TC Energy

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Group 3

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Executive Summary

Our investment recommendation related to Energy Corporation (TRP) stock is a **BUY,** as we think the company will have a very positive future situation, taking advantage of their current market position and strong asset base, which will allow it to be a key player on the current and upcoming energy transition opportunities that their target markets are a part of.

We expect the company to significantly increase its revenue, mainly due to their market's energy transition to more reliance on Natural Gas, which demand will grow more than 25% this decade and represents more than 75% of TC Energy's revenues. We also expect higher Capital Expenditure in the next few years, in order to be able to respond to this increasing demand of the energy transition. This CAPEX will allow the company to position itself for the new opportunities in the renewables segment. Despite a small contribution to current cash flows, TC Energy expects it to become a relevant part of its business in the long term. Based on our analyses and forecasts, we expect the company to maintain its robust and strong financial situation, continuing with its low-risk business model, which has safe and predictable cash flows.

It is important to note that there are also some risks that could have an impact on our valuation, such as regulatory and environmental. The Keystone XL Pipeline is an example of such negative outcomes. Nevertheless, TC Energy's long-term strategy and positioning for the renewable shift in the energy matrix will allow it to mitigate risks.

The report and projections are listed in nominal terms and based on information available as of 2/22/22. The financials of the company are in Canadian Dollars (CAD), as reported by the company.

Company Background

As a major player in the energy transportation industry (second largest behind Enbridge Incorporated), TC Energy Corporation operates energy infrastructure in North America through three primary business segments: Natural Gas Pipelines, Liquids Pipelines, and Power & Storage. The Natural Gas segment represents 77% of revenues as of 2021, and the segment is expected to grow significantly as part of the transformation to clean energy. The company's liquids (crude oil) pipelines are responsible for 17% of revenues today, and the contribution should decrease over the next decade with the slow phasing out of highly polluting fossil fuels. The remaining 5% comes from Power & Storage.

TC Energy's business comes from three sources: Pipelines, Power Generation, and Storage. All three are complementary in the energy chain, and TC's generation business is 75% emission-free. The company is well positioned to adapt to a new energy matrix, and it will be at the forefront of the transformation. Approximately 95% of TC's services are regulated through long term contracts, so the company is insulated from short term moves in commodity prices or shifts in demand.

Strategic Analysis

As the company's infrastructure is its most important asset, the annual capital expenditure levels are very high, and in 2021 TC Energy placed over $4 billion of assets into service, while sanctioning $7 billion of new projects. The primary strategy is to expand and extend its natural gas pipeline grid in North

America, creating versatile and useful intra-regional pipelines in key locations and inter regional pipelines from source to terminals to basins. These investments generate returns for extremely long periods of time, and should prove to be a source of continued growth for TC Energy's business. Part of this growth is its 2050 net carbon neutrality goal and planned $5+ billion in new projects around the green and renewable energy economies. However, despite high capital investment, TC Energy continues to perform in the short run, as it pays out a significant dividend every quarter.

Finally, one of the main risks for the company involves capital investments in projects that are abandoned before beginning to generate cash. In 2021, TC Energy terminated its Keystone XL Pipeline project, after more than $9 billion of investments since 2008. The cancellation of the pipeline by President Biden came after a decade of litigation and environmental protests, which exposed TC Energy to negative press in one of its landmark projects. Despite the large downside realized on the project, the company was still able to increase its dividend and continue operating normally.

TC Energy's rising Capital Expenditures (CAPEX) are mostly focused around the green economy and renewable electrification, where they expect to sanction another $5+ billion of new growth projects in the coming years. The following points from the company's annual report emphasize its growth strategy moving forward:

- *Electrification of our pipeline network*
  - *Using renewables to power a portion of our pipeline network*
- *Other in-corridor growth*
  - *Capital-light investments and enhanced returns on existing assets*
- *Canyon Creek and Ontario pumped hydro storage*
  - *On-demand, flexible, clean energy*
- *Alberta Carbon Grid in Partnership with Pembina*
  - *World-scale carbon transportation and sequestration system*
- *Irving Oil agreement*
  - *Joint development of clean energy projects*
- *Nikola and Hyzon hydrogen agreements*
  - *Hubs producing up to 150+ tonnes of hydrogen per day*

In analyzing the most important points through Porter's Five Forces Model, we see that the competitive landscape is challenging but still remains very well protected from new entrants, and has low vertical competition. (See **Exhibit 1** for more info about our analysis under Porter's 5 forces). In addition to that, we used the "Economic Attributes Framework" to further analyze the company's situation. TC Energy remains on solid ground despite the competitive landscape of the energy market. The energy solutions wing is strategically placed to ensure new clients come in, the fuel is competitively priced and the demand for natural gas is robust. The credit rating has been stable at BBB+ according to S&P Global Ratings. (See **Exhibit 2** for more information about our analysis under the E.A.F.)

Main Identifiable Risks

Risks facing TC Energy are market and counterparty credit risk, as well as regulatory and environmental risk. Market and counterparty risks are managed with limits set by the Board of Directors, carried out by senior management and various in-house auditing teams.

