr	N/A			
Broken Hill Battery (NSW)	Firming	In operation	50 MW / 1 hr	N/A			
DEVELOPMENT PIPELINE: 6.2 GW ¹							
Liddell Battery (NSW)	Firming	Under construction	500 MW / 2 hrs	N/A			
Barn Hill Wind Farm (SA)	Renewable	In development	270 MW	FY25-26*			
QLD Battery 1 (QLD)	Firming	In development	500 MW / 4 hrs	FY25-26			
Bowmans Creek Wind Farm (NSW)	Renewable	In development	350 - 450 MW	FY26-27			
Muswellbrook Pumped Hydro (NSW)	Firming	In development	400 MW / 8 hrs	FY26			
NSW Wind Farm 1 (NSW)	Renewable	In development	450 – 500 MW	FY26-27*			
Pottinger Battery (NSW)	Firming	In development	500 MW / 4 hrs	FY26			
Pottinger Wind Farm (NSW)	Renewable	In development	1,200 MW	FY26			
Tomago Battery (NSW)	Firming	In development	500 MW / 4 hrs	FY25-26*			
Barker Inlet Power Station 2 (SA)	Firming	In development	250 MW	FY26-27			
Kwinana Swift Gas 2 (WA)	Firming	In development	180 MW	FY26-27			
SA Battery 1 (SA)	Firming	In development	270 MW / 4 hrs	FY28-29			
VIC Wind Farm 1 (VIC)	Renewable	In development	550 – 700 MW	FY28			
EARLY-STAGE OPPORTUNITIES: 6.6 GW							
Gippsland Skies Offshore Wind ²			~2.5 GW	Subject to			
Other Renewables			0.9 GW	ongoing development			
Other Firming			3.2 GW	assessment			
TILT RENEWABLES DEVELOPMENT PIPELINE ³ > 3.5 GW							

- 1. As at 14 August 2024.
- 2. Gippsland Skies Offshore Wind is a consortium comprised of Mainstream Renewable Power, Reventus Power, DIRECT Infrastructure and AGL Energy, in which AGL has a 20% interest.

^{3.} AGL has 20% ownership in Tilt Renewables.

¹⁷

The acquisition of Firm Power and Terrain Solar significantly strengthens AGL's development pipeline and options

Overview of the acquisition:

- AGL has entered into a binding agreement for the acquisition of 100% of the shares in Firm Power and Terrain Solar¹
- Firm Power is a Battery Energy Storage System (BESS) developer with 21 projects in development; Terrain Solar is a solar project developer with 6 solar and BESS projects and one wind project in development
- High quality development pipeline of primarily BESS projects strengthens AGL's firming and storage optionality:
- Includes several mid-sized BESS projects, ranging between 200 MW to 500 MW / 2-to-8-hour durations, primarily across New South Wales and Queensland
- The development projects have a strong match with AGL's customer portfolio position
- The proposed acquisition is subject to customary conditions precedent, with completion anticipated in 2024.

2) Direct current basis.

The combined development pipeline (8.1 GW) comprises:



6.1 GW of grid-scale BESS projects across:

New South Wales (2.3 GW), Queensland (2.7 GW), Victoria (0.3 GW), Western Australia (0.5 GW) and South Australia (0.3 GW)



1.8 GW² of solar projects across:

New South Wales (0.5 GW), Queensland (1.1 GW) Western Australia (0.1 GW) and South Australia (<0.1 GW)



250 MW onshore wind project in New South Wales

¹⁾ Comprising the securities in Firm Power Assets Pty Ltd, Terrain Solar Pty Ltd, Terrain Solar Holdings Pty Ltd and the Terrain Solar Holdings Trust.

Transitioning our energy portfolio

New firming capacity options under assessment and development

AGL is expanding its flexible asset options across asset classes – Pumped hydro, gas generation, next generation solar storage, coupled with an ambition to build and operate a leading battery portfolio in the NEM

- AGL is the largest private owner of hydro power stations and is developing further pumped hydro power stations (blue-field)
- AGL has an ambition to build and operate a leading battery portfolio in the NEM
- AGL is well positioned for incremental development of gas peaker options with access to flexible gas underpinned by sizeable storage and haulage portfolios



Muswellbrook Pumped Hydro Project

AGL and joint venture partner, Idemitsu Australia, welcomed the Muswellbrook Pumped Hydro project receiving Critical State Significant Infrastructure status from the NSW Government in July



PROJECT OVERVIEW:

