

Phil Bowen PSM FCPA
Parliamentary Budget Officer

Senator Richard Di Natale Leader of the Australian Greens Australian Greens Parliament House CANBERRA ACT 2600

Dear Senator Di Natale

Please find attached a response to your costing request, *National Green Buildings Plan* (letter of 30 June 2016).

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

If you have any queries about this costing, please contact Colin Brown on (02) 6277 9530.

Yours sincerely

Phil Bowen

June 2016



# Policy costing—during the caretaker period for the 2016 general election

Name of proposal:	National Green Buildings Plan
Summary of proposal:	The proposal would establish a national green buildings plan to reach a national target of 100 per cent zero carbon buildings by 2040. The proposal contains the following components:
	Component 1: Environmental Upgrade Agreements (EUAs)
	This component would pay \$5.00 per tonne of abatement achieved through Environmental Upgrade Agreements (EUAs) to local councils for signing agreements with commercial building owners. The payment would occur over the 10 year life of the projects.
	Component 2: Clean Energy Finance Cooperation (CEFC)
	This component would establish a new \$100.0 million annual loan facility through the CEFC for large scale retrofit of commercial buildings with a focus on mid-tier commercial buildings (small and medium business) from within the existing CEFC loan facility.
	Component 3: Grant funding for new buildings
	This component would provide \$50.0 million annual grant funding for new buildings to achieve 'world leadership' 6 Star Green Star certification or an equivalent rating.
	Component 4: Grant funding for new green roofs and walls
	This component would provide \$10.0 million annual grant funding for a new green roofs and walls program. This component would also introduce the requirement for any buildings receiving government funding to include green walls and roofs.
	Component 5: National Construction Code
	This component would review and upgrade the National Construction Code (the Code) relating to energy performance standards with a trajectory to net zero emissions by 2040. This component would also amend the Code to include end-of-trip facilities for bicycle users.

	Departmental expenditure required to implement the proposal would be in addition to the capped amounts specified.  The proposal would have effect from 1 September 2016.
Person/party requesting costing:	Senator Richard Di Natale, Australian Greens
Date of public release of policy:	30 June 2016
Date costing request received:	30 June 2016
Date costing completed:	30 June 2016
Expiry date for the costing:	Release of the next economic and fiscal outlook report

#### Costing overview

This proposal would be expected to decrease the fiscal and underlying cash balances by \$258.4 million over the 2016-17 Budget forward estimates period. This impact is due to an increase of \$249.7 million in administered expenses and \$8.7 million in departmental expenses.

The proposal would have an impact beyond the 2016-17 Budget forward estimates period. The disaggregated financial impacts for the total (Table A1) and Components 1, 3 and 4 of the proposal (Tables A2-A4) over the period 2016-17 to 2026-27 are provided at Attachment A.

Component 1 of this costing is considered to be of very low reliability as it relies on assumptions about the growth of EUA schemes and the scalability of an existing scheme to reflect a national level rollout. Components 2 to 4 of this costing are considered to be of high reliability as they are based on specified capped amounts and the application of administrative costs based on similar programs.

Table 1: Financial implications (outturn prices)<sup>(a)(b)</sup>

Impact on (\$m)	2016–17	2017–18	2018–19	2019–20	Total
Fiscal balance	-64.0	-64.7	-64.8	-64.8	-258.4
Underlying cash balance	-64.0	-64.7	-64.8	-64.8	-258.4

<sup>(</sup>a) A positive number indicates an increase in the relevant budget balance, a negative number a decrease.

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

#### Key assumptions

In costing this proposal, the following assumptions have been made:

- For Component 1, current and projected City of Melbourne EUAs are representative of opportunities across Australia.
- For Component 2, there would be a change to the mandate for the CEFC that would specify that \$100.0 million of annual loans coming from within existing CEFC equity would be directed to the specified purpose, with the dividends from this redirection being at the same level as the overall dividend performance of the current CEFC investments (therefore, this component would have no effect on the budget bottom line).
- Components 3 to 4 would be administered by the Department of the Environment.
- While Components 3 to 4 commence on 1 September 2016, the full amount of funding could be delivered in 2016-17.
- The introduction of a new requirement for new buildings receiving government funding to include green walls or roofs would not have a material impact on the cost of existing programs or program administration.
- For Component 5, the review and upgrade of the Code represent the core responsibility
  of the Australian Building Codes Board, and the cost would be met from within the
  existing resources.

### Methodology

For Component 1, the abatement achieved from City of Melbourne EUAs per dollar invested was scaled up to reflect the potential level of abatement across Victoria using data for the level of expected state-wide investment. The estimated abatement for Victoria was then scaled to the national level using Australian Bureau of Statistics population data. Departmental costs are consistent with analogous programs. The \$5.00 per tonne of abatement has been indexed by the Consumer Price Index from 2017-18. The 2016-17 estimates account for the 1 September 2016 start date.