The company's emphasis on energy infrastructure and commodity trading opens the door to risk from fluctuating commodity prices, foregin exchange rates, and varying interest. TC Energy hedges these risks using a combination of derivatives contracts including forwards, futures, swaps, and options. The company operates through transportation and storage agreements which offset market risk by stabilizing predictable cash flow throughout the year. TC Energy pays a fixed interest rate on its long term debt and a floating rate on its commercial paper and credit facility drawdowns. The company manages this varying interest risk through a combination of buying and selling interest rate derivatives. The company primarily generates revenue and incurs expenses in the American dollar, resulting in risk from foreign exchange rates. Given the fluctuation between USD and CAD, TC Energy offsets a portion of this risk with interest expense on US dollar-denominated debt. The exposure balance is actively managed on a rolling two-year basis using foreign exchange derivatives.

TC Energy is also exposed to regulatory and environmental risk. With fossil fuel use becoming a political tool, many representatives oppose the use of such energy, and while the transition to clean energy will be a long process, there is increasing pressure on companies to diminish carbon emissions today. The Keystone XL Pipeline is a prime example of such pressures affecting the operations of TC Energy. Despite the risk that regulations will further curb growth for energy companies, TC Energy has enough diversification in its portfolio to avoid a significant downturn in its business.

Financial Analysis

Despite the Coronavirus pandemic and the different supply-chain issues that have affected most industries and companies during the last months, TC Energy Corporation has maintained a strong financial position during the last few years, with help of its low-risk business model and its long-term contracts, as well as its secured future projects. This has allowed the management team to have visibility and predictability on the company's earnings and cash flows, which has helped for effective operations planning.

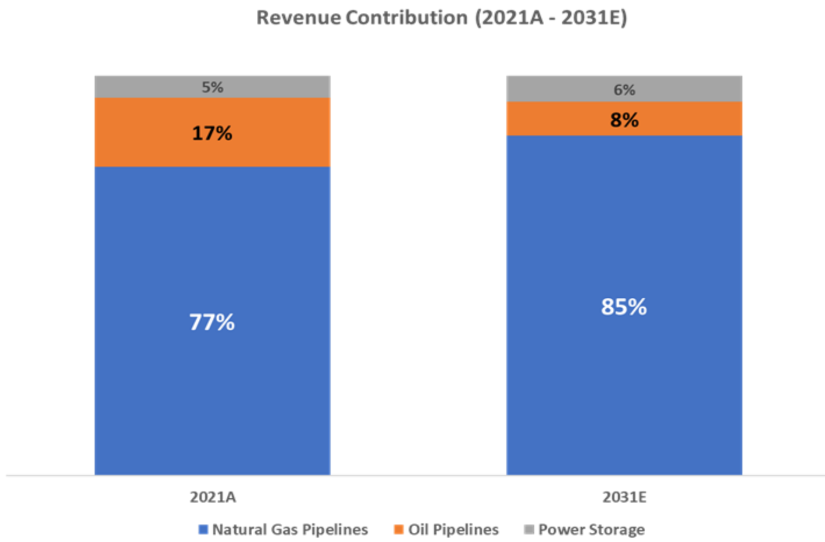
The strong financial situation has allowed the company to have a strong track record of dividend distribution, and with an annual dividend of $3.60 per common share (as of March 31, 2022), the company has now increased its dividend on common shares for the 22nd consecutive year (**Exhibit 3**).

It is important to mention TC Energy's current relative high Debt/Capital ratio (68%) and its high Net Debt ($55.5B), which are mainly with the objective of funding the company's high CAPEX, typical for this asset-intensive industry, as well as for the company's growth plans for its portfolio transformation. Additionally, TRP has maintained relatively high and stable margins (**Exhibit 4**) due to their business model, which makes them incur low operating costs.

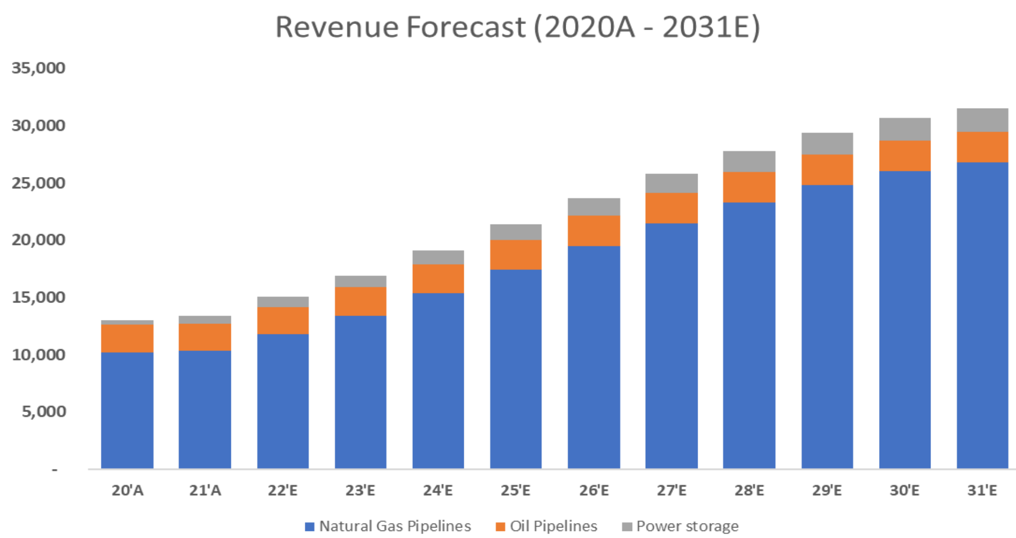
Financial Forecast

For forecasting the financial statements for the company, we looked at the historical financial performance of TRP, as well as the qualitative aspects, previously mentioned, that we think will have a positive impact on the company's performance.

