Parliament of Australia
Parliamentary Budget Office

Phil Bowen PSM FCPA
Parliamentary Budget Officer

Senator Christine Milne
Leader of the Australian Greens
Parliament House
CANBERRA ACT 2600

Dear Senator Milne

Please find attached a response to your costing request, *Clean energy roadmap* (letter of 14 August 2013).

The response to this request will be released on the PBO website (www.aph.gov.au/pbo).

If you have any queries about this costing, please do not hesitate to contact Colin Brown on (02) 6277 9530.

Yours sincerely

Phil Bowen
21 August 2013

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COSTING – ELECTION CARETAKER PERIOD

Name of proposal to be costed:	**Clean Energy Roadmap**
Summary of proposal:	The proposal would increase the Renewable Energy Target (RET) to 90 per cent by 2030 and increase appropriations to the Clean Energy Finance Corporation (CEFC) to $3 billion a year for ten years. The intention of the proposal is to increase investment in renewable energy. The increased RET would apply from 2020 to 2030. The increased appropriations to the CEFC would apply from the 2013-14 financial year.
Person/party requesting costing:	Senator Christine Milne, Australian Greens
Date costing request received:	14 August 2013
Date costing completed:	21 August 2013
Date of public release of policy:	1 July 2013
Additional information requested:	On 15 August 2013, clarification was sought on whether the existing 20 per cent RET by 2020 would be retained under this proposal.
Additional information received:	On 15 August 2013, the Office of Senator Milne confirmed that the current RET would be maintained.
Agencies from which information was obtained:	Clean Energy Finance Corporation

Costing overview

The proposal is expected to increase the underlying cash balance by $98.5 million and decrease the fiscal balance by $293.0 million over the 2013-14 Budget forward estimates period.

This costing has two elements:

1) Increased RET

The proposal to increase the RET to 90 per cent by 2030 would not have a material impact on the underlying cash and fiscal balances over the 2013-14 Budget forward estimates period as the current 20 per cent target for 2020 would be retained.

Increasing the RET would have financial impacts beyond the 2013-14 Budget forward estimates period that would occur upon transition from the 20 per cent target to the 90 per cent target.

2) Expanded CEFC

The impact of expanding the CEFC on the underlying cash balance reflects an increase in the receipt of interest and dividends of $142.5 million, partially offset by an increase in payments of $44.0 million, comprising cash payments of operating and capital expenditure.

The impact on the fiscal balance reflects an increase in expenses of $579.5 million, comprising operating and capital expenses and a concessional loan charge. The CEFC provides loans with interest rates that are lower than commercial lending rates and the concessional loan charge reflects this difference in interest rates. The decrease in the fiscal balance is partially offset by an increase in revenue of $286.5 million consisting of interest and dividends received, including capitalised interest.

The proposal would reduce the headline cash balance by $2.9 billion over the 2013-14 Budget forward estimates period. The impact on the headline cash balance reflects cash outflows from Government loans and equity investments to project proponents (this does not impact on the underlying cash balance) as well as the operating costs of the CEFC. These cash outflows are partially offset by the interest, dividends and principal repayments from project proponents.

The proposal would provide an additional $3 billion per year to the CEFC for five years from 2018-19. Expanding the CEFC would have financial impacts beyond the 2013-14 Budget forward estimates period that would continue until its loans have been discharged and its investments are wound up. Due to the variable nature of interest rates and investment returns, the proposal's fiscal and underlying cash balance impacts beyond the forward estimates would be difficult to estimate.

A detailed breakdown of the financial impacts of expanding the CEFC is included at Attachment A.

This element of the costing is considered to be of medium reliability and is based on information provided by the CEFC on the assumptions underlying its estimates as reflected in the 2013 Pre-election Economic and Fiscal Outlook (PEFO), including assumptions on the amount of interest and dividends received and the market rates used to calculate the concessional loan charge.

The PBO has not undertaken any analysis on the availability and quality of the additional loans and investments that would be made by the CEFC as a result of the proposal.

The figures in this costing differ from those referred to in the costing request due to CEFC estimates being updated at the 2013 PEFO.

Table 1: Financial implications (outturn prices)[(a)]

Impact on	2013-14	2014-15	2015-16	2016-17
Underlying cash balance ($m)	4.8	17.9	30.2	45.6
Fiscal balance ($m)	-82.3	-121.1	-77.2	-12.5
Headline cash balance ($m)	-553.7	-572.4	-841.5	-963.3

(a) A positive number for the underlying cash balance indicates an increase to the budget bottom line in cash terms. A negative number for the fiscal balance indicates a decrease to the budget bottom line in accrual terms. A negative number for the headline cash balance indicates a net cash outflow associated with Government investments in financial assets for policy purposes. Amounts may not sum due to rounding.

