Parliamentary
Budget Office

## Policy costing

Recapitalising the Clean Energy Finance Corporation

| Party: | Australian Labor Party |
| :--- | :--- |

Summary of proposal:
The proposal would expand the capital base of the Clean Energy Finance Corporation (CEFC) by contributing $\$ 2$ billion each year over five years (a total of $\$ 10$ billion) from 1 July 2019. The CEFC would be directed to undertake the following investments with part of this capital.

- $\$ 1$ billion to support clean hydrogen development.
- Concessional loans to households who participate in the Household Battery Program (which has been separately costed ${ }^{1}$ ). The Household Battery Program would provide cash grants to up to 100,000 households for the purchase of energy storage batteries. The grants would be paid at a rate of $\$ 500$ per kilowatt hour (KWh) of battery capacity, capped at $\$ 2,000$ per household. Participating households would be able to apply for concessional financing through the CEFC to help pay for the balance of battery costs and to purchase new or additional solar panels if required. The Household Battery Program would have effect from 1 January 2020.
- Up to $\$ 1$ billion for public schools to install solar panels and battery storage. The scheme would roll out on a trial basis in the first 24 months. All public schools would be able to apply for access to the scheme. Those schools that already have rooftop solar would be able to apply to expand existing installations and also install battery storage. This scheme would have effect from 1 January 2020.


## Costing overview

This proposal would be expected to decrease the fiscal balance by $\$ 150$ million, increase the underlying cash balance by $\$ 73$ million and decrease the headline cash balance by $\$ 3,382$ million over the 2019-20 Budget forward estimates period.

A breakdown of the financial implications of this proposal over the period to 2029-30 is provided at Attachment A. The proposal would be expected to have financial implications beyond the 2019-20 Budget forward estimates period.

Consistent with Parliamentary Budget Office (PBO) Guidance 02/2015, public debt interest (PDI) expense impacts have been included in this costing because the concessional finance provided under this proposal involves financial asset transactions.

The fiscal, underlying cash and headline cash balance impacts differ due to how they treat the loan's concessional interest rate, and the flow of loan principal and interest repayment amounts. Only the fiscal balance includes an estimate of the concessional loan discount expense and associated unwinding income.

[^0]Only the headline cash balance includes changes in loans issued and principal repayments. A note on the accounting treatment of concessional loans is included at Attachment B.

The estimates of the financial implications in this costing are highly sensitive to assumptions regarding the funding profile, the availability and timing of appropriate projects that would be eligible for financing under this proposal, and the financial performance of the portfolio. The estimates of the value of the concession are sensitive to the assumed market rates for loans, which depend on the balance of business, household and other loans in the expanded portfolio.

Table 1: Financial implications (\$m) $)^{(\mathrm{a})(\mathrm{b})}$

|  | $2019-20$ | $2020-21$ | $2021-22$ | $2022-23$ | Total to <br> $\mathbf{2 0 2 2 - 2 3}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Fiscal balance | -24 | -37 | -43 | -45 | $\mathbf{- 1 5 0}$ |
| Underlying cash balance | 2 | 10 | 24 | 39 | $\mathbf{7 3}$ |
| Headline cash balance | -350 | -689 | $-1,012$ | $-1,328$ | $\mathbf{- 3 , 3 8 2}$ |

(a) A positive number represents an increase in the relevant budget balance; a negative number represents a decrease.
(b) Figures may not sum to totals due to rounding.

## Key assumptions

The PBO has made the following assumptions in costing this proposal.

