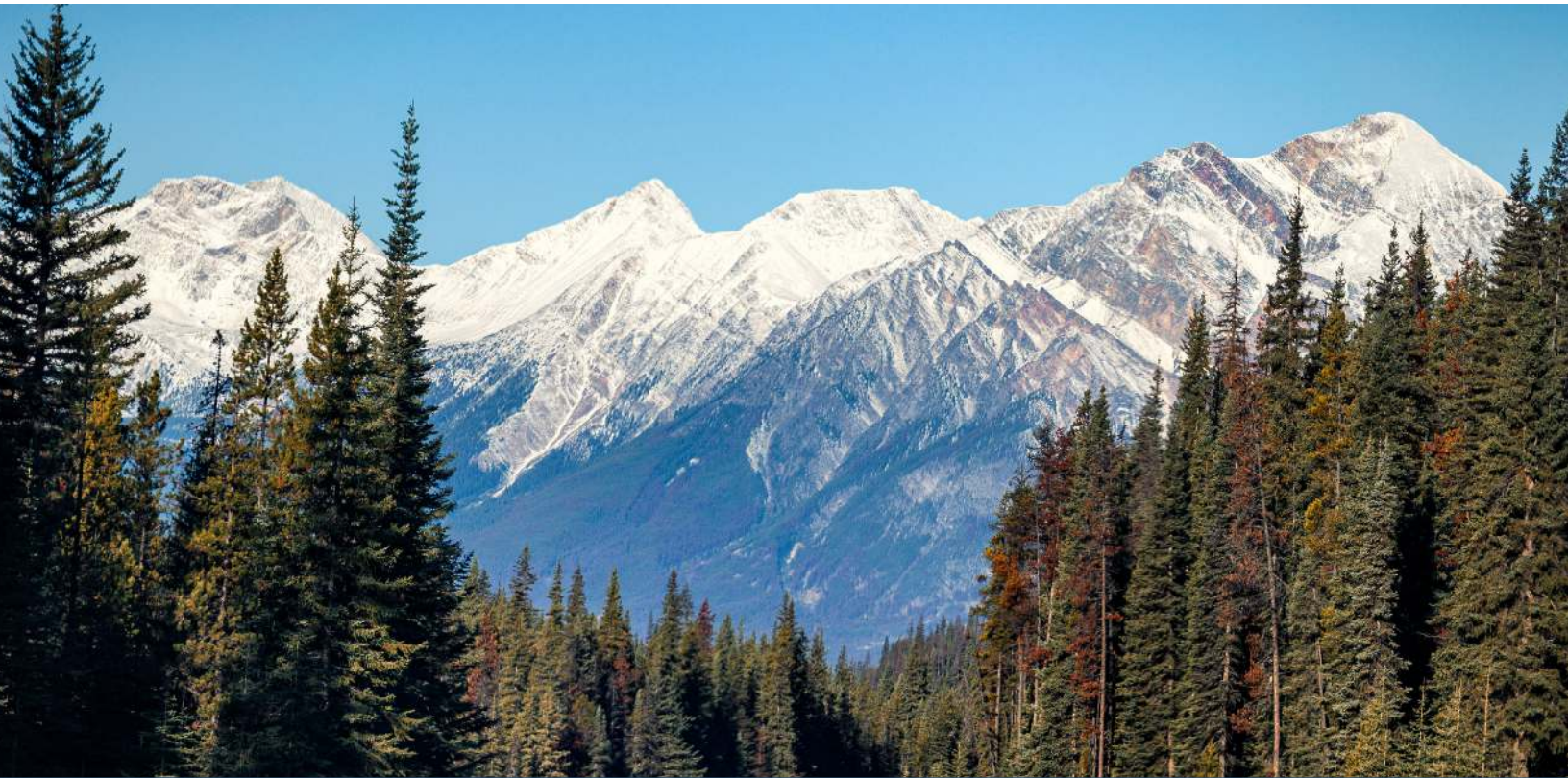


June 22, 2022



TRANS MOUNTAIN PIPELINE - UPDATE



OFFICE OF THE PARLIAMENTARY BUDGET OFFICER
BUREAU DU DIRECTEUR PARLEMENTAIRE DU BUDGET

The Parliamentary Budget Officer (PBO) supports Parliament by providing economic and financial analysis for the purposes of raising the quality of parliamentary debate and promoting greater budget transparency and accountability.

In December 2020, PBO released a report assessing the Government of Canada's 2018 decision to acquire, expand, operate, and eventually divest of the Trans Mountain Pipeline system.

This report provides an updated financial valuation of the purchased assets and estimates the valuation's sensitivity to several key factors.

Lead Analysts:

Jason Stanton, Advisor-Analyst

Kaitlyn Vanderwees, Analyst

This report was prepared under the direction of:

Jason Jacques, Director General

Nancy Beauchamp, Marie-Eve Hamel Laberge and Rémy Vanherweghem assisted with the preparation of the report for publication.