The main driver of our model was the projected total revenue, which consisted of individual projections of the company's three business units. An important aspect of our forecast is the company's intention to migrate their portfolio composition over time to respond to opportunities in the worldwide energy transition toward cleaner energies. This is reflected in growth numbers for the "Natural Gas Pipeline Unit" and the "Power Storage Unit", while forecasting limited growth and decreasing reliance of the "Oil Pipeline Unit".



We created a 10-year forecast, despite the fact that the company's recent financial performance has not been high growth. We believe that the important upcoming changes in the company's portfolio mix and the impact of a cleaner energy matrix would not let us reach a realistic steady state before a 10-year time horizon.



The rest of the forecast of the income statement was mainly based on historical trends with some adjustments to abnormal historical performances, as well as some minor adjustments based on our positive outlook of the company and its industry. (See **Exhibit 6** for projected Income Statement)

We used a similar approach of historical trends with minor adjustments, for forecasting the Balance Sheet, in which the operating assets and operating liabilities were forecasted based on historical trends of its relationship to the company's revenue and/or COGS, while when possible, following the same approach for the forecast of the non-operating assets, non-operating liabilities and the Equity. On the other hand, the Cash Flow Statement was forecasted based on our projections of the different line items from the income statement and the balance sheet, and it's yearly variations. (See **Exhibit 7 and 8** for forecasted BS and CFS, respectively)

During our whole forecast process, we focused on maintaining our projections in line with the historical trends, the industry trends, as well as the company's stated future plans. This can be seen on our different forecasts ranging from operating margins, till the Capital Expenditure for being a main player on the energy-mix transition. It is important to mention that some line items of the financial statements, which are not possible to accurately forecast due to its uncertainty, were decided to leave at current levels or to forecast as zero (FX impact, Goodwill, Income from affiliates, etc.)

TC Energy Corporation Intrinsic Valuation

Based on the previously mentioned financial statements forecasts, we performed an income valuation approach with the Discounted Cash Flow methodology. (See **Exhibit 9** to see DCF valuation assumptions).

Discounted Cash Flow Valuation

Assumptions		
Tax Rate	25%	
Discount Rate	9.00%	
Perpetual Growth Rate	3.00%	
EV/EBITDA Multiple	10.00x	
Current Share Price	$ 66.25	Closing price 2/22/22
Shares Outstanding (M)	981.00	

Terminal Value	
EV/EBITDA	$ 211,740
Perp.Growth Rate	$ 197,351

Discounted Cash Flow	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
EBIT	$ 3,161	$ 7,201	$ 8,111	$ 9,157	$ 10,490	$ 11,607	$ 12,780	$ 13,895	$ 14,707	$ 15,512
Less: Taxes	$ 790	$ 1,800	$ 2,028	$ 2,289	$ 2,622	$ 2,902	$ 3,195	$ 3,474	$ 3,677	$ 3,878
EBIAT	$ 2,371	$ 5,401	$ 6,083	$ 6,868	$ 7,867	$ 8,706	$ 9,585	$ 10,422	$ 11,030	$ 11,634
Plus: Depreciation & Amortization	$ 2,698	$ 3,039	$ 3,431	$ 3,842	$ 4,252	$ 4,634	$ 4,988	$ 5,279	$ 5,513	$ 5,662
Less: Capital Expenditures	$ 6,760	$ 7,107	$ 7,641	$ 7,487	$ 7,101	$ 6,450	$ 5,554	$ 5,878	$ 5,525	$ 5,674
Less: Changes in Net Working capital	$ (1,562)	$ (166)	$ (181)	$ 50	$ (172)	$ (18)	$ 29	$ (118)	$ 86	$ 126
Unlevered Free Cash Flow (FCFF)	$ (129)	$ 1,500	$ 2,055	$ 3,173	$ 5,190	$ 6,908	$ 8,990	$ 9,940	$ 10,932	$ 11,496

As seen on projected FCFs, we expect the company will have a higher CAPEX during the next few years, in order to be able to respond to the energy transition of its main market (North America) and achieve its stated investment plans to support the growing demand. During the latter part of the forecast, we can see that the CAPEX and D&A are very similar, as we implied the company will reach a steady state, in which there will only be the need for CAPEX to replace the existing asset base. The implied plowback ratio (**Exhibit 10**) also helps show how our forecast implied a decreasing reinvestment rate, as the company achieves its expansion plans and reaches a stable state, while increasing its operating profits after adjusted taxes (NOPAT), mainly due to its top-line growth as it benefits from energy transition opportunities.

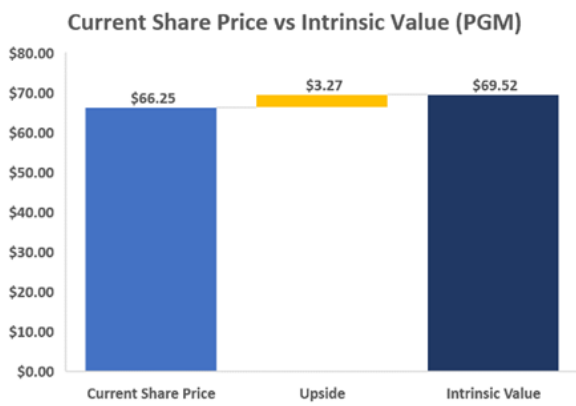
Intrinsic Value (PGM)	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Unlevered Free Cash Flow	$ (129)	$ 1,500	$ 2,055	$ 3,173	$ 5,190	$ 6,908	$ 8,990	$ 9,940	$ 10,932	$ 208,848

