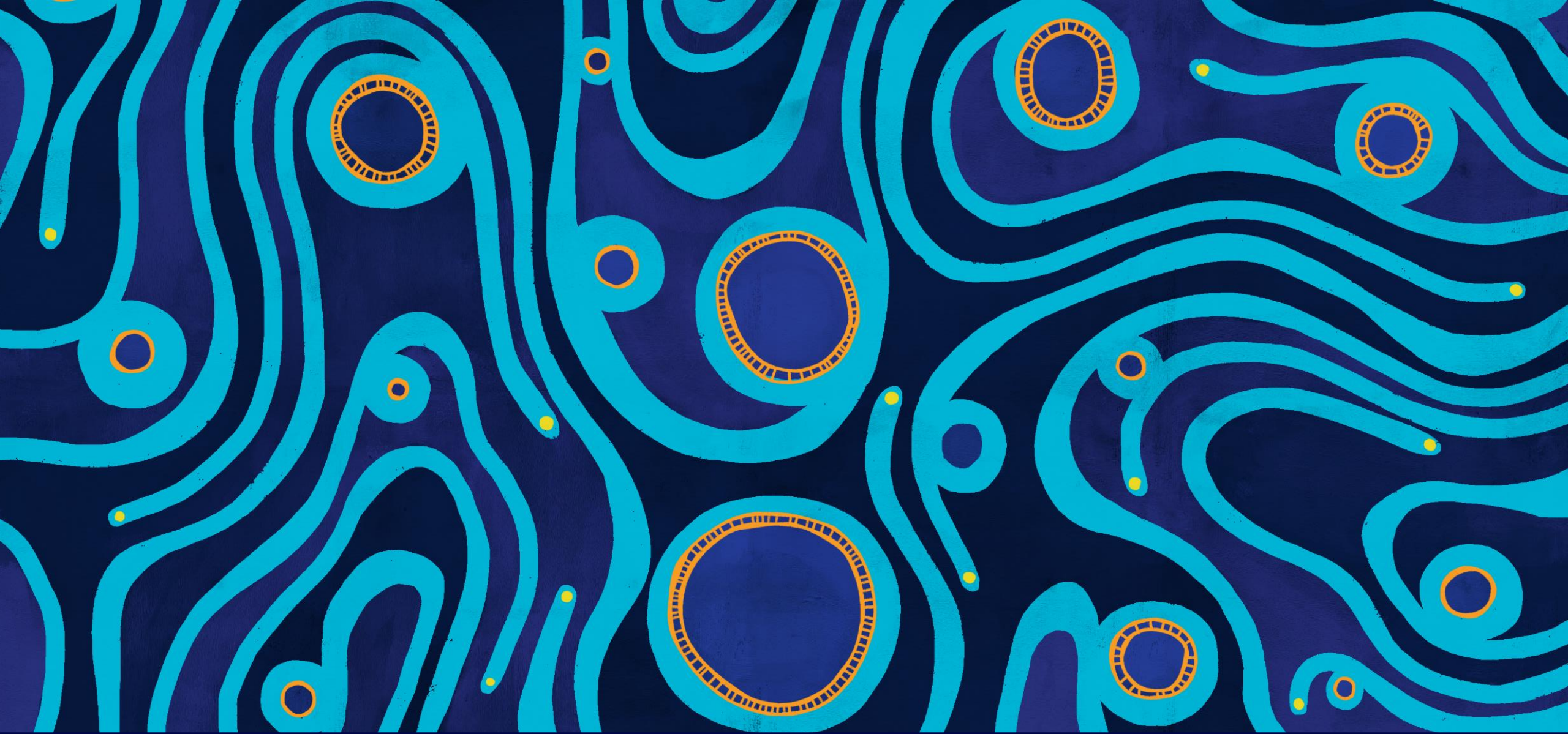


Newcastle Community Dialogue Group

Tuesday, 3 June 2025



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

- 1 Open and welcome, apologies, declarations, previous minutes, business arising and correspondence
- 2 Newcastle Gas Storage Facility latest news
- 3 AGL Update

- 4 Tomago Battery Project Update
- 5 General business, next meeting and close

NGSF Update – this period

- No major incident, MTIs or LTIs
- Tank is full; 1.4 PJ
- Critical maintenance commenced
- Awaiting cooler weather to inject gas back to the grid