- The funding commitment and deployment under this proposal, including the split between loans and equity investments, would reflect the CEFC's investment profile as at the 2019 Pre-election Economic and Fiscal Outlook.
- The contributions to be made under this proposal would be drawn down from the Special Account only when they are ready to be deployed. The CEFC would enter into $\$ 2$ billion of commitments each year for five years. These $\$ 2$ billion commitments would each be deployed evenly over five years. For example, $\$ 400$ million would be deployed in the first year of the proposal, $\$ 800$ million in the second, and so on.
- Loans would be issued to investment-grade institutions and default rates would be relatively low at 1.5 per cent.
- The average maturity of concessional loans would be seven years, with principal repayments being reinvested in subsequent loans on an annual basis.
- Projects financed via equity injections would meet rates of return and payments of dividends consistent with the CEFC's projections over the 2019-20 Budget forward estimates period. These would not be expected to mature over the medium term (to 2029-30), and hence would not return any principal over that period.
- All interest rates (concessional, market and the return on equity investment) used in this costing would move in line with the five-year government bond rate projection.
- Additional departmental funding would be required while the contribution is being made and when the CEFC starts expanding its portfolio by drawing on the proposed new contributions.
- The proposed loans for clean hydrogen development and the public school solar scheme would not materially alter the CEFC's overall financial performance as the lending would occur as part of the CEFC's business-as-usual operations.
- This would be the case even if the specified volume of funds could not be deployed to hydrogen projects or the public schools solar scheme in a reasonable timeframe. In this case, the CEFC Board would deploy the funds in other projects consistent with the objectives of its current Act.
- Concessional loans for households under the Household Battery Program would be facilitated through an arrangement which is part of the CEFC's existing operations, such as between the CEFC and the peer-to-peer lender RateSetter.
- The timing of the expansion is consistent with the Household Battery Program and the public school solar scheme commencing from 1 January 2020.
- The roll-out of additional funds would start on 1 July 2019.


## Methodology

A concessional loan model was developed to estimate the financial implications of this proposal. The model is based on the Department of Finance Accounting for Concessional Loans policy guidelines. The model incorporates relevant aspects of the CEFC's modelling as at the 2019 Pre-election Economic and Fiscal Outlook, including investment profiles, loan terms, the concessional interest rate, and principal reinvestment. The model also incorporates an element to confirm that the volume of funds expected to be loaned for batteries and solar panels under the Household Battery Program and public school solar scheme does not exceed the total volume of funds drawn down in any period.

All estimates have been rounded to the nearest $\$ 1$ million.

## Data sources

The Department of the Environment and Energy provided costing models relating to the CEFC as at the 2019 Pre-election Economic and Fiscal Outlook.

The Treasury provided economic parameters and yield curves as at the 2019 Pre-election Economic and Fiscal Outlook.

CEFC, 2018. 1000 green energy installations and counting: RateSetter and CEFC extend green loans program. [Online] Available at https://www.cefc.com.au/media/files/1000-green-energy-installations-and-counting-ratesetter-and-cefc-extend-green-loans-program/ [Accessed 19 March 2019].

Department of Finance, 2016. Accounting for concessional loans, Resource Management Guide No. 115. [Online] Available at https://www.finance.gov.au/sites/default/files/rmg-115-accounting-forconcessional-loans.pdf [Accessed 24 April 2019].

Parliamentary Budget Office, 2015. Public Debt Interest (PDI) payments in PBO costings, PBO Guidance 02/2015, Canberra: PBO.

Reserve Bank of Australia, 2019. Statistical Tables: Indicator Lending Rates - F5. [Online] Available at https://www.rba.gov.au/statistics/tables/ [Accessed 25 April 2019].
Reserve Bank of Australia, 2018. Financial Stability Review October 2018. [Online] Available at https://www.rba.gov.au/publications/fsr/2018/oct/pdf/financial-stability-review-2018-10.pdf [Accessed 5 March 2019].

## Attachment A - Recapitalising the Clean Energy Finance Corporation financial implications

Table A1: Recapitalising the Clean Energy Finance Corporation - Fiscal balance (\$m) $\mathbf{( a )}^{(\mathrm{a})(\mathrm{b})}$