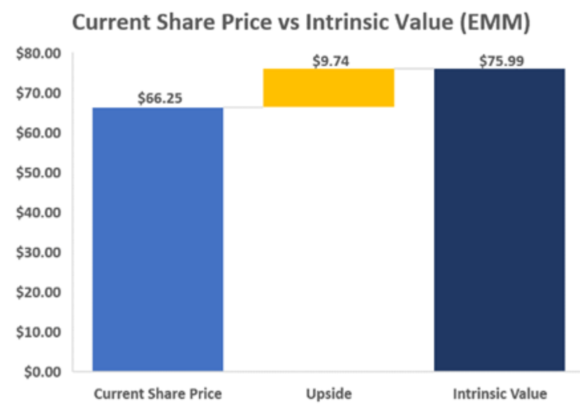
Enterprise Value	$ 120,721	**% EV from TV**	72%
Cash	$ 673		
Debt	$ 53,195		
Net Debt	$ 52,522		
Equity Value	**$ 68,199**		
Equity Value/Share	**$ 69.5**		
Current Share Price	$ 66.3		
Target Price	$ 69.5		
TP Upside	**4.9%**		

Intrinsic Value (EMM)	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Unlevered Free Cash Flow	$ (129)	$ 1,500	$ 2,055	$ 3,173	$ 5,190	$ 6,908	$ 8,990	$ 9,940	$ 10,932	$ 223,236

Enterprise Value	$ 127,066	**% EV from TV**	73%
Cash	$ 673		
Debt	$ 53,195		
Net Debt	$ 52,522		
Equity Value	**$ 74,544**		
Equity Value/Share	$76.0		
Current Share Price	$66.3		
Target Price	$76.0		
TP Upside	**14.7%**		

As seen on our DCF valuation, under Terminal Value methodologies, Perpetuity Growth Method, and Exit Multiple Method, we arrived at slightly different Equity Values, with small differences on per share target price. This difference is only due to the different elements that are used to calculate TV under both methodologies. Nevertheless, we are comfortable with this difference, as we think it is not significant and it helps us to reaffirm our upside potential for share price, with 4.9% under PGM ($69.5) and 14.7% under EMM ($76) to the closing share price as of 2/22/22.





Conclusion

Based on all our analyses our final recommendations is to **BUY** TC Energy Corporation (TRP) stock, as the company, in our opinion, has a very positive outlook for the future, mainly due to its position and capacity to be a key player in the market and grow with the current and upcoming energy transition opportunities. Our target share price presents a potential upside on its price ranging from 4.9% to 14.7%. The stock also provides a reliable return to shareholders in the form of dividends, and the combination of the two is a great opportunity for investors.

EXHIBITS

Exhibit 1: Porter's 5 Forces Analysis

Competitive rivalry — HIGH

- Overlap of pipeline grid causes high competition especially in the Alberta to US Gulf coast and the South and East Coast corridor basin.
- TC's value proposition is in the size of intra region grids. It's better at local distribution but at the same time it has the second longest pipelines that transmit liquid natural gas.

Threat of new entrants — LOW

- Already established pipelines spanning North America. Building new projects at that scale requires a lot of time, resources and government backing.
- In the transmission business, there is a lot of regulation by government agencies in charters and licenses that are granted to run and operate a business.

Supplier's bargaining power — LOW

- It operates in an alliance that is a contract for a few years, terms only change every few years but not at a significant level.
- Enbridge and TC compete for the contracts, but have significant leverage over suppliers.

Bargaining power of customers — LOW

- The company runs on a take-or-pay system, so the revenues are essentially guaranteed
- The basis for long-term contracts is 10-20 years.

Threat of substitute products — LOW

- Pipelines are the cheapest form of transportation for gas and natural gas liquids.
- The only scenario where a substitute would be used is if there are bottlenecks in pipelines from unforeseen situations.

Exhibit 2: Economic Framework Analysis

Demand — Mature and consistent demand, through long term contracts

- Flutuations in oil price do not change demand
- Unforseen calamities (acts of god) create disruptions in transmission and downstream demand

Supply — High level of competition and output

- Very high barriers to entry interms of cost outlay, getting government approval, funding
- Mutliple large cap companies in the midstream services industry

Production Process — Highly capital intensive, low manpower requirement

- Pipelines are mostly operated from terminals and are automated
- Only require manpower for mainenance

Marketing — Energy Solutions segment of TC is involved in gas marketing

- Brings contracts and business to transmission business
- Ensures continuing business with longeterm contracts and maintains relationships
- provides consulting to business on their energy solutions

Financing — Highest amount of debt financing among comparable companies

- industry has a high debt to enterprise value ratio as whole
- Risky projects financed through equity

Exhibit 3: TRP Historical dividend growth and share price on the TSX

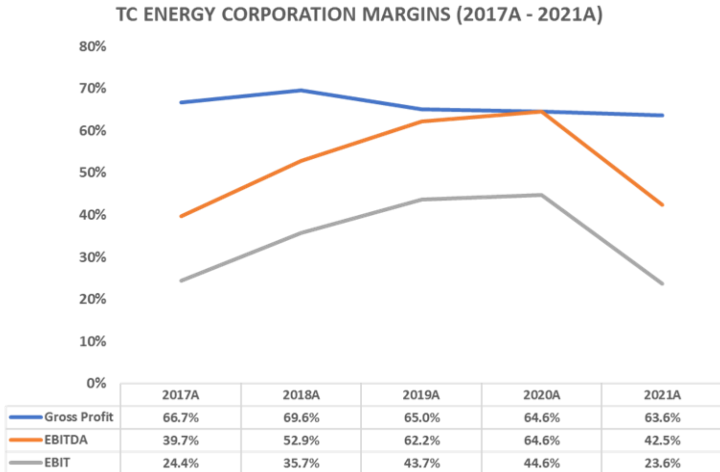


Exhibit 4: Historical margins

Exhibit 5: Revenue Mix (2021A vs 2031E)