NGSF – Since 2015

- No LTI or Serious Injury in 10 years
- One MTI – offsite in 2017
- License to operate from SafeWork NSW
- No major PINs and notices from the regulators
- No breach of licenses
- Recognized by AWU for handling COVID while keeping the plant operational
- More than 100 local contractors
- Total LNG Liquefied: 10,770 TJ
- Total gas to Jemena HP network: 7,950 TJ
- Total gas to TAC: 5,300 TJ
- Total gas to local LP network: 4,179 TJ

Hosting Joint Chemical Engineering Committee Members



Thrilled to report a great **JCEC NSW** site visit to **AGL** Newcastle Gas Storage Facility (NGSF) - only possible thanks to the excellent team at AGL.

Sean, Craig, **Kourosh** and **Jo** gave in-depth overviews of operations at NGSF, demonstrating the importance placed on process safety, as well as care for the asset and its operation.

We had interesting discussions around:

- ★ Practical requirements and key learnings in maintaining a major hazard facility (MHF).
- ★ Unique layers of protection for liquefied natural gas storage.
- ★ Technologies and strategies to prevent critical equipment failures, ensuring energy security.

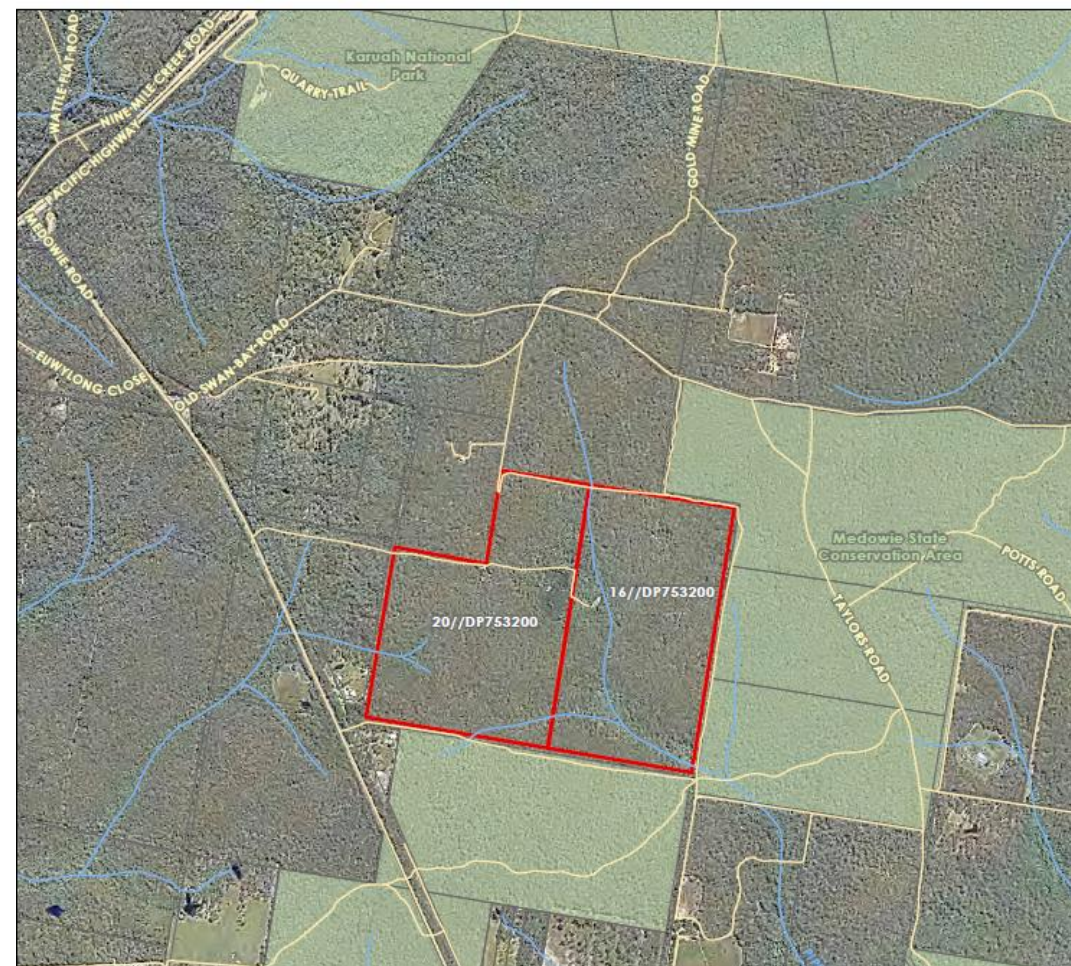


Environment update

No environmental incidents or regulatory non-compliances during the reporting period

