



Parliamentary Budget Office - Election Policy Costing

NSW Parliament • Parliament House, Macquarie Street Sydney NSW 2000

Referred By: Australian Labor Party
Date Referred: 12/10/2022

Proposal No: C714
Date Published: 20/03/2023

Proposal Title: Domestic Manufacturing Package

Cluster: Transport

General Government Sector Impacts

| | 2022-23 \$'000 | 2023-24 \$'000 | 2024-25 \$'000 | 2025-26 \$'000 | 4 year Total \$'000 |
|-------------------------------|-------------------|-------------------|-------------------|-------------------|------------------------|
| Expenses (ex. depreciation) | | | | | - |
| Depreciation | | | | | - |
| Less: Offsets | | | | | - |
| Revenue | | | | | - |
| 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 a target of 50% minimum local content for future rolling stock contracts, to be reached by the end of the first term.

Key assumptions:

The policy assumes "local" to mean Australia and New Zealand, in line with other states and international agreements, but with a preference for NSW where possible. For the purposes of this costing, rolling stock is taken to mean rail carriages including metro, light rail vehicles and buses.

The Parliamentary Budget Office accepts the assumption that this policy can be implemented so as to apply to procurement processes and contracts negotiated in the next term of government with timing of payments under those contracts to occur after the forward estimates period. There is likely to be a financial impact in the long run; however, that impact is too uncertain to be costed reliably. It will depend on both domestic and international market conditions at the time – that is, after 1 July 2026.

Two key factors that will affect the market are the pipeline of work available and competition from other countries, explained in more detail overleaf.

Notes and costing assumptions continued:

Pipeline

To be sustainable, a local industry would need to be supported by a pipeline of investment in rolling stock. This would allow for the establishment of local facilities, jobs and growth of skills. Overheads and local labour costs may also be higher compared to overseas. Establishing manufacturing facilities, local skills and training, will each have their own lead times. There would be challenges in particular in obtaining specific expertise in some elements of Sydney Metro rolling stock manufacture for which Australia does not have any expertise at present (e.g. traction systems, signalling)

Procurement of rolling stock for Sydney Trains, NSW Train link

With regard to rolling stock for operation on the Sydney Trains and NSW Train Link networks, Transport for NSW advises the PBO that current rolling stock procurements are complete. The only train set that is not Disability Standards for Accessible Public Transport (DSAPT) compliant is the Tangara model which will need to be replaced or upgraded prior to 2032. Transport advises that achieving a 50% local manufacturing target in the procurement of future rolling stock is possible but will lead to higher costs.

Procurement of rolling stock for Sydney Metro

Transport for NSW advice is that Sydney Metro has previously purchased off the shelf rolling stock for the North West and City & Southwest lines. These units were designed in Europe and manufactured in India, using component parts from varying locations, including France and China.

Sydney Metro rolling stock procurement includes both the trains and systems in one contract. The driverless nature of the Metro means the trains and the systems (including signalling systems) are an integral component. There are only 3-4 global suppliers offering a combined rolling stock and signalling systems solution with a proven track record of delivering driverless railway system. The system is much more complex and important than the rolling stock itself.

There is no current capacity in Australia for the manufacture of driverless Metro rolling stock. While there may be some capabilities to manufacture some mechanical parts, there are no established capabilities to manufacture the entire train with the core technology to enable driverless operation. Significant up-front investment and lead time would be required to set up manufacturing facilities in NSW or another state or territory in Australia or New Zealand.

Transport for NSW advises Sydney Metro's currently funded but not contracted Metro rolling stock order is small and is limited to 16 trainsets (7-car) for Metro West. Rolling stock for Metro Western Sydney Airport will have been contracted for by end of 2022. To date, Sydney Metro has contracted for the trains and systems together with operations itself.

While the cost to require local manufacturing content for rolling stock for Metro West has not been quantified by Transport for NSW, they anticipate that it would add to costs, and the lead time required to develop local manufacturing capabilities would also likely delay current program timeframes.

Bus

Transport confirmed there are currently no prescribed or mandated local content percentages in bus contracts. Transport also advises that for the Greater Sydney region, 50% local manufacturing may be practical for small scale bus manufacture of up to approximately 120 buses per annum.

However this would not align with the timing of the NSW Government Zero Emission Bus (ZEB) Transition Plan (Greater Sydney region by 2035) which requires far more new buses delivered per annum. Transport advice is that stipulating 50% local manufacturing may limit the ability of an accelerated transition in regions, if required in the future.

Transport have identified risks with stipulating higher percentage of local content and to mitigate potential risks, a local content target could be progressively increased over time to allow both local and international suppliers to scale up their manufacturing activities in Australia and New Zealand. For example, there are seven ZEB manufacturers in the current bus panel. Four of these are located in Australia with two in NSW. Only one Australian manufacturer builds their own chassis in Australia (this results in a local content ratio of around 50%) whilst others import the chassis and assemble the product using a combination of local and imported parts. Transport advice is that the small pool of manufacturers will not be able to deliver the total number of ZEBs required as a part of the current ZEB Transition Plan.

Light Rail

Transport advice is that currently there are no local content percentage requirements in the Light Vehicle contracts and the current forecast order for Parramatta Light Rail (PLR) Stage 2 requires approximately 13 vehicles. Generally higher levels of local content (50%) are more feasible on larger scale fleet procurements, enabling amortisation of one-off costs such as design, supply chain establishment, facility mobilisation and other development and delivery activities over larger order quantities.

The PBO notes that the manufacture of light rail vehicles (LRVs) with 50% local content has been achieved in Australia on recent Victorian tram procurements. The Victorian Local Manufacture Policy was developed over the last decade and the policy requires at least 50% local content on rolling stock fleet procurements.