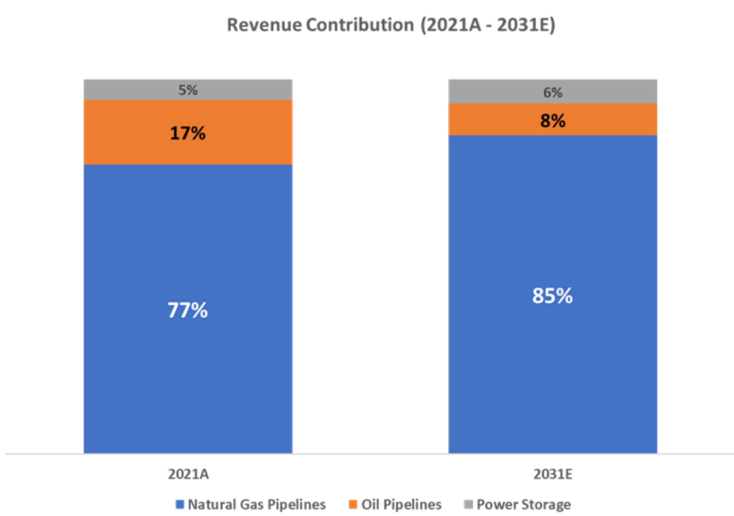


Exhibit 6: Forecasted Income Statement

TC Energy Corporation (TRP)	Historical					Forecasted									
In million of CAD, except per share	2017A	2018A	2019A	2020A	2021A	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Income Statement															
Revenue:															
Natural Gas Pipelines	7,847	8,971	9,591	10,216	10,357	11,755	13,401	15,344	17,416	19,505	21,456	23,280	24,793	26,032	26,813
Oil Pipelines	2,009	2,584	2,879	2,371	2,306	2,398	2,494	2,569	2,620	2,647	2,673	2,686	2,686	2,673	2,660
Power storage	3,593	2,124	785	412	724	869	1,025	1,189	1,356	1,518	1,670	1,804	1,912	1,989	2,048
Total Revenue	**13,449**	**13,679**	**13,255**	**12,999**	**13,387**	**15,022**	**16,920**	**19,102**	**21,392**	**23,670**	**25,799**	**27,770**	**29,391**	**30,694**	**31,521**
Cost of Goods Sold	4,475	4,160	4,640	4,605	4,872	5,123	5,770	6,514	7,059	7,811	8,385	8,886	9,405	9,669	9,772
Gross Profit	**8,974**	**9,519**	**8,615**	**8,394**	**8,515**	**9,899**	**11,150**	**12,588**	**14,332**	**15,859**	**17,414**	**18,884**	**19,986**	**21,025**	**21,750**
Other Operating Expense	3,639	2,289	365	-	2,832	-	-	-	-	-	-	-	-	-	-
Depreciation & Amortization	2,055	2,350	2,464	2,590	2,522	2,698	3,039	3,431	3,842	4,252	4,634	4,988	5,279	5,513	5,662
Operating Income (EBIT)	**3,280**	**4,880**	**5,786**	**5,804**	**3,161**	**7,201**	**8,111**	**9,157**	**10,490**	**11,607**	**12,780**	**13,895**	**14,707**	**15,512**	**16,088**
Interest	1,885	2,189	1,873	2,015	2,160	2,258	2,378	2,731	3,084	3,417	3,686	3,899	4,044	4,124	4,143
Foreign Exchange	379	394	434	446	320	-	-	-	-	-	-	-	-	-	-
Income from Affiliates	(773)	(714)	(920)	(1,019)	(898)	-	-	-	-	-	-	-	-	-	-
Other Non-Operating Income	(1,517)	(938)	(788)	(745)	(587)	-	-	-	-	-	-	-	-	-	-
EBT	3,306	3,949	5,187	5,107	2,166	4,943	5,733	6,426	7,405	8,191	9,094	9,997	10,663	11,388	11,945
Taxes	(89)	432	754	194	120	318	368	413	476	526	584	642	685	732	767
Net Income	**3,395**	**3,517**	**4,433**	**4,913**	**2,046**	**4,626**	**5,365**	**6,013**	**6,930**	**7,664**	**8,510**	**9,355**	**9,978**	**10,656**	**11,178**
Net Income Attributable to Non-Cont. Int.	238	(185)	293	297	91	-	-	-	-	-	-	-	-	-	-
Net Income to Controlling Interest	**3,157**	**3,702**	**4,140**	**4,616**	**1,955**	**4,626**	**5,365**	**6,013**	**6,930**	**7,664**	**8,510**	**9,355**	**9,978**	**10,656**	**11,178**
Dividend	1,494	1,729	1,958	3,146	3,458	3,238	3,755	4,209	4,851	5,365	5,957	6,548	6,984	7,460	7,824

