# RESEARCH TOPICS BY RHYTHM CAPITAL CORP.

Topic Two: ROI for Trans Mountain Pipeline

#### Abstract

The Government of Canada acquired Trans Mountain Pipeline to ensure the completion of its capacity expansion from 300,000 bpd to 890,000 bpd. With construction completed, what return on investment is conceivably achievable by the Government of Canada? This review puts forward a view that 9% annually has been earned from the start of ownership until the recommended exit transactions are completed with further opportunity for material returns over the subsequent decade.

Aaron Taylor, Director Rhythm Capital Corp. March 12, 2024

## Table of Contents

List of Figures	3
Research Topics by Rhythm Capital Corp.	4
Topic Two – ROI for Trans Mountain Pipeline	4
Background of Pipeline:	5
Proposed Expansion Project	
Scope of Pipeline Project	7
Purpose of Purchase	8
Political Appeasement	8
Economic Benefits	8
Historical Earnings	10
Potential Expansion Earnings	11
Pipeline Valuation Estimates	
Equity Invested by the Government of Canada	16
Valuation Methods	18
Method 1 - Price per Barrel per Day of Pipeline Throughput Capacity	
Method 2 – Earnings' Multiples	19
Valuation Comparison	20
TMPL's Value Realization Options	21
Prospective TMPL Buyers	21
Existing Pipeline Owners	
Investment Funds	24
Initial Public Offering ("IPO")	25
Timeline for Divestiture	28
TMPL Exit Selection	29
Recommendation	30
Estimated Return on Investment	31
CONCLUSION	33
APPENDIX 1 - Trans Mountain Pipeline Current Route + Expansion	34
APPENDIX 2 - Trans Mountain Expansion Project Proposed Pipeline Route	35
APPENDIX 3 - Trans Mountain Proforma Revenues and Expenses for 2024 to 2043	36
<b>APPENDIX 4</b> - Province of Alberta Estimated Increase in Crude Oil Royalties from Expanded Trans Mountain Pipeline	37

PPENDIX 6 - Trans Mountain Pipeline Inflation Adjusted Valuation	
PPENDIX 7 - Publicly Traded Competitive Pipeline Valuations	
PPENDIX 8 - Potential Purchasers of TMPL Assessed	
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	X
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## List of Figures

Figure 1 - Trans Mountain Earnings 2018 to 2023	
Figure 2 - Trans Mountain Proforma - Operating Income	2024 to 204311
Figure 3 - Local Taxes to be Paid by TMEP 2024 to 2043.	
Figure 4 - TMEP Estimated Personal Incomes Taxes (in CI	DN \$'s)13
Figure 5 - Alberta Crude Oil Royalties due to Increased T	MPL Capacity14
Figure 6 - Total NPV Revenues Generated for Governmer	nts
Figure 7 – GoC Capital Contributions to TMPL	
Figure 8 - TMPL Book Value at Sep 30, 2023	
Figure 9 - TMPL Valuation Based on \$/ Bbl/ Day Through	put
Figure 10 - Recent Pipeline Transactions	
Figure 11 - Application of Comparable Companies' Valua	tion Multiples
Figure 12 - IPO Capital Raise	
Figure 13 - GoC Equity Post IPO	
Figure 14 - GoC Return on Investment	
Figure 15 - TMEP Route	
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## Research Topics by Rhythm Capital Corp.

Published: March 11<sup>th</sup>, 2024 By: Aaron Taylor, Director, Rhythm Capital Corp.

As part of Rhythm Capital Corp's ("**RCC**") ongoing endeavors to broaden knowledge availability for the general public, the firm asked for its 'Reading Week' readers to submit questions they may have. The ask was left undefined as to the range of topics for submission. The topics asked to date have related to economic activities within specific regions as well as differences in employment opportunities within Canada while other questions have delved into the social practices of suit wearing in city downtowns.

Questions submitted are reviewed by RCC, where the firm then develops researched responses along with incorporating some of its own opinions on the matter. The following is the second of an ongoing series of researched topic responses.

Topic Two – ROI for Trans Mountain Pipeline

Question from a reader:

What is the return-on-investment ("**ROI**") potential for Government of Canada's ownership of Trans Mountain Pipeline?

#### DISCLAIMER

This report is based on the Author's research and analysis of publicly available information. The figures and conclusions are based the Author's own work and where others' information is used, they are referenced as such. The Author has no vested interest in the valuation of TMPL beyond that of a being Canadian taxpayer.

## Background of Pipeline:

The Trans Mountain Pipe Line Company ("**TMPL**") came into operation in 1953 as the first and still only pipeline taking crude oil and refined products from Alberta to the West Coast of Canada. Initially, a standalone company, it was acquired by BC Gas (eventually renamed 'Terasen Pipelines') in 1994. Then, following the purchase of Terasen Pipelines in 2005 by Kinder Morgan, TMPL became Kinder Morgan Canada Ltd. ("**KMC**").<sup>1</sup>

TMPL is considered a 'Common Carrier' inter-provincial pipeline transporting different energy products while also offering its storage services.<sup>2</sup> One of the unique features of TMPL is that it processes volume movements as a 'Batch'. A 'Batch' represents a defined product such as gasoline which may flow first as Batch 1, followed by a diesel or distillate as Batch 2 then a light crude as Batch 3 with the order reversed to have Batch 4 as another distillate and again, Batch 5 being a gasoline (refined product). Utilizing this separation of products process allows for TMPL to serve the local retail needs for refined products while also offering the delivery of crude oil for refineries such as the one in Burnaby, BC presently owned by Parkland Corporation, and crude to the refineries just south of the US border near Anacortes and Ferndale in Washington State. In Burrard Inlet, TMPL has a marine terminal allowing for exporting of crude oil. The Batch process provides greater flexibility for managing demand variations in products.

In 2016, KMC received approval to expand the pipeline from 300,000 barrels per day ("**bpd**") to 890,000 bpd. The project faced headwinds from the start as the regulatory and public engagement processes became a national issue of concern for the public as well as Indigenous groups whose unceded lands were being crossed. By 2017, KMC was looking at options to offload the enormous project and the associated difficulties they experienced in getting approvals to proceed. At that time, the environmental impacts and concerns were raised as very significant while oil producers were mired in a price and an economic slump that began in 2014.<sup>3</sup> The future for the pipeline's expansion was not bright.

To ensure that a pipeline to tide waters would get built, or as in TMPL's case, an expansion of a pipeline, the Government of Canada ("GoC") stepped into the fray. Having watched Enbridge's Gateway North approval get cancelled in the courts as well as the ongoing uncertainty of TC Energy's Keystone XL pipeline extension and expansion into the United States confronting multiple and ongoing roadblocks at several levels of US government, the GoC took a radical step. Watching legal cases proceeding through the courts showing a similar pattern as the path that led to Gateway North's approvals being squashed, the GoC started negotiations to acquire TMPL.

On May 31, 2018, the GoC entered a Purchase Agreement to acquire TMPL for CAD \$4.45 billion. The clinching moment came on August 30<sup>th</sup>, 2018 when the Federal Court disallowed the approvals for building TMPL's pipeline expansion and somewhat coincidentally, within 30 minutes of the Court's announcement,

<sup>&</sup>lt;sup>1</sup> Source: Trans Mountain Pipeline's history - <u>https://www.transmountain.com/history</u> .

<sup>&</sup>lt;sup>2</sup> Source: Definition of Common Carrier: <u>https://www.bcuc.com/WhatWeDo/Pipelines</u>.

<sup>&</sup>lt;sup>3</sup> Source: Oil price slump in 2014 - <u>https://blogs.worldbank.org/developmenttalk/what-triggered-oil-price-plunge-</u> 2014-2016-and-why-it-failed-deliver-economic-impetus-eight-charts.

KMC's shareholders voted approval to sell to the GoC.<sup>4, 5</sup> With that vote, the GoC acquired TMPL along with the proposed expansion plan.

Officially, the GoC began operating the pipeline on August 31<sup>st</sup>, 2018.

Having acquired the expansion of Trans Mountain Pipeline dubbed the Trans Mountain Expansion Project ("**TMEP**"), the GoC restarted the efforts to obtain full approvals for the proposed capacity increase to 890,000 bpd and address issues noted in the Federal Court's ruling. The project experienced a number of delays and restarts as TMEP was scrutinized at all levels. There were local groups, provincial groups, national and international groups along with those groups who had been there all along. Engagement involved all those parties in front of the National Energy Board (now called the Canadian Energy Regulator – "**CER**") plus numerous in-person community forums.

Ultimately, TMEP was approved to begin construction on June 18, 2019, subject to 156 conditions to be fulfilled over the course of the project.

As of the 30<sup>th</sup> of September 2023, TMEP is 96% complete with a target of Q1 2024 for initial operations.<sup>6</sup>

<sup>&</sup>lt;sup>4</sup> Source: Canadian Energy Regulator - <u>https://www.cer-rec.gc.ca/en/applications-hearings/view-applications-projects/trans-mountain-expansion/trans-mountain-pipeline-system-purchase-agreement-fags.html .</u>

<sup>&</sup>lt;sup>5</sup> Source: CBC.ca Aug 30/2018 - <u>https://www.cbc.ca/news/canada/calgary/kinder-morgan-canada-shareholders-vote-sale-trans-mountain-pipeline-1.4804503</u>.

<sup>&</sup>lt;sup>6</sup> Source: TMPL Management Report For Q3 2023 - https://www.transmountain.com/corporate-reports.

## Proposed Expansion Project

The TMPL expansions looks to increase volume flow capacity to 890,000 bpd from 300,000 bpd moving a mix of 20% Heavy // 80% Light oil. The new line will focus on moving heavier crude oils targeting export opportunities while retaining the ability to move lighter crudes too. The existing line will focus on moving refined products and light crude where the refined products (e.g. gasoline and diesel) support the retail, industrial and commercial businesses in Kamloops and the Greater Vancouver area.

In total, the increased capacity for TMPL takes the annual throughput capacity from 120,450,000 barrels to 324,850,000 barrels. As a comparison, crude oil production in all of Alberta for 2022 was 1,388,204,500 barrels.<sup>7</sup> The resulting increased pipeline capacity represents an ability for Alberta's crude oil production to rise by 14.7% annually.

#### Scope of Pipeline Project

Expansion of TMPL is, in the simplest of terms, a twinning of the current pipeline roughly following the present route. The current operating TMPL is composed of 1,150 kilometres of pipe running from Strathcona County (West of Edmonton), Alberta through British Columbia's interior, terminating in the City of Burnaby, BC which has access to a marine terminal for ship loading. Along the way, in Sumas, BC, a branch of the pipeline separates heading south into Washington State of the United States where the line serves refineries in the Puget Sound area.

Using the majority of existing right-of-way for the route, 980 km of new pipe is being laid as well as reactivation of existing but presently unused pipeline. See Appendix 1 & 2 for the detailed route including the communities through which TMEP will pass. Flow of the additional fluid volumes through the lines is assured by the building 12 additional pump stations while 19 new storage tanks are being added between the terminals of Edmonton, Burnaby and Sumas. To facilitate additional exports, the Westridge Marine Terminal is being expanded by three new births giving a monthly loading capacity of 34 Aframax-size tankers.<sup>8, 9</sup> The new loading capacity equates, on the low end, 500,000 bbls per load, totalling a potential of 17 million bbls per month of export potential.

<sup>&</sup>lt;sup>7</sup> Source – Crude Bitumen & Crude Oil production in 2022 - <u>www.aer.ca</u>.