|  | $\begin{gathered} 2019- \\ 20 \end{gathered}$ | $\begin{gathered} 2020- \\ 21 \end{gathered}$ | $\begin{gathered} 2021- \\ 22 \end{gathered}$ | $\begin{gathered} 2022- \\ 23 \end{gathered}$ | $\begin{gathered} 2023- \\ 24 \end{gathered}$ | $\begin{gathered} 2024- \\ 25 \end{gathered}$ | $\begin{gathered} 2025- \\ 26 \end{gathered}$ | $\begin{gathered} 2026- \\ 27 \end{gathered}$ | $\begin{gathered} 2027- \\ 28 \end{gathered}$ | $\begin{gathered} 2028- \\ 29 \end{gathered}$ | $\begin{gathered} 2029- \\ 30 \end{gathered}$ | Total to 2022-23 | $\begin{array}{r} \text { Total to } \\ \text { 2029-30 } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Revenue |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Income from unwinding concessional loan discounts | 8 | 24 | 48 | 79 | 119 | 151 | 175 | 191 | 199 | 198 | 196 | 159 | 1,387 |
| Loan interest accrued | 9 | 26 | 53 | 88 | 150 | 215 | 277 | 330 | 371 | 395 | 417 | 176 | 2,331 |
| Equity investment dividends | 1 | 2 | 5 | 8 | 11 | 14 | 16 | 17 | 17 | 17 | 17 | 15 | 123 |
| Total - revenue | 18 | 52 | 106 | 175 | 280 | 380 | 468 | 538 | 587 | 610 | 630 | 350 | 3,841 |
| Expenses |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Administered |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Concessional loan discount expense | -33 | -70 | -114 | -162 | -217 | -214 | -210 | -206 | -197 | -181 | -191 | -379 | -1,794 |
| Write downs | - | - |  | - | - | - | -5 | -11 | -17 | -25 | -34 | - | -92 |
| Total - administered | -33 | -70 | -114 | -162 | -217 | -214 | -215 | -217 | -214 | -206 | -225 | -379 | -1,886 |
| Departmental costs | -6 | -8 | -12 | -17 | -21 | - | - | - | - | - | - | -43 | -64 |
| Total - expenses | -39 | -78 | -126 | -179 | -238 | -214 | -215 | -217 | -214 | -206 | -225 | -422 | -1,950 |
| Total (excluding PDI) | -21 | -26 | -20 | -4 | 42 | 166 | 253 | 321 | 373 | 404 | 405 | -72 | 1,891 |
| PDI impacts | -3 | -11 | -23 | -41 | -70 | -105 | -134 | -152 | -158 | -150 | -145 | -78 | -992 |
| Total (including PDI) | -24 | -37 | -43 | -45 | -28 | 61 | 119 | 169 | 215 | 254 | 260 | -150 | 899 |

(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.
(b) Figures may not sum to totals due to rounding.

Indicates nil.

Table A2: Recapitalising the Clean Energy Finance Corporation - Underlying cash balance (\$m) $\mathbf{( a )}^{(\mathrm{a})(\mathrm{b})}$

|  | $\begin{gathered} 2019- \\ 20 \end{gathered}$ | $\begin{gathered} 2020- \\ 21 \end{gathered}$ | $\begin{gathered} 2021- \\ 22 \end{gathered}$ | $\begin{gathered} 2022- \\ 23 \end{gathered}$ | $\begin{gathered} 2023- \\ 24 \end{gathered}$ | $\begin{gathered} 2024- \\ 25 \end{gathered}$ | $\begin{gathered} 2025- \\ 26 \end{gathered}$ | $\begin{gathered} 2026 \\ 27 \end{gathered}$ | $\begin{gathered} 2027- \\ 28 \end{gathered}$ | $\begin{gathered} 2028- \\ 29 \end{gathered}$ | $\begin{gathered} 2029- \\ 30 \end{gathered}$ | $\begin{aligned} & \text { Total to } \\ & \text { 2022-23 } \end{aligned}$ | $\begin{array}{r} \text { Total to } \\ \text { 2029-30 } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Receipts |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Loan interest received | 9 | 26 | 53 | 88 | 150 | 215 | 277 | 330 | 371 | 395 | 417 | 176 | 2,331 |
| Dividends on equity investments | 1 | 2 | 5 | 8 | 11 | 14 | 16 | 17 | 17 | 17 | 17 | 15 | 123 |
| Total - receipts | 10 | 28 | 58 | 96 | 161 | 229 | 293 | 347 | 388 | 412 | 434 | 191 | 2,454 |
| Payments |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Departmental costs | -6 | -8 | -12 | -17 | -21 | - | - | - | - | - | - | -43 | -64 |
| Total - payments | -6 | -8 | -12 | -17 | -21 | - | - | - | - | - | - | -43 | -64 |
| Total (excluding PDI) | 4 | 20 | 46 | 79 | 140 | 229 | 293 | 347 | 388 | 412 | 434 | 148 | 2,390 |
| PDI impacts | -2 | -10 | -22 | -40 | -68 | -102 | -132 | -151 | -158 | -151 | -145 | -75 | -982 |
| Total (including PDI) | 2 | 10 | 24 | 39 | 72 | 127 | 161 | 196 | 230 | 261 | 289 | 73 | 1,408 |

