



Parliamentary Budget Office - Election Policy Costing

NSW Parliament • Parliament House, Macquarie Street Sydney NSW 2000

Referred By: Australian Labor Party
Date Referred: 26/02/2015

Proposal No: A274
Date Published: 23/03/2015

Proposal Title: **DEPLOY ENERGY EFFICIENT LIGHTING TO ALL HOSPITALS**

Cluster: Health

General Government Sector Impacts

	2014-15 \$'000	2015-16 \$'000	2016-17 \$'000	2017-18 \$'000	4 Year Total \$'000
Expenses (ex. depreciation)		300	100		400
Depreciation					-
Less: Offsets		2,025	4,151	4,255	10,431
Revenue					-
Net Operating Result:	-	1,725	4,051	4,255	10,031

Capital Expenditure		37,023			37,023
Capital Offsets					-
Capital Expenditure:	-	37,023	-	-	37,023

Net Lending/(Borrowing)	-	(35,298)	4,051	4,255	(26,992)
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Net Financial Liabilities:	-	35,298	31,247	26,992	
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Total State Sector Impacts

Net Financial Liabilities:	-	35,298	31,247	26,992	
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Notes and costing assumptions

The policy proposes to replace fluorescent and incandescent lighting with LED technology in hospitals.

Due to the relative newness of the technology, LED lighting projects have previously not been implemented in NSW hospitals. The estimation has been made by extrapolating from a LED lighting upgrade in a single teaching hospital in NSW (John Hunter Hospital) to a statewide basis based on facility bed numbers. The Ministry of Health note that as the upgrade is still in the procurement stage, the costs and benefits are indicative only and the actual costs and benefits could vary by ±20 per cent.

The costing assumes:

- The delivery occurs in 2015-16.

- All facilities are compliant to the current code/standard and no additional cost has been allocated to change or alter current operations.

- All lighting works are to be completed by external contractors and involve removing the existing light fitting and replacing with a completely new LED fitting. The work is assumed to be during working hours (7am-5pm) and no allocation has been made for any out of hours work. No cost allocation has been made for regional travel.

- All costs are based on current market pricing for materials and labour. The PBO notes, however, that carrying out the replacement in a single financial year may saturate the installation market and result in pressures on materials

Costing assumptions continued:

and labour costs.

- Only fluorescent fittings have been considered as they represent the majority of lights in hospitals. Clinical areas have been excluded as LED lamps do not currently meet the cyanosis requirements prescribed in the requirements for clinical observation lighting (this is a patient safety issue: it affects the ability of medical staff to observe cyanosis or bluish skin pigmentation in patients).
- No allowance has been made for lighting controls or dimming systems as these will vary from site to site.
- A 12.5 per cent contingency has been made for polychlorinated biphenyls (PCBs) and asbestos management, storage and removal and the recycling of old light fittings.
- The increase in expenses relates to the hiring of two employees: a Sensor Program Manager at \$300,000 for 18 months (12 months in 2015-16 and follow ups in the first six months of 2016-17); and a Project Officer at \$100,000 for 12 months (2015-16).
- The recurrent savings consist of energy and maintenance savings, escalated by 2.5 per cent per annum. Savings are assumed at 50 per cent in the first year to allow for roll out of the policy.

Savings over 10 and 15 years

The table below shows the energy and maintenance savings based on the John Hunter Hospital lighting upgrade business case, extrapolated across the State and escalated at 2.5 per cent per year. The Ministry of Health note that as the upgrade is still in the procurement stage, the savings are indicative only and the actual savings could vary by ±20 per cent.

	Energy MWh	Energy \$000	Maintenance \$000	Gross \$000
Over 10 years	256,730	32,350	13,024	45,374
Over 15 years	385,095	51,778	20,846	72,624