2023-24 Budget – Business Case

Proposal Name: Big Canberra Battery Stream 1

Basis of authority for consideration in 2023-24 Budget: Agreed as Big Canberra Battery Stream 1

Brief Description: The proposal would enable the Territory to enter into an agreement to deliver 250 megawatts (MW) of large-scale battery storage under Stream 1 of the Big Canberra Battery project (PAGA Item A1(v)). It seeks to replace the provisioned expense and revenue for this item with updated expenses and revenues.

Lead Minister: Barr

Portfolio: Climate Action

Supporting Minister(s) and related portfolio/s: N/A

Lead Agency: Chief Minister, Treasury and Economic Development Directorate

Supporting Agencies: Environment, Planning and Sustainable Development Directorate

Wellbeing domain 1: Environment and climate

Wellbeing domain 2: Economy

Wellbeing Framework priority target group(s):

☐ Older Canberrans	☐ Women and/or gender diverse people	☐ LGBTIQA+	☐ Carers
☐ Culturally and linguistically diverse people	☐ Children and young people	☐ Aboriginal and Torres Strait Islander Peoples	☐ People with disability

Priority alignment:

✓ PAGA Appendix 1 or 2 item	☐ Other Election commitment	☐ *National Agreement on Closing the Gap*	☐ *ACT Aboriginal and Torres Strait Islander Agreement 2019-2028*
☐ Housing	☐ Mental health	☐ Early years	☐ Women and/or the *ACT Women's Plan 2016-2026*

Electorate: All

Funding category: Revenue

Existing program(s): This business case is an update to ACT Distributed Large Scale Battery Storage System – Stream 1 (Large Grid Connected Batteries), published in the 2022-23 budget.

Year to cease funding or ongoing: The revenue and expenses from the Revenue Share Agreement will end in 2040, as will contract management expenses.

Link to Budget consultation: No

Contact officer: Kieran Lawton

Business Case Authorisations

Lead Minister

Ministerial Endorsement	Signature and date or evidence of endorsement
Lead Minister: Barr **Portfolio:** Climate Action	

ICT reviews

Responsible area	Name, position, signature and date or evidence of endorsement
1. Business system owner	N/A - this business case does not include any ICT component within government
2. Digital, Data and Technological Solutions (Senior Director, Strategic Business)	(DDTS representative) * N/A
3. Budget Assessment Sub-Group Committee	(BASG representative) * N/A

*This signature does not represent support for the proposal as a spending proposition.

Business case contact officer

Responsible area	Name, position, signature and date or evidence of endorsement
Office for Climate Action	Kieran Lawton 4/3/2023 Kieran Lawton, Executive Branch Manager, OCA

Financial Impacts Summary (Preferred Option)	**2023-24 $'000**	**2024-25 $'000**	**2025-26 $'000**	**2026-27 $'000**	**Total $'000**
Capital Impacts	-	-	-	-	-
Expense Impacts					
Expense	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Expense – Offsets[c]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Expense – Offsets – Existing provision[a]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted])
New expense provision	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Depreciation	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Revenue[d]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Revenue – Offset - Existing provision[a]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Savings	-	-	-	-	-

Staffing Impact[e]	**2023-24**	**2024-25**	**2025-26**	**2026-27**
Total Additional FTEs (number)	0	0	1	1*

(a) The revenue and expense provisions were established in the 2022-23 budget reference CAB22/299-4, CMTEDD E23 Big Canberra Battery Stream 1.

(b) Please refer to Treasury Memoranda (Memo 2022/05) for additional details as to how MPC-related fees should be incorporated. Should not be applied to ICT or to designated major projects.

(c) Please refer to 'Identifying genuine savings' in the *2023-24 Budget Process Rules* for what constitutes a genuine offset.

(d) A positive number here indicates a proposal that is increasing the revenue collected by government. A negative number here indicated a proposal which is reducing the amount of revenue collected by government.
(e) All initiatives seeking additional FTEs will require a recruitment strategy to be completed, refer to section 6 of the business case.
*Ongoing position required for approximately 20 years to manage revenue share contract.

