

COVID-19 Initial Impact Report

TC Energy Corp.

Ticker: TSE: TRP

SEPTEMBER 2020

Summary

TC (formerly TransCanada Corporation) develops and operates energy infrastructure in Canada, the U.S., and Mexico across three core businesses: Natural Gas Pipelines (which transports more than 25% of North American demand for natural gas), Liquids Pipelines (which accounts for about 20% of Western Canadian exports), and Energy (a division that owns or has interests in 11 power generation facilities with combined capacity of 6,600 megawatts). The Company states it is guided by values of safety, responsibility, collaboration and integrity, with around 7,300 people committed to sustainably developing and operating natural gas and crude oil pipelines, power generation that includes nuclear facilities, and energy storage solutions. There have been a number of controversies associated with TC over the years, most notably the Keystone XL Pipeline project that projected 830,000 barrels of oil per day could be transported from the Athabasca oil sands in Alberta to Steele City, Nebraska upon completion. Critics say that by developing the oil sands the focus of energy generation would be firmly back on fossil fuels (as opposed to 'green' energy sources), so adding harm to the environment. In addition there have been raised concerns about the risks of spillage as the Sandhills region of Nebraska is found to be a fragile ecosystem. With its headquarters in Calgary, Canada, TC was founded in 1951.

Market Data

Financial Data Stated in Millions

Share Price	Market Capitalization	Net Debt
60.99	53,092	35,642

Total Debt	Cash & Equivalents	Enterprise Value
36,985	1,343	94,348

Basic Shares O/S
929

Stock Chart



TC has the Energy to Power Through the Pandemic

TC Energy Corp. (“TC” or “the Company”) operates oil and gas pipelines, storage facilities, and power-generation plants. As such it is in a sector that has seen particular hardship as a result of the Covid-19 pandemic, with insolvency and liquidity concerns having a greater impact in oil and gas than in other industries as a result of the dramatic global fall in their prices. And while these prices have been rebounding back of late, aided by factors such as more and more airlines taking to the air with the gradual easing of rules associated with travel restrictions and social distancing, the market as a whole still has to overcome difficult obstacles and complex disputes in the coming months and years as parties argue about how the huge costs of the pandemic should be allocated.

Yet even against this bleak backdrop there can still be companies that appear to be going in the right direction at the very least, and in TC’s case it has stated it has predictable and growing cash flows from operations, cash on hand, substantial committed credit facilities, and various other financing levers available to it, and so is well positioned to continue funding its obligations, capital program, and dividends through a prolonged period of disruption. The concept of thriving and not just surviving is what any investment should be about, and as such TC is primed more than most to emerge from the other side in great financial health. While question marks deservedly remain as to whether one should enter into the energy sector, TC nonetheless represents income, growth, and stability in a volatile market.

Key Factors: The pandemic has affected all businesses that operate in the physical world (as opposed to those existing only virtually/online, say), and the energy industry is no exception. In addition to the disruption in global supply chains and construction activities, companies like TC have also had to endure plunging oil and gas prices, all adding to increased operating costs that have to be mitigated somehow.

Financial Stress Test: TC has solid financials overall, with a strong balance sheet and enhanced liquidity available to limit the impact of the pandemic. The strong potential for growth via its numerous projects is also evident, such that an affordable share price at this point in time can be viewed as being particularly low risk / high reward.

TC Energy Corp. Pandemic Impact Factors Review

NXTanalytic considers 7 factors and 30 specific indications that we believe will impact companies during and after the Covid-19 pandemic. These factors include: Online Business Profiles, Dealing with Consumers In Person, Effect of Increased Health Regulations, Supply Chain Risks, Travel, Changes and Disruption in Tourism, Travel and Hospitality, Increased Demand for Health Care and Health Safety, WFH and SAH.

COVID-19 Factor Analysis

Net Benefit	Total Regression Score
NEGATIVE	-12.0
Covid-19 Risk Rate	Covid-19 Benefit Rate
-12.0	0.0

Pandemic Impact Factor Analysis

Long-term participants in the energy sector have weathered significant fluctuations in oil and gas prices in the past (for instance, during the '14-'15 oil price crash). However, severe disruption to the global economy caused by the pandemic has significantly impacted energy consumption, with sharp falls in demand. The International Energy Agency has reported that energy demand globally will fall by 6% in 2020 (which is seven times the decline after the '07-'08 global financial crisis), with advanced economies predicted to see the biggest declines.

The idea of energy storage (as in attempting to store crude oil until a large enough rebound in price makes selling more economical) is good on paper; however, storage options are already quickly approaching maximum capacity, and by mid-April some producers were even forced to pay buyers to take barrels they could not store. Alternatively, many producers have resorted to storing their barrels on offshore supertankers, though again the downside to doing so is the cost of offshore storage growing to that of a significantly high premium.