<sup>&</sup>lt;sup>8</sup> Aframax: The maximum size of vessel to use the Average Freight Rate Assessment method for calculating shipping rates; these tankers are around 240 metres (790 feet) long and have capacities of 80,000 to 120,000 dwt. They carry roughly 500,000 to 800,000 barrels. <u>https://www.britannica.com/technology/tanker</u>.

<sup>&</sup>lt;sup>9</sup> Source: Trans Mountain Expansion Project - <u>https://www.transmountain.com/project-overview</u>.

## Purpose of Purchase

#### **Political Appeasement**

The need to allow a pipeline to tidal waters and therefore, international market access, had become a politically sensitive issue. There were multiple options to expand the export capacity of crude oil put forward in the 2000's. Two involved Canadian only solutions while one relied on going through the United States.

One of the options was to build and/ expand on existing lines going east, all the way to and through Quebec<sup>10</sup>. Present refineries in QC rely primarily on imports of crude oil delivered via tankers coming up the St. Lawrence River. It would seem there should be interest in a pipeline to eliminate the in-bound tanker traffic and obtain economic benefit from the exports. The logic of the idea did not convince the QC Provincial Government and at the Federal level, the Liberal Government was not keen to press the issue and risk those voters.

Another option even achieved approvals. In 2014, Enbridge's Northern Gateway pipeline – from Alberta to Kitimat, BC – was approved for construction however, two short years later, its approvals were rejected by the Federal Courts. The pipeline cancellation received unhappy responses from Alberta leaving additional oil production land locked; First Nations had mixed views given the environmental risks but also the economic loss; and environmentalists were happy as the oil tanker traffic out of Kitimat brought memories of the nearby Exxon Valdez incident of 1989.<sup>11</sup>

The third option that seemed most achievable was to build an expanded pipeline South. Leveraging its existing pipeline, TC Energy's XL Pipeline was to bring Canadian Crude south to US refineries as well as connect it to the Gulf Coast via Texas. This option met numerous hurdles from each level of government as it pushed to obtain approvals. At the juncture the GoC was weighing TMPL, this project was still mired in court reviews with an unknown likelihood of approval.

Given the feasibility of the present options, acquiring TMPL became an expedient way to appease economic desires out of Alberta while also offering the ability, as the Government of Canada, to address First Nations and environmental issues.

In an attempt to balance the economic benefits for Canada with the Federal Government's environmental philosophy, the TMPL purchase became a palatable method to do so.

## Economic Benefits

While the economic benefits of TMPL's acquisition are real, they served as justification for the main driver – political need.

<sup>&</sup>lt;sup>10</sup> Source: CER - <u>https://www.cer-rec.gc.ca/en/data-analysis/energy-markets/market-snapshots/2022/market-snapshot-crude-oil-imports-declined-in-2021-while-refined-petroleum-product-imports-rose-modestly.html</u>

<sup>&</sup>lt;sup>11</sup> Source: NOAA's Damage Assessment, Remediation, and Restoration Program (DARRP) - <u>https://darrp.noaa.gov/oil-spills/exxon-valdez</u>.

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Yes, there would be jobs created but those getting the jobs were hoped to be future governing party voters. Yes, there would be tax revenues created, resulting in offsetting critiques by those in business circles and budgetary watchdogs. Yes, there would be First Nations engagement, involvement and ultimately, the potential for First Nations ownership, all of which would fit into the present governmental efforts to achieve Reconciliation.

As is typical, the political calculus used in assessing and weighting the varying factors is rarely laid out in the public declarations. This author believes, benefits would accrue with the pipeline purchase, however it wasn't the outwardly stated economic virtues that pushed the decision to acquire TMPL, it was the anticipated political capital gained in making the purchase which ultimately determined the decision to make the acquisition.

Figure 1 - Trans Mountain Farnings 2018 to 2023 14

## Historical Earnings

Having completed the paper aspect of the purchase, the GoC took operational control of TMPL on August 31<sup>st</sup>, 2018, and have reported earnings since. In the data presented in this assessment, the years of 2018 and 2023 have been converted into full year values. For 2018, the reported earnings were extrapolated into a full year from the reported results of August 31 to December 31, 2018, while in 2023, the initial 9 months of reporting were projected into a full year.

The pipeline operations have been consistently profitable albeit they faced an operations blip in November 2021 when torrential rains resulted in flooding for Southern British Columbia. The weather risks resulted in TMPL halting the pipeline flow out of safety concerns, only restarting in mid-December while at a reduced capacity. The pipeline was not put back into full operational capacity until mid-January 2022.<sup>12</sup>

When reviewing the earnings as they progress towards current, one will note that accounting practices used for reporting on TMEP's expenses show additional revenues, noted as 'Equity Allowance', reported after operating income. In the last three years, the Equity Allowance has been booked as \$373,981,000 in 2021, \$704,334,000 in 2022 and \$-803,239,000 in 2023 where the 2023 figure is an extrapolation from Q3 data that includes recognition of Goodwill Impairment in Q3 of \$888,098,000.<sup>13</sup>

To accurately represent forward looking data, and deriving proformas for future years, only the lines of Operational Income and above, were used. That method has allowed for a consistent basis for deriving future earnings post project completion.

rigure 1 - riuris iviouri	LUIII L	.urmings 20.	10 10	2025		$\boldsymbol{X}$				
TransMountain Fina	ncials	5			C					
(in thousands CDN \$'s)					- /					
	Pro	rate to FY		FY		FY	FY	FY	Pro	orate to FY
YEAR		2018		2019		2020	2021	2022		2023
LINE										
			$\sim$							
Revenues		6	$\sim$							
Total	\$	550,043	\$	419,752	\$	427,655	\$ 443,144	\$ 478,004	\$	530,881
Expenses			$\mathbf{N}$							
Total Expenses	\$	445,509	\$	325,905	\$	337,267	\$ 364,298	\$ 395,682	\$	1,334,121
Op Income	\$	104,533	\$	93 <i>,</i> 847	\$	90,388	\$ 78,846	\$ /	-\$	803,239
IBT	\$	52,173	\$	98,533	\$	188,746	\$ 365,609	\$ 708,073	-\$	265,627
Net Income	\$	90,247	\$	130,855	\$	140,802	\$ 273,277	\$ 533,997	-\$	491,528
		2								

<sup>&</sup>lt;sup>12</sup> Source – Trans Mountain Corporation Management Report for the year ended December 31, 2021 – March 28, 2022.

<sup>&</sup>lt;sup>13</sup> Note: Full year projections for 2023 do not assume any further impairments beyond the amount recognized in Q3 of 2023.

<sup>&</sup>lt;sup>14</sup> Source: Trans Mountain posted financial statements - <u>https://www.transmountain.com/corporate-reports</u>.

## Potential Expansion Earnings

In developing earnings that may accrue to the GoC, this review assumes that if the GoC had not stepped in to acquire TMPL, the pipeline expansion would not have been built. As noted above, the project was facing roadblocks to completion and even a strong likelihood of approvals' reversal (which ultimately did occur). Given those difficulties, KMC had determined it was going to stop the TMEP and halt any further efforts into the build process. Simply retaining the base business was the default action for KMC. As GoC stepped forward to champion the expansion, ownership of both the base pipeline and rights to TMEP were a necessity.

Beyond the overall operations revenues, it is the incremental values accruing from the expansion of the pipeline – construction and increased oil production – being considered part of the potential return on the GoC's investment. These incremental revenues result from the owner of TMPL being the Government of Canada. The additional governmental benefits accrue not just for the federal government but are created at all levels of governments including provincial and local levels.

#### Proforma Earnings at Total Capacity

The estimated proforma earnings for a completed TMEP are noted in Figure 2 with the detailed proforma noted in Appendix 3.<sup>15</sup> The tolls used in developing the proformas for a completed TMEP have been put forward by TMPL but as of December 2023, have not been approved. The tolls charged by TMPL for customers putting product through the pipeline are overseen by CER who in turn ensures fair prices which allow for operations along with reasonable profits. Revised toll rates incorporating the costs of TMEP have been put forward by TMPL however shippers have filed concerns with CER as they are not in agreement with the proposed new rates – mainly because the new rates are substantially higher than the current tolls. The projected revenues assume the current proposed toll rates will ultimately be approved.

Assuming a ramp up to full capacity over two years where the initial operating income is projected to start at \$1.4 billion then rising to average \$3 billion annually. Looking out 20 years from the initial start, the net present value ("**NPV**")<sup>16</sup> of the operating income equates to \$23.7 billion.

(in thousands CDN \$'s)												
		Estimated										
YEAR		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034 to 2043
LINE	$\langle \rangle$											
	% flow	60%	90%	100%	100%	100%	100%	100%	100%	100%	100%	
Revenues	Toll Adj	0%	0%	0%	0%	0	6%	0%	0%	0%	0%	
Total	\$	2,456,481	\$ 3,647,039	\$ 4,045,399 \$	4,046,884	\$ 4,048,399	\$ 4,288,055	\$ 4,289,631	\$ 4,291,238	\$ 4,292,878	\$ 4,294,550	
Expenses												_
Total Expenses	\$	985,581	\$ 1,020,176	\$ 1,056,011 \$	1,093,130	\$ 1,131,580	\$ 1,171,409	\$ 1,212,669	\$ 1,255,411	\$ 1,299,690	\$ 1,345,563	_
Op Income	\$	1,470,900	\$ 2,626,862	\$ 2,989,388 \$	2,953,754	\$ 2,916,819	\$ 3,116,646	\$ 3,076,962	\$ 3,035,827	\$ 2,993,188	\$ 2,948,988	\$29,398,948
PV 20 Yrs \$23,	,708,119	\$1,337,182	\$2,170,961	\$2,245,971	\$2,017,454	\$1,811,115	\$1,759,265	\$1,578,968	\$1,416,236	\$1,269,404	\$1,136,962	\$ 6,964,601
	\$ ,708,119	, .,			,, -		1 - 7 - 7				1 11	1

Figure 2 - Trans Mountain Proforma - Operating Income 2024 to 2043 TransMountain Proforma Financials

<sup>&</sup>lt;sup>15</sup> See Appendix 3 for the full 20-year projected TMPL earnings.

<sup>&</sup>lt;sup>16</sup> Note: All Net Present Value calculations use a 10% discount factor unless otherwise specifically noted.

#### Business Taxes – Incremental Federal, Provincial & Municipal Revenues

To operate the expanded pipeline through the various municipalities, TMEP will be contributing increased payments to those local governments in the form of property taxes, business taxes and similar fees. As an example, the annual property taxes alone for the expanded operations in Burnaby, BC are estimated at \$13.0 million, representing an increase of \$6.0 million per year.<sup>17</sup> For the 20 years post-project completion, TMEP will be paying those municipalities, towns and cities along the pipelines route a total of \$601 million in local taxes.

Figure 3 - Local Taxes to be Paid by TMEP 2024 to 2043<sup>18</sup>

Local Taxes From Expanded Trans Mountain Pipeline (in \$ millions)

	Years 2024 to 2043
Alberta	\$340
British Columbia	\$261
Total	\$601

#### Income Taxes – Personal (Federal & Provincial)

From the date of purchase forward, the GoC has been collecting an increase in personal income taxes from the additional staff and contractors working on TMEP. Looking from the initial date of acquisition in 2018 through to 20 years past the estimated in-service expansion date of 2024, the GoC is estimated to collect over \$42.9 million in NPV for having taken on and then completing the project over the course of that timeframe.

The provinces of both, Alberta ("**AB**") and British Columbia ("**BC**"), also benefit from the employed staff during the construction and post-completion. Again, the amounts reflect the taxes collected over the course of the project and twenty years into the future. The present value of the provincial income tax revenue totals \$10.9 million for BC and \$10.5 million for Alberta.