Breakdown of Expenses	**2023-24 $'000**	**2024-25 $'000**	**2025-26 $'000**	**2026-27 $'000**	**Total $'000**
Employee expenses			[redacted]	[redacted]	[redacted]
Land purchase (CMTEDD)	[redacted]				[redacted]
Land management	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Consultancies to support contract management	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Revenue Share – Support charge			[redacted]	[redacted]	[redacted]
TOTAL	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Breakdown of Revenue/offsets	**2023-24 $'000**	**2024-25 $'000**	**2025-26 $'000**	**2026-27 $'000**	**Total $'000**
Revenue shared from Revenue Share Agreement			[redacted]	[redacted]	[redacted]
Land sale (SLA)	[redacted]				400
Land lease revenue	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
TOTAL	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

1. Background

Action A1(v) of the Parliamentary and Governing Agreement (PAGA) specifies a commitment to deliver at least 250 MW of new 'large-scale' battery storage distributed across the ACT (the Big Canberra Battery Project).

A 2022-23 budget business case (CAB22/299-4, CMTEDD E23) was delivered, which provided agreement to proceed to a procurement for delivery of at least 250 MW of battery storage and provisioned expense and revenue amounts. That business case noted that the Territory would offer respondents a choice between a Revenue Share and Virtual Storage agreement, for a term of 10-20 years, and identified that a further business case, provided here, would be brought forward prior to execution of any contracts from this procurement once final pricing was known.

2. Options analysis

The recommendation in this business case is the culmination of a lengthy series of market engagement and procurement processes. The team initially started with an extensive list of commercial models, including full government ownership, equity co-investment, a first loss equity co-investment mechanism, low interest loans and loans with repayments based on project revenues rather than fixed annual repayments, as a number of contracts for output including revenue share, firming of existing wind/solar contracts, cap products and virtual storage. These models were taken to the Climate Action Sub-Committee of Cabinet. The options were narrowed down after a market sounding process and analysis by a consultant undertaking modelling of the financial impacts to the Territory. This was further refined to two selected models which were taken to an expression of interest (EOI) process. This process sought market feedback on the suitability of these mechanisms and helped further refine the mechanisms. The legal advisor for the project developed a contract for each mechanism, which were taken to a Request for Proposals process.

The Territory then worked with two preferred suppliers in a parallel negotiation process to further refine the proposals and contract design.

The Delegate is satisfied that the negotiated contract with the preferred supplier represents the best Value for Money to the Territory of all options considered. This contract is ready for signature, pending ERC agreement to the financial implications. As such, only two options are presented in this business case – proceed, or do not proceed.

2.1 Options comparison table (summary comparison)

	Option 1: Full option (preferred)	**Option 2: Do not proceed**
Benefits Outline the key strengths and advantages	Delivers the Parliamentary Agreement Commitment A1(v) and provides significant revenue to the Territory over the contract life.	Nil
Timescale What period will the costs and benefits be incurred over	The revenue and expenses will be incurred over 15 years of operations, from November 2025.	N/A
Costs Summarise the costs and assumptions	[redacted]	Nil
Disadvantages and Major Risks Summarise the major weaknesses, negative consequences and risks associated	Territory expenses are fixed, but revenue may be lower than forecast if electricity price volatility is less than forecast.	Reputational risk associated with failing to meet the Parliamentary Agreement Commitment A1(v).
Performance measurement Determine how the performance of the proposal will be monitored	See Section 7. Performance measures and evaluation.	N/A

3. Proposed Solution (as per options table above)

The negotiated contract will see delivery of a 250 megawatt (MW), 500 megawatt-hour (MWh) battery, capable of powering one third of Canberra, for 2 hours at a time.

[redacted]

The contract includes a mechanism to share any benefits that arise as a result of refinancing, for instance if the project secures a higher proportion of funding from debt or debt at a lower interest rate than included in the baseline scenario. The territory is not exposed to worse than anticipated financing outcomes.

The supplier has committed to delivering a battery with grid forming capability, with the ability to provide black-start capability and inertia services, helping to support the ACT, NSW and national electricity grids.

The battery is expected to use Lithium Iron Phosphate technology (LFP), which has longer lifespan and improved safety with less chance of fire than traditional lithium batteries. LFP batteries do not contain cobalt, and therefore avoid the social and environmental harm that can be associated with cobalt mining.