Energy companies are also tackling immediate operational challenges including restrictions on movement of workers, difficulties with supply chains and a significant amount of uncertainty as to when 'business as usual' can be resumed.

What is certain is an increase in complex disputes in the coming months and years as parties argue about how the huge costs involved should be allocated. Given the prevalence of international arbitration in energy market disputes, a corresponding increase in arbitration is also likely.

Relevant Factors

- **In Person (Businesses, Crowds & Groups):** TC states it executes projects with a focus on health, safety and reliability, taking appropriate precautions to support the well-being of its workers (where the option to work from home has been made possible) while continuing to operate its facilities with protective measures in place to limit the potential spread of Covid-19. However, the pandemic has caused expected slowdown to some of the Company's construction activities (as has been seen across all industry types), not to mention its capital expenditures.
- **Increased Health Regulations:** With major changes happening and continuing to happen in the energy sector in order to protect the integrity of the supply chains in response to increasing health safety regulations, the costs involved will have to be carried by the likes of TC which will undoubtedly disrupt its cash flows by way of suppressing them. Also, until a vaccine is broadly distributed and global restrictions are greatly eased, the industry as a whole will not be able to return to full normal, and that particular time frame is going to be counted in terms of years, not months.

Pandemic Factor Screening and Scoring

NXTanalytic research is based on the thesis that consumer and business behaviour and practices will be changed significantly as a result of the pandemic and its aftermath. We have developed a group of seven major factors that we believe indicate whether a company has an increased risk or reward profile.

We approach our analysis in the context of three time periods:

1. Near term effect of the pandemic
2. A Resulting Recession/Bear Market
3. Longer Term Psychological Effects: Changes in consumer and business behavior and practices as a result of the pandemic.

Scoring and Rating for Factor Exposure

We objectively score businesses based on positive and negative factors and how significantly they may be affected by each applicable factor. Our model generates a total regression score by generating a coefficient of the risk and reward scores given to the company by an experienced analyst.

We generate a Total Regression Score, a Covid-19 Risk Rate and a Covid-19 Benefit Rate.

Online Businesses: Due to social distancing and lockdowns and Work From Home, businesses that operate online, or produce the tools for companies to adapt to more demand for online services should experience a surge in demand due to the coronavirus, Covid-19 outbreak. Consumers will more rapidly move online across many categories. Trends already in place will accelerate. Companies whose businesses are online or are rapidly moving online are better prepared to serve the market while those based on bricks and mortar are more likely to be challenged.

Dealing with Consumers In Person: Businesses that deal with large numbers of people in close proximity to each other will be negatively affected long term. Regardless of how long the pandemic will continue, its psychological, economic and financial effects, have inevitably altered the perception of risk from exposure to large group settings. Consumers are going to avoid gathering in large groups – particularly individuals over 60. We believe consumers will be fearful of the virus and we are assuming that even when the rate of infection has slowed through social distancing and other “curve flattening” efforts, the virus will be a threat for more than a year or until widespread vaccination has taken place. Even after vaccination efforts minimize the immediate threat consumer behavior will be changed long term and concern over future pandemics will be heightened for many years.

Increased Health Regulations and Restrictions: Restrictions on travel and trade as a result of the pandemic are likely to remain in place for months or years and public health regulations will become stricter and more widespread. It’s highly probable that enhanced screening, permit and visa requirements, reductions in ease of travel and transport of goods will be impacted or implemented. Governments, in an effort to restore consumer confidence, will enforce new regulations designed to protect consumers from the current pandemic and future pandemics will overshoot and result in impairing businesses who rely on international supply chains, movement of large numbers of people, or are otherwise perceived as presenting a high risk of infection to consumers.

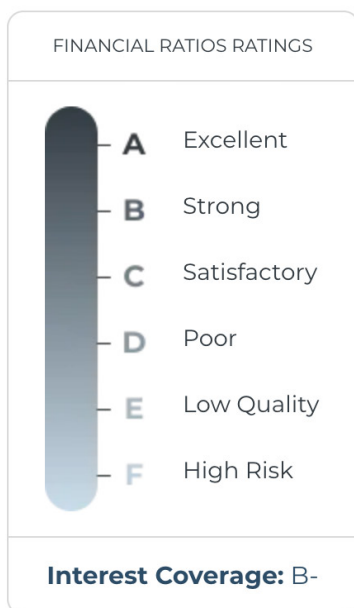
Supply Chain and Cross Border Risks: The fact the virus can remain alive for many days on inanimate objects and surfaces is a good example of a pending supply chain issue. Perishable product supply chains designed to move items from producer to consumer in days could be significantly impacted. Overall we believe that businesses that ship goods internationally or rely on global supply chains are at risk of business interruption as the pandemic circulates globally. Further, companies with long international supply chains in countries with poor healthcare systems will likely be pressured to replace suppliers and build new supply chains closer to home markets in order to avoid new border restrictions and the potential of localized lockdowns put in place to handle future outbreaks.

