Yvette Berry MLA
Deputy Chief Minister
Minister for Education and Early Childhood
Minister for Homes, Homelessness and New Suburbs
Minister for Sport and Recreation

Member for Ginninderra

Response to question on notice

Questions on Notice Paper No 10
19 September 2025
Question No. 619

PETER CAIN MLA: To ask the Minister for Education and Early Childhood-

1. What is the total budget allocated for the geothermal heating project at Weetangera Primary School, including how much has been spent to date.
2. Has the project referred to in part (1) experienced cost overruns; if so, what is the revised budget.
3. Has a cost-benefit analysis been conducted for the project referred to in part (1); if so, will it be made publicly available.
4. Has the Government assessed whether the project referred to in part (1) represents proven economic infrastructure.
5. What is the total timeframe for the project referred to in part (1), from commencement to completion.
6. What is the estimated period before the project referred to in part (1) becomes energy positive, taking into account the energy consumed during drilling and construction, embedded energy in manufacturing and installing infrastructure, and the projected operational energy savings.
7. What was the original project timeline and what is the expected revised completion date of the project referred to in part (1).
8. What delays have been encountered to date, including those caused by geological issues, and how have these affected costs and schedule.
9. What measures have been implemented to minimise disruption to classroom learning and nearby residents caused by drilling noise and construction.
10. What arrangements have been made to address the temporary loss of playground space during construction.
11. How will the performance and cost-effectiveness of the geothermal system be evaluated once operational.
12. How many other schools are planned for similar geothermal or renewable heating conversions, and what is the projected cost of those programs.

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YVETTE BERRY MLA - The answer to the Member's question is as follows:

1. The total budget allocation for the geothermal heating project at Weetangera Primary School is $7,500,000 (excluding GST), including program contingency. The current contract value is $5,250,000 (excluding GST). The spend to date for this project is $2,548,618.97 (excluding GST).

2. There are no cost overruns to the total budget allocated. Latent ground conditions encountered will increase the initial contract value, still within the allocated budget of $7,500,000 (Excluding GST). As a pilot project, the first ACT Government geothermal project, and due to unknown ground conditions, additional contingency was factored into the total budget.

3. During the planning phase, a feasibility study was conducted that presented multiple options for electrification at each of the sites in the Electrification of Gas Assets (EoGGA) Program. Three options were presented for Weetangera Primary School electrification. Each option detailed capital costs, whole of life costs, advantages and disadvantages. The geothermal option was recommended due to a number of benefits, including preventing the need for major electrical upgrades to the substation and site, and reduced ongoing operational costs. The substation is also shared and supplies part of the surrounding residents, consideration was given to eliminate the risk of impacting electrical supply to the community and prevent significant delay to project completion.

4. The project is part of the EoGGA Program, which is a commitment by the ACT Government to replace all gas-powered assets used within Government owned and operated buildings by 2040 to meet net zero targets. The key driver for the program is to enable the phasing out of the gas network in the ACT by 2045. The reduction of ACT Government emissions is expected to provide economic, social and health benefits for residents.
   Utilising geothermal technology provides a reliable, constant and renewable heat resource with minimal above ground footprint. This provides multiple benefits to the school, including improved heating and cooling efficiency, and reduced operational costs.
   As a pilot project, iCBR are learning more about geothermal as a viable technology for the ACT's climate and will continue to monitor the system efficiency post completion to see how it performs. Investing in this technology will help develop the industry in the Territory and provide more solutions for future building electrification.

5. The total project timeframe is 19 months, with a completion date of April 2026.

6. This electrification project aims to eliminate gas use on site, thereby reducing carbon emissions. While the primary goal is not to lower overall energy consumption, the new system's efficiency—particularly its use of ground source energy for heating and cooling—will result in reduced energy use as a secondary benefit.

   At this stage, detailed tracking of energy consumption by individual plant equipment or the embedded emissions in manufactured components is not included in the infrastructure scope. These are considered Scope 3 emissions, which are not currently reported for all infrastructure projects. However, the Climate Change, Energy and Water team in City and Environment Directorate is working to improve the ACT Government's ability to track Scope 3 emissions across its operations.

7. The original project timeline was 15 months, with a completion date of December 2025. Adidtional time is required due to latent ground conditions, that while were unforeseen had been tracked as a high risk for the project. At 80 to 120 metres there is ultra-hard stone, which has increased drill bit wear, drilling rod failures and resulted in a reduced the drilling rate. Alternative drilling methods have been trialled, however there is a subsurface fracture between 72 and 94 metres which has impacted drilling and prevented the use of alternative drilling methods to be adopted.

8. The ground conditions have increased the total project timeline by approximately four months, which subsequently increases the cost of the initial contract price. This increase is within the total project budget allocation.

9. Acoustic testing has been undertaken to ensure noise levels do not exceed planned levels. Acoustic dampening has been installed around the worksite to reduce the noise for nearby residents and classrooms. This risk was identified early in the planning process and multiple mitigations have been undertaken to keep this to a minimum. These mitigations have been supported by timely, ongoing communications with the school and community.

10. The area being utilised for the geothermal pipework was chosen in collaboration with the Education Directorate and the school. The geothermal consultant presented multiple areas for consideration, with the current location being selected as optimal for the solution and minimal disruption. This area was not previously a sports field or playground and is a green space in-between classrooms.

11. The performance and cost-effectiveness will be evaluated by measuring the reduction in gas usage and savings associated with reduction of gas bills as the project includes the abolishment of gas at this site. The school is forecast to save approximately one terajoule of gas usage per year, reducing carbon emissions by approximately 40 tonnes a year. This will save approximately $30,000 a year in gas bills. While there will be an increase in electrical consumption, it is anticipated that due to the increased efficiency of the system being installed, there will be a significant net saving to the school.

12. As part of the planning process for the Electrification of Government Gas Assets (EoGGA), engineering studies are being undertaken across all government owned sites, including schools, to investigate the cost and most effective pathway to electrification. The target of the program is that all schools in the ACT will be electrified by 2040 to contribute to the reduction of the Government's greenhouse gas emissions, and the goal of net zero emissions from government operations by 2040.

Approved for circulation to the Member and incorporation into Hansard.

Yvette Berry MLA
Minister for Education and Early Childhood

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This response required 5hrs 00mins to complete, at an approximate cost of $624.49.