Exhibit 7: Forecasted Balance Sheet

TC Energy Corporation (TRP)	Historical					Forecasted									
In million of CAD, except per share	2017A	2018A	2019A	2020A	2021A	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Balance Sheet															
ASSETS:															
Current Assets															
Cash & Cash Equivalents	1,089	446	1,343	1,530	673	2,461	6,889	12,390	18,879	26,569	32,332	38,551	43,543	47,797	50,460
Accounts Receivable	2,522	2,535	2,422	2,162	3,092	2,713	3,055	3,440	3,863	4,274	4,659	5,001	5,307	5,543	5,692
Inventory	378	431	452	629	724	585	659	742	806	892	958	1,012	1,074	1,104	1,116
Other Current Assets	691	1,723	3,434	880	2,934	2,173	2,448	2,763	3,094	3,424	3,732	4,017	4,252	4,440	4,560
Total Current Assets	**4,680**	**5,135**	**7,651**	**5,201**	**7,423**	**7,931**	**13,051**	**19,335**	**26,642**	**35,159**	**41,681**	**48,581**	**54,176**	**58,884**	**61,828**
Non-Current Assets															
PP&E, Net	57,277	66,503	65,489	69,775	70,182	74,244	78,311	82,521	86,165	89,014	90,830	91,396	91,995	92,006	92,018
Goodwill	13,084	14,178	12,887	12,679	12,582	12,582	12,582	12,582	12,582	12,582	12,582	12,582	12,582	12,582	12,582
Other Intangible Assets	-	1,921	2,168	979	1,403	1,818	2,047	2,311	2,588	2,864	3,122	3,360	3,556	3,714	3,814
Investments in Affiliates/ JVs	6,366	7,113	6,506	6,677	8,441	7,897	8,895	10,042	11,245	12,443	13,562	14,598	15,450	16,135	16,570
Other LT Assets	4,694	4,070	4,578	4,989	4,187	5,073	5,714	6,451	7,224	7,993	8,712	9,378	9,925	10,365	10,645
Total Non-Current Assets	**81,421**	**93,785**	**91,628**	**95,099**	**96,795**	**101,613**	**107,549**	**113,906**	**119,804**	**124,897**	**128,808**	**131,314**	**133,509**	**134,803**	**135,629**
Total Assets	**86,101**	**98,920**	**99,279**	**100,300**	**104,218**	**109,545**	**120,600**	**133,241**	**146,447**	**160,056**	**170,489**	**179,895**	**187,685**	**193,686**	**197,456**
LIABILITIES:															
Current Liabilities															
Accounts Payable	4,861	5,800	5,723	5,091	6,285	6,263	7,054	7,942	8,630	9,549	10,250	10,834	11,498	11,820	11,945
Short-Term Debt	4,629	6,224	7,061	6,204	6,535	6,902	7,774	8,777	9,829	10,876	11,854	12,759	13,504	14,103	14,483
Other Current Liabilities	387	922	115	692	221	526	592	669	749	828	903	972	1,029	1,074	1,103
Total Current Liabilities	**9,877**	**12,946**	**12,899**	**11,987**	**13,041**	**13,691**	**15,420**	**17,387**	**19,207**	**21,253**	**23,007**	**24,565**	**26,031**	**26,997**	**27,532**
Non-Current Liabilities															
Long-Term Debt	38,882	44,017	43,370	43,838	46,660	48,792	54,957	62,044	69,480	76,881	81,267	84,698	86,704	87,478	86,683
Other Long-Term Liabilities	10,451	10,964	10,613	11,395	11,121	12,278	13,829	15,613	17,484	19,346	21,086	22,697	24,022	25,087	25,763
Total Non-Current Liabilities	**49,333**	**54,981**	**53,983**	**55,233**	**57,781**	**61,070**	**68,786**	**77,657**	**86,964**	**96,228**	**102,354**	**107,395**	**110,727**	**112,565**	**112,447**
Total Liabilities	**59,210**	**67,927**	**66,882**	**67,220**	**70,822**	**74,761**	**84,207**	**95,044**	**106,171**	**117,481**	**125,361**	**131,960**	**136,757**	**139,562**	**139,978**
EQUITY															
Shareholder's Equity	25,268	28,220	28,442	27,713	29,623	29,623	29,623	29,623	29,623	29,623	29,623	29,623	29,623	29,623	29,623
Retained Earnings	1,623	2,773	3,955	5,367	3,773	5,161	6,770	8,574	10,653	12,952	15,505	18,312	21,305	24,502	27,855
Total Equity	**26,891**	**30,993**	**32,397**	**33,080**	**33,396**	**34,784**	**36,393**	**38,197**	**40,276**	**42,575**	**45,128**	**47,935**	**50,928**	**54,125**	**57,478**
Total Liabilities + Equity	**86,101**	**98,920**	**99,279**	**100,300**	**104,218**	**109,545**	**120,600**	**133,241**	**146,447**	**160,056**	**170,489**	**179,895**	**187,685**	**193,686**	**197,456**

