



Policy costing

Home Battery Tax Relief	
Person/party requesting the costing:	Senator Andrew Bragg, Liberal Party of Australia
Date costing completed:	24 July 2023
Expiry date of the costing:	Release of the next economic and fiscal outlook report.
Status at time of request:	Submitted outside the caretaker period
	<input checked="" type="checkbox"/> Confidential <i>Authorised for public release on 21 August 2023</i> <input type="checkbox"/> Not confidential
<p>Summary of proposal:</p> <p>The proposal would provide tax deductions to promote the take-up of solar home battery systems to support renewable energy production. The proposal has three policy options each starting 1 July 2024 and closing 30 June 2034. The system must be designed and installed by a Clean Energy Council accredited designer and installer and the capacity must not exceed 100 kilowatts (kW).</p> <p><u>Option 1</u></p> <p>Eligible households could access the policy option detailed below.</p> <ul style="list-style-type: none"> From 1 July 2024 - 30 June 2034, a tax deduction of up to \$3,500 or 50% of the cost of home battery system installations (whichever is lower). From 1 July 2024 - 30 June 2034, a tax deduction of up to \$1,750 or 25% of the cost to upgrade from an existing home battery system (whichever is lower). <p><u>Option 2</u></p> <p>Eligible households could access the policy options detailed below.</p> <ul style="list-style-type: none"> From 1 July 2024 – 30 June 2029, a tax deduction of up to \$3,500 or 50% of the cost of home battery system installations (whichever is lower). From 1 July 2029 – 30 June 2030, a tax deduction of up to \$3,000 or 43% of the cost of home battery system installations (whichever is lower). From 1 July 2030 – 30 June 2031, a tax deduction of up to \$2,500 or 36% of the cost of home battery system installations (whichever is lower). From 1 July 2031 – 30 June 2032, a tax deduction of up to \$2,000 or 29% of the cost of home battery system installations (whichever is lower). 1 July 2032 – 30 June 2033, a tax deduction of up to \$1,500 or 22% of the cost of home battery system installations (whichever is lower). 	

- 1 July 2023 – 30 June 2024, a tax deduction of up to \$1,000 or 15% the cost of home battery system installations (whichever is lower).
- From 1 July 2024 – 30 June 2029, a tax deduction of up to \$1,750 or 25% of the cost to upgrade from an existing home battery system (whichever is lower). Then the deduction would step down in similar fashion to new installations as listed above.

Option 3

Eligible households could access the policy option detailed below.

- From 1 July 2024 - 30 June 2034, a tax deduction of up to \$5,250 or 75% of the cost of home battery system installations (whichever is lower).
- From 1 July 2024 - 30 June 2034, a tax deduction of up to \$3,500 or 50% of the cost to upgrade from an existing home battery system (whichever is lower).

Indexation (using the consumer price index (CPI)) is to be applied to the thresholds from 1 July 2025 onwards.

Eligibility Criteria

Applicants are required to:

- live in a property that has solar panels with a capacity equal or greater than 5kW,
- have no existing energy storage system (unless upgrading),
- be owner occupiers, and
- have not received a rebate through other schemes (including from State, Territory, and local governments).

The request sought to have modelled the national take up rate of solar battery systems and the average cost of a solar home battery system (including installation) per kilowatt-hour (kWh) over the medium term. It also sought a breakdown of existing solar and battery subsidy schemes by state and territory.

Costing overview

The options in this proposal would be expected to decrease the fiscal balance by between \$94.3 million and \$143.8 million and the underlying cash balance by between \$70.2 million and \$102.7 million over the 2023-24 Budget forward estimates period. The financial implications are primarily driven by a reduction in tax revenue from the tax deduction claims as well as an increase in departmental expenses for the Australian Taxation Office (ATO).

The options in the proposal would have an impact beyond the 2023-24 Budget forward estimates period. A breakdown of the financial implications (including separate public debt interest (PDI) tables) over the period to 2033-34 is provided at Attachment A.

A breakdown of the projected national take up of solar batteries, as well as projected battery capacity and cost over the period to 2033-34 is provided at Attachment B.

A breakdown of existing solar and battery subsidy schemes by state and territory is provided at Attachment C.