The contract includes terms to limit the Territory's financial exposure in the event of poor battery performance, and includes obligations for appropriate end of life decommissioning, with a bank guarantee in place to mitigate risk to the Territory.

4. Policy alignment

Action A1(v) of the PAGA specifies a government commitment to deliver at least 250 MW of new 'large-scale' battery storage distributed across the ACT. This business case will deliver important elements of this PAGA commitment.

This proposal will deliver environmental and economic benefits to the Territory. It has no specific impact, positive or negative, on the ACT Aboriginal and Torres Strait Islander community or on gender equality.

5. Implementation, risk management and governance

Project design and implementation has been managed to date, using funding secured in the 2020-21 through 2022-23 financial years. Funding has been appropriated to CMTEDD, with delivery overseen by the Office of the Coordinator General for Climate Action. The delivery team has been functionally located in EPSDD (reimbursed by CMTEDD), which has ensured linkages with other energy initiatives and leveraged existing knowledge and capability. The Coordinator General for Climate Action reports to the Climate Action Subcommittee of Strategic Board on implementation progress.

There is now a contract ready for execution, pending Cabinet approval of this business case. Risks have been managed through the procurement process, in accordance with the Risk Management Plan approved by the Delegate.

The project will be managed, from contract execution, by the staff member funded in this business case in the Climate Change and Energy Division (CCED) of the Environment, Planning and Sustainable Development Directorate. Reporting will be delivered through the Office for Climate Action to the Minister for Climate Action as the responsible Minister.

6. Recruitment strategy

The level of staffing required to undertake this work has been analysed and reviewed to ensure the appropriate staffing levels and resources are needed on an ongoing basis.

CCED actively manages engagement, recruitment and retention of staff. The ACT's continued leadership in climate change has fostered strong interest from high-quality candidates for recruitment for vacancies in the division. For example, recent recruitment undertaken for ASO6, SOGC and SOGB levels within CCED have received between 15 to 40 applications with around 10 to 15 strong candidates merit listed for each role. Permanent positions have been filled relatively easily. As a result, we are confident that the new ongoing position will be filled quickly.

7. Performance measures and evaluation

Performance of the proposal will be measured according to a number of metrics:

<u>Financial performance</u>

The negotiated contract requires the respondent to provide timely and accurate statements of the expense and revenues incurred/received by the Territory. These will be provided to Treasury for the purpose of updating the Territory's financial position.

This business case includes funding for estimating the fair value of the Territory's contract, i.e. the cash flows expected over the contract lifetime.

These two sources of data will provide Treasury with visibility of the net financial position of the Territory and allow comparison with the forecast in this business case.

<u>Battery performance</u>

The negotiated contract includes a methodology for measuring performance of the battery against availability and dispatch performance benchmarks. Where performance of the battery falls below agreed benchmarks, the supplier will be required to compensate the Territory for the performance shortfall. Significant and extended underperformance will also provide the Territory a right to terminate the contract, resulting in a payout at a mark to market rate.

<u>End of life decommissioning</u>

The negotiated contract imposes an obligation on the supplier to decommission and recycle the battery at end of life and rehabilitate the land. As the supplier is considering expansions to the size, and/or extensions to the lifespan of the asset, the agreed position is that:

- [redacted]
- [redacted]

- This bond is expected to be sufficient for the Territory to manage site decommissioning if the supplier were not to meet their decommissioning obligations. In addition, the intent is to use any remaining asset value, in the form of raw but valuable minerals, to further offset decommissioning costs.

8. Inter-agency collaboration and stakeholder management

The Project has been delivered in collaboration between the Office of the Coordinator General for Climate Action in CMTEDD and the Climate Change and Energy Division of EPSDD, as outlined under 'Governance'. This business case has been developed with assistance from CMTEDD including several parts of Treasury (Finance and Budget, Infrastructure Finance and Reform, Economic and Financial Analysis, Strategic Finance and Financial Reporting and Frameworks).

The Utilities Technical Regulation team, Access Canberra is supporting the Project team with technical advice.

The Project team has also worked with a number of other governments and government agencies to refine the Project design, procurement plan and draft contracts, including the NSW Department of Planning, Industry and Environment, Victorian Department of Environment, Land, Water and Planning, Clean Energy Finance Corporation and the Australian Energy Market Operator. External consultation has been undertaken with industry through the market sounding in order to refine the design of the Project.