- Medowie Offsets Properties

- Lot 16 and Lot 20 Old Swan Bay Rd, Ferodale
- Each Lot is approximately 58 ha, under Conservation Agreement since 2016
- Contains a diverse array of wildlife including threatened species and ecological communities
- Supplementary native trees recently planted in Lot 20
- Recent rain has made parts of the property inaccessible, delaying scheduled track and fence maintenance
- NPWS has requested property access to assist with planned Hazard Reduction Burns in Autumn 2026
- Biodiversity Conservation Trust to inspect property next quarter



Environment - Upcoming priorities

- EPL 20130 Annual Return Report
- FY25 Sustainability Report
- FY25 National Pollutant Inventory Report
- Annual review of Pollution Incident Response Management Plan
- 5 yearly air emissions stack testing of three boilers during gas send out



Environment update – water monitoring (Amelia)

Groundwater and surface water sampling completed in accordance with the Operations Water Management Plan in March 2025

- Two exceedances of adopted threshold but results consistent with previous monitoring

Groundwater Well	Exceedance	Criteria	Understanding of risk
MW14	Chromium (0.006 mg/L)	Adopted Threshold (0.005 mg/L) Drinking Water Guidelines (0.05 mg/L)	hexavalent chromium (<0.005 mg/L), the fraction associated with toxicity, below detection limits and drinking water criteria Chromium source unknown but isolated
MW19	Nitrate (0.05 mg/L)	Adopted Threshold (0.02 mg/L) Drinking Water Guideline (3 mg/L)	First time exceedance No increasing trend Below drinking water criteria

- Pending endorsement of change in frequency, next monitoring scheduled for March 2026.
 - Recommendation to change frequency from 6 monthly to annual based on
 - robust data (20 monitoring rounds with baseline, construction and operational monitoring data)
 - no increase in risk of environmental harm
 - low rate of change

AGL in the Community

Jo Ferguson – Manager Community Relations

The Newcastle Show



Thank you to our Sponsors



43,000	SHOW ATTENDANCE 2025
\$3,601,000	EST ECONOMIC VALUE
1.650 000	DIGITAL MARKETING IMPRESSIONS



Celebrating 10 Years of Operation at NGSF



 NEWS



 view Newcastle Herald's complete view of property

AGL Tomago: \$310 million gas storage facility opens

By Matthew Kelly
June 12 2015 - 9:30pm

0 Comments



AGL opens new gas storage facility near Newcastle

Oil and Gas

Fri 12 Jun 2015



AGL's gas storage plant at Tomago, Newcastle. (ABC News: Liz Farquhar)

abc.net.au/news/agl-opens-new-gas-storage-facility-near-n...



Share article

\$310M gas storage plant opened at Tomago

07 July 2015 / Vol. 11 / No. 6

AGL Energy Limited (AGL) officially opened a new Gas Storage Facility near Newcastle in June. The company says the \$310 million Newcastle Gas Storage Facility (NGSF) will improve security of gas supply to not only Hunter residents but to the hundreds of thousands of customers in NSW.

The project has been under construction since August 2012 and was delivered on time and on budget. AGL Managing Director & CEO Andy Vesey and NSW Parliamentary Secretary for the Hunter and Central Coast, the Hon. Scot MacDonald, were on site at Tomago to open the facility.

AGL supplies natural gas to 700,000 gas users in NSW including hospitals, schools, homes, and businesses. The 40 metre high tank has the capacity to hold 30,000 tonnes – or 1.5 petajoules – of liquefied natural gas (LNG) and will be used to support gas supplies during peak winter demand and if there is a major disruption to NSW supply. According to Mr Vesey “the cost of one day’s interruption to the region’s gas supply is estimated to be \$5.5 million. The tank provides storage capability for up to two weeks of gas demand providing much needed energy security, particularly to manufacturers.”

During construction the NGSF project employed more than 300 people and its construction contributed an estimated \$144 million, directly and indirectly, to the regional economy between 2012 and 2015.