The combined personal income taxes are projected to total \$138 million in nominal dollars with a current NPV of \$64.4 million to the three governments.<sup>19</sup>

<sup>&</sup>lt;sup>17</sup> Source: Trans Mountain website – "Your Top 9 Questions about the Trans Mountain Expansion Project for Burnaby Home > News Aug. 4, 2016" - <u>https://www.transmountain.com/news/2016/your-top-9-questions-about-the-trans-mountain-expansion-project-for-burnaby</u>.

<sup>&</sup>lt;sup>18</sup> Source: Trans Mountain Pipeline contracted - An independent economic impact assessment for the Project by Ernst & Young LLP (EY) in March 2023; <u>https://www.transmountain.com/news/2023/trans-mountain-corporation-provides-update-on-the-expansion-project</u>.

<sup>&</sup>lt;sup>19</sup> See Appendix 5 for further information on derived values. Of note these values do not include secondary employment and the associated tax revenues that resulted from the TMEP and then from ongoing TMPL.

	Net Prov Taxes							
Year	N	NPV Fed Tax \$'s		BC NPV \$'s		AB NPV \$'s		
2018	\$	811,650	\$	203,704	\$	201,923		
2019	\$	988,551	\$	248,102	\$	245,932		
2020	\$	1,460,933	\$	366,658	\$	363,452		
2021	\$	2,435,646	\$	611,288	\$	605,941		
2022	\$	2,800,157	\$	702,771	\$	696,624		
2023	\$	3,746,163	\$	940,196	\$	931,972		
2024	\$	2,396,487	\$	601,460	\$	596,199		
2025 to 2043	\$	28,296,427	\$	7,246,646	\$	6,901,568		
	\$	42,936,014	\$	10,920,825	\$	10,543,611		

#### Figure 4 - TMEP Estimated Personal Incomes Taxes (in CDN \$'s)<sup>20</sup> Federal & Provincial Taxes – Personal

## Sales Taxes – Goods & Service Tax ("GST") / Provincial Sales Tax ("PST")

The additional 5% GST earned by the GoC and 7% PST earned by the Province of British Columbia, are based on the expenses (excluding salaries, wages and benefits) spent on the project. The collection of GST is on the total TMEP expenses while PST is estimated as payable on 75% of the project's costs reflecting that Alberta has no PST.

The totals for the collected GST & PST are based on \$15 billion spent until Q1 2023 plus a further \$3 billion still to be spent in construction costs, excluding wages.<sup>21</sup> The estimated sales taxes are \$772 million in GST collected and BC's PST collected is estimated at \$811 million.

#### Royalties - Crude Oil Production

The expansion of TMPL creates an annual capacity to transport 324,850,000 bbls, an increase of 204,400,000 bbls. This increased volume represents 14.7% of current crude oil production within Alberta.

It is believed that sufficient crude oil production can be increased to fill the additional pipeline capacity. In turn, the growth in royalties for the Government of Alberta are projected to total \$11.7 billion representing the NPV of crude oil royalties paid on the additional crude oil produced for the years 2024 to 2043.<sup>22</sup>

This is a significant sum of additional revenue that accrues to Alberta's coffers, all without Alberta having had to put forward any of its own capital.

<sup>&</sup>lt;sup>20</sup> The future years of 2024 thru to 2043 represent a net present value using a discount of 10%.

<sup>&</sup>lt;sup>21</sup> Source: E&Y Report - Trans Mountain Corporation Economic Impact Assessment of the Trans Mountain Expansion Project, March 2023; <u>https://www.transmountain.com/news/2023/trans-mountain-corporation-provides-update-on-the-expansion-project</u>.

<sup>&</sup>lt;sup>22</sup> Note: TMEP's crude volume is planned at 80% Light // 20% Heavy which in this assessment is accounted for in recognizing that the oil sands will be the growth area for oil production therefore heavier oils will go via other pipelines or additional upgrading will be done prior to shipping resulting in ongoing oilsands royalty figures going forward.

#### Figure 5 - Alberta Crude Oil Royalties due to Increased TMPL Capacity

<b>Iberta Royalties - Crude Oil</b> n \$'s)	Actuals	Actuals		torical Based Estimate	Fut	ure Royalties		
rude Oil Extraction Method eavy - oil sands	2021 \$ 11,605,000,000 \$	2022 11,000,000,000	:	2024 Fwd 7,600,000,000	Annual A \$	Additional Revenue 1,119,028,212	\$	20 Yr Totals 22,380,564,247
ght/ Med - conventional	\$ 1,947,000,000 \$	1,900,000,000	\$ 1	1,705,000,000	\$	251,045,145	\$	5,020,902,900
otals	\$13,552,000,000 \$	12,900,000,000	ŞŸ	9,305,000,000	\$	1,370,073,357	Ş	27,401,467,147
					PV 20yr	s @10%	\$	11,664,206,829
						01	6	GHI
				2	0	, OX		
		6	2	5.5	5			
	10							
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BHUHW								

## Total Derived TMEP Value

Gathering all the values generated by the GoC completing the Trans Mountain Expansion Project gives a total over \$37 billion in current Canadian dollars. The largest contributor to the NPV is the increase in operating income from the expanded flow capacity of TMPL. The next largest revenue generator are the royalties earned by the Province of Alberta on crude oil production increases. Other economic benefits, not captured in this review, will accrue from knock-on impacts as the added employment leads to the generation of further employment opportunities from the firms and individuals spending and investing their earnings in the local, regional and national economies.

For the GoC, TMPL creates \$24.5 billion in present value upon completion of the expansion with opportunities to offset other funding expenditures to the provinces of AB and BC in the amount of \$12.5 billion. The latter figure is not a certainty but does offer a negotiating point for the GoC with those provinces to potentially reduce federal transfers. Again, this was a political decision, and the factors and associated figures are a tool for negotiating between the parties at a profitable level.

#### Figure 6 - Total NPV Revenues Generated for Governments

**Revenues Generated from TMPL Expansion Build & Ongoing Operations** (in CDN \$'s)

NPV Revenues	GoC	Prov of AB	Prov of BC	Totals
		$\sim$		
Operating Income	\$23,708,118,524	\$0	\$0	\$23,708,118,524
Personal Income Taxes	\$30,692,914	\$7,497,767	\$7,848,106	\$46,038,787
Sales Taxes (GST + PST)	\$772,500,000	\$0	\$811,125,000	\$1,583,625,000
Oil Royalties	\$0	\$11,664,206,829	\$0	\$11,664,206,829
	C			
Totals	\$24,511,311,439	\$11,671,704,595	\$818,973,106	\$37,001,989,140
	Allo.			
	(A)			
BHALHIN				

## **Pipeline Valuation Estimates**

In defining a value for a completed TMPL, the starting point is with the amount of equity the GoC has invested into the company through its acquisition and in turn the work toward building out the expansion. This value lays the foundation for comparisons to the two derived valuation methods being put forward.

#### Equity Invested by the Government of Canada

The initial investment was the acquisition price of \$4.45 billion but over the course of ownership, up to September 30, 2023, total equity contributed by the GoC is \$12.569 billion. In 2022, the GoC stated they would not provide any further 'public funds' as contributions towards TMPL leaving future additional capital needs to be sourced via debt or operating revenues.<sup>23</sup>

#### Figure 7 – GoC Capital Contributions to TMPL

GoC TMPL Capital Contirbutions (in billions CDN \$'s)

Year	Totals
2018	\$7.293
2019	\$0.527
2020	\$1.285
2021	\$2.230
2022	\$1.235
2023 - Q3	\$0.000

Total Equity Contributed <u>\$12.569</u>

While the equity contributed to TMPL totals over \$12 billion, the most recently provided financial update (Q3 2023) states an equity value of \$8.2 billion for GoC's stake in the pipeline. This net value represents a paper loss of roughly \$4.4 billion to GoC by owning the pipeline as at the end of September 2023.<sup>24</sup>

Figure 8 - TMPL Book Value at Sep 30, 2023 **Trans Mountain Pipeline Equity** (in thousands CDN \$'s) 30-Sep-23 Equity \$8,169,144 **Total Book Value** \$8,169,144

Beyond the direct capital infusions, the GoC has also provided loan guarantees allowing the project to secure financing on good terms including lower interest rates. The value of those commitments to the project is best shown in the lower interest rates payable for use of the syndicated credit with rates of 6.6%

<sup>&</sup>lt;sup>23</sup> Source: <u>https://www.reuters.com/business/energy/trans-mountain-sees-expansion-project-cost-almost-doubling-ceo-retire-2022-02-18/</u>.

<sup>&</sup>lt;sup>24</sup> Source: TRANS MOUNTAIN CORPORATION – Q3 2023 CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (unaudited) For the three and nine month periods ended September 30, 2023.

and 6.0% where the credit facility was most recently increased on July 20<sup>th</sup>, 2023 to \$16.0 billion.<sup>25</sup> Those rates are at a discount to the Bank of Canada's ("**BoC**") Prime Rate that was revised up on July 19<sup>th</sup>, 2023 to 7.2%, the day before TMPL finalized the latest financing commitment increase. At the time, Prime moved up by 0.25% from 6.95%, and remains at the 7.2% rate as of January 2024.<sup>26</sup>

The total debt of the project may become a factor for prospective buyers who are unlikely to have the same ability to offer sovereign loan guarantees so in turn, the debt liabilities become a key aspect for negotiation in any sale.

In summary, TMPL's \$8.2 billion Book Value is less than the GoC contributed equity total of \$12.6 billion.<sup>27</sup> This value is offset by additional created future value of \$13.3 billion composed of GST/PST (\$1.6 billion), Personal Income Taxes (\$0.005 billion) and Crude Oil Royalties (\$11.7 billion). Should the GoC be able to net other governmental expenditures against the future revenues created by TMPL – in particular, the \$11.7 billion to be earned in royalties by the Province of Alberta – the GoC is then ahead by roughly \$3.5 billion upon completion without having to sell the asset.

However, given the present political relations between Canada's Federal Government and Alberta's Provincial Government, the netting of the created additional revenues would likely not be attempted nor accepted therefore, the GoC will need to complete a sale of TMPL to realize a return and a maximized value.<sup>28</sup>

<sup>25</sup> Source: TRANS MOUNTAIN CORPORATION – Q3 2023 CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (unaudited) For the three and nine month periods ended September 30, 2023.

<sup>26</sup> Source: Bank of Canada - <u>https://www.bankofcanada.ca/rates/banking-and-financial-statistics/posted-interest-rates-offered-by-chartered-banks/</u>.

<sup>27</sup> Source: Annual TMPL Financial Statements for years 2018 – 2022 and Quarterly Update Financial Statements Q3 2023.

<sup>28</sup> Sources: <u>https://macleans.ca/longforms/unsteady-reign-danielle-smith/;</u>

https://globalnews.ca/news/10198746/danielle-smith-alberta-year-end-interview/;

https://www.cbc.ca/news/canada/edmonton/sovereingty-act-clean-electricity-regulations-1.7041533;

https://www.cbc.ca/news/politics/guilbeault-smith-fed-prov-climate-debate-1.6863267 .

#### Valuation Methods

In valuing TMPL, there have been two methods used to derive a value for a completed Trans Mountain Pipeline expansion. These valuation methods offer two means of looking at what TMPL may be worth once the pipeline is pumping at full capacity and in turn, what potential value might be available to the GoC in owning the finished pipeline.