Exhibit 8: Forecasted Cash Flow Statement

TC Energy Corporation (TRP) In million of CAD, except per share	Historical					Forecasted									
	2017A	2018A	2019A	2020A	2021A	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Cash Flow Statement															
Operating Cash Flow															
Net Income	3,157	3,702	4,140	4,616	1,955	4,626	5,365	6,013	6,930	7,664	8,510	9,355	9,978	10,656	11,178
Plus: Depreciation & Amortization	2,055	2,350	2,464	2,590	2,522	2,698	3,039	3,431	3,842	4,252	4,634	4,988	5,279	5,513	5,662
Less: Changes in Working Capital	-	(376)	2,503	(2,582)	2,356	(1,562)	(166)	(181)	50	(172)	(18)	29	(118)	86	126
Total Cash Flow from Operations	**5,212**	**6,428**	**4,101**	**9,788**	**2,121**	**8,886**	**8,570**	**9,625**	**10,722**	**12,088**	**13,162**	**14,314**	**15,375**	**16,084**	**16,714**
Investing Cash Flow															
Capital Expenditures	(5,007)	(9,300)	(7,475)	(8,013)	(5,924)	(6,760)	(7,107)	(7,641)	(7,487)	(7,101)	(6,450)	(5,554)	(5,878)	(5,525)	(5,674)
Other Intangible Assets						(415)	(230)	(264)	(277)	(276)	(258)	(238)	(196)	(158)	(100)
Investments in Affiliates/JVs						544	(998)	(1,147)	(1,203)	(1,198)	(1,119)	(1,036)	(852)	(685)	(435)
Other LT Assets						(886)	(641)	(737)	(773)	(770)	(719)	(666)	(548)	(440)	(279)
Total Cash Flow from Investing	**(5,007)**	**(9,300)**	**(7,475)**	**(8,013)**	**(5,924)**	**(7,516)**	**(8,975)**	**(9,789)**	**(9,741)**	**(9,344)**	**(8,545)**	**(7,494)**	**(7,474)**	**(6,807)**	**(6,488)**
Financing Cash Flow															
Issuance (repayment) LT Debt		7,243	(161)	393	2,879	2,132	6,165	7,087	7,436	7,401	4,386	3,431	2,006	774	(794)
Issuance (repayment) ST Debt						367	872	1,003	1,052	1,047	978	905	745	599	380
Issuance (repayment) in LT Liabilities						1,157	1,551	1,783	1,871	1,862	1,740	1,611	1,325	1,065	676
Issuance Equity						-	-	-	-	-	-	-	-	-	-
Dividend payment	(1,494)	(1,729)	(1,958)	(3,146)	(3,458)	(3,238)	(3,755)	(4,209)	(4,851)	(5,365)	(5,957)	(6,548)	(6,984)	(7,460)	(7,824)
Total Cash Flow from Financing	**(1,494)**	**5,514**	**(2,119)**	**(2,753)**	**(579)**	**418**	**4,833**	**5,664**	**5,508**	**4,946**	**1,148**	**(601)**	**(2,908)**	**(5,023)**	**(7,562)**
Opening Cash Balance		1,089	446	1,343	1,530	673	2,461	6,889	12,390	18,879	26,569	32,332	38,551	43,543	47,797
Net Increase (decrease) in Cash		2,642	(5,493)	(978)	(4,382)	1,788	4,428	5,500	6,489	7,690	5,764	6,218	4,992	4,254	2,663
Closing Cash Balance	**1,089**	**446**	**1,343**	**1,530**	**673**	**2,461**	**6,889**	**12,390**	**18,879**	**26,569**	**32,332**	**38,551**	**43,543**	**47,797**	**50,460**

Exhibit 9: Important Assumptions TRP DCF

Assumption	Explanation
Tax Rate = 25%	Based on average of the historical federal and provincial statutory tax rate reported on company's annual report 2021.
Discount Rate = 9%	Assumption given in class.
Perpetual Growth Rate = 3%	Range normally used in Wall Street is between 2% and 4% (nominal GDP growth, Inflation Rate).
EV/EBITDA Multiple = 10x	Based on Bloomberg Comparable Companies forward (FY2) Median EV/EBITDA.
Current Share Price = $66.25	Closing price on Tuesday, February 2nd, 2022.
Shares Outstanding (M) = 981	Based on Bloomberg information of fully diluted shares outstanding as of February 2nd, 2022.
Present Value Calculation Methodology = Mid-Year Discount	To account for the fact that annual FCF is usually received throught the year, and not only at the end of the year.

Exhibit 10: Implied Plowback Ratio (2022E-2031E)

Plowback Ratio	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
EBIAT	$ 2,371	$ 5,401	$ 6,083	$ 6,868	$ 7,867	$ 8,706	$ 9,585	$ 10,422	$ 11,030	$ 11,634
Capex	$ 6,760	$ 7,107	$ 7,641	$ 7,487	$ 7,101	$ 6,450	$ 5,554	$ 5,878	$ 5,525	$ 5,674
Depreciation & Amortization	$ 2,698	$ 3,039	$ 3,431	$ 3,842	$ 4,252	$ 4,634	$ 4,988	$ 5,279	$ 5,513	$ 5,662
Changes in NWC	$ (1,562)	$ (166)	$ (181)	$ 50	$ (172)	$ (18)	$ 29	$ (118)	$ 86	$ 126
Implied Plowback ratio	105.5%	72.2%	66.2%	53.8%	34.0%	20.7%	6.2%	4.6%	0.9%	1.2%

Exhibit 11: Financial Analysis (2017A-2031E)