Departmental Expenses

The departmental expenses of this costing are driven by an increase in resourcing for the ATO and the Clean Energy Regulator (CER). These reflect upfront and on-going costs of updating technology

systems and procedures, alongside the administrative processes associated with a new policy, and the undertaking of regulatory and data collection activities. To assist with the integrity of the policy, data on battery installations from the CER and state and territory governments (where possible) would be supplied to the ATO to enable potential prefilling of deductions and for compliance purposes.

Table 1: Home Battery Tax Relief – Financial implications (\$m)^{(a)(b)}

	2023-24	2024-25	2025-26	2026-27	Total to 2026-27
Option 1: Constant deduction of \$3,500 or 50% for new battery; \$1,750 or 25% for battery upgrade					
Fiscal balance	-	-36.1	-29.1	-29.1	-94.3
Underlying cash balance	-	-4.5	-34.8	-30.9	-70.2
Option 2: Option 1 with a progressive reduction in the maximum deduction from 2029-30					
Fiscal balance	-	-36.1	-29.1	-29.1	-94.3
Underlying cash balance	-	-4.5	-34.8	-30.9	-70.2
Option 3: Constant deduction of \$5,250 or 75% for new battery; 3,500 or 50% for battery upgrade					
Fiscal balance	-	-54.0	-44.8	-45.0	-143.8
Underlying cash balance	-	-4.5	-51.3	-46.9	-102.7

(a) A positive number represents an increase in the relevant budget balance; a negative number represents a decrease.

(b) PDI impacts are not included in the totals.

- Indicates nil.

Timing Differences

The fiscal and underlying cash balances for both options reflect timing differences between when tax revenue is recognised and when tax receipts or refunds are collected or paid. Taxpayers would incur the installation costs in a given year but would not receive the tax benefit of the tax deduction until the following year when their tax return is lodged.

Financial Implications and Uncertainties

The financial implications of this proposal are highly sensitive to the assumed take-up rates of household solar battery storage. Take-up rates are impacted by total eligible households, external shocks (such as economic conditions and energy price fluctuations), feed-in tariff prices, upfront installation costs, alternative concession schemes or electricity provision (for example, community large-scale solar battery policy schemes), technological advancements and the perceived benefits (or risks) of installations.

Behavioural Response

As a result of this tax deduction scheme a behavioural response is expected to increase the number of people that would take-up solar batteries nationally by up to 15% (for Option 3), particularly in states and territories with no concessions available that would be incentivised to upgrade or install a new solar battery storage system. The behavioural response is informed by research conducted by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) on behalf of the Australian Energy Market Operator (AEMO) as of 2022. In this report they projected take-up rates of solar battery storage in various scenarios. The PBO has used the “progressive scenario” as a baseline. We note that this was AEMO’s conservative projection.

Key assumptions

The Parliamentary Budget Office (PBO) has made the following assumptions in costing this proposal.

- The number of household battery installations and take-up rates would increase in line with the AEMO projections across the medium term. The projected split of solar battery systems would be 1% for upgrades and 99% for new battery installations in 2024-25, growing to 10% for upgrades and 90% for new battery installations by 2033-34.
 - Data and analysis sourced from AEMO’s *Small-scale Solar PV and Battery Projections 2022 Report* (AEMO report) informed the projections.
 - The low initial scaling between upgrades and new installations reflects the low current base of battery systems against the high projected rate of new system installations, and scales upwards as the battery base matures.
 - The behavioural response would be based on the *Progressive Scenario* as the baseline and would apply as set out in Table 2 below.

Table 2: Home Battery Tax Relief – Behavioural response (%)

	2024-25 to 2028-29	2029-30	2030-31	2031-32	2032-33	2033-34
Option 1	10%					
Option 2	10%	8.6%	7.2%	5.8%	4.4%	3.0%
Option 3	15%					