Energy company AGL says its new gas storage facility near Newcastle has given the Hunter region much needed security of supply.

AGL managing director Andy Vesey has today officially opened the \$310 million Newcastle Gas Storage plant at Tomago.

Construction started three years ago and AGL began filling the 30,000 tonne tank in April.

Mr Vesey said it gives the region a two week back up supply of gas.

“This is a peaking facility,” he said.

This ensures that industrial commercial and residential users of gas have a continuous supply.

“So when gas demand is at its highest this ensures that industrial commercial and residential users of gas have a continuous supply.”

He said the storage facility is crucial, given the location of the Hunter region at the end of the gas supply pipeline.

“When you’re towards the end of that pipeline, you tend to see the impacts of peak gas constraints.”

The storage facility will secure supply for industrial customers, such as the neighbouring Tomago Aluminium smelter, as well as homes across the Hunter region and beyond.

Celebrating 10 Years of Operation at NGSF



Join the change



10 years supporting our community

- Hunter Region Botanic Gardens
- Native Animal Trust Fund
- Hunter Life Educations
- Tanilba bay & District Senior Citizens
- Hunter Breast Cancer Foundation
- Nelsons Bay Croquet Club
- Tilligery Arts Group
- Tomaree Neighbourhood centre
- Irrawang Public School
- The Men's Shed
- Port Stephens Koalas
- The Newcastle Fringe Festival
- The Newcastle Show
- Wahroonga Aboriginal Corporation
- Seaside Singers Community Choir of Port Stephens
- Port Stephens Family & Neighbourhood Services
- Bikers for Kids Toy Run
- Hunter Wildlife Rescue
- Caring for our Port Stephens Youth
- Soldiers Point Tennis Club
- Tomaree Museum Association
- Newcastle Toy Library
- Catholic Care Social Services
- Karuah Progress Association
- Tomaree Headland Heritage
- Jenny's Place for Domestic Violence Victims
- Opera Hunter
- Westpac Rescue Helicopter Service
- Survivour's R Us Incorporated
- Newcastle NPL T-20

AGL Update



Join the change



Priorities for FY 2025



Customers

Helping our customers decarbonise the way they live, move and work while transforming our retail business.



Portfolio

Developing our renewable and firming capacity pipeline, including repurposing our existing thermal sites into energy hubs



Business

Running our business exceptionally well, while maintaining a strong focus on health, environment and safety.

AEMO's 2024 Integrated System Plan

Key facts and figures ('Step Change' scenario)