TC Energy Corporation (TRP) In million of CAD, except per share	Historical					Forecasted									
	2017A	2018A	2019A	2020A	2021A	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Financial Analysis															
YoY Growth:															
Natural Gas Pipelines		14.3%	6.9%	6.5%	1.4%	13.5%	14.0%	14.5%	13.5%	12.0%	10.0%	8.5%	6.5%	5.0%	3.0%
Oil Pipelines		28.6%	11.4%	-17.6%	-2.7%	4.0%	4.0%	3.0%	2.0%	1.0%	1.0%	0.5%	0.0%	-0.5%	-0.5%
Power storage		-40.9%	-63.0%	-47.5%	75.7%	20.0%	18.0%	16.0%	14.0%	12.0%	10.0%	8.0%	6.0%	4.0%	3.0%
Total Revenue		**1.7%**	**-3.1%**	**-1.9%**	**3.0%**	**12.2%**	**12.6%**	**12.9%**	**12.0%**	**10.7%**	**9.0%**	**7.6%**	**5.8%**	**4.4%**	**2.7%**
EBITDA		35.5%	14.1%	1.7%	-32.3%	74.2%	12.6%	12.9%	13.9%	10.7%	9.8%	8.4%	5.8%	5.2%	3.4%
EBIT		48.8%	18.6%	0.3%	-45.5%	127.8%	12.6%	12.9%	14.6%	10.7%	10.1%	8.7%	5.8%	5.5%	3.7%
Net Income		17.3%	11.8%	11.5%	-57.6%	136.6%	16.0%	12.1%	15.2%	10.6%	11.0%	9.9%	6.7%	6.8%	4.9%
Revenue Contribution															
Natural Gas Pipelines	58.3%	65.6%	72.4%	78.6%	77.4%	78.3%	79.2%	80.3%	81.4%	82.4%	83.2%	83.8%	84.4%	84.8%	85.1%
Oil Pipelines	14.9%	18.9%	21.7%	18.2%	17.2%	16.0%	14.7%	13.4%	12.2%	11.2%	10.4%	9.7%	9.1%	8.7%	8.4%
Other Revenue	26.7%	15.5%	5.9%	3.2%	5.4%	5.8%	6.1%	6.2%	6.3%	6.4%	6.5%	6.5%	6.5%	6.5%	6.5%
Margins															
Gross Profit	66.7%	69.6%	65.0%	64.6%	63.6%	65.9%	65.9%	65.9%	67.0%	67.0%	67.5%	68.0%	68.0%	68.5%	69.0%
EBITDA	39.7%	52.9%	62.2%	64.6%	42.5%	65.9%	65.9%	65.9%	67.0%	67.0%	67.5%	68.0%	68.0%	68.5%	69.0%
EBIT	24.4%	35.7%	43.7%	44.6%	23.6%	47.9%	47.9%	47.9%	49.0%	49.0%	49.5%	50.0%	50.0%	50.5%	51.0%
Net Income	23.5%	27.1%	31.2%	35.5%	14.6%	30.8%	31.7%	31.5%	32.4%	32.4%	33.0%	33.7%	33.9%	34.7%	35.5%
Financial Health															
Short term liquidity ratios															
Current ratio	0.47	0.40	0.59	0.43	0.57	0.58	0.85	1.11	1.39	1.65	1.81	1.98	2.08	2.18	2.25
Quick ratio	0.44	0.36	0.56	0.38	0.51	0.54	0.80	1.07	1.35	1.61	1.77	1.94	2.04	2.14	2.21
Solvency ratios															
Interest coverage ratio	1.74	2.23	3.09	2.88	1.46	3.19	3.41	3.35	3.40	3.40	3.47	3.56	3.64	3.76	3.88
EBITDA/Interest expense	2.83	3.30	4.40	4.17	2.63	4.38	4.69	4.61	4.65	4.64	4.72	4.84	4.94	5.10	5.25
Leverage ratios															
Debt to equity	2.20	2.19	2.06	2.03	2.12	2.15	2.31	2.49	2.64	2.76	2.78	2.75	2.69	2.58	2.44
Debt to capital	0.69	0.69	0.67	0.67	0.68	0.68	0.70	0.71	0.72	0.73	0.74	0.73	0.73	0.72	0.71
Total assets to equity	3.20	3.19	3.06	3.03	3.12	3.15	3.31	3.49	3.64	3.76	3.78	3.75	3.69	3.58	3.44
Debt to EBITDA	11.10	9.40	8.11	8.01	12.46	7.55	7.55	7.55	7.41	7.41	7.20	6.99	6.84	6.64	6.44
Operating Assets & Liabilities															
Inventory turnover	11.8	9.7	10.3	7.3	6.7	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
Inventory days	30.8	37.8	35.6	50.0	54.2	41.7	41.7	41.7	41.7	41.7	41.7	41.7	41.7	41.7	41.7
A/R turnover	5.3	5.4	5.5	6.0	4.3	5.5	5.5	5.6	5.5	5.5	5.5	5.6	5.5	5.5	5.5
A/R days	68.4	67.6	66.7	60.9	84.3	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9
A/P turnover	0.9	0.7	0.8	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
A/P days	396.5	508.9	450.2	404.6	470.9	446.2	446.2	446.2	446.2	446.2	446.2	446.2	446.2	446.2	446.2
Profitability															
ROA	**3.7%**	**3.7%**	**4.2%**	**4.6%**	**1.9%**	**4.2%**	**4.4%**	**4.5%**	**4.7%**	**4.8%**	**5.0%**	**5.2%**	**5.3%**	**5.5%**	**5.7%**
ROE	11.7%	11.9%	12.8%	14.0%	5.9%	13.3%	14.7%	15.7%	17.2%	18.0%	18.9%	19.5%	19.6%	19.7%	19.4%