- The estimated solar battery size would be the same over the medium term (currently an average of 10.8 Kilowatt hours (kWh)) based on the recent Distributed Energy Resource Register (DERR) AEMO database as of December 2022.
- Solar battery installation (and upgrade) costs would decrease in line with AEMO’s projected figures until 2033-34.
- Household taxable income would grow in line with the wage price index (WPI) over the medium term.
- Projected marginal tax rates and thresholds are modelled from 2024-25 to 2033-34 (including the Stage Three Tax Cuts).
 - Average distribution of taxable incomes for households that are owner occupiers with dwelling structures that can accommodate solar PV/panel and battery systems remains consistent.
- The eligible households would remain constant over the medium term.
 - Projected solar panel/PV size for those installing a battery would align with the recent AEMO data (between 7 kWh and 9 kWh).
- The highest earning member of the household will claim the tax deduction in full to maximise the value of the concession to the household.
- The percentage of people that take-up alternative schemes would remain at an assumed 10% for the relevant States and Territories (historic and projected). The concessions currently available from State, Territory, or local governments would exist in the current form for solar battery storage or upgrades over the medium term. These concessions relate to installation grants and subsidies.

- 10% of households in States or Territories with concessions were assumed to be ineligible for the proposal.
- Feed-in-tariffs (market retailers and government retailers) would remain consistent over the medium term with AEMO’s 2022 report.
- All households accessing the tax deduction would fund the upfront costs such as the solar battery system installation or upgrade costs.
- The tax deduction take-up would be distributed evenly throughout all income ranges to factor the wide array of individual demographics (retirees, families, and individuals).
 - All eligible households that install or upgrade a solar battery over the medium term would claim the tax deduction.
- There will be sufficient solar batteries and skilled workers available to carry out the extra installations this scheme would generate.
- The Clean Energy Regulator would verify battery installs were performed by Clean Energy Council accredited installers through adjustment to existing Small-scale Renewable Energy Scheme infrastructure.

Methodology

The financial implications for all options were derived by estimating the number of eligible households that would take-up the tax deduction at each taxable income threshold, and the cost for the installation and upgrades for the average battery size projected over the medium term.

- The maximum deduction thresholds were indexed by the CPI from 1 July 2024, for all options.
- Household taxable incomes for owner occupiers with suitable dwellings (owner occupiers with suitable roof space) were sourced from the 2021 Census. The applicable rates and thresholds were applied without and with the deduction until 2033-34.
 - For coupled households’ taxable income was based on the primary earner’s proportion of total household income being 66%.
- Average battery size and costs were based on the AEMO DERR database and projections over the medium term. Average battery size of 10.8 kWh was used over the medium term.
- Battery projections over the medium term were provided by AEMO and were projected from 2023-24 till 2033-34.

The departmental costs for staffing and capital funding were estimated based on similar programs as detailed in Budget papers for activities administered by the ATO and the CER.

Financial implications were rounded consistent with the PBO’s rounding rules as outlined on the PBO Costings and budget information webpage.¹

Data sources

Australian Bureau of Statistics, 2021. [Table Builder 2021 Census – Selected Dwelling Characteristics](#). Accessed 19 July 2023.

¹ https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Budget_Office/Costings_and_budget_information

Australian Broadcasting Corporation, 2022. [No home solar battery rebates on offer in Queensland as the government opts for large-scale projects](#). [media article]. Accessed 19 July 2023.

Australian Capital Territory Government, 2023. [Next Gen Energy Storage reaches program target - Chief Minister, Treasury and Economic Development Directorate](#) [media release]. Accessed 19 July 2023.

Australian Institute of Health and Welfare, 2023. [Australian property sales by value | Housing market | Housing data \(12 Months ending January 2023\)](#). Accessed 19 July 2023.

Australian Energy Market Operators, 2022. [Small-scale solar PV and Battery projections 2022 Report](#). Accessed 19 July 2023.

Commonwealth Scientific and Industrial Research Organisation, 2022. [Small-scale Solar PV and Battery Projections 2022 \(Commissioned by the Australian Energy Market Operator\)](#). Accessed 19 July 2023.

Department of Climate Change, Energy, the Environment and Water, 2023. *Rebates and Assistance*. [Online] Accessed 21 July 2023 at [Rebates and assistance | energy.gov.au](#)

Department of Climate Change, Energy, the Environment and Water, 2022. *Portfolio Budget Statements 2022-23, Budget Related Paper No. 1.3, Climate Change, Energy, The Environment and Water Portfolio*. [dcceew-2022-23-pbs.PDF](#). Accessed 20 July 2023.

Government of South Australia, 2023. [Home Battery Scheme closure | Energy & Mining \(energymining.sa.gov.au\)](#). Accessed 19 July 2023.