#### Method 1 - Price per Barrel per Day of Pipeline Throughput Capacity

The first model for pricing TMPL's potential sale price leverages the same price metrics used by the GoC when they acquired the pipeline in 2018.

At time of acquisition, TMPL had a defined throughput volume capacity of 300,000 bpd. The price paid by the GoC was \$4.45 billion which equated to a purchase price of \$14,825 per daily barrel of TMPL's volume capacity. That simplistic calculation of throughput divided by purchase price does capture all the key factors of the acquisition – volume capacity, open market pricing while also acknowledging that the expansion was essentially just starting and in fact, had to be restarted for public discussions. This left a simple asset operating with a potential growth option.

Figure 9 - TMPL Valuation Based on \$/ Bbl/ Day Throughput

Valuation of Trans Mountain Pipeline (in CDN \$'s)

Method 1 Based on GoC Pipeline Purchased Barrel Per Day Value	R
Starting Volume Capacity (b/day)	300,000
Purchase Price Paid by Gov't Canada	\$4,447,352,000
Price per Daily Thruput Barrel	\$14,825
New Volume Capacity (b/day)	890,000
Prior \$/bbl/day	\$14,825
New Valuation	\$13,193,810,933
Inflation Adjusted Valuation	\$15,484,867,658

Once the GoC completes the expansion, throughput capacity is to be rated at 890,000 bpd. Taking the original GoC purchase price of \$14,825 per bpd and multiplying that by the new TMPL capacity of 890,000 bpd, a value of \$13.2 billion is calculated. Going a step further to properly represent the original purchase price in current dollars, the initial price becomes \$17,399 per bpd after adjusting for inflation which, over the years since purchase and through construction, was over 20%. The resulting inflation adjusted TMPL completed expansion value is \$15.5 billion.<sup>29</sup>

<sup>&</sup>lt;sup>29</sup> Source: Inflation data from - Statistics Canada website: <u>https://www.statcan.gc.ca/en/subjects-start/prices and price indexes/consumer price indexes</u>.

#### Method 2 – Earnings' Multiples

In the past six months there have been three notable pipeline sales transactions publicly reported on which to glean the current valuation metrics used in determining the value of the assets being sold/ purchased. The sales range from the relatively small purchase by Kinder Morgan of NextEra for \$2.53 billion, to Pembina Pipeline's \$4.19 billion consolidation of previous holdings, onto the largest purchase being Enbridge's \$19.01 billion acquisition of EOG, Questar and PSNC.

#### Figure 10 - Recent Pipeline Transactions<sup>30</sup>

(in billions \$CDN)							
Buyer Name	Acquired Asset	Transaction	Multiple Used	Inclusive Debt	Month of	Type of	
		Value		Acquired	Transaction	Pipeline	Location(s)
Enbridge	EOG, Questar and PSNC	\$19.01	16.5 x 2023 Est Earnings// 1.3 x EV	\$6.25	Sep-23	Gas Utilities	North America
Kinder Morgan	NextEra Energy Partner's STX Midstream	\$2.53	8.6 times 2024 EBITDA	\$0.00	Nov-23	NG	North America
Pembina Pipeline	Consolidation of Alliance Pipeline and Aux Sable	\$4.19	9.0 times EBITDA of adj 2023	\$0.44	Dec-23	NG & NGL Facilities	North America
Exchange Rate	\$1 CDN = \$X US			C	C).	)	
01-Sep-23	\$0.7364						
01-Nov-23	\$0.7207						
01-Dec-23	\$0.7404						

As shown in Figure 10, the three transactions each used or perhaps had, a differing basis for valuing the assets being purchased. Two of the transactions utilized a multiple based on future or adjusted current year Earning Before Interest Taxes Depreciation & Amortization ("EBITDA") while the Enbridge purchase disclosed the valuation as being based on estimated full year earnings and Enterprise Value ("EV").

Looking for further comparables, a review of nine publicly traded pipeline companies was conducted with the full data noted in Appendix 7. From those publicly traded entities, implied multiples were noted using the current share price relative to revenues and net earnings while standardizing into a common currency of Canadian dollars. The resulting multiples showed that the selected US companies' were valued lower than the Canadian selected companies including accounting for exchange rate. While interesting and perhaps the basis of a separate future study, the average multiples were applied to TMPL's future earnings. Specifically, the year 2026 when operations will be at full capacity thereby producing the expected long-term annual revenues.

<sup>&</sup>lt;sup>30</sup> Sources: Enbridge - <u>https://www.newswire.ca/news-releases/enbridge-announces-strategic-acquisition-of-three-u-s-based-utilities-to-create-largest-natural-gas-utility-franchise-in-north-america-810429000.html; Kinder Morgan - <u>https://ir.kindermorgan.com/news/news-details/2023/Kinder-Morgan-to-Purchase-NextEra-Energy-Partners-STX-Midstream/default.aspx; Pembina Pipeline - <u>https://www.pembina.com/media-centre/news/details/fd150028-cc5c-4882-8ef3-197c0d60bfeb</u></u></u>

#### Figure 11 - Application of Comparable Companies' Valuation Multiples

#### TMPL Revenues for Multiples Valuation

(in thousands CDN \$'s)

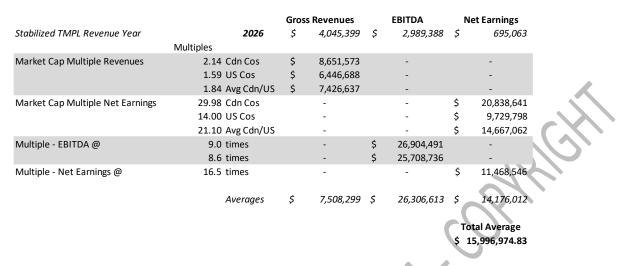


Figure 11 shows the varying multiples applied to TMPL's gross revenues of \$4.04 billion, EBITDA of \$2.99 billion and net earnings of \$0.695 billion. The resulting valuations of TMPL range from \$6.4 billion at the low end to a high of \$26.9 billion. The gross revenue multiples provided the lowest valuation of TMPL while those using EBITDA resulted in the largest values with the net earnings multiples providing values in the middle yet that method also generated the widest range of values given the variance of Canadian & US company multiples.

Using the simplistic but powerful tool of averages, the value for TMPL using the varying multiples presently implied in the public markets and stated in recent transactions, TMPL has a value of \$15.996 billion – perhaps easier noted as a rounded \$16 billion.

#### Valuation Comparison

The two methods utilized in developing a value for a completed TMPL result in a range of values. Applying averaging to the multiples method leads to a difference of \$0.5 billion between the two methodologies.

The value question left to answer is, "What is the right valuation?" The ultimate value may be best described as, "In the eye of the beholder." That is, for any prospective purchaser or investor, they bring with them a set of perceived benefits that are believed to accrue to them in acquiring TMPL beyond the directly obtained revenues and profits. There may be perceived growth opportunities via synergies or integration of other assets, or expertise brought to leverage efficiencies – all those factors will ultimately give rise to variations of whatever values are noted above.

This Author sees TMPL as having a value of \$15 to \$16 billion based on the forecast revenues of the completed TMPL. Realizing that value would offer a positive return to the GoC for its equity investment of \$8.2 billion.

## TMPL's Value Realization Options

For TMPL to achieve the valuations noted, there must be at least one buyer who has an interest in owning all or a part of the pipeline. The only parties to state their interest in owning TMPL to date have been a number of First Nations looking to have a stake in the pipeline that runs through their unceded lands while the only other declared party is Alberta Investment Management Corporation ("**AIMCo**")<sup>31</sup>. Any other interested parties have been muted in expressing interest. Therefore, this report will be bringing forward names of potential candidates to purchase all or some of TMPL who the Author believes may be well suited to owning the pipeline. Factors considered include financial capability, existing operational expertise, growth ambitions, nationality, or some combined level of any of those traits.

#### Prospective TMPL Buyers

#### Existing Pipeline Owners

The list of potential buyers for TMPL starts with those firms presently operating pipelines. Groups discussed below, run similar crude oil pipelines or lines dedicated solely to natural gas or a mixture of liquids and gas – the key similarity are their operations of a pipeline moving hydrocarbon products giving them insights into operations logistics and regulatory compliance requirements.

#### TC Energy

TC Energy, headquartered in Calgary, Alberta operates more than 95,000 kilometres of oil and gas pipelines, has over 650 billion cubic feet of natural gas storage, and produces about 4,200 megawatts of electric power from natural gas and nuclear power. The rationale for TC Energy being a top potential acquirer of TMPL is driven by a recent announcement as well as its historical efforts to expand its oil moving capacity which saw Keystone get cancelled.<sup>32</sup>

#### PROS:

- Historical efforts to expand oil pipeline transportation capacity saw the cancellation of Keystone pipeline from Alberta to BC's West Coast.
- Recently announced plans to split its company into two publicly traded entities with one focusing on 'natural gas and energy solutions' while the other concentrates on the associated infrastructure.<sup>33</sup> Being both publicly traded and having an opportunity to expand through an acquisition of such a 'key' crude oil pipeline puts TC Energy at the top of potential suitors.
- The company has the expertise to operate TMPL and integrate it into its critical infrastructure including a head office located in Calgary.
- CONS:

Becoming two entities takes a lot of executive time as well as internal logistics to separate the entities into their own operating organizations with independent corporate departments.

• The company also recently completed its Coastal Gaslink pipeline going from Dawson Creek, BC to the West Coast of BC near Kitimat which could be viewed as a positive but in this case, the Author

<sup>&</sup>lt;sup>31</sup> Source: CBC - <u>https://www.cbc.ca/news/canada/calgary/aimco-interested-buying-trans-mountain-pipeline-</u> 1.7094581

<sup>&</sup>lt;sup>32</sup> TC Energy Background: <u>https://www.tcenergy.com/</u>

<sup>&</sup>lt;sup>33</sup> Source: TC Energy's 'Liquids Spinoff' - <u>https://www.tcenergy.com/investors/liquids-spinoff/</u>

sees it as a Con due to the need to recover the capital expended versus spending further capital on an acquisition.

• There would be uncertainty of the market's interest in having such a large acquisition being brought forward so soon after the creation of the two corporations.

POTENTIAL TO ACQUIRE TMPL:

• Medium to high probability.

#### Enbridge

Enbridge, based out of Calgary, Alberta owns a large portfolio of midstream assets transporting hydrocarbons across the U.S. and Canada. Its main oil pipeline network includes the Canadian Mainline system, regional oil sands pipelines, and natural gas pipelines. Enbridge also owns and operates gas utilities and storage with a renewables portfolio.<sup>34</sup>

This company is viewed as a potential suitor due to its size, capital and breadth of operations, and past efforts to grow via an oil pipeline to the West Coast which was cancelled.

#### PROS:

• Having had its previous expansion attempt rejected by the Canadian Courts in 2016, buying a completed pipeline is a simpler way to add more operating kilometres to their holdings.

• The firm has a wide breadth of experience in North America as well as internationally with its current Canadian crude oil transportation going east and south.

CONS:

- Competitive issues are prevalent should Enbridge become the owner of TMPL. They control and operate a pipeline system that presently moves 3.4 million barrels per day ("MMbpd") of Canadian crude oil south and east into and through the US market. Adding an additional 890 kbpd of crude pipeline capacity creates risk for the marketplace with one operator overseeing such a large market share.
- Furthermore, from Enbridge's point of view, they may not wish to have such a large exposure to one business line.
- Currently, they are expanding their T-North and T-South gas pipeline that runs through Central British Columbia which is consuming over \$4.8 billion of capital plus management attention.<sup>35</sup>
- POTENTIAL TO ACQUIRE TMPL:
- Medium probability.