(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.
(b) Figures may not sum to totals due to rounding.

- Indicates nil.

Table A3: Recapitalising the Clean Energy Finance Corporation - Headline cash balance (\$m) ${ }^{(\mathrm{a})(\mathrm{b})}$

|  | $\begin{gathered} 2019- \\ 20 \end{gathered}$ | $\begin{gathered} 2020- \\ 21 \end{gathered}$ | $\begin{gathered} 2021- \\ 22 \end{gathered}$ | $\begin{gathered} 2022- \\ 23 \end{gathered}$ | $\begin{gathered} 2023- \\ 24 \end{gathered}$ | $\begin{gathered} 2024- \\ 25 \end{gathered}$ | $\begin{gathered} 2025- \\ 26 \end{gathered}$ | $\begin{gathered} 2026- \\ 27 \end{gathered}$ | $\begin{gathered} 2027- \\ 28 \end{gathered}$ | $\begin{gathered} 2028- \\ 29 \end{gathered}$ | $\begin{gathered} 2029- \\ 30 \end{gathered}$ | $\begin{array}{r} \text { Total to } \\ \text { 2022-23 } \end{array}$ | $\begin{array}{r} \text { Total to } \\ 2029-30 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Receipts |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Loan repayments | 48 | 149 | 313 | 546 | 863 | 1,179 | 1,492 | 1,754 | 1,950 | 2,060 | 2,117 | 1,056 | 12,471 |
| Interest repayments received on loans | 9 | 26 | 53 | 88 | 150 | 215 | 277 | 330 | 371 | 395 | 417 | 176 | 2,331 |
| Equity repayments | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Dividends on equity investments | 1 | 2 | 5 | 8 | 11 | 14 | 16 | 17 | 17 | 17 | 17 | 15 | 123 |
| Total - receipts | 58 | 177 | 371 | 642 | 1,024 | 1,408 | 1,785 | 2,101 | 2,338 | 2,472 | 2,551 | 1,247 | 14,925 |
| Payments |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Administered |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Loans made | -342 | -717 | -1,165 | -1,656 | -2,252 | -2,246 | -2,228 | -2,198 | -2,109 | -1,950 | -2,060 | -3,881 | -18,924 |
| Equity investments | -58 | -131 | -184 | -257 | -294 | -217 | -151 | -94 | -44 | - | - | -630 | -1,430 |
| Total - administered | -400 | -848 | -1,349 | -1,913 | -2,546 | -2,463 | -2,379 | -2,292 | -2,153 | -1,950 | -2,060 | -4,511 | -20,354 |
| Departmental costs | -6 | -8 | -12 | -17 | -21 | - | - | - | - | - | - | -43 | -64 |
| Total - payments | -406 | -856 | -1,361 | -1,930 | -2,567 | -2,463 | -2,379 | -2,292 | -2,153 | -1,950 | -2,060 | -4,554 | -20,418 |
| Total (excluding PDI) | -348 | -679 | -990 | -1,288 | -1,543 | -1,055 | -594 | -191 | 185 | 522 | 491 | -3,307 | -5,493 |
| PDI impacts | -2 | -10 | -22 | -40 | -68 | -102 | -132 | -151 | -158 | -151 | -145 | -75 | -982 |
| Total (including PDI) | -350 | -689 | -1,012 | -1,328 | -1,611 | -1,157 | -726 | -342 | 27 | 371 | 346 | -3,382 | -6,475 |

(a) A positive number for the headline cash balance indicates an increase in receipts or a decrease in payments or net capital investment in headline cash terms. A negative number for the headline cash balance indicates a decrease in receipts or an increase in payments or net capital investment in headline cash terms.
(b) Figures may not sum to totals due to rounding.