New South Wales Government, 2023. [Rebate swap for solar and energy efficient upgrades | NSW Climate and Energy Action](#). Accessed 19 July 2023.

Northern Territory Government, 2022. [Home and Business Battery Scheme](#). Accessed 19 July 2023.

Queensland Government, 2018. [Battery grants drive next renewable wave](#) [media release]. Accessed 19 July 2023.

State Government of Victoria, 2021. [Ensuring more Victorian households and small businesses have access to solar energy | Solar Victoria](#). Accessed 19 July 2023.

State Government of Victoria, 2022. [Solar Homes Program | Solar Victoria](#). Accessed 19 July 2023.

State Government of Victoria, 2023. [Solar battery rebate | Solar Victoria](#). Accessed 19 July 2023.

The Department of Finance and the Treasury provided economic parameters as at the 2023-24 Budget.

The Australian Energy Market Operator provided data on projected solar battery uptake over the period from 2022-23 to 2033-34, as at December 2022.

The PBO thank the Parliamentary Library for their timely, impartial and confidential input to this response.

Attachment A – Home Battery Tax Relief – financial implications

Table A1: Home Battery Tax Relief – Option 1: Constant deduction of \$3,500 or 50% for new battery; \$1,750 or 25% for battery upgrade – Fiscal balance (\$m)^(a)

	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	Total to 2026-27	Total to 2033-34
Revenue													
<i>Tax deductions</i>	-	-31.6	-27.5	-27.8	-28.7	-31.3	-34.7	-44.7	-39.9	-43.9	-47.0	-86.9	-357.1
Total – revenue	-	-31.6	-27.5	-27.8	-28.7	-31.3	-34.7	-44.7	-39.9	-43.9	-47.0	-86.9	-357.1
Expenses													
<i>Departmental resourcing</i>	-	-4.5	-1.6	-1.3	-1.4	-1.4	-1.4	-1.4	-1.5	-1.5	-1.5	-7.4	-17.5
Total – expenses	-	-4.5	-1.6	-1.3	-1.4	-1.4	-1.4	-1.4	-1.5	-1.5	-1.5	-7.4	-17.5
Total (excluding PDI)	-	-36.1	-29.1	-29.1	-30.1	-32.7	-36.1	-46.1	-41.4	-45.4	-48.5	-94.3	-374.6

(a) A positive number for the fiscal balance indicates an increase in revenue or a decrease in expenses or net capital investment in accrual terms. A negative number for the fiscal balance indicates a decrease in revenue or an increase in expenses or net capital investment in accrual terms.

- Indicates nil.

Table A2: Home Battery Tax Relief – Option 1: Constant deduction of \$3,500 or 50% for new battery; \$1,750 or 25% for battery upgrade – Underlying cash balance (\$m)^(a)

	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	Total to 2026-27	Total to 2033-34
Receipts													
<i>Tax deductions</i>	-	-	-33.2	-29.6	-29.1	-30.0	-32.5	-35.9	-45.4	-41.7	-45.1	-62.8	-322.5
Total – receipts	-	-	-33.2	-29.6	-29.1	-30.0	-32.5	-35.9	-45.4	-41.7	-45.1	-62.8	-322.5
Payments													
<i>Departmental resourcing</i>	-	-4.5	-1.6	-1.3	-1.4	-1.4	-1.4	-1.4	-1.5	-1.5	-1.5	-7.4	-17.5
Total – payments	-	-4.5	-1.6	-1.3	-1.4	-1.4	-1.4	-1.4	-1.5	-1.5	-1.5	-7.4	-17.5
Total (excluding PDI)	-	-4.5	-34.8	-30.9	-30.5	-31.4	-33.9	-37.3	-46.9	-43.2	-46.6	-70.2	-340.0

(a) A positive number for the underlying cash balance indicates an increase in receipts or a decrease in payments or net capital investment in cash terms. A negative number for the underlying cash balance indicates a decrease in receipts or an increase in payments or net capital investment in cash terms.

- Indicates nil.