#### Pembina Pipeline

Pembina Pipeline is a midstream company that transports hydrocarbon liquids and natural gas products produced primarily in Western Canada. They own gas gathering and processing facilities and an oil and natural gas liquids infrastructure and logistics business.<sup>36</sup>

This firm is considered a prospective buyer as it has grown from a regional player into a small to medium North American participant and may see TMPL as an opportunity to continue its growth.

<sup>&</sup>lt;sup>34</sup> Enbridge Background: <u>https://www.enbridge.com/</u>

<sup>&</sup>lt;sup>35</sup> Source: Enbridge Investor Day Presentation – March 1, 2023.

<sup>&</sup>lt;sup>36</sup> Pembina Pipeline Background: <u>https://www.pembina.com/</u>

PROS:

- Ongoing growth acquisitions show commitment to expand company beyond organic growth.
- Recent years, capital has been spent on expanding their feeder systems where acquiring TMPL would benefit Pembina's prior capital expenditures with further integration of oil carrying capacity.
- They are a Canadian based firm.

CONS:

- The recent capital deployed in the acquisition of additional interest in Alliance Pipeline and Aux Sable.<sup>37</sup>
- Acquiring TMPL would be a large acquisition in context of their total present market capitalization of \$24.9 billion.

POTENTIAL TO ACQUIRE TMPL:

• Low to Medium probability.

Inter Pipeline Ltd. (owned by Brookfield Infrastructure)

Inter Pipeline, taken private by Brookfield Infrastructure in 2021<sup>38</sup>, is involved in energy infrastructure businesses providing transportation, processing and storage of energy products across Western Canada and Europe.<sup>39, 40</sup>

PROS:

- Being owned by a large Canadian based fund that has capital raising ability to fund the purchase.
- Through Brookfield, the firm has access to the necessary expertise to manage TMPL as well as the experience of integrating large entities.
- As of November 2023, a related Brookfield fund had US\$102-billion available for investment opportunities. They have also shown a strong ability to raise investor capital should further funds be required.<sup>41</sup>

CONS:

 Another pipeline entity purchase may be too soon for Brookfield to properly integrate if it were to acquire TMPL.

POTENTIAL TO ACQUIRE TMPL:

• Low to Medium probability.

#### Energy Transfer

Energy Transfer LP is a publicly traded limited partnership with assets mainly in the US. Their core operations include transportation, storage and terminalling for natural gas, crude oil, NGLs, refined products and liquid natural gas.<sup>42</sup>

<sup>&</sup>lt;sup>37</sup> Source: https://www.pembina.com/media-centre/news/details/fd150028-cc5c-4882-8ef3-197c0d60bfeb

<sup>&</sup>lt;sup>38</sup> Source: Inter Pipeline website: <u>https://interpipeline.com/news-releases/brookfield-infrastructure-closes-</u> <u>strategic-acquisition-of-inter-pipeline/</u>.

<sup>&</sup>lt;sup>39</sup> Inter Pipeline Background: <u>https://interpipeline.com/</u>

<sup>&</sup>lt;sup>40</sup> Brookfield Infrastructure Background: <u>https://bip.brookfield.com/</u>

<sup>&</sup>lt;sup>41</sup> Source: The Globe and Mail: <u>https://www.theglobeandmail.com/business/article-brookfield-asset-management-adds-us26-billion-in-new-capital-in-third/</u>.

<sup>&</sup>lt;sup>42</sup> Energy Transfer Background: <u>https://www.energytransfer.com/</u>

PROS:

- They have a market capitalization of \$59 billion with a debt to equity of 1.19 times.
- Management has spoken of growth focus.

CONS:

- o Limited Canadian presence currently with two feeder systems in Northern Alberta.43
- They are based out of Dallas, Texas.
- POTENTIAL TO ACQUIRE TMPL:
- Low probability.

Western Midstream Partners LP

Western Gas Equity Partners, LP has Occidental Petroleum Corporation as its General Partner ("**GP**"). The LP operates separately from its GP where it independently operates, acquires and develops midstream energy assets. They also buy and sell natural gas, NGLs, and condensate on their own behalf and as an agent for some of their customers.<sup>44</sup>

PROS:

TMPL would be an opportunity to expand into Canada with a significant asset.

CONS:

- They are a smaller market participant with a present market capitalization of \$14.6 billion with a debt to equity ratio of 2.46 times.
- The firm is based in The Woodlands, Texas.
- POTENTIAL TO ACQUIRE TMPL:
- Low probability.

#### Investment Funds

There are many potential funds that exist with the capability of acquiring TMPL and interest in doing so. Funds may include sovereign funds as well as private funds looking for infrastructure assets to provide long-term steady revenue streams, as Brookfield saw in its acquisition of Inter Pipeline. As the TMPL pipeline is of national importance to Canada, it would be unlikely a foreign sovereign fund would be allowed to acquire TMPL and while a private fund may ultimately make a bid, the number of private funds are too numerous to address individually, this review will only look at two Canadian sovereign funds as prospective buyers.

Canadian Pension Plan ("CPP")45

Canada's pension plan provides retirement benefits to Canadian where the investment arm has its mandate set out in legislation. The mandate states the investment arm is to invest in the best interests of CPP contributors and beneficiaries; have a singular objective: to maximize long-term investment returns

<sup>&</sup>lt;sup>43</sup> Source: Energy Transfer operations map - <u>https://www.energytransfer.com/operations-map/</u>

<sup>&</sup>lt;sup>44</sup> Western Midstream Partners Background: <u>https://www.westernmidstream.com/</u>

<sup>&</sup>lt;sup>45</sup> CPP Background: <u>https://www.canada.ca/en/services/benefits/publicpensions/cpp.html</u>; <u>https://www.cppinvestments.com/</u>

without undue risk; and provide cash management services to the Canada Pension Plan so that benefits can be paid out.

PROS:

- Organization has the size and expertise to purchase and manage TMPL.
- $\circ$   $\,$  Ownership by CPP ensures TMPL remains Canadian owned and benefits accrue to Canada. CONS:
- Creates further and ongoing exposure to TMPL for Canadian taxpayers.
- Typically, CPP does not take 100% of assets such as this and they would need a partner who would have the operational expertise.

POTENTIAL TO ACQUIRE TMPL:

• Medium probability.

#### AIMCo<sup>46</sup>

AIMCo (Alberta Investment Management Corporation), a Crown corporation of the Province of Alberta, operates as an investment manager for the investments of pension, endowment and government funds in Alberta.

#### PROS:

- Organization has mandate to help Albertans which aligns with TMPL purchase.
- AIMCo has the size to financially facilitate the purchase.
- CONS:
- Recent poor performance may limit acquisitions of such a visible nature.<sup>47</sup>
- Ability for GoC to negotiate with the Alberta Government entity and vice versa may limit a deal consensus.

POTENTIAL TO ACQUIRE TMPL:

o Medium probability.

#### Initial Public Offering ("IPO"

Another option for the GoC to obtain value without necessarily relinquishing control nor selling at a value below expectations, is to sell its shares for listing on a stock exchange.

Proceeding with an IPO provides the GoC with a number of benefits -

Firstly, to develop the prospectus describing and disclosing company data requires legal and bank (or group of banks) to work together to put the requisite information together. The key aspect for the GoC is the defining of an appropriate listing/ offering price per share. Issuing TMPL stock gives the GoC a means to see the public perception of TMPL's value.

Secondly, the GoC would not have to list all of TMPL's equity, instead, they would be able to put a minority percentage out for public ownership while retaining a majority position.

<sup>&</sup>lt;sup>46</sup> AIMCo Background: <u>https://www.aimco.ca/</u>

<sup>&</sup>lt;sup>47</sup> Source: AIMCo performance 2022: <u>https://www.cbc.ca/news/canada/calgary/aimco-loss-investment-alberta-</u> 1.6804176

Thirdly, of the GoC's retained share, they would be able to provide First Nations with the opportunity to acquire a portion of TMPL.

And lastly, the GoC can hold onto its equity portion to ensure its investment is recouped through profits and/ or future divestiture(s) of its TMPL stake.

The positives for an IPO seem quite easily achieved however it is 'Government' that owns TMPL, and as a government, GoC is ultimately beholden to the electorate. This fact may influence decisions that, from a non-political point-of-view, appear to be illogical. Therefore, the negatives of this option are derived from the political calculus which ultimately ties to a governing party being able to get re-elected.

Based on this Author's assessment, there may be pressure to off-load TMPL as the governing party looks to appease the public as well as recoup, at least some portion, of the investment. Arguments would likely accrue related to:

- TMPL is completed, time to let the private market operate the pipeline as GoC's ongoing involvement leads to distortion of the market place;
- Obtaining some return of capital as there is an ongoing budget shortfall at the federal level;
- Desire by the governing party to disassociate with the pipeline operations for fear of any negative operational issues arising, such as a leak; and
- Ongoing conflicts with the provinces that view the GoC to be treading in provincial jurisdiction.

There are two historical examples of Crown corporations being listed and ultimately sold in the public markets. In 1995, Canadian National Railway, a pipeline on wheels, was privatized after having been created through the amalgamation of failed rail companies back in 1919.<sup>48</sup> The other example comes from the creation of Petro-Canada in 1975 – created as a means "to provide more Canadian control over the domestic oil industry, to ensure Canada would receive its fair share of remote energy resources, and to provide the federal government with a better understanding of the country's oil industry." <sup>49</sup> Petro-Canada was then privatized through public listing over the course of multiple transactions starting in 1991 and culminating with final GoC stake being sold in 2004.<sup>50</sup>

The two Crown corporation sales examples do not provide a return on investment figures as the objective for both companies was not to obtain a direct return on the capital employed but rather to facilitate something beyond the direct operations of a railway or oil company; the railway investment allowed the continuation of a national railway servicing all of Canada while the oil company ownership provided insights into the oil markets at a time when the commodity was creating global concerns. The exiting values obtained for the two companies was substantial however the ultimate rate of return could be deemed immeasurable in dollars or could be defined as large as some portion of the total Canadian Gross domestic Product in the case of CN Rail.

The GoC exiting TMPL by way of IPO provides a means to determine valuation and then provide First Nations some portion of the ownership while still retaining or at least having the alternative to retain a majority stake to ensure a return on investment in the near term or future. Furthermore, the two examples

<sup>&</sup>lt;sup>48</sup> Source: CN Rail privatization - <u>https://www.cn.ca/en/news/2020/11/cn-proud-to-celebrate-25th-anniversary-of-its-privatization/;</u> Historica Canada - <u>http://education.historicacanada.ca/en/tools/129</u>

<sup>&</sup>lt;sup>49</sup> Source: Petro-Canada - <u>https://www.petro-canada.ca/en/about-petro-canada/our-story</u>

<sup>&</sup>lt;sup>50</sup> Source: History of Petro-Canada, <u>https://www.thecanadianencyclopedia.ca/en/article/petro-canada;</u>

of public listing show an IPO as a feasible option for the GoC to exit TMPL thereby making an IPO highly probable.

MHM CAPITAL CORR. DA. COMBINIT

## Timeline for Divestiture

The timeline for the GoC selling its stake in TMPL is not fixed and should there be a defined sales date, it date has not been communicated. Once the pipeline construction completes and is moving oil products, there will likely be a push for the GoC to take some action or at a minimum set a timeline for when actions will be taken but beyond public pressure to act, TMPL's debt repayment dates in 2025 may force the GoC to act as the debt will need refinancing.

