



Tara Cheyne MLA Manager of Government Business Attorney-General Minister for Human Rights Minister for City and Government Services Minister for the Night-Time Economy

Member for Ginninderra

RESPONSE TO QUESTION ON NOTICE Questions on Notice Paper No 3 Friday, 7 March 2025 Question No. 182

MR CAIN: To ask the Minister for City and Government Services -

- 1. What specific measures is the Government taking to ensure that the landfill gas recovery system at Mugga Lane effectively minimises the release of harmful gases into the environment.
- 2. How are the measures, referred to in part (1), monitored and evaluated.
- 3. How does the Government plan to further increase the efficiency of electricity generation from landfill gas.
- 4. What are the targets for future years beyond the current expansion project.
- 5. What are the projected costs of the landfill gas plant expansion project at Mugga Lane.
- 6. How will the Government ensure that the project stays within budget and is completed on time.
- 7. What specific benefits does the Government anticipate from the new battery storage and grid connection as part of the Mugga Lane landfill expansion.
- 8. How will the improvements, referred to in part (7), enhance the overall stability and reliability of the ACT's electricity grid.
- 9. How will the Government address any potential shortfalls in energy generation to ensure that the community's energy needs are reliably met.
- 10. How does the Government plan to communicate the benefits of the landfill gas-to-energy project to the local community.
- 11. What steps are being taken to ensure that the community is involved and informed throughout the expansion process.

Ms Tara Cheyne MLA – The answer to the Member's questions are as follows:



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- The Government has contracted LGI Limited to undertake gas capture and power generation at the Mugga Lane landfill. LGI has installed a comprehensive landfill gas recovery system which includes a gas collection network within the landfill cells, and a power station. The power station was recently expanded from 4-megawatt (MW) capacity to 6 MW capacity, plus a 20 MW grid connection. Currently 33 wells are active at the landfill tip face to ensure gas capture is fully utilised. New infrastructure will be installed when required to ensure the power plant is running at maximum capacity.
- 2. The measures are monitored through continuous gas monitoring systems that track the composition and volume of gases being captured. Regular maintenance and inspections are conducted to ensure the system operates efficiently. Additionally, surface gas monitoring is regularly undertaken by the landfill gas operator. The operator reports monthly to the Government on performance of the system.
- 3. The current expansion of the biogas to renewable energy power station has already included the installation of two 1 MW generators, and a 20MW grid connection. Phase two of the expansion will see 12MW of battery storage installed at the power station by the end of 2025. This is in addition to the 4MW generators that were already installed on site.
- 4. The targets for future years include increasing the capture rate of landfill gas, expanding the capacity of the gas processing facility, and achieving higher electricity generation efficiency. Specific numerical targets will be set based on the outcomes of the current expansion project and ongoing technological advancements.
- 5. LGI Limited (the current contractor) is funding the expansion project. LGI pay the ACT Government a royalty for the gas captured.
- 6. A dedicated contract management team oversee the project to ensure it adheres to the planned schedule. Phase one of the project was completed within the specified timeframe.
- 7. The new battery storage and grid connection are expected to provide several benefits. These include increased energy storage capacity, increased extraction of methane (reducing emissions), enhanced grid stability, the ability to store excess energy generated during peak production periods for use during high-demand periods.
- 8. The improvements will enhance grid stability by providing a reliable source of stored energy that can be dispatched during periods of high demand or grid instability. This will help balance supply and demand, reduce the risk of blackouts, and support the integration of renewable energy sources.
- 9. The contribution of the additional generation and storage is not material to meeting the ACT Community's energy needs. The ACT meets most of its demand by importing electricity from the National Electricity Market. The ACT Government works with other jurisdictions and

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energy market bodies to ensure sufficient and reliable electricity for the ACT. In addition, Evoenergy, as the ACT's electricity distributor, has responsibilities for ensuring the reliable supply of electricity to ACT customers from the National Energy Market.

- 10. The landfill gas to energy project has a dedicated web page on the TCCS/ City Services website which is regularly updated to share information with the community <u>https://www.cityservices.act.gov.au/Infrastructure-Projects/programs/waste-and-recycling-infrastructure/mugga-lane-landfill-gas-to-energy</u>. Information about the project has also been communicated with the community via media releases which have been picked up by various media outlets showcasing the innovative initiative both locally and nationally. The project has also been supported by ACT Government social media and the Our Canberra publication.
 - https://www.facebook.com/share/p/19BNjGXzWS/
 - https://www.facebook.com/share/p/18e7CAfeWV/
 - <u>https://www.facebook.com/share/p/16H97C4xzL/</u>
 - <u>https://www.act.gov.au/our-canberra/latest-news/2023/november/Expanded-project-to-cut-emissions-and-power-homes</u>
- 11. The ACT Government works closely with LGI Limited to ensure regular communications are shared with the community. This includes project status updates as well as showcasing the benefits of this innovative initiative. The expansion was first announced by Minister Steel in November 2023:

https://www.cmtedd.act.gov.au/open_government/inform/act_government_media_release s/chris-steel-mla-media-releases/2023/expanded-project-to-cut-emissions-and-power-10,800-homes.

This received coverage in local media and with various industry media outlets. November 2024 project update media release:

https://www.cmtedd.act.gov.au/open government/inform/act government media release s/act-transport-canberra-and-city-services-media-releases/2024/carbon-cutting-project-onestep-closer-to-powering-10,800-canberra-homes.

A media event was held to share information with the community. Information about the project was shared across local and national media publications. The landfill gas to energy project has a dedicated project page on the City Services website where regular updates on the project are shared <u>https://www.cityservices.act.gov.au/Infrastructure-</u> <u>Projects/programs/waste-and-recycling-infrastructure/mugga-lane-landfill-gas-to-energy</u>

Letters have also been delivered over the past 12 months to households in the suburbs of Chisholm, Fadden, Gilmore, Gowrie and Macarthur informing residents of works which are happening across multiple projects at the Mugga Lane resource management centre.

An open day was held on 12 March 2025 to showcase the benefits and capabilities of the project to local and regional industry partners. It also received local media coverage.

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Approved for circulation to the Member and incorporation into Hansard.

Tara Cheyne MitA

Minister for City and Government Services

Date: \$ 14 25

This response required 2 hours and 30 mins to complete, at an approximate cost of \$230.06.