Table A3: Home Battery Tax Relief – Option 1: Constant deduction of \$3,500 or 50% for new battery; \$1,750 or 25% for battery upgrade – Memorandum item: Public Debt Interest (PDI) impacts – Fiscal and underlying cash balances (\$m)^{(a)(b)}

	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	Total to 2026-27	Total to 2033-34
Fiscal balance	-	-0.1	-0.7	-1.9	-2.9	-4.1	-5.4	-6.9	-8.8	-10.8	-13.0	-2.7	-54.6
Underlying cash balance	-	-0.1	-0.6	-1.6	-2.8	-3.9	-5.2	-6.7	-8.4	-10.5	-12.6	-2.3	-52.4

- (a) As this table is presented as a memorandum item, these figures are not reflected in the totals in the tables above. This is consistent with the approach taken in the budget where the budget impact of most measures is presented excluding the impact on PDI. If the reader would like a complete picture of the total aggregate, then these figures would need to be added to the figures above. For further information on government borrowing and financing please refer to the PBO's online budget glossary².
- (b) A positive number for the fiscal balance indicates an increase in revenue or a decrease in expenses or net capital investment in accrual terms. A negative number for the fiscal balance indicates a decrease in revenue or an increase in expenses or net capital investment in accrual terms. A positive number for the underlying cash balance indicates an increase in receipts or a decrease in payments or net capital investment in cash terms. A negative number for the underlying cash balance indicates a decrease in receipts or an increase in payments or net capital investment in cash terms.
- Indicates nil.

Table A4: Home Battery Tax Relief – Option 2: Option 1 with a progressive reduction in the maximum deduction from 2029-30 – Fiscal balance (\$m)^(a)

	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	Total to 2026-27	Total to 2033-34
Revenue													
<i>Tax deductions</i>	-	-31.6	-27.5	-27.8	-28.7	-31.3	-29.5	-31.4	-22.3	-18.4	-13.5	-86.9	-262.0
Total – revenue	-	-31.6	-27.5	-27.8	-28.7	-31.3	-29.5	-31.4	-22.3	-18.4	-13.5	-86.9	-262.0
Expenses													
<i>Departmental resourcing</i>	-	-4.5	-1.6	-1.3	-1.4	-1.4	-1.4	-1.4	-1.5	-1.5	-1.5	-7.4	-17.5
Total – expenses	-	-4.5	-1.6	-1.3	-1.4	-1.4	-1.4	-1.4	-1.5	-1.5	-1.5	-7.4	-17.5
Total (excluding PDI)	-	-36.1	-29.1	-29.1	-30.1	-32.7	-30.9	-32.8	-23.8	-19.9	-15.0	-94.3	-279.5

- (a) A positive number for the fiscal balance indicates an increase in revenue or a decrease in expenses or net capital investment in accrual terms. A negative number for the fiscal balance indicates a decrease in revenue or an increase in expenses or net capital investment in accrual terms.
- Indicates nil.

² [Online budget glossary – Parliament of Australia \(aph.gov.au\)](https://aph.gov.au)

Table A5: Home Battery Tax Relief – Option 2: Option 1 with a progressive reduction in the maximum deduction from 2029-30 – Underlying cash balance (\$m)^(a)

	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	Total to 2026-27	Total to 2033-34
Receipts													
<i>Tax deductions</i>	-	-	-33.2	-29.6	-29.1	-30.0	-32.5	-31.1	-32.7	-24.5	-20.2	-62.8	-262.9
Total – receipts	-	-	-33.2	-29.6	-29.1	-30.0	-32.5	-31.1	-32.7	-24.5	-20.2	-62.8	-262.9
Payments													
<i>Departmental resourcing</i>	-	-4.5	-1.6	-1.3	-1.4	-1.4	-1.4	-1.4	-1.5	-1.5	-1.5	-7.4	-17.5
Total – payments	-	-4.5	-1.6	-1.3	-1.4	-1.4	-1.4	-1.4	-1.5	-1.5	-1.5	-7.4	-17.5
Total (excluding PDI)	-	-4.5	-34.8	-30.9	-30.5	-31.4	-33.9	-32.5	-34.2	-26.0	-21.7	-70.2	-280.4

(a) A positive number for the underlying cash balance indicates an increase in receipts or a decrease in payments or net capital investment in cash terms. A negative number for the underlying cash balance indicates a decrease in receipts or an increase in payments or net capital investment in cash terms.