Presently, TMPL's debt, as at the end of Q3 2023 totaled \$22.4 billion.<sup>51</sup> The debt is composed of \$14.4 billion due for repayment March 2025 to a syndicate of lenders while the credit facility from TMPL's parent company, TMP Finance, totals \$8.1 billion with a due date of August 2025.

For the GoC's divestiture, the delayed pipeline completion that presently looks to be Q2 2024 increases the difficulty of sales discussions. Without material operational history to base valuations on, talks will rely on proforma incomes where buyers tend to undervalue unproven projections. As discussions proceed, the debt due dates may be leveraged by interested buyers to get a lower purchase price. However, the GoC could make the due date a positive, as they may look at the debt repayment date as a target where having no deal in place by that time means the GoC will retain its ownership of TMPL. Holding onto the asset, while not necessarily the best option does provide for profitability as shown in prior proformas.

All that said, there is no definitive timeline for the GoC to divest its ownership of TMPL.

<sup>&</sup>lt;sup>51</sup> Source: Trans Mountain posted financial statements - <u>https://www.transmountain.com/corporate-reports</u>

## TMPL Exit Selection

In recommending the optimal realization, all considered options appear to maximize the sales value but there needs to be pragmatic considerations of achievability in completing the transaction.

In the case of TMPL acquisition by another existing pipeline, the firms noted all have the expertise and financial capability to complete however, there are two aspects that have a high probability of creating risks to the closure of a purchase.

Firstly, those pipelines noted as US based may create concerns for the foreign ownership of this critical crude oil pipeline which is the sole line with tidal water export capability. Having Canadian oil being beholden to a non-Canadian entity creates uncertainty. Couple that with the desire for First Nations, Canadian First Nations, to own a stake in the pipeline may limit the interest of those foreign entities as well.

Secondly, the Canadian based pipelines taking ownership of TMPL becomes a competition concern where the existing pipelines come to control too large a portion of oil transportation within Canada. This worry may not only be viewed by the public but also by the very companies looking to move their oil via TMPL. Therefore, the acquisition by an existing pipeline is seen as having a low probability for successfully closing on the transaction.

For investment firms, they can certainly source the necessary capital but similar to the pipelines, ownership would need to be Canadian based due foreign control concerns. While there may be many Canadian funds that are able to complete the transaction, the two noted have conflicts of interest in offering a full market value price – politics between Federal & Provincial governments are currently primed to become an obstacle for a truly 3<sup>rd</sup> party transaction being negotiated thereby risking maximizing the value (AIMCO) or being overpaid (CPP).

The remaining, and recommended, option is the IPO option. This option is seen as the best way for the GoC to maximize on its investment in TMPL and also allow for fulfilling the GoC's other key desired objective of supporting participation by Indigenous groups in the go forward ownership of TMPL.

### Recommendation

Proceeding with an IPO of TMPL's stock allows the GoC some flexibility in how much it wishes to value the equity of TMPL including defining the portion it wishes to sell via the initial offering.

While this report values TMPL at \$16.0 billion, that valuation has risk of declining should crude oil prices drop between now and the time of offer listing – lower crude prices historically lead to lower pipeline space demand. To hedge its position, it is recommended that the GoC retain a material position of control of TMPL for the initial capital raise thereby limiting the downside risks which also allows for selling some portion of their ownership position to First Nations while preserving their majority ownership position.

The proposed IPO offering model is to have the GoC retain 70% of the ownership equity while listing 20% for public offering and the remaining 10% being held until post listing then ultimately being sold to a First Nations group(s).

After listing of 20% of TMPL's value results in the GoC realizing approximately \$3.1 billion after transaction fees. The subsequent transaction would have a 10% stake acquired by First Nations leaving a net equity position of \$11.2 billion or ~70% controlled by the GoC.

Figure 12 - IPO Capital Raise			2
Capital Raise			$\mathcal{N}$
(in thousands CDN \$'s)			
TMPL Valuation		-9	\$ 16,000,000
Listed Equity Portion	20.00% \$	3,200,000	
LESS: Transaction Fees	2.50% \$	80,000	
Gross Capital Raised	$\langle \rangle \rangle$		\$ 3,120,000
Equity for First Nations	10.0% \$	1,600,000	
	$\langle -$		\$ 1,600,000
Net GoC's Retained Equity	70.5%	·	\$ 11,280,000
M.			

## Estimated Return on Investment

The investment made by the GoC in TMPL, from its initial acquisition through to the anticipated exit as recommended, totals \$12.6 billion. The GoC will recover \$3.1 billion on the IPO plus an additional \$1.6 billion through the sale to First Nations for a total of \$4.7 billion in equity sold. The GoC will remain with an equity stake of 70% in TMPL at a value of \$11.3 billion. The remaining invested GoC equity would total \$7.8 billion as set out in Figure 13.

#### Figure 13 - GoC Equity Post IPO

Government of Canada Sha (in thousands CDN \$'s)	reholdeı	<sup>-</sup> Investment	
GoC Contributed Capital	\$	12,569,300	
(as at Sep 30/2023)			
Equity Sales			
IPO Equity Sold	\$	3,120,000	
First Nation Equity Sale	<u>\$</u>	1,600,000	
Remaining GoC			
Shareholder Investment	\$	7,849,300	20r

After completing the IPO, the GoC's return on investment in TMPL totals \$4.2 billion which incorporates the unrealized TMPL value gain of \$3.4 billion plus the additional taxes generated because they made the TMPL project happen. The total gains of \$4.2 billion equates to a 54% return for GoC over six years of owning TMPL, or roughly 9.0% each year of ownership. This return is quite significant given the limitations faced to complete the project at the time of the GoC's acquisition of TMPL.

#### Figure 14 - GoC Return on Investment

#### **Government of Canada Return On Investment**

(in thousands CDN \$'s)		
	Before IPO	After IPO
TMPL Valuation	\$ 16,000,000	\$ 11,280,000
GoC Contributed Capital	\$ 12,569,300	\$ 7,849,300
(as at Sep 30/2023)		
NET Un-Realized Gain	\$ 3,430,700	\$ 3,430,700
Income Tax Increase	\$ 30,693	\$ 30,693
GST Increase	\$ 772,500	\$ 772,500
Total Gains	\$ 4,233,893	\$ 4,233,893
Return Percentage	33.7%	53.9%
Annualized Return (6yrs)	5.6%	9.0%

There are further returns beyond those noted in Figure 14 as the ongoing net earnings that are projected to accrue to the GoC as 70.5% owners are not included. Assuming the GoC retains the same ownership position for the coming 10 years, the GoC would earn a present valued return (discounted at 10%) of \$2.9 billion.

Overall, the Government of Canada is projected to make a materially positive return on their ownership investment of Trans Mountain Pipeline by completing the capacity expansion from 300,000 barrels per day to 890,000 barrels per day.

## CONCLUSION

The Government of Canada acquired Trans Mountain Pipeline as the proposed pipeline expansion faced multiple impediments to obtaining construction approvals which had put expansion plans in a position to be cancelled by its owner at the time, Kinder Morgan. Issues faced by the expansion project were tied to environmental objections and Indigenous rights that were perceived as having been insufficiently addressed during pre-project consultations; those were prior to even addressing the physical building difficulties that came to include working during a global pandemic and around 100-year floods along the route.

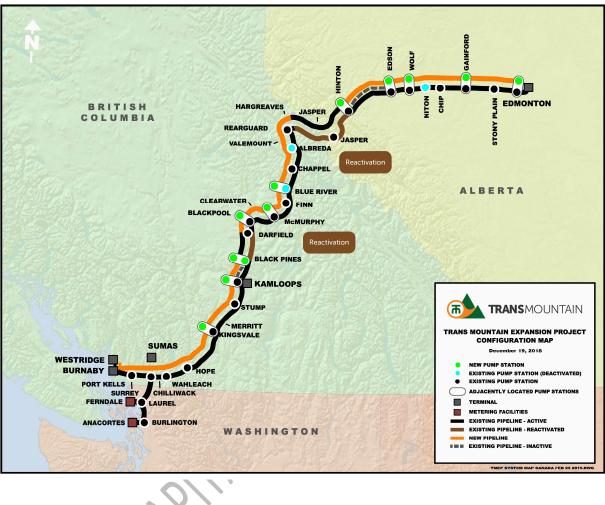
Over the course of six years, starting with initial Purchase Agreement signing in late Spring 2018 through to obtaining of approvals and ultimately constructing 980 kilometres of new pipe along with additional terminalling tanks and an expanded marine export facility, the GoC's ownership of TMPL allowed the Trans Mountain expansion to be completed – or, very near completion as of March 2024.

The initial investment of \$4.45 billion by the GoC grew to \$12.6 billion invested. Valuation of the completed expansion to a 890,000 barrel per day pipeline is \$16 billion. Considering the various potential buyers and relative uncertainty for obtaining the full pipeline value through complete divestiture, an initial public offering for 20% of the equity to the general public is recommended. This would then be followed by a sale of 10% of TMPL to First Nations. The GoC would retain 70% ownership of TMPL while having reduced its investment exposure as well as defining a transparent exit strategy for selling any further portions of its TMPL holdings.

Based on the equity offering, the GoC has an unrealized gain on its investment of \$4.2 billion – roughly a 54% return on investment that equates to an annual return of 9% for the 6 years since acquiring the pipeline while also earning another \$2.9 billion in present value by retaining its 70% ownership stake over the next ten years.

Lastly, the GoC's investment in TMPL also leads to additional revenues accruing to the Provincial Governments of Alberta and British Columbia over the coming 20 years with present values of \$11.6 billion and \$0.8 billion respectively. Neither of these governments had to invest in the project but both Provinces will benefit from the expansion.

In conclusion, the acquisition of Trans Mountain Pipeline by the Government of Canada was a political necessity that has led to direct economic benefits and positive investment returns in the present as well as into the future.

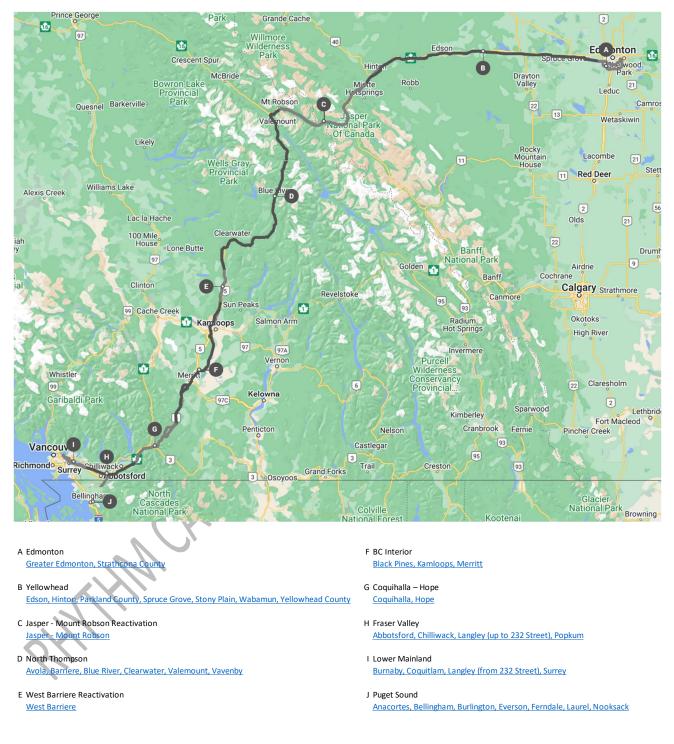


## APPENDIX 1 - Trans Mountain Pipeline Current Route + Expansion

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## APPENDIX 2 - Trans Mountain Expansion Project Proposed Pipeline Route<sup>52</sup>

Figure 15 - TMEP Route



<sup>&</sup>lt;sup>52</sup> Map Source: <u>https://www.transmountain.com/all-communities?b=47.781%2C-127.022%2C54.646%2C-109.268</u>.