Consultation with Evoenergy and Transgrid has been undertaken to understand the availability of the ACT electricity network to host battery storage and preferred locations.

9. Communications

This business case has been developed in consultation with CMTEDD Communications and EPSDD Communications.

A media event is expected to be held with the Minister for Climate Action and the successful supplier, on or around 31 March 2023.

Further events are anticipated, which may include sod turning at the start of construction and 'go live' event after.

10. Detailed costs

10.1 Cost estimates – Revenue Share agreement

- A 2022-23 budget business case provided cost estimates for a 10-year Revenue Share agreement, for a 50% share of a 250 MW, 500 MWh battery. These estimates were provisioned as expense and revenue amounts.
- This business case seeks to update ERC on the financial outcomes arising from:
  - final pricing received from the preferred supplier;
  - final contract terms; and
  - updated electricity price forecasts;

- A summary of the changes to financial implications assumed in the 2022-23 business case, and arising from the negotiated contract are in the table below.
- The Territory will not be able to publish the costs and revenues of this contract, whether separately or as a net position as doing so would result in the publication of confidential information for the supplier. This information could be published if aggregated with sufficient other revenue/expense items.

	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]

- While the Support charge payable has increased relative to the estimates provided in the prior business case, the net position to the Territory has also improved. This reflects significantly higher forecasts of future electricity pricing/price volatility, as well as modest increases in construction costs, relative to what was foreseen at the time of the prior business case.

10.3 Additional Cost items

- The business case seeks $400,000 for CMTEDD to purchase Tuggeranong block 1471 from SLA. If approved by Cabinet on March 20, the purchase and transfer will need to occur in the week beginning March 20, 2023 to enable contract signing. In this case the $400,000 will be cash managed out of CMTEDD's broader capital works program to make the payment in March 2023. $400,000 will then be re-imbursed back to the capital works program in the following financial year.

- Property Group have advised that they can assist in managing the portion of block 1471 that is not leased to the preferred supplier, if requested. Property Group have advised that management costs for unleased approximately 40 Hectares would be approximately $170,000 per annum. This business case therefore seeks $170,000 per annum for land management, and this amount would be required for the 40-year sub-lease term.
- Block 1471 is currently heavily degraded and the portion of the block that is not sub-leased has the potential for significant positive biodiversity gains. Furthermore, a biodiversity positive land management approach is likely to be more cost effective overall, for example by investing in biodiversity improvement in the early years to reduce slashing and maintenance costs in later years. Any land management cost savings made by taking this approach will be returned to budget.
- Regardless, the unleased portion of block 1471 will always have appropriate fire management in relation to the electrical infrastructure assets on the leased portion of the block.
- This business case seeks funding for 1 SOG A for ongoing management of the Stream 1 (and Stream 2) contracts from 2025-26 onwards. This position has been entered for the forward estimates, but this position will be required for the life of the contract – through to 2039. Recruitment for this position will therefore be on the basis of a permanent contract. Note that current funding for the Big Canberra Battery team reduces from 4.5 FTE to 2 FTE at the end of 2023-24, and then reduces from 2 FTE to zero FTE at the end of 2024-25. The single SOG A position sought through this business case would remain to oversee this and other BCB contracts. The position would be integrated within the CCED corporate structure.
- In order to support the contract management, this business case seeks $100,000 per annum in expenses funding in the forward estimates only for consultancy services. This will include an annual consultancy to determine the fair value of the anticipated payments from the contract, to enable the Budget to be updated appropriately.
- The funding will also deliver other services which may be necessary, including commercial, legal and technical advice to manage the contract and handle changes to market rules.

10.4 Offsets

- The revenue and expense items in this business case replace the provisioned revenue and expense items in the 2022-23 budget business case).
- Part of Tuggeranong block 1471 will be sub-leased to the preferred supplier for delivery of the battery. The portion of the block required for delivery of their proposed solution will be granted at a peppercorn lease.
- [redacted]
- There are no current plans for the Territory to have any stake in, or revenue share arrangement in place for any expansion to the battery. The negotiated contract provides that the Territory has first right of refusal to contract for a share of the output of any expansion to the battery. However, any Territory decision to execute this right would be subject to a decision by ERC at the time.