- Indicates nil.

Table A6: Home Battery Tax Relief – Option 2: Option 1 with a progressive reduction in the maximum deduction from 2029-30 – Memorandum item: Public Debt Interest (PDI) impacts – Fiscal and underlying cash balances (\$m)^{(a)(b)}

	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	Total to 2026-27	Total to 2033-34
Fiscal balance	-	-0.1	-0.7	-1.9	-2.9	-4.1	-5.4	-6.8	-8.4	-9.8	-11.2	-2.7	-51.3
Underlying cash balance	-	-0.1	-0.6	-1.6	-2.8	-3.9	-5.2	-6.6	-8.1	-9.6	-10.9	-2.3	-49.4

(a) As this table is presented as a memorandum item, these figures are not reflected in the totals in the tables above. This is consistent with the approach taken in the budget where the budget impact of most measures is presented excluding the impact on PDI. If the reader would like a complete picture of the total aggregate, then these figures would need to be added to the figures above. For further information on government borrowing and financing please refer to the PBO's online budget glossary³.

(b) A positive number for the fiscal balance indicates an increase in revenue or a decrease in expenses or net capital investment in accrual terms. A negative number for the fiscal balance indicates a decrease in revenue or an increase in expenses or net capital investment in accrual terms. A positive number for the underlying cash balance indicates an increase in receipts or a decrease in payments or net capital investment in cash terms. A negative number for the underlying cash balance indicates a decrease in receipts or an increase in payments or net capital investment in cash terms.

- Indicates nil.

³ [Online budget glossary – Parliament of Australia \(aph.gov.au\)](https://aph.gov.au)

Table A7: Home Battery Tax Relief – Option 3: Constant deduction of \$5,250 or 75% for new battery; 3,500 or 50% for battery upgrade – Fiscal balance (\$m)^(a)

	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	Total to 2026-27	Total to 2033-34
Revenue													
<i>Tax deductions</i>	-	-49.5	-43.2	-43.7	-45.3	-49.6	-55.2	-71.1	-63.6	-70.0	-74.8	-136.4	-566.0
Total – revenue	-	-49.5	-43.2	-43.7	-45.3	-49.6	-55.2	-71.1	-63.6	-70.0	-74.8	-136.4	-566.0
Expenses													
<i>Departmental resourcing</i>	-	-4.5	-1.6	-1.3	-1.4	-1.4	-1.4	-1.4	-1.5	-1.5	-1.5	-7.4	-17.5
Total – expenses	-	-4.5	-1.6	-1.3	-1.4	-1.4	-1.4	-1.4	-1.5	-1.5	-1.5	-7.4	-17.5
Total (excluding PDI)	-	-54.0	-44.8	-45.0	-46.7	-51.0	-56.6	-72.5	-65.1	-71.5	-76.3	-143.8	-583.5

(a) A positive number for the fiscal balance indicates an increase in revenue or a decrease in expenses or net capital investment in accrual terms. A negative number for the fiscal balance indicates a decrease in revenue or an increase in expenses or net capital investment in accrual terms.

- Indicates nil.

Table A8: Home Battery Tax Relief – Option 3: Constant deduction of \$5,250 or 75% for new battery; 3,500 or 50% for battery upgrade – Underlying cash balance (\$m)^(a)

	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	Total to 2026-27	Total to 2033-34
Receipts													
<i>Tax deductions</i>	-	-	-49.7	-45.6	-45.0	-46.5	-50.7	-56.1	-71.2	-65.7	-71.0	-95.3	-501.5
Total – receipts	-	-	-49.7	-45.6	-45.0	-46.5	-50.7	-56.1	-71.2	-65.7	-71.0	-95.3	-501.5
Payments													
<i>Departmental resourcing</i>	-	-4.5	-1.6	-1.3	-1.4	-1.4	-1.4	-1.4	-1.5	-1.5	-1.5	-7.4	-17.5
Total – payments	-	-4.5	-1.6	-1.3	-1.4	-1.4	-1.4	-1.4	-1.5	-1.5	-1.5	-7.4	-17.5
Total (excluding PDI)	-	-4.5	-51.3	-46.9	-46.4	-47.9	-52.1	-57.5	-72.7	-67.2	-72.5	-102.7	-519.0

(a) A positive number for the underlying cash balance indicates an increase in receipts or a decrease in payments or net capital investment in cash terms. A negative number for the underlying cash balance indicates a decrease in receipts or an increase in payments or net capital investment in cash terms.