CAPEX >**\$1B+**

400 MW / 8hrs storage

Asset life ~100 years (4 - 5 times battery storage)

Hydraulic head 470m to 500m

~3 **GL** Upper reservoir water storage

UndergroundPowerhouse design

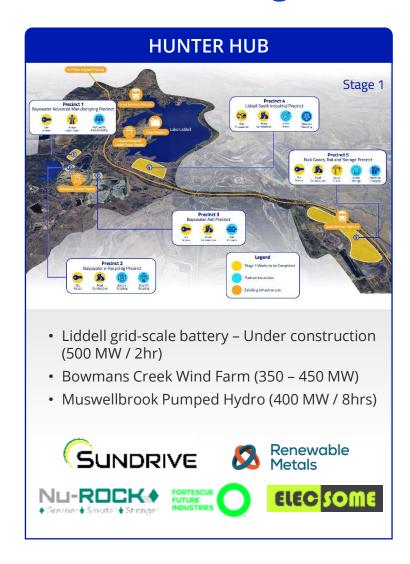
Full underground waterways to reduce environment impacts

1.5Km to Transgrid 330kV Substation

Approximately 4 years to construct and commission

If constructed the Muswellbrook Project would be a world first to convert a coal mine into renewable energy storage¹

Significant progress across all three Energy Hubs including ten MoUs signed







Transitioning our energy portfolio

7.4 GW of flexible dispatchable capacity in operation or under construction places AGL in a strong position

Diverse set of assets that combined provides high portfolio flexibility			Capacity	Response time
Grid-scale Batteries		 Batteries provide very fast frequency control ancillary services to maintain grid stability and reliability Battery storage is typically cycled daily to soak up renewable generation in the middle of the day, and discharge during evening peaks 	1,000 MW ¹	< 1 second Time from zero output to full output
Virtual Power Plants	W 64 A	 A virtual power plant (VPP) is a network of distributed energy resources including solar-powered homes and businesses that generate and store solar energy in batteries VPP's enable AGL to "load shift" to manage risk and help optimise its supply profile (E.g. Peak Energy Rewards demand response program; hot water orchestration) 	1,250 MW ²	1 second to 6 hours Time from sync to full load
Hydro		 AGL's fleet of hydro power stations provide fast start and load flex capability Water reservoirs typically provide multi month duration of storage. This provides flexibility to meet daily peak demands, cover seasonal energy swings and protect against outages 	785 MW	< 5 minutes Time from sync to full load
Gas		 Gas-powered generation units have the flexibility to turn off during lower priced periods, and then turn on for high priced periods AGL's integrated gas portfolio allows flexibility of gas supply, including the ability to run for extended durations 	1,110 MW	3.5 to 20 minutes Time from sync to full load
Coal		 AGL has invested heavily in increasing the reliability, efficiency and flexible capacity of the coal-fired generation fleet Bayswater and Loy Yang A units can be flexed down ~70% and ~60% respectively, on nameplate capacity 	3,235 MW ³	50 minutes to 2 hours Ramp up time from minimum to full load

- 1. Includes 500 MW Liddell Battery under construction
- 2. Includes smelters
- 3. Includes 90 MW across three units at Bayswater Power Station currently being registered with AEMO

Significant improvement in fleet performance, with higher availability and increased volatility captured



Positive outcomes from increased investment in thermal fleet

THERMAL FLEET COMMERCIAL AVAILABILITY¹

91.1% 15.2pp vs FY23

- Higher equivalent availability factor at Loy Yang A of 12.5% and Bayswater of 8.2% compared to FY23
- Bayswater and Loy Yang A improvement in unplanned outage factor of 5.8% due to a rotor failure outage on Loy Yang Unit 2 in FY23 and fewer boiler tube leak outages in FY24
- Successful early delivery of both the major planned outage on Bayswater Unit 1 and pitstop outage on Bayswater Unit 4



Stronger volatility capture driven by higher thermal fleet availability

VOLATILITY CAPTURED²

66.7% **9.3pp** vs FY23

- Volatility captured was significantly increased on FY23 due to improved availability of the thermal fleet
- Volatility captured was impacted by Loy Yang A's disconnection from the grid following the significant storm activity on February 13 and the failure of transmission lines and towers
- The return to full availability of AGL's hydro fleet is expected to provide further upside in FY25



Marginally higher generation volumes (normalised for Liddell Power Station closure in April 2023)