For further information, please contact pbo-dpb@parl.gc.ca

Yves Giroux

Parliamentary Budget Officer

RP-2223-011-S_e

© Office of the Parliamentary Budget Officer, Ottawa, Canada, 2022

Table of Contents

Executive Summary	3
1. Introduction	4
1.1. Since 2020, developments have occurred that impact the financial valuation of Trans Mountain	4
1.2. PBO re-assessed Trans Mountain with new data, assumptions	4
2. Results	5
2.1. Trans Mountain no longer continues to be a profitable undertaking	5
2.2. If TMEP is cancelled, the Government would face a significant asset write-off	7
Notes	9

Executive Summary

Parliamentarians continue to have interest in the Government of Canada's 2018 decision to acquire, expand, operate, and eventually divest of the Trans Mountain Pipeline system. In response, PBO has proactively undertaken a follow-up to his December 2020 report to provide updated financial analysis of the Trans Mountain assets.

PBO requested updated projected future cash flows for the Trans Mountain Pipeline system from the Canada Development Investment Corporation (CDEV), the crown corporation holding the Trans Mountain assets. Using the same methodology and model from its December 2020 report, PBO updated its model with the new data in conjunction with relevant publicly available information.

In this update, PBO finds that the Government's 2018 decision to acquire, expand, operate, and eventually divest of the Trans Mountain assets will result in a net loss for the federal government as calculated on a Net Present Value (NPV basis).

PBO also examined a scenario where the Trans Mountain Pipeline expansion is stopped after June 2022 and cancelled indefinitely. Under this scenario, the Government would need to write off over \$14 billion in assets. The net impact would result in a significant financial loss for the Government and would lead to the Trans Mountain Corporation no longer being a going concern.

1. Introduction

1.1. Since 2020, developments have occurred that impact the financial valuation of Trans Mountain

Parliamentarians continue to have interest in the Government of Canada's 2018 decision to acquire, expand, operate, and eventually divest of the Trans Mountain Pipeline system. In response, PBO has proactively undertaken a follow-up to his December 2020 report to provide updated financial analysis of the Trans Mountain assets.

Since PBO's previous report, there have been certain developments which alter the underlying assumptions of the previous model, most notably:

- the construction budget for the Trans Mountain Expansion Project (TMEP) has increased from \$12.6 to \$21.4 billion with an anticipated mechanical completion date in late 2023¹; and,
- the federal government has announced a \$10 billion loan guarantee for the project.²

1.2. PBO re-assessed Trans Mountain with new data, assumptions

PBO requested updated projected future cash flows for the Trans Mountain Pipeline system from the Canada Development Investment Corporation (CDEV), the crown corporation holding the Trans Mountain assets. CDEV provided all requested information to PBO, but the information was classified as commercially confidential.³ The data's confidentiality did not inhibit PBO's work to model the data, assess the value of the Trans Mountain assets, or publish analytical results in this report.

Using the same methodology and model from its December 2020 report, PBO updated its model with the new data in conjunction with relevant publicly available information.⁴ Based on this new information and data, Table 1 outlines key PBO assumptions which informed the calculation of the financial value of the Trans Mountain assets.

Table 1-1

Key assumptions on Trans Mountain's projected cash flows (Reference Case)

TMEP total construction and financing costs	\$21.4 billion
TMEP in-service date	December 31, 2023
Long term discount rate	7.8% ⁵
Trans Mountain Pipeline system utilization	Contract utilization: Full Spot utilization: Near Full
Service and tolling framework after 20-year contracts expire (2044 –)	Continuation of similar contract service: Committed contracts (up to 80% of pipeline capacity) Spot contracts (remaining capacity) Source: Parliamentary Budget Officer.

To remain consistent with the previous analysis, the "reference case" assumes that shippers will recontract after their existing 20-year contracts expire.⁶ PBO has included a reversion back to a cost-of-service tolling framework as part of its sensitivity analysis in the following section.⁷

PBO's assessment was limited to examining the financial cost of the pipeline expansion; any other economic costs or benefits associated with the pipeline were not included in this analysis.

2. Results

With these assumptions, PBO used a discounted cash flow (DCF) analysis to determine the net present value (NPV) of the Trans Mountain Pipeline system, based on the present value of the future cash flows it is expected to generate.

2.1. Trans Mountain no longer continues to be a profitable undertaking

Based on the new developments since the previous report, specifically the increased construction costs and the delay in the in-service date, PBO finds that the Government's 2018 decision to acquire, expand, operate, and eventually divest of the Trans Mountain assets will result in a net loss for the federal government (Table 2-1).