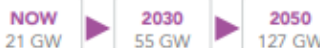


Storage capacity
**to increase
significantly**

Batteries, virtual power plants,
pumped hydro



Grid-scale wind and solar
**to increase
6-fold**



Distributed solar PV
**to increase
4-fold**

Rooftop solar,
other distributed solar



Electricity consumption
from the grid
**to nearly
double**



Gas-powered generation
to increase

While current mid-merit
plants will all retire
within that period



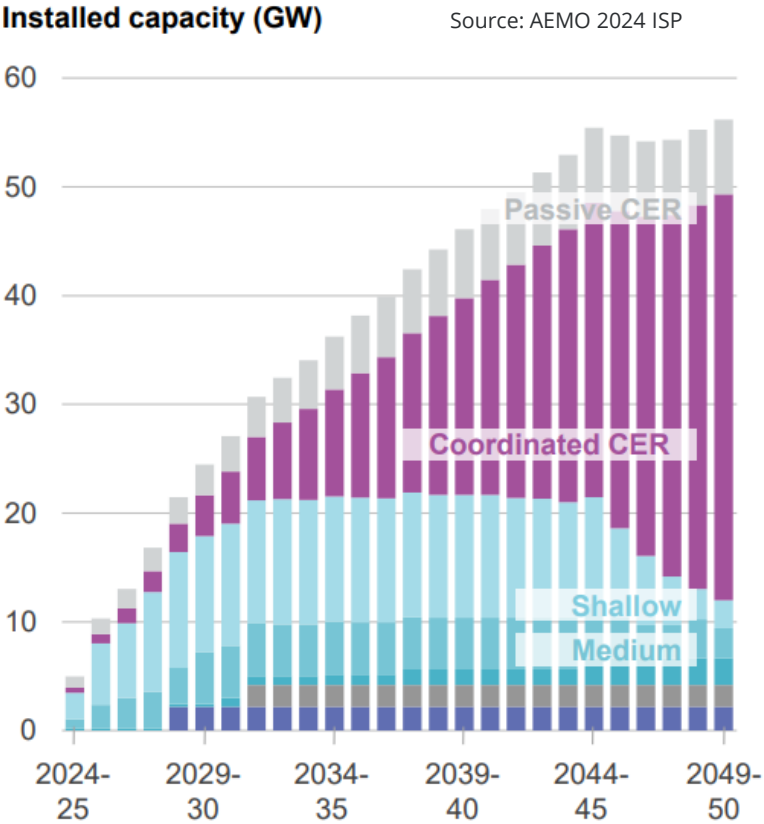
Coal generation
**to be
withdrawn**

Capacity to be retired by:



AGL's current portfolio prioritises deployment of firming assets to meet immediate market needs, while also building renewable options

AEMO has forecast a requirement for ~24GW of storage capacity in the NEM by 2029-30



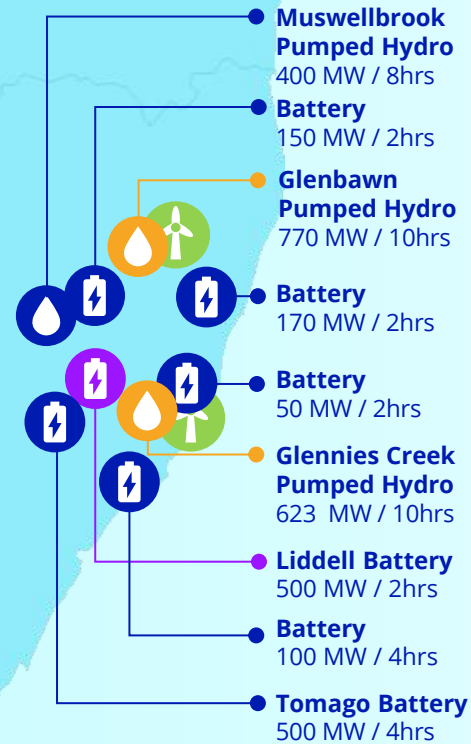
AGL's current pipeline comprises ~10GW firming and ~6GW renewable opportunities

TYPE	STATUS	CAPACITY
IN OPERATION: 300 MW		
Firming	In operation	300MW
DEVELOPMENT PIPELINE: 7.0 GW		
Firming	Under construction	500MW
Firming	In development	3.8GW
Renewable	In development	2.7GW
EARLY-STAGE OPPORTUNITIES: 9.0 GW		
Firming	In development	5.6GW
Renewable	In development	3.4GW
Total AGL Pipeline: 16.3 GW		
TILT RENEWABLES DEVELOPMENT PIPELINE ⁴ > 3.5 GW		

AGL is focused on progressing firming assets in the Hunter region due to its favourable geographic characteristics

Legend

- Existing development pipeline
- New addition to pipeline*
- Projects under construction
- Potential project
- Onshore Wind
- Battery
- Pumped Hydro



**NETWORK
STRENGTH**



**EXISTING
OPERATIONS**



**PROXIMITY TO LARGE
LOAD CENTRE**

Note: includes both fully owned and joint venture projects, without PPAs.

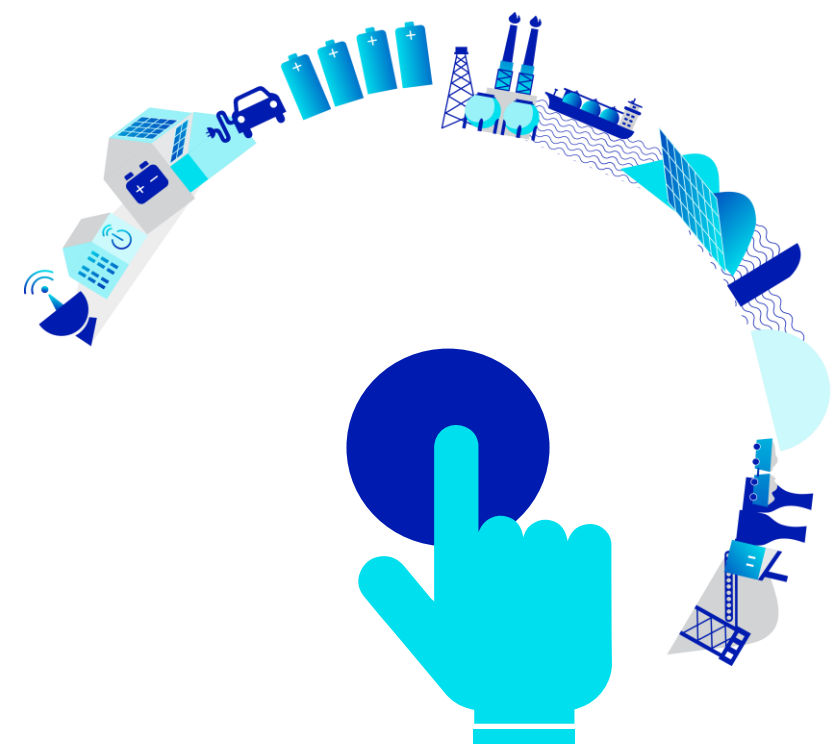
*New additions to development pipeline since disclosed at the HY25 Result announcement on 12 February 2025.