- Indicates nil.


## Attachment B - Accounting treatment of concessional loans

A concessional loan is a loan provided on more favourable terms than the borrower could obtain in the financial market. The most common concession is a below-market interest rate, but concessions can also include favourable repayment conditions. The income contingent loans available through the Higher Education Loan Program are an example of concessional loans offered by the Commonwealth.

## Budget impact ${ }^{2}$

The accounting treatment of concessional loans differs across each budget aggregate. The underlying cash balance only captures actual flows of interest related to the loans. The headline cash balance captures actual flows of principal as well as interest. The fiscal balance captures accrued interest, the value of the concession and any write-offs related to the loans. The interest cost of financing these loans is captured in all budget aggregates, and is separately identified by the PBO. ${ }^{3}$ (Table B1 provides information about the detail provided in a costing.) The provision of concessional loans decreases the Commonwealth Government's net worth if the liabilities issued (the value of Commonwealth Government Securities (CGS) issued to finance the loans) are greater than the assets created (measured at their 'fair value' or price at which the loans could be sold).

## Treatment of debt not expected to be repaid

All budget aggregates take into account estimates of the share of loans not expected to be repaid when calculating interest flows and estimating the value of the concession that is being provided. None of the measures capture the direct impact on net worth of the loans not expected to be repaid. If a portion of loans are not expected to be repaid, estimates of the 'fair value' of the loans outstanding will be reduced. Such reductions, both when loans are issued and if loans are subsequently re-valued, are recorded in the budget under 'Other economic flows' which are reflected in net worth but not in the budget aggregates.

Table B1: Components of concessional loan financial impacts in costing proposals

| Budget item Appears in <br> Interest accrued <br> or received All budget <br> aggregatesComments <br> (The budget cannot include interest income on a debt that is not expected to be repaid.) |  |  |
| :--- | :--- | :--- |
| Concessional loan <br> discount expense <br> and unwinding <br> revenue | Fiscal <br> balance | The net present value of the concession (based on the difference between the market <br> and concessional interest rates) is captured as an expense in the fiscal balance. As loans <br> are repaid, the remaining value of the concession reduces, so this expense is 'unwound' <br> with a positive impact on the fiscal balance. The concessional discount and its unwinding <br> are not recognised in cash balances as there is no cash inflow or outflow. |
| Write-offs | Fiscal <br> balance | Debt forgiveness, also known as mutually agreed write-downs (for example in the case of <br> the death of the borrower of a HELP loan) are expensed when they occur, reducing the <br> fiscal balance. These transactions do not affect the cash balances as no cash flows occur. |
| Initial loan; <br> principal <br> repayments | Headline <br> cash <br> balance | Higher estimates of loans not expected to be repaid lowers principal repayments. These <br> transactions are not included in the fiscal balance or underlying cash balance as they <br> involve the exchange of one financial asset (loan) for another (cash). |
| Public debt <br> interest (PDI) | All budget <br> aggregates | The PDI impact is the cost of the change in the government's borrowing requirements to <br> fund the loans. The net headline cash balance impact excluding PDI is used to estimate <br> the proposal's impact on PDI payments. |

[^1]
[^0]:    ${ }^{1}$ Refer to PBO costing Household Battery Program (PER219).

[^1]:    ${ }^{2}$ The PBO's treatment of these loans is consistent with the Department of Finance costing guidelines.
    ${ }^{3}$ This is in accordance with PBO Guidance $02 / 2015$ and the Charter of Budget Honesty Policy Costing Guidelines which specify that costings of proposals that 'involve transactions of financial assets' need to take into account the impact on PDI payments.