GENERATION VOLUMES³

34.1 TWh **6.8%** vs FY23

- Coal-fired generation was 12.1% higher than FY233
- Gas generation was 19.3% lower due to lower market prices
- Renewable generation volume (wind, hydro and solar) was 12.3% lower
 - Hydro generation volume was 21.7% lower due to tunnel repairs; successful return-to-service after the McKay and Bogong hydro headrace tunnel repairs
 - Wind generation volume was 11.8% lower due to reduced capacity factors across wind farms, driven by lower yield and lower availability

- 1. Thermal commercial availability includes Bayswater and Loy Yang A Power Stations.
- 2. Value of volatility captured by generation divided by value if all capacity of dispatchable asset were generating.
- 3. Excludes Liddell Power Station in FY23.

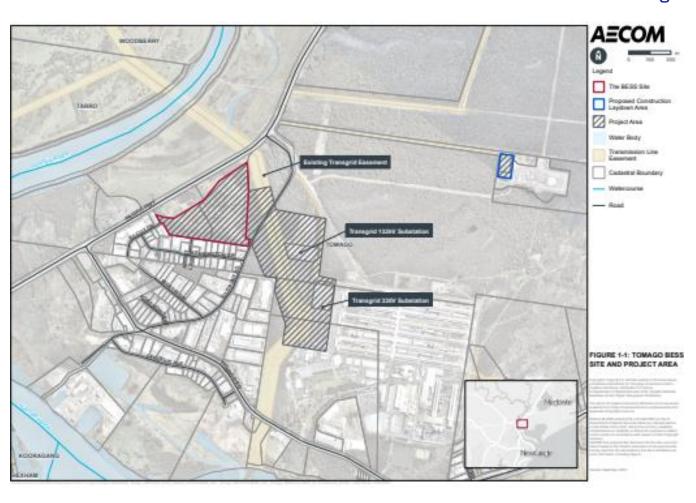
AGL Energy FY24 Full-Year Results | 14 August 2024





Key Project Details

- Project Capacity 500MW / 2000 MWh (4 hours).
- Providing grid stabilising generation and electricity storage.
- Transmission line from the battery project site to either the 132kV Transgrid substation (north) or the 330kV Transgrid substation (south).
- Connection to an existing switchyard, including minor works to connect the Battery to the preferred neighbouring substation.
- AGL Community Grants Program to be initiated by project operation date in 2028.
- Procurement process ongoing targeting local suppliers.



Schedule



Approvals Status



Conditions of consent:

- •19/6/24 AGL received Draft Conditions of Consent from DPHI
- •24/6/24 AGL accepted the proposed conditions (however outlined some comments for consideration)

RFI:

- •19/6/24 DPHI requested additional information re VPA and Old Punt Road access (NB: PSC discussions are ongoing)
- •5/5/24 -Biodiversity, Conservation & Science (BCS) provided recommendations
- •21/6/24 AGL submitted response to BCS recommendations.
- •27/6/24 BCS provided letter stipulating the need:
 - o for additional surveys to meet the requirements of the Biodiversity Assessment Method (BAM) for inclusion in the Biodiversity Development Assessment Report (BDAR) for Small-flower grevillea, Leafless tongue orchid, Netted bottle brush, Singleton mint bush, Pterostylis chaetophora, Heath wrinklewort, Black-eyed Susan
 - o for additional surveys to meet the requirements of the BAM for Pale-headed Snake
 - o to develop species polygon for Large-eared Pied Bats and Eastern Cave Bats and generate associated credit liability
 - o to develop species polygon for Squirrel Glider and generate associated credit liability

Approvals Status – BCS - Remaining Actions



- AGL will update of BAM and BDAR with assumed presence for species nominated by BCS and associated generation of credit liability to facilitate approval of the project.
- Commitment to complete additional post-approval surveys to ensure surveys conducted within suitable species survey window. The BDAR will be revised to incorporate findings of additional surveys including a reassessment of credit liability. Surveys to be conducted, as per BCS recommendations, and include:
 - targeted flora surveys in western area for Small-flower grevillea, Leafless tongue orchid, Netted bottle brush, Singleton mint bush, Pterostylis chaetophora, Heath wrinklewort, and Black-eyed Susan.
 - Pale headed Snake with funnel trap.
- Generation of polygon and credit liability for the Large-eared Pied Bats, Eastern Cave Bats and Squirrel Glider to meet BCS requirements

Questions

Contact

Jo Ferguson
Community Relations Manager
AGL Hunter
Jo.ferguson@agl.com.au

