Parliamentary Budget Office - Election Policy Costing

NSW Parliament • Parliament House, Macquarie Street Sydney NSW 2000

Referred By:	Australian Labor Party	Proposal No:	B378
Date Referred:	22/02/2019	Date Published:	18/03/2019

Proposal Title: Establish a Waste Levy Fund

Cluster: Treasury

General Government Sector Impacts

	2018-19 $'000	2019-20 $'000	2020-21 $'000	2021-22 $'000	4 year Total $'000
Expenses (ex. depreciation)	-	15,364	47,843	80,420	143,627
Depreciation	-	-	-	-	-
Less: Offsets	-	-	-	-	-
Revenue	-	15,364	47,843	80,420	143,627
Net Operating Balance:	**-**	**-**	**-**	**-**	**-**
Capital Expenditure	-	-	-	-	-
Capital Offsets	-	-	-	-	-
Net Capital Expenditure:	**-**	**-**	**-**	**-**	**-**
Net Lending/(Borrowing):	**-**	**-**	**-**	**-**	**-**

Total State Sector Impacts

Net Lending/(Borrowing):	**-**	**-**	**-**	**-**	**-**

Notes and costing assumptions

The policy proposes to set up a Waste Levy Fund (WLF) which would distribute its earnings - after costs - to be spent on environmental projects. All revenues collected from the waste and environment levy not allocated to environmental agencies would be put into the Fund.

NSW Treasury has advised the PBO that approximately one third of the revenue from the waste and environment levy is currently allocated (by policy, not legislation) to NSW environmental agencies such as the Environmental Protection Authority, Office of Environment and Heritage, and the Environmental Trust. The costing therefore assumes two thirds of future levy revenue would go into the Fund. The policy specifies the NSW government would issue an equivalent amount of bonds to fund current expenditure.

The Fund would be modelled on current NSW Government funds with the highest risk tolerance. The Fund, after covering bond interest and management costs, would distribute all net returns to be spent on environmental projects to increase recycling and reduce waste.

Based on NSW Treasury advice, the PBO has used the following assumptions:
- the Fund would be expected on average to generate a return similar to the Australian Future Fund, with an estimated return of CPI + 4.5% per year (though returns each year would be quite volatile)
- net returns are distributed at the end of the year
- management fees are estimated at 0.41 per cent per year of the fund's value
- inflation (CPI) is assumed to be 2.25% in 2019-20 and 2.5% thereafter
- bond costs are estimated to be 3% per year, and
- the cost of overseeing the fund would be absorbed by NSW Treasury.

Notes and costing assumptions continued:

To calculate the average yearly balance for the WLF we start with forecasts in the NSW Half Yearly Review for the Waste and Environment Levy. We assume the average Fund balance over the year is the sum of all of the previous years' collected levies plus half the funds collected in the year, multiplied by two thirds.

	2019-20	2020-21	2021-22
Waste and Environment levy revenue $ m	727	724	759
Sum of previously collected levies plus half of current year $ m	364	1089	1831
Multiply by 2/3			
Average Water Levy Fund balance for year $ m	242	726	1220

We have assumed a 2.5% per annum growth rate in levy revenues from 2023-24 to 2028-29 in line with CPI.

Table 1 shows the return calculations for the Fund.

Financial year	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
Average yearly revenue in the WLF $ m	242	726	1220	1735	2266	2810	3367	3938	4524	5124
CPI	2.25%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Return above CPI	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
Management fee	-0.41%	-0.41%	-0.41%	-0.41%	-0.41%	-0.41%	-0.41%	-0.41%	-0.41%	-0.41%
Return %	6.34%	6.59%	6.59%	6.59%	6.59%	6.59%	6.59%	6.59%	6.59%	6.59%
Total return $ m	15.4	47.8	80.4	114.4	149.3	185.2	221.9	259.5	298.1	337.7
Interest costs $ m	7.3	21.8	36.6	52.1	68.0	84.3	101.0	118.2	135.7	153.7
Net distributed return $ m	8.1	26.1	43.8	62.3	81.3	100.9	120.9	141.4	162.4	184.0

In Year 1 the Fund has an average balance of $242 million and generates a 6.34% return on this balance or $15.4 million. Interest costs on the $242 million of bonds issued is $7.3 million, so the net amount available to be spent on environmental projects is $8.1 million.

The Fund provides $78 million to spend on environmental projects and incurs costs of $65.7 million over the forward estimates.

Over ten years, the Fund grows to a total size of $5.1 billion, provides total returns of $1.71 billion, makes distributions of $931 million, and the government incurs interest costs of $779 million from issuing bonds.

Key assumptions and qualifications

The costing shows consistent returns over the 10 year period; however in practice the Fund's returns would be quite volatile because it is invested in high risk/high return assets. This volatility cannot be predicted on a year on year basis. The Fund could generate negative returns in some years and not be able to make any distributions until it recovers the losses.

Based on NSW Treasury advice, the Fund would be expected to have a negative return once in every 4.2 years, with underlying average volatility of +/- 8.5% per year.

The issuing of $5.1 billion of bonds over 10 years would raise borrowing costs to the NSW Government by a small amount, and could marginally raise borrowing costs to the private sector. The impact is minor, a second round effect, and has not been included in the costing.

(Notes continued on the next page).

Notes and costing assumptions continued:

There are risks to the policy's two objectives of full distribution of earnings plus high returns. Distributing all net returns would imply the Fund invests in liquid assets (that is, ones which can be sold quickly). However, to achieve high returns the fund may need to invest in high risk assets which have low liquidity; NSW Treasury advises unrealised capital gains per year may be about 44% of the total return on average from funds of this nature. It may thus be difficult to achieve both high returns and high annual distributions.

However, the fund also receives waste levy tax inflows of $480 million per year, growing to $600 million per year by 2028-29. These inflows could assist in providing revenues to pay the distributions in a year where it would not be prudent for the fund to sell assets. This would avoid the need for the Fund to prematurely realise investments to pay distributions, that (other things being equal) would reduce the total returns from the Fund.

In line with other funds of this nature, we have assumed the Fund is held by the Government as an equity interest in the General Government Sector.