Travel, Tourism, Hospitality and Entertainment: The most obviously impacted sectors are businesses on the front line of day to day consumer interaction. Restaurants, coffee shops, event venues, bars, pubs, hotels, resorts, etc could experience a prolonged or permanent change in consumer demand or be required to spend significantly on technologies and services designed to mitigate consumer concerns over health risks. Consumers will likely continue to avoid contact with crowds or reduce visits to brick and mortar hospitality and entertainment focused businesses. Companies in these sectors will need to change business practices and deploy technologies and systems designed to protect customers – many of these do not exist yet or are expensive.

Work From Home and Stay At Home: The most obvious winners are companies who enable consumer cocooning or Work From Home (WFH) and Stay at Home (SAH) behaviour. As these social and business trends become entrenched, demand for a range of new solutions for managing a distributed workforce will provide existing platform companies and new entrants with opportunities to grow market share and fill demand. Companies not offering WFH opportunities will suffer, compromising their ability to attract the best employees. The delivery economy, pioneered by the likes of Amazon.com and any company that focuses on in home exercise, consumer electronics, home entertainment and ecommerce are well positioned to profit from a long term trend towards SAH behaviour. The trend towards non-brick and mortar retail, will accelerate.

Health, Medicine & Safety: Companies focused on the health and safety of consumers and crowds will be positioned to assist businesses who will require new and robust health security solutions in order to attract customers. Heightened focus on health and virus risks will likely spur expenditures on antiviral medications and treatments, vaccines, screening systems and devices, rapid testing, containment and quarantine solutions and services, and telemedicine. Demand for antimicrobial or antiviral materials or other “bio tech materials” and products is likely to be strong in a post pandemic world.

Financial Stress Test



Financial Ratios

FYE – Dec. 31st	Financial Leverage	Debt-to-Capital
2019 A	3.06 X	0.53 X

Debt-to-Assets	Debt-to-Equity	EBIT/Interest
0.37 X	1.14 X	3.20 X

EV/FCF
-240.07 X

NXTanalytic reviews a series of financial measures designed to provide a snapshot of the company’s financial health and ability to deal with the challenges or opportunities created by the pandemic, the recession and post pandemic economic environment.

Cash Flow Stress Test

EV/FCF Ratio (when CFFO is 90% of actual)	F
EV/FCF Ratio (when CFFO is 80% of actual)	F
EV/FCF Ratio (when CFFO is 70% of actual)	F

NXTanalytic completes a simple cash flow stress test by reducing Cash Flow From Operations by three levels: a 10%, 20% and 30% reduction. We then rate the EV/FCF ratio. We use the EV/FCF ratio to assess the total valuation of the company in relation to its ability to generate cash flows as a measure of a company’s ability to service its debts from cash flow.

Our opinion

Despite the challenging capital market conditions, TC believes it can maintain its strong operating and financial position by taking significant steps to fund its 2020 capital expenditure program, with the most notable pathway to achieving this being the announcement in late March of the long awaited construction of the Keystone XL Pipeline project finally taking place (which commenced as of April). Expected to enter service in 2023, the pipeline will play a critical role in connecting the world's third largest oil reserves in the Canadian oil sands with the continent's largest refining market in the U.S. Gulf Coast. It is underpinned by new 20-year contracts for 575,000 barrels per day that are expected to generate approximately US\$1.3 billion of incremental EBITDA on an annual basis when the pipeline enters service. TC has partnered with the Government of Alberta, who will invest approximately US\$1.1 billion in equity and fully guarantee a US\$4.2 billion project-level credit facility through construction. Once the project is completed and placed into service, the Company expects to acquire the Government of Alberta's equity interest and refinance the credit facility.

The availability of TC's infrastructure has remained largely unimpacted with utilization levels robust and in line with historical norms. With approximately 95% of its comparable EBITDA generated from regulated assets and/or long-term contracts, the Company is largely insulated from short-term volatility associated with volume throughput and commodity prices. During the first quarter of 2020, TC's diversified portfolio continued to perform very well with comparable earnings per share increasing 10% (compared to the same period last year), while comparable funds generated from operations of US\$2.1 billion were 17% higher. The increases reflect the robust performance of its legacy assets and contributions from the approximately US\$1.6 billion of capacity projects that have entered service to date in 2020.

