

New Zealand

CBAX Tool



TYPE OF TOOL
Data and digital initiatives



MAIN SECTORS
All sectors



THEME
Green



INFRASTRUCTURE GOVERNANCE PILLARS
Evidence-informed decision-making

In a nutshell



OBJECTIVE: The CBAX Tool is aimed at helping agencies monetise impacts of important public sector decisions and conduct cost benefit analysis.



Agency in charge
New Zealand Treasury



Levels of government
National



Year of implementation
2015



Current status
Fully operational

Overview

Traditional tools and mechanisms to appraise and prioritise infrastructure projects often do not adequately consider environmental and climate aspects, and this is also due to the inherent difficulty to estimate the environmental costs and benefits of an infrastructure asset and translate them in monetary values. In order to strengthen the role of cost benefit analysis (CBA) in public sector decision-making, the New Zealand Treasury developed the CBAX Tool, which is an excel-spreadsheet model with a database of values to help agencies monetise costs and benefits. The Tool improves the robustness and reliability of the cost-benefit analysis and offers an important support to agencies for the monetisation of environmental impacts. It contains publicly available data that can be used to value many types of impacts (i.e., benefits (or savings) and costs). The tool also allows individual users to add their own values for impacts into the model. Besides being an instrument to help agencies in the monetisation of costs and benefits, including environmental and climate impacts, the CBAX tool has also the advantage of making the CBA more robust, transparent and consistent across the different sectors, as it provides common values and assumptions. Moreover, it encourages a longer-term perspective. This is key in ensuring an adequate assessment of environmental costs and benefits which are more likely to accrue over the long term. The tool includes recommended values for emission valuation, also known as “shadow emission values”. These are based on the estimates of the future costs of emission reduction (abatement) required for the country to reach its domestic emission targets. Values are annually updated as knowledge of abatement costs improves. For each year, 'low', 'central' and 'high' price paths are provided to reflect the uncertainty around future abatement costs. This enables agencies to undertake a sensitivity analysis for new policies and investments, analyse the difference in results and provide a range around the central value. To broaden the scope of the analysis and better assess the long-term outcomes for sustainability, the CBAX Tool includes environment-related impact values. These were developed with the support of the Ministry of the Environment who will further expand and refine them over time.

REFERENCES:

- New Zealand Treasury, *The Treasury's CBAX Tool*, <https://www.treasury.govt.nz/information-and-services/state-sector-leadership/investment-management/plan-investment-choices/cost-benefit-analysis-including-public-sector-discount-rates/treasurys-cbax-tool>