- Indicates nil.

Table A9: Home Battery Tax Relief – Option 3: Constant deduction of \$5,250 or 75% for new battery; 3,500 or 50% for battery upgrade – Memorandum item: Public Debt Interest (PDI) impacts – Fiscal and underlying cash balances (\$m)^{(a)(b)}

	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	Total to 2026-27	Total to 2033-34
<i>Fiscal balance</i>	-	-0.1	-1.0	-2.7	-4.3	-6.1	-8.1	-10.4	-13.3	-16.5	-19.9	-3.8	-82.4
<i>Underlying cash balance</i>	-	-0.1	-0.8	-2.4	-4.0	-5.8	-7.8	-10.0	-12.8	-15.9	-19.2	-3.3	-78.8

- (a) As this table is presented as a memorandum item, these figures are not reflected in the totals in the tables above. This is consistent with the approach taken in the budget where the budget impact of most measures is presented excluding the impact on PDI. If the reader would like a complete picture of the total aggregate, then these figures would need to be added to the figures above. For further information on government borrowing and financing please refer to the PBO's online budget glossary⁴.
- (b) A positive number for the fiscal balance indicates an increase in revenue or a decrease in expenses or net capital investment in accrual terms. A negative number for the fiscal balance indicates a decrease in revenue or an increase in expenses or net capital investment in accrual terms. A positive number for the underlying cash balance indicates an increase in receipts or a decrease in payments or net capital investment in cash terms. A negative number for the underlying cash balance indicates a decrease in receipts or an increase in payments or net capital investment in cash terms.
- Indicates nil.

⁴ [Online budget glossary – Parliament of Australia \(aph.gov.au\)](https://aph.gov.au)

Attachment B – Home Battery Tax Relief – Additional Modelling Analysis

Table B1: Home Battery Tax Relief – Solar battery average size and projected costs – All options^(a)

	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34
Average battery size (kWh)	N/A	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
Average battery cost (\$ per kWh)	N/A	1,270	1,240	1,200	1,180	1,150	1,135	1,125	1,113	1,100	1,080
Average Battery Cost (\$)	N/A	13,679	13,356	12,925	12,710	12,387	12,225	12,118	11,988	11,848	11,633

(a) This analysis is based on Australian Energy Market Operator (AEMO) data. The analysis and projections detailed above are subject changes in the underpinning data at a future point.

Table B2: Home Battery Tax Relief – Number of solar battery installations eligible for the tax deduction – Option 1^{(a)(b)}

	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34
Existing battery upgrades	N/A	298	507	749	986	1,318	1,716	2,491	2,487	3,011	3,471
New battery installations	N/A	29,557	24,876	24,220	23,686	25,047	26,898	33,100	28,605	30,449	31,246
Total	N/A	29,855	25,383	24,969	24,672	26,365	28,614	35,591	31,092	33,460	34,717

(a) The analysis provides the PBO's projected solar battery installations which are based on the data from AEMO as the baseline.

(b) Accounts for additional battery installations as a result of the policy and excludes batteries from the AEMO profile not eligible as per the policy specifications.

Table B3: Home Battery Tax Relief – Number of solar battery installations eligible for the tax deduction – Option 2^{(a)(b)}

	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34
Existing battery upgrades	N/A	298	507	749	986	1,318	1,695	2,428	2,392	2,858	3,250
New battery installations	N/A	29,557	24,876	24,220	23,686	25,047	26,556	32,258	27,513	28,899	29,257
Total	N/A	29,855	25,383	24,969	24,672	26,365	28,251	34,686	29,905	31,757	32,507

(a) The analysis provides the PBO's projected solar battery installations which are based on the data from AEMO as the baseline.

(b) Accounts for additional battery installations as a result of the policy and excludes batteries from the AEMO profile not eligible as per the policy specifications.