Key assumptions

Based on the costing request, the current RET of 20 per cent by 2020 is retained with the proposed changes to the RET applying from 2020 onwards.

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

1) Increased RET

- The only change to the RET under this proposal is to set a new 90 per cent target by 2030. The existing elements of the RET including the split into the large and small scale components, the shortfall charge and the certificate fees would be retained.

2) Expanded CEFC

- The CEFC's expenditure, concessional loan charge, interest and dividends would increase in proportion with the increased appropriations provided to the CEFC
- The CEFC's additional outlays would be made in line with the current estimated ratio between loans and equity investments
- There are sufficient clean energy technology projects currently in the pipeline for an additional $1.0 billion of loans and investments to be made by the CEFC before 30 June 2014, and
- The CEFC Investment Mandate's $300 million limit on concessionality would be increased in line with the increased appropriations provided to the CEFC and the qualitative requirements of the Investment Mandate would be unchanged.

Consistent with the treatment reflected in CEFC's current estimates, the provision for doubtful debts (estimated to be around an additional $12 million per year over the forward estimates period) is excluded from fiscal and underlying cash balance impacts as per the Australian Accounting Standards Board's accounting standard 1049. The doubtful debt provision would decrease the Government's net worth.

Methodology

The estimated financial impacts of expanding the CEFC are based on information obtained from the CEFC on the assumptions underlying its estimates as reflected in the 2013 PEFO. The additional $1.0 billion per year to be provided to the CEFC over the 2013-14 Budget forward estimates period would represent a 50 per cent increase to the $2.0 billion per year it currently receives over this period.

Data sources

Information on the underlying cash and fiscal balance impacts of the CEFC and relevant underlying assumptions were obtained from the CEFC.

ATTACHMENT A: EXPANDING THE CEFC
DETAILED BREAKDOWN OF FINANCIAL IMPACTS

Table A1: Breakdown of Underlying Cash Balance (UCB) Impacts[a]

UCB impacts ($m)	2013-14	2014-15	2015-16	2016-17
Interest and Dividends[b]	14.3	28.7	41.7	57.8
Operating and Capital	-9.5	-10.7	-11.5	-12.2
Net UCB impact	**4.8**	**17.9**	**30.2**	**45.6**

(a) A positive number for the underlying cash balance indicates a net increase in revenue in cash terms. A negative number for the underlying cash balance indicates a net increase in expenses or net capital investment in cash terms.
(b) These figures include a reduction to interest received associated with the net effect of capitalised interest.

Note: Amounts may not sum due to rounding.

Table A2: Breakdown of Fiscal Balance (FB) Impacts[a]

FB impacts ($m)	2013-14	2014-15	2015-16	2016-17
Interest and Dividends[b]	13.2	39.5	84.2	149.6
Concessional Loan Charge[c]	-85.2	-149.5	-149.5	-149.5
Operating and Capital	-10.3	-11.1	-11.9	-12.6
Net FB impact	**-82.3**	**-121.1**	**-77.2**	**-12.5**

(a) A positive number for the fiscal balance indicates an increase in revenue in accrual terms. A negative number for the fiscal balance indicates an increase in expenses or net capital investment in accrual terms.
(b) The presentation of this component is as per CEFC's published financial statements, which includes the positive impact of unwinding of the concessional loan charge (i.e. reversing the loan discount component).
(c) The concessional loan charges would be entirely reversed over the term of the underlying loans. Amounts associated with unwinding the concessional loan charges are included in the Interest and Dividends line (see note above).

Note: Amounts may not sum due to rounding.

Table A3: Breakdown of Headline Cash Impacts[a]

Headline cash impacts ($m)	2013-14	2014-15	2015-16	2016-17
Loans and equity investments[b]	-560.1	-618.2	-935.2	-1,116.2
Repayments of loan principal	1.7	27.9	63.5	107.3
Interest and Dividends[c]	14.3	28.7	41.7	57.8
Operating and Capital[c]	-9.5	-10.7	-11.5	-12.2
Net headline cash impact	**-553.7**	**-572.4**	**-841.5**	**-963.3**

(a) A positive number for the headline cash balance indicates a cash inflow. A negative number for the headline cash balance indicates a cash outflow.
(b) The annual cash outflows associated with providing loans differ from the amount of loans committed each year due to the loans being advanced to project proponents over a period of up to 36 months following the loan commitment.
(c) These figures are the same as those reflected in the underlying cash balance impacts (Table A1).

Note: Amounts may not sum due to rounding.