For Components 3 to 4, administered expenditure is as specified in the request. Departmental expenditure estimates are based on other like initiatives and estimates account for the net effect of indexation parameters and the efficiency dividend, in accordance with the Department of Finance's costing practices.

#### Data sources

Australian Bureau of Statistics (Cat no. 3101.0) Australian Demographic Statistics, June 2015.

Estimates of projected EUA investments across Victoria and specifically in the City of Melbourne were sourced from the Eastern Alliance for Greenhouse Action at <a href="https://eaga.com.au/wp-content/uploads/EUA-Finance-for-the-Regions-Summary-Report-2013-12-02.pdf">https://eaga.com.au/wp-content/uploads/EUA-Finance-for-the-Regions-Summary-Report-2013-12-02.pdf</a>.

Estimates and projections of projects, costs and abatement for the City of Melbourne were sourced from the Sustainable Melbourne Fund at

http://sustainablemelbournefund.com.au/services/environmental-upgrade-agreements/.

The Department of Finance provided indexation and efficiency dividend parameters.

## Attachment A: National Green Buildings Plan —financial implications

Table A1: National Green Buildings Plan – Financial implications (outturn prices)<sup>(a)(b)</sup>

(\$m)	2016–17	2017–18	2018–19	2019–20	Total to 2019–20	2020–21	2021–22	2022–23	2023–24	2024–25	2025–26	2026–27	Total to 2026–27
Impact on fiscal and underlying cash balances – expenses/payments													
Administered	-61.9	-62.6	-62.6	-62.7	-249.7	-62.7	-62.8	-62.9	-63.0	-63.0	-63.1	-63.2	-690.5
Departmental	-2.2	-2.2	-2.2	-2.2	-8.7	-2.2	-2.2	-2.2	-2.2	-2.2	-2.3	-2.3	-24.2
Total	-64.0	-64.7	-64.8	-64.8	-258.4	-64.9	-65.0	-65.1	-65.2	-65.3	-65.4	-65.5	-714.7

<sup>(</sup>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.

<sup>(</sup>b) Figures may not sum to totals due to rounding.

Table A2: Component 1: EUAs – Financial implications (outturn prices)<sup>(a)(b)</sup>

(\$m)	2016–17	2017–18	2018–19	2019–20	Total to 2019–20	2020 <b>_</b> 21	2021–22	2022–23	2023–24	2024–25	2025–26	2026–27	Total to 2026–27
Impact on fiscal and underlying cash balances – expenses/payments													
Administered	-1.9	-2.6	-2.6	-2.7	-9.7	-2.7	-2.8	-2.9	-3.0	-3.0	-3.1	-3.2	-30.5
Departmental	-0.1	-0.1	-0.1	-0.1	-0.4	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-1.1
Total	-1.9	-2.7	-2.7	-2.8	-10.1	-2.8	-2.9	-3.0	-3.1	-3.1	-3.2	-3.3	-31.5

<sup>(</sup>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.

Table A3: Component 3: Grant funding for new building – Financial implications (outturn prices)<sup>(a)(b)</sup>

(\$m)	2016–17	2017–18	2018–19	2019–20	Total to 2019–20	ついつい_つ1	2021–22	2022–23	2023–24	2024–25	2025–26	2026–27	Total to 2026–27
Impact on fiscal and underlying cash balances – expenses/payments													
Administered	-50.0	-50.0	-50.0	-50.0	-200.0	-50.0	-50.0	-50.0	-50.0	-50.0	-50.0	-50.0	-550.0
Departmental	-1.6	-1.6	-1.6	-1.6	-6.4	-1.6	-1.6	-1.6	-1.6	-1.6	-1.7	-1.7	-17.8
Total	-51.6	-51.6	-51.6	-51.6	-206.4	-51.6	-51.6	-51.6	-51.6	-51.6	-51.7	-51.7	-567.8

<sup>(</sup>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.

<sup>(</sup>b) Figures may not sum to totals due to rounding.

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Table A4: Component 4: Grant funding for new green roofs and walls – Financial implications (outturn prices)<sup>(a)(b)</sup>

(\$m)	2016–17	2017–18	2018–19	2019–20	Total to 2019–20	2020 <b>_</b> 21	2021–22	2022–23	2023–24	2024–25	2025–26	2026–27	Total to 2026–27
Impact on fiscal and underlying cash balances – expenses/payments													
Administered	-10.0	-10.0	-10.0	-10.0	-40.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-110.0
Departmental	-0.5	-0.5	-0.5	-0.5	-1.9	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-5.3
Total	-10.5	-10.5	-10.5	-10.5	-41.9	-10.5	-10.5	-10.5	-10.5	-10.5	-10.5	-10.5	-115.3

<sup>(</sup>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.

<sup>(</sup>b) Figures may not sum to totals due to rounding.