#### 2034 to 2043 \$29,398,948 100% 0% 135,099 36,573 \$ 2,948,988 374,335 83,892 4,294,550 715,664 1,345,563 2033 BR. 2014 ŝ ŝ v 688,138 363,432 81,448 131,164 35,508 100% %0 2,993,188 4,292,878 \$ 1,299,690 2032 ŝ ŝ ŝ 100% 0% 34,474 661,671 352,846 79,076 127,344 4,291,238 1,255,411 \$ 3,035,827 2031 ŝ \$ \$ \$ \$ \$ \$ \$ ŝ \$ -33,470 100% %0 636,222 342,569 76,773 123,635 4,289,631 3,076,962 1,212,669 2030 ŝ ŝ ŝ ŝ ŝ ŝ v ŝ 332,592 74,537 120,034 32,495 100% %9 4,288,055 611,752 3,116,646 1,171,409 2029 ŝ \$ ŝ \$ v ŝ 100% 0 31,549 588,223 322,904 72,366 116,538 2,916,819 4,048,399 1,131,580 2028 ŝ v ŝ ŝ 100% 0% 70,258 113,143 30,630 313,499 2,953,754 4,046,884 565,599 1,093,130 2027 ŝ \$ ŝ ŝ ŝ ŝ ŝ 68,212 109,848 29,738 304,368 100% %0 543,846 4,045,399 2,989,388 \$ 1,056,011 2026 ŝ ŝ 66,225 106,648 %06 %0 3,647,039 522,928 295,503 \$ 2,626,862 28,871 1020 1 2025 ŝ ŝ v 60% 0% 502,816 286,896 103,542 1,470,900 64,296 2,456,481 28,031 985,581 Estimated 2024 TransMountain Proforma Financials ŝ ŝ ŝ ŝ ŝ ÷ ÷ Goodwill Impairment Pipeline Op Costs Sal & Ben Growth Deprec (in thousands CDN \$'s) Admin Taxes **/EAR Total Expenses** Op Income Revenues Expenses Total LINE

## APPENDIX 3 - Trans Mountain Proforma Revenues and Expenses for 2024 to 2043

## **APPENDIX 4** - Province of Alberta Estimated Increase in Crude Oil Royalties from Expanded Trans Mountain Pipeline

#### Royalty Revenues from Expansion of Trans Mountain Pipeline

Royalties by Crude Oi	l Extraction		Trans Mountain Pipeline Annual Thruput Capacity Rela			
Oil Sands Royalty						
2022/23 \$	16,879		Previous Bbls Annually	120,450,000 bbls		
	11,605		New Annual Bbls via TMP	324,850,000 bbls		
2020/21 \$	2,006		Delta	204,400,000 bbls		
2019/20 \$	4,089		Total AB Oil Production	1,388,204,500 bbls		
_2018/19 \$	3,214	_	Additional Oil Production 14.7%			
Average \$	7,559		DCF Discount @ 10.0			
			$Q_X$			
	Actuals	Historical Based	Future Royalties			
, (000010			· atale ite jailles			
2021	2022		Annual Additional Revenue	20 Yr Totals		
	1,900,000,000			\$ 5,020,902,900		
\$ 13,552,000,000 \$	12,900,000,000			\$ 27,401,467,147		
		2.				
	Oil Sands Royalty 2022/23 \$ 2021/22 \$ 2020/21 \$ 2019/20 \$ 2018/19 <u>\$</u> Average \$ al-royalty-revenue-data	2022/23       \$       16,879         2021/22       \$       11,605         2020/21       \$       2,006         2019/20       \$       4,089         2018/19       \$       3,214         Average       \$       7,559         al-royalty-revenue-data       \$       4ctuals         Actuals       Actuals       \$         \$       11,605,000,000       \$       11,000,000,000         \$       1,947,000,000       \$       1,900,000,000	Oil Sands Royalty           2022/23         \$         16,879           2021/22         \$         11,605           2020/21         \$         2,006           2019/20         \$         4,089           2018/19         \$         3,214           Average         \$         7,559           al-royalty-revenue-data         Estimate           2021         2022         2024 Fwd           \$         11,605,000,000         \$         11,000,000,000         \$           \$         1,947,000,000         \$         1,900,000,000         \$         1,705,000,000	Annual Thruput Capacity Relation         Oil Sands Royalty         2022/23       \$       16,879       Previous Bbls Annually         2021/22       \$       11,605       New Annual Bbls via TMP         2020/21       \$       2,006       Delta         2019/20       \$       4,089       Total AB Oil Production         2018/19       \$       3,214       Additional Oil Production         Average       \$       7,559       DCF Discount @         al-royalty-revenue-data       Estimate       2021       2022       2024 Fwd       Annual Additional Revenue         \$       11,605,000,000       \$       11,000,000,000       \$       7,600,000,000       \$       1,119,028,212         \$       1,947,000,000       \$       1,900,000,000       \$       1,705,000,000       \$       251,045,145		

## **APPENDIX 5** - Personal Income Taxes from TMEP – Federal: Government of Canada & Provincial: British Columbia & Alberta

			٦	Fotal Wages	I	Estimated TMEP P	ortio	n	
Year	Aver	rage Wage	!	50% of SWB	Fed Tax Rate	GoC Taxes	% Project	NP	V Fed Tax \$'s
2018	\$	80,000	\$	39,592,701	20.5%	\$ 8,116,504	10.0%	\$	811,65
2019	\$	82,400	\$	32,148,000	20.5%	\$ 6,590,340	15.0%	\$	988,5
2020	\$	84,872	\$	35,632,500	20.5%	\$ 7,304,663	20.0%	\$	1,460,93
2021	\$	87,418	\$	39,604,000	20.5%	\$ 8,118,820	30.0%	\$	2,435,64
2022	\$	90,041	\$	45,531,000	20.5%	\$ 9,333,855	30.0%	\$	2,800,1
2023	\$	92,742	\$	52,211,333	20.5%	\$ 10,703,323	35.0%	\$	3,746,1
2024	\$	95,524	\$	32,148,000	20.5%	\$ 6,590,340	40.0%	\$	2,396,4
025 to 2043	\$	98,390	\$	831,680,799	20.5%	\$ 170,494,564	45.0%	\$	28,296,4
						\$ 227,252,408		\$	42,936,0

#### Federal & Provincial Taxes – Personal

	Residency o	of Workforce	Prov T	ax Rate	Prov	Тахе	es	Net Pro	v Ta	ixes
Year	BC %	AB %	BC	AB	вс		AB	BC NPV \$'s		AB NPV \$'s
2018	49%	51%	10.50%	10.00%	\$ 2,037,044	\$	2,019,228	\$ 203,704	\$	201,923
2019	49%	51%	10.50%	10.00%	\$ 1,654,015	\$	1,639,548	\$ 248,102	\$	245,932
2020	49%	51%	10.50%	10.00%	\$ 1,833,292	\$	1,817,258	\$ 366,658	\$	363,452
2021	49%	51%	10.50%	10.00%	\$ 2,037,626	\$	2,019,804	\$ 611,288	\$	605,941
2022	49%	51%	10.50%	10.00%	\$ 2,342,570	\$	2,322,081	\$ 702,771	\$	696,624
2023	49%	51%	10.50%	10.00%	\$ 2,686,273	\$	2,662,778	\$ 940,196	\$	931,972
2024	49%	51%	10.50%	10.00%	\$ 1,654,015	\$	1,639,548	\$ 601,460	\$	596,199
2025 to 2043	50%	50%	10.50%	10.00%	\$ 43,663,242	\$	41,584,040	\$ 7,246,646	\$	6,901,568
					\$ 57,908,077	\$	55,704,284	\$ 10,920,825	\$	10,543,611
K										
6%,	~									

## APPENDIX 6 - Trans Mountain Pipeline Inflation Adjusted Valuation

#### TMPL Valuation in Dollars per BBL per Day Pricing Adjusted for Inflation

Inflation Factor	A	B Inflation		Cummu	lative	Annua	il i	Jsing Annual Inflation
Bought May 31, 2018	2018	140.7	Jun-18					\$14,825
	2019	142.7	Jun-19	2.0	1.4%	2.0	1.4%	\$15,035
	2020	145.0	Jun-20	4.3	3.1%	2.3	1.6%	\$15,278
	2021	148.9	Jun-21	8.2	5.8%	3.9	2.7%	\$15,688
	2022	161.4	Jun-22	20.7	14.7%	12.5	8.4%	\$17,006
-	2023	164.4	Jun-23	23.7	16.8%	3.0	1.9%	\$17,322
					BC Infla	tion Adjuste	d Value	<u>\$15,416,222,583</u>
Inflation Factor	В	C Inflation		Cummu	lative	Annua	it t	Jsing Annual Inflation
Bought May 31, 2018	2018	128.6	Jun-18				V `	\$14,825
	2019	131.9	Jun-19	3.3	2.6%	3.3	2.6%	\$15,205
	2020	132.6	Jun-20	4.0	3.1%	0.7	0.5%	\$15,286
	2021	135.8	Jun-21	7.2	5.6%	3.2	2.4%	\$15,654
	2022	146.5	Jun-22	17.9	13.9%	10.7	7.9%	\$16,888
_	2023	151.6	Jun-23	23.0	17.9%	5.1	3.5%	\$17,476
				C	AB Infla	tion Adjuste	d Value	<u>\$15,553,512,733</u>
						ation Adjust	ad Duina	615 ADA 007 CF0
				AVE	eraged Intil	ation Adjust		<u><b>\$15,484,867,658</b></u> or
				veraged l	oflation Ad	justed \$'s/ B		<u>\$17,399</u>
				werageun	Ination Au	justeu ș ș/ L	DL/Day	<u>917,999</u>
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## **APPENDIX 7 -** Publicly Traded Competitive Pipeline Valuations<sup>53</sup>

#### **Publicly Traded Pipeline Competitors**

(as at Jan 16/2024 12:37pm)

