AGL Camden **Gas Project** Update July 2019 ≥ '/, ag' 1000

About the Camden Gas Project

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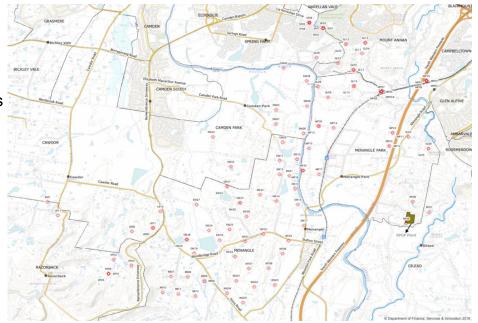
Camden Gas Project fields:

Fast facts

- Began producing in 2001
- 60km southwest of Sydney, in the Camden, Wollondilly and Campbelltown LGAs
- Produces approximately 5% of NSW's gas supply (that's about how much gas 265,000 homes use in a year)
- 100km of low-pressure gas gathering lines

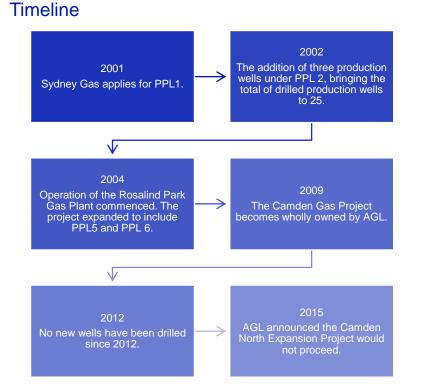
144 wells have been drilled:

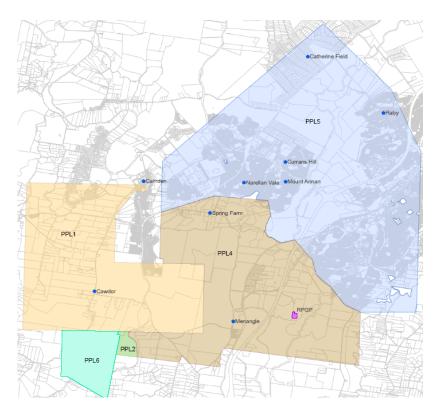
- 87 wells producing
- 14 shut in / suspended
- 43 decommissioned



About the Camden Gas Project







About the Camden Gas Project Schedule



Camden Rehabilitation Project - Whole Project Projected Preliminary Timeline

Calendar Year End	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Indicative Number of Remaining Wells	124	114	103	100	95	90	85	60	30	0		
Stage 1		Stage 1 Sit	e Works*									
Intermediate Stage			Intermediate Stage Site Works*									
Final Stage								Final	Stage Site Wo	orks*		
Stakeholder Consultation		Regulators, Landowners & Community Consultation									Sign-off & Relinquishm	
Stakeholder Regulators Landowners & Community Consultation										•		

Decommissioning and Rehabilitation



Decommissioning and Rehabilitation

Background

- As AGL progressively decommissions and rehabilitates wells toward ceasing production in 2023, we will not drill new wells.
- Decommissioning and rehabilitation work is undertaken with a high level of regulatory oversight by the NSW Government's Department of Planning & Environment and the NSW Environmental Protection Authority (EPA), following standards set in the NSW Government's Code of Practice for Coal Seam Gas.
- Decommissioning requires the use of a Workover Rig.
- AGL also works with land owners to ensure the rehabilitated wellsite is left to their satisfaction.



Decommissioning and Rehabilitation

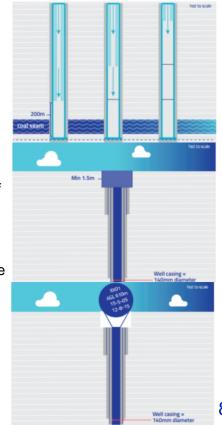
The decommissioning process

When a coal seam gas well is identified as no longer required for production, it must be decommissioned and the site fully rehabilitated before receiving regulatory sign-off. AGL decommissions and rehabilitates each well site using the following process:

Decommissioning:

- The equipment at the top of the well is safely removed.
- A Workover Rig and other machinery comes to the well site.
- · Residents are notified before this occurs.
- Purpose-specific cement, which complies with the standards set by the NSW Government's Code of Practice for Coal Seam Gas Well Integrity, is placed inside the well from bottom to top in stages.
- This cement seals the wellbore and adds to the integrity of the well.
- The well casing is cut off, at least 1.5 metres below the surface, so that it does not interfere with agricultural and other future land uses. A steel cap, containing data such as the name of the well, the name of the operator, the well depth, when it was drilled and when it was decommissioned, is attached to the top of the casing.
- The decommissioning works are overseen by the Department of Planning & Environment (DP&E) and the Environment Protection Authority (EPA) Gas Regulation branch, and conducted within stringent health, safety and environment guidelines. A full report is provided to the regulator once all decommissioning works have been completed.





Operations & Environment



Decommissioning & Rehabilitation

EM28 natural gas well: 1. prior to decommissioning; 2. AGL Rig-1 decommissioning well





Decommissioning and Rehabilitation

The rehabilitation process

- Initial rehabilitation returns the surface of the site to the original contour of the land, usually seed is sown, or as agreed with the landowner.
- Rehabilitation then continues over 12-18 months until both the regulator and landowner are satisfied.
- EM28 natural gas well: 3. cement to surface; 4. cut 2m below ground level and data cap welded on; 5. surface recontoured and top soil spread.





Decommissioning and Rehabilitation Stage 1

- AGL completed all rig work associated with the decommissioning of 19 wells between 2017-2018. This was known as the Stage One program.
- AGL will continue to progressively decommission and rehabilitate gas wells as they reach end of life, accounting for landholder preferences, operational and regulatory requirements, up until closure of the facility planned for 2023. After this, all remaining wells will be decommissioned and rehabilitated.
- 46 wells (of the original 144) have been, or are in the process of being, decommissioned and rehabilitated.



Community

DROUGHT

agl

Community

AGL's Commitments to the Macarthur Region

- The Camden Gas Project employs approximately 20 locals.
- AGL aims to deliver community wide benefits, encourage innovation in and support for issues of community significance, and build and maintain strong relationships throughout the community.
- AGL runs a regular Local Community Investment Program that provides grants of up to \$5,000 to local community groups.
- During this financial year, AGL has contributed nearly \$50,000 in sponsorships for a variety of groups including:
 - Youth Solutions, Cawdor Public School, Campbelltown Community Pre-school, Douglas Park little Athletics, Camden Rotary Club, Fisher's Ghost Youth Orchestra, Macarthur Aviary Bird Club, My Gateway, Tahmoor Netball Club, We are Community, Turbans4Australia.



Community

How the community can contact AGL



Mail	PO Box 67, Menangle NSW 2568
Web	agl.com.au/Camden
Phone (24-hour enquiries and complaints)	1800 039 600
Email	aglcommunity@agl.com.au
 CCC provides a forum of open discussion between AGL and the community aimed at facilitating good working relationships amongst committee members and to act as a channel to help AGL improve its communication, education and notification with the Macarthur community Held over 50 meetings 	CCC Independent ChairMargaret MacDonald-Hillmmacdonald-hill@bigpond.com

Customer billing complaints and enquiries

MP@agl.com.au

Contact

Ernesto Calderon Community Relations Manager 1800 039 600 ECalderon@agl.com.au