Table B4: Home Battery Tax Relief – Number of solar battery installations eligible for the tax deduction – Option 3^{(a)(b)}

	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34
Existing battery upgrades	N/A	313	532	786	1,036	1,383	1,802	2,615	2,611	3,161	3,644
New battery installations	N/A	31,031	26,115	25,427	24,865	26,294	28,237	34,747	30,029	31,964	32,800
Total	N/A	31,344	26,647	26,213	25,901	27,677	30,039	37,362	32,640	35,125	36,444

(a) The analysis provides the PBO's projected solar battery installations which are based on the data from AEMO as the baseline.

(b) Accounts for additional battery installations as a result of the policy and excludes batteries from the AMEO profile not eligible as per the policy specifications.

Attachment C – Home Battery Tax Relief – Summary of State/Territory solar and battery incentive programs

Table C1: Home Battery Tax Relief – Summary of State/Territory solar and battery incentive programs^(a)

State/Territory	Type of product	Description
National		
Small-scale Renewable Energy Scheme	Solar panels, other energy-efficient products.	<p>The Small-scale Renewable Energy Scheme creates a financial incentive for individuals, households and small businesses to install eligible small-scale renewable energy systems. It does this through the generation of small-scale technology certificates (STCs).</p> <p>Each megawatt hour of renewable energy generated/or displaced by the system is awarded one STC. STCs can then be sold to partially offset the cost of the system. System owners typically assign the right to an agent to sell STCs on their behalf to receive an upfront lower purchase price.</p>
Australian Capital Territory		
Sustainable Household Scheme	Solar panels, battery storage, other energy-efficient products.	The Sustainable Household Scheme offers zero-interest loans to eligible ACT homeowners to help with the costs of energy-efficient upgrades. Loans can range in value from \$2,000 to \$25,000.
Home Energy Support Program	Solar panels, other energy-efficient products.	<p>Eligible concession card holders may be able to get rebates to help with the upfront costs of installing energy-efficient products and undertaking sustainable home upgrades.</p> <p>Eligible homeowners can access a rebate of up to \$2,500 for the installation of rooftop solar, and an additional rebate of up to \$2,500 to install certain other products.</p>
New South Wales		
Smart Distributed Batteries Project	Battery storage	<p>The Smart Distributed Batteries project, operated by SolarHub with funding from the NSW Government, will develop a 6 MW virtual power plant (VPP) to strengthen the NSW electricity network and reduce electricity costs.</p> <p>SolarHub is offering a discount to approximately 650 residential and small business customers to encourage battery installation. Customers will be required to join the VPP to receive the discount.</p>

State/Territory	Type of product	Description
Rebate swap for solar and energy efficient upgrades	Solar panels, other energy-efficient products.	NSW residents currently receiving an energy rebate may be eligible to swap the rebate for a free 3 kilowatt solar system or energy efficient upgrades.
Northern Territory		
Home and Business Battery Scheme	Solar panels, battery storage, other energy-efficient products.	<p>The Home and Business Battery Scheme provides grant assistance to Northern Territory households, businesses, not-for-profit and community organisations to buy and install a solar photovoltaic (PV) system with an eligible battery and inverter or an eligible battery and inverter if a solar PV system is already installed.</p> <p>The minimum capacity for eligible batteries is 7 kWh.</p> <p>Households and businesses will be able to purchase a battery to fit their needs with a grant of \$450 per kWh of battery system capacity, up to a maximum grant of \$6,000.</p>
Queensland		
Nil		
South Australia		
Sustainability Incentives Scheme	Solar panels, other energy efficient products and energy services.	The Sustainability Incentives Scheme offers rebates to residents, businesses, and groups located within the City of Adelaide municipal area for the installation of sustainable technologies in their home or building.
Tasmania		
Energy Saver Loan Scheme	Solar panels, battery storage, other energy-efficient products.	The Energy Saver Loan Scheme provides no-interest loans to eligible applicants to ease the up-front cost of making energy efficient investments in their home, business or organisation.
Victoria		
Solar Homes Program	Solar panels, battery storage, other energy-efficient products.	The Solar Homes Program offers loans and rebates to eligible Victorians to reduce the upfront cost of installing solar panels, to upgrade to an efficient hot water system, or to install a solar battery.
Western Australia		
Nil		

(a) This list was sourced from energy.gov.au and is current as at 21 July 2023, and predominantly covers programs at the national and state/territory level. The list may not capture programs operated at the local government level.