Name         in millions \$CDN! in millions \$CDN!         (# of times)         (in millions \$CDN)         (# of times)           Enbridge         \$         78,307         \$         41,005         1.91         \$         2,310         33.90         17.38         17.78           Suncor         \$         56,851         \$         62,907         0.90         \$         9,077         6.26         8.98         7.09           Pembina Pipeline         \$         25,386         \$         11,611         2.19         \$         2,971         8.54         14,56         21.29           TC Energy         \$         40,950         \$         11,520         3.55         \$         575         71.22         11.73         12.42           Average - CDN companies         -         21.4         29.98         13.16         14.65           Targa Resources (US)         \$         25,524         \$         30,212         1.84         \$         2,324         23.90         15.38         12.87           Energy Transfer LP (US)         \$         59,463         \$         121,290         0.49         \$         5,843         10.18         12.04         11.41           Western Midstream Partnersw LP (\$ <td< th=""></td<>
Suncor       \$ 56,851 \$ 62,907       0.90       \$ 9,077       6.26       8.98       7.09         Pembina Pipeline       \$ 25,386 \$ 11,611       2.19       \$ 2,971       8.54       14,56       21.29         TC Energy       \$ 40,950 \$ 11,520       3.55       \$ 575       71.22       11.73       12.42         Average - CDN companies       21.4       29.98       13.16       14.65         Targa Resources (US)       \$ 25,222 \$ 28,246       0.89       \$ 1,541       16.37       11.93       21.79         Oneok Inc (US)       \$ 55,543 \$ 30,212       1.84       \$ 2,324       23.90       15.38       12.87         Energy Transfer LP (US)       \$ 59,463 \$ 121,290       0.49 \$ 5,843       10.18       12.04       11.41         Western Midstream Partnersw LP (\$ 14,648 \$ 4,389       3.34       \$ 1,642       8.92       8.63       10.43         Nustar Energy LP (US)       \$ 3,199 \$ 2,271       1.41       \$ 301       10.63       16.34       21.51         Average - US companies       1.59       14,00       12.86       15.60
Pembina Pipeline       \$       25,386       \$       11,611       2.19       \$       2,971       8.54       14,56       21.29         TC Energy       \$       40,950       \$       11,520       3.55       \$       575       71.22       11.73       12.42         Average - CDN companies       21,22       21,4       29.98       13.16       14.65         Targa Resources (US)       \$       25,222       \$       28,246       0.89       \$       1,541       16.37       11.93       21.79         Oneok Inc (US)       \$       55,543       \$       30,212       1.84       \$       2,324       23.90       15.38       12.87         Energy Transfer LP (US)       \$       59,463       \$       121,290       0.49       \$       5,843       10,18       12.04       11.41         Western Midstream Partnersw LP (I \$       14,648       \$       4,389       3.34       \$       1,642       8.92       8.63       10.43         Nustar Energy LP (US)       \$       3,199       \$       2,271       1.41       \$       301       10.63       16.34       21.51         Average - US companies       1.59       14,00       12.86       15.
Pembina Pipeline       \$       25,386       \$       11,611       2.19       \$       2,971       8.54       14,56       21.29         TC Energy       \$       40,950       \$       11,520       3.55       \$       575       71.22       11.73       12.42         Average - CDN companies       21,22       21,4       29.98       13.16       14.65         Targa Resources (US)       \$       25,222       \$       28,246       0.89       \$       1,541       16.37       11.93       21.79         Oneok Inc (US)       \$       55,543       \$       30,212       1.84       \$       2,324       23.90       15.38       12.87         Energy Transfer LP (US)       \$       59,463       \$       121,290       0.49       \$       5,843       10,18       12.04       11.41         Western Midstream Partnersw LP (I \$       14,648       \$       4,389       3.34       \$       1,642       8.92       8.63       10.43         Nustar Energy LP (US)       \$       3,199       \$       2,271       1.41       \$       301       10.63       16.34       21.51         Average - US companies       1.59       14,00       12.86       15.
TC Energy       \$ 40,950       \$ 11,520       3.55       \$ 575       71.22       11.73       12.42         Average - CDN companies       2.14       29.98       13.16       14.65         Targa Resources (US)       \$ 25,222       \$ 28,246       0.89       \$ 1,541       16.37       11.93       21.79         Oneok Inc (US)       \$ 55,543       \$ 30,212       1.84       \$ 2,324       23.90       15.38       12.87         Energy Transfer LP (US)       \$ 59,463       \$ 121,290       0.49       \$ 5,843       10,18       12.04       11.41         Western Midstream Partnersw LP (I \$ 14,648       \$ 4,389       3.34       \$ 1,642       8.92       8.63       10.43         Nustar Energy LP (US)       \$ 3,199       \$ 2,271       1.41       \$ 301       10.63       16.34       21.51         Average - US companies       1.59       14,00       12.86       15.60
Average - CDN companies       2.14       29.98       13.16       14.65         Targa Resources (US)       \$ 25,222       \$ 28,246       0.89       \$ 1,541       16.37       11.93       21.79         Oneok Inc (US)       \$ 55,543       \$ 30,212       1.84       \$ 2,324       23.90       15.38       12.87         Energy Transfer LP (US)       \$ 59,463       \$ 121,290       0.49       \$ 5,843       10,18       12.04       11.41         Western Midstream Partnersw LP (I \$ 14,648       \$ 4,389       3.34       \$ 1,642       8.92       8.63       10.43         Nustar Energy LP (US)       \$ 3,199       \$ 2,271       1.41       \$ 301       10.63       16.34       21.51         Average - US companies <b>1.59 14,00 12.86 15.60</b>
Targa Resources (US)       \$ 25,222       \$ 28,246       0.89       \$ 1,541       16.37       11.93       21.79         Oneok Inc (US)       \$ 55,543       \$ 30,212       1.84       \$ 2,324       23.90       15.38       12.87         Energy Transfer LP (US)       \$ 59,463       \$ 121,290       0.49       \$ 5,843       10,18       12.04       11.41         Western Midstream Partnersw LP (I \$ 14,648       \$ 4,389       3.34       \$ 1,642       8.92       8.63       10.43         Nustar Energy LP (US)       \$ 3,199       \$ 2,271       1.41       \$ 301       10.63       16.34       21.51         Average - US companies <b>1.59 14,00 12.86 15.60</b>
Oneok Inc (US)       \$55,543       \$30,212       1.84       \$2,324       23.90       15.38       12.87         Energy Transfer LP (US)       \$59,463       \$121,290       0.49       \$5,843       10.18       12.04       11.41         Western Midstream Partnersw LP (I \$14,648       \$4,389       3.34       \$1,642       8.92       8.63       10.43         Nustar Energy LP (US)       \$3,199       \$2,271       1.41       \$301       10.63       16.34       21.51         Average - US companies <b>1.59 14,00 12.86 15.60</b>
Energy Transfer LP (US)       \$ 59,463       \$ 121,290       0.49       \$ 5,843       10,18       12.04       11.41         Western Midstream Partnersw LP (I \$ 14,648       \$ 4,389       3.34       \$ 1,642       8.92       8.63       10.43         Nustar Energy LP (US)       \$ 3,199       \$ 2,271       1.41       \$ 301       10.63       16.34       21.51         Average - US companies <b>1.59 14,00 12.86 15.60</b>
Energy Transfer LP (US)       \$ 59,463       \$ 121,290       0.49       \$ 5,843       10,18       12.04       11.41         Western Midstream Partnersw LP (I \$ 14,648       \$ 4,389       3.34       \$ 1,642       8.92       8.63       10.43         Nustar Energy LP (US)       \$ 3,199       \$ 2,271       1.41       \$ 301       10.63       16.34       21.51         Average - US companies <b>1.59 14,00 12.86 15.60</b>
Nustar Energy LP (US)         \$ 3,199         \$ 2,271         1.41         \$ 301         10.63         16.34         21.51           Average - US companies         1.59         14.00         12.86         15.60
Nustar Energy LP (US)         \$ 3,199         \$ 2,271         1.41         \$ 301         10.63         16.34         21.51           Average - US companies         1.59         14.00         12.86         15.60
Average - US companies         1.59         14.00         12.86         15.60
Overall Averages 1.84 21.10
Gross Revenues
Trans Mountain Pipeline         \$ 4,045         CDN         \$ 8,652         \$ 695         \$ 20,839         n/a         n/a
USD \$ 6,447 \$ 9,730
Avg US/ CDN \$ 7,427 \$ 14,667
Conversation rate of \$USD to \$CDN
\$1CDN = \$0.7410 USD
*TTM = Trailing Twelve Months
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<sup>&</sup>lt;sup>53</sup> Source: Data for company data from - <u>https://www.theglobeandmail.com/investing/markets/</u>

## APPENDIX 8 - Potential Purchasers of TMPL Assessed

#### Potential Purchasers of TMPL

	PROS:	CONS:	POTENTIAL TO ACQUIRE TMPL:
Existing Pipeline Owners			
TC Energy	Historical efforts to expand oil pipeline transportation capacity saw the cancellation of Keystone pipeline from Alberta to BC's West Coast.	Becoming two entities takes a lot of executive time as well as internal logistics to separate the entities into their own operating organizations with independent corporate departments.	Medium to high probability.
	Recently announced plans to split its company into two publicly traded entities with one focusing on 'natural gas and energy solutions' while the other concentrates on the associated infrastructure. Being both publicly traded and having an opportunity to expand through an acquisition of such a 'key' crude oil pipeline puts TC Energy at the top of potential suitors.	The company also recently completed its Coastal Gaslink pipeline going from Dawson Creek, BC to the West Coast of BC near Kitimat which could be viewed as a positive but in this case, the Author sees it as a Con due to the need to recover the capital expended versus spending further capital on a new project.	
	The company has the expertise to operate TMPL and integrate it into its critical infrastructure including a head office located in Calgary.	There would be uncertainty of the market's interest in having such a large acquisition being brought forward so soon after the creation of the two corporations.	
Enbridge	Having had its previous expansion attempt rejected by the Canadian Courts in 2016, buying a completed pipeline is a simpler way to add more operating kilometres to their holdings. The firm has a wide breadth of experience in North America as well as internationally with current its current Canadian crude oil transportation going east and south.	Competitive issues are prevalent should Enbridge become the owner of TMPL. They control and operate a pipeline system that presently moves 3.4 million barrels per day ("MMbpd") of Canadian crude oil south and east into and through the US market. Adding an additional 890 kbpd of crude pipeline capacity creates risk for the marketplace with one operator overseeing such a large market share. Furthermore, from Enbridge's point of view, they may not wish to have such a large exposure to one business line. Currently, they are expanding their T-North and T-South gas pipeline that runs through Central British Columbia which is consuming over \$4.8 billion of capital plus management attention.	Medium probability.
Pembina Pipeline	Ongoing growth acquisitions show commitment to expand company beyond organic growth. Recent years, capital has been spent on expanding their feeder systems where acquiring TMPL would benefit Pembina's prior capital expenditures with further integration of oil carrying capacity. They are a Canadian based firm.	The recent capital deployed in the acquisition of additional interest in Alliance Pipeline and Aux Sable. Acquiring TMPL would be a large acquisition in context of their total present market capitalization of \$24.9 billion.	Low to Medium probability.
Inter Pipeline Ltd. (owned by Brookfield Infrastructure)	Being owned by a large Canadian based fund that has capital raising ability to fund the purchase. Through Brookfield, the firm has access to the necessary expertise to manage TMPL as well as the experience of integrating large entities. As of November 2023, a related Brookfield fund had US\$102-billion available for investment opportunities. They have also shown a strong ability to raise investor capital should further funds be required.	Another pipeline entity purchase may be too soon for Brookfield to properly integrate if it were to acquire TMPL.	Low to Medium probability.
Energy Transfer	They have a market capitalization of \$59 billion with a debt to equity of 1.19 times. Management has spoken of growth focus.	Limited Canadian presence currently with two feeder systems in Northern Alberta. They are based out of Dallas, Texas.	Low probability.
Western Midstream Partners LP	TMPL would be an opportunity to expand into Canada with a significant asset.	They are a smaller market participant with a present market capitalization of \$14.6 billion with a debt to equity ratio of 2.46 times. The firm is based in The Woodlands, Texas.	Low probability.
Investment Funds			
Canadian Pension Plan ("CPP")	Organization has the size and expertise to purchase and manage TMPL.	Creates further and ongoing exposure to TMPL for Canadian taxpayers.	Medium probability.
	Ownership by CPP ensures TMPL remains Canadian owned and benefits accrue to Canada.	Typically, CPP does not take 100% of assets such as this and they would need a partner who would have the operational expertise.	
Alberta Investment Management Corporation ("AIMCo")	Organization has mandate to help Albertans which aligns with TMPL purchase.	Recent performance may limit acquisitions of such a visible nature. Ability for GoC to negotiate with the Alberta Government entity and	Medium probability.
	AIMCo has the size to financially facilitate the purchase.	vice versa may limit a deal consensus.	