AGL is pursuing a range of firming options, as no single asset class can meet all market needs

A combination of firming assets will be required to support the energy transition

Role of Asset	Batteries (2-4 hrs)	Gas Powered Generation	Pumped Hydro (8+ hrs)
Wholesale Market Services	✓	✓	✓
Ancillary Services	✓	✓	✓
Lead time to Operation	Fast	Medium	Long
Expected asset life	20 years	40 years	50+ years
ESG considerations	End-of-life	Carbon emissions	Footprint

- **Batteries** provide wide ranging services and can be deployed quickly but are commercially limited to 4 hours storage duration
- **Gas generation** provides unlimited firming capacity with sufficient fuel supply but requires a medium lead time to reach commercial operations
- **Gas generation** also produces emissions, which must be offset
- **Pumped hydro** can provide long duration storage but requires a significant lead time to reach commercial operations
- The long asset life and large footprint also present challenges for investors, approvers and local stakeholders



500 MW Liddell Battery on track for early 2026

250 MW expected to be operational in early 2026; remaining 250 MW expected by April 2026



500 MW / 1,000 MWh

Grid-forming battery with a 20-year asset life.
Fluence is the EPC provider.



Commencement of operations expected in early 2026

~30% complete with 1,055 battery cubes on site. Next milestone is the major equipment delivery and generation registration completion. Phased implementation with 250 MW expected to be operational in early 2026 and the remaining 250 MW expected by April 2026.



Site mobilisation successfully completed

Bulk civil earthworks are progressing. This includes cut-and-fill operations, bench preparation, and the installation of stormwater and drainage systems. Transgrid has commenced civil works at the switchyard and battery substation.



Expanding on our extensive development expertise

Incorporating experience from the delivery of the 250 MW Torrens Island and 50 MW Broken Hill battery projects



Capex on target

50% already invested with delivery of battery main components complete. Estimated construction cost of \$750m funded on AGL's balance sheet utilising operating cash flow, existing debt facilities (including green capex loans)



1,055 battery cubes delivered
to the Liddell Battery layout area

1) Total estimated construction cost of approximately \$750m includes engineering, procurement and construction costs, project management costs, overheads, contingency, and interest during construction

Tomago Battery Project

500MW/2000MWh (4 hours duration)



Schedule



Updates



Join the change

- 132kv Transmission Line Route selected.
- AGL received approval
 - to enable staging of the Fire Safety Study (FSS) under Condition B28 so that approval of the final FSS for the battery components is not required until the components, are due to be installed and energised.
 - to update the species credit requirements based on additional surveys under Condition B11
- AGL and Port Stephens Council to enter into a Voluntary Planning Agreement to be advertised 10/7-6/8 and executed by Council 10/9
- Management Plans being prepared:
 - Biodiversity Management Plan (Condition B13) - Site visit scheduled with Conservation Programs, Heritage and Regulation (formerly BCS)
 - Cultural Heritage Management Plan – 28 day exhibition closed 10/5. Consultation with Heritage NSW and Aboriginal stakeholders
 - Environmental Management Strategy to the satisfaction of the Planning Secretary
 - Soil and Water Management Plan in consultation with the Water Group
 - Other Management plans to be prepared by Construction contractor, including FSS, emergency management plan and traffic management plan

Questions

Thank you!