Table 2-1 Net Present Value of Trans Mountain Pipeline System (Reference Case)

Present value of cash flows since acquisition	\$3.9 billion
Purchase Price	\$4.4 billion
Net Present Value	-\$0.6 billion

Source: Parliamentary Budget Officer.

Notes: Totals may not add due to rounding.

The present value of cash flows since acquisition includes construction costs.

The key assumptions underpinning PBO's financial valuation of the Trans Mountain are subject to risk and uncertainty. Changes to key assumptions underpinning the financial modelling will impact the value of Trans Mountain Pipeline system.

Consistent with the previous report, PBO considered how the value of the Trans Mountain Pipeline system is impacted by changes to five key assumptions:

- TMEP's in-service date;
- TMEP's construction costs;
- Pipeline utilization on the Trans Mountain system;
- The service and tolling framework after 20-year contracts expire; and
- The discount rate used to value Trans Mountain's cash flows.

Table 2-2 provides a summary of the impact of changing each assumption individually and the associated NPV.

Table 2-2 Net present value (NPV) of the Trans Mountain Pipeline system based on changes to key assumptions in Trans Mountain's projected cash flow

(\$ millions)

Assumption	NPV	Change in NPV
Reference Case	- 600	
In-service date		
<i>One-year delay</i>	- 1,700	- 1,200
Construction costs		
- 10.0 per cent	300	800
+ 10.0 per cent	- 1,400	- 800
Pipeline utilization		
- 5.0 percentage points	- 1,100	- 500
+ 5.0 percentage points	- 200	400
Discount rate		
- 0.5 percentage points	700	1,300
+ 0.5 percentage points	- 1,700	- 1,100
Service and tolling framework after 20-year contracts expire		
<i>Cost-of-service</i>	- 2,700	- 2,100

Source: Parliamentary Budget Officer.

Notes: The net present value presented in the table is net of the purchase price paid by the Government of Canada to acquire the Trans Mountain Pipeline system. These figures were calculated assuming that for any given change in a specific assumption, all other assumptions remain the same. The ratio of capped and uncapped costs is a PBO assumption. Any change to this ratio would also impact the NPV.

2.2. If TMEP is cancelled, the Government would face a significant asset write-off

PBO also examined the impacts of a scenario where the expansion on the Trans Mountain Pipeline is stopped and cancelled indefinitely. While this section looks at the financial implications for this scenario, it is not intended to indicate that it is what PBO deems most likely.

Under this scenario, PBO assumes that construction on the Expansion Pipeline will stop at the end of June 2022. Only the base pipeline and existing assets continue to operate.

If the construction of TMEP is halted and the expansion project is cancelled indefinitely, PBO estimates that the Government may need to write off assets worth \$14.4 billion in 2022. This includes sunk costs in capital expenditures for the expansion pipeline, as well as the portion of the goodwill related to the Expansion Project.⁸

The net impact would result in a significant financial loss for the Government and would lead to the Trans Mountain Corporation no longer being a going concern.

Notes

1. Canada Development Investment Corporation. Annual Report 2021. https://www.cdev.gc.ca/wp-content/uploads/2022/05/29210_CDEV_English-2021_LR.pdf
2. <https://www.canada.ca/en/department-finance/news/2022/05/update-on-trans-mountain-expansion-project.html>
3. Staf, A. (2022, March 15). [Letter to Yves Giroux, Parliamentary Budget Officer]. Retrieved from <https://www.pbo-dpb.ca/en/information-requests--demandes-information/IR0628>
4. More details on the methodology and model used can be found in PBO's December 2020 report. <https://www.pbo-dpb.ca/en/publications/RP-2021-035-S--trans-mountain-pipeline-financial-economic-considerations-update--pipeline-trans-mountain-considerations-financieres-economiques-mise-jour>
5. For the calculation of the discount rate, PBO used a weighted average cost of capital (WACC). To calculate this, PBO used data and information from various sources, including Capital IQ (accessed May 20, 2022), PBO's economic projections and data provided by CDEV.
6. PBO's analysis includes cash flows up until 2063. This is consistent with the methodology used in PBO's previous report, which included cash flows for 40 years after TMEP's in-service date.
7. In a cost-of-service tolling framework, the total tolls charged to shippers would equal the total cost to Trans Mountain to provide service, including a regulated return on the base rate. A reversion to a cost-of-service toll framework in the 2040s would be less lucrative for Trans Mountain Corporation and lower the assets' net present value accordingly.

A return to a cost-of-service tolling framework in the 2040s is one possibility. Others include less than 80 per cent of the pipeline's capacity committed to similar contract service or an alternative negotiated settlement.
8. It should be noted that these figures exclude potentially significant revenues (e.g., salvage value) and costs (e.g., severance payments, rehabilitation and wind down costs) that would be associated with the cancellation of TMEP. These additional revenues and costs would have a financial impact for the Government.