Into the second quarter, and TC's outlook for full year 2020 remained essentially unchanged while stating it had significant internally generated cash flow, a strong financial position, and continued access to capital markets, all contributing to maintaining its strong credit ratings. The Company continued to advance its industry leading US\$37 billion secured capital program by placing approximately US\$3 billion of assets into service during the first half of 2020.

In addition, the Company enhanced its liquidity in excess of US\$11 billion by concluding the partial sale and project financing of Coastal GasLink along with the disposition of its Ontario natural gas-fired power plants for combined proceeds of approximately US\$4.9 billion, completing senior debt issuances of US\$2.0 billion and US\$1.25 billion on compelling terms, as well as arranging US\$2 billion of incremental committed credit facilities with its core banking group.

In also having manageable financial obligations as reflected via its acceptable debt ratios, TC is worthy of investment interest in spite of all the industry setbacks, with a stock price that is arguably at fair value at this present time, in conjunction with there being a long history of enhancing shareholders' returns through higher dividend payouts (and a currently high yield at 5.2% is evidence of a very secure return). The Company's resilience in the face of this pandemic crisis is one thing, but as it continues to develop quality projects supported by long-term commercial arrangements with creditworthy counterparties, the strong expectation of generating significant growth in earnings and cash flows is the other (important) thing that matters to an investor.

Stress Test Highlights

Debt-to-Assets: TC has a great debt-to-assets ratio at 0.37 X to imply it has a strong balance sheet along with the rest of its leverage ratios at suitably low values (arguably, the debt-to-equity ratio at 1.14 X is suggestive of the Company being slightly more leveraged by debt than is ideal, yet capital-intensive industries (like TC) often have ratios that can be greater than 2 before they're then classed as being 'unacceptable').

Interest Coverage: An interest coverage ratio at 3.20 X translates to the Company having relatively stable revenues, and so can continue to pay its interest expenses on outstanding debt (aided by TC recently stating that it is in a strong financial position).

EV/FCF: A company with negative free cash flows indicates an inability to generate enough cash to support the business, so while an EV/FCF ratio at -240.07 X is certainly unacceptable, nonetheless, TC has enhanced its liquidity by more than \$11 billion during the second quarter of 2020, meaning the 'true picture' is actually a much healthier one. Also, a theoretical decrease in the Company's Cash Flow From Operations (CFFO), from actual down to 70% of actual, shows a grading that doesn't change, so despite being 'poor' it implies a worsening of cash flows isn't actually all that impactful.

Financial Stress Test Analysis

NXTanalytic completes a financial analysis of each company using data taken from the most recently audited financial statements. Our goal is to provide a snapshot of a company's financial condition and ability to survive a prolonged period of reduced growth, and/or finance growth or restructuring to take advantage of new opportunities.

Cash Flows as a Focus of Screening

Debt Servicing

- **Interest Coverage Ratio = EBIT / Interest Expense:** A powerful measurement of the 'survivability' of a corporation. It reflects the ability of a company to pay interest on the outstanding debt and is thus an important assessment of short-term solvency. If the ratio is underneath 1.0 X, this means that the company cannot currently cover interest charges on its debt from current operational income. This could mean that the company is funding itself through the sale of assets or further financing; which are unsustainable. The higher the ratio, the higher probability to survive in the future financial hardship.

Free Cash Flow Valuation

- **EV/FCF Ratio = Enterprise Value / Free Cash Flow:** Based on our debt servicing thesis we primarily value companies based on their cash flows. We rely on the EV/FCF ratio to assess the total valuation of the company in relation to its ability to generate cash flows. Enterprise Value is the value of the entire company, both its debt and traded equity. When this is divided by its Free Cash Flow we see how much we are paying to buy that cash flow. The lower the ratio the cheaper it is to "buy" the cash flows of the company.

Leverage Ratios

Debt ratios are classic balance sheet health measuring tools used to indicate potential risks to future financing ability (ie. violating debt covenants) or as a barometer of the defensive position of the company if cash flows are ever an issue. They are long-term solvency metrics and reflect the degree to which the company is financing its operation through debt versus equity. If a company has poor leverage ratios (too much debt), it might need to aggressively finance its growth through debt and as a result require more and more cash flow from operations to adequately service its debt. Our view is that companies with less debt are more likely to be able to withstand challenges or fund opportunities created by the pandemic.

- **Financial Leverage Ratio = Total Debt / Total Equity:** The Financial Leverage Ratio is a measure of the degree to which a company is financing its operations through debt. More specifically, it reflects the ability of shareholder equity to cover all outstanding debts in the event of a business downturn.
- **Debt-to-Capital Ratio = Total Debt / (Total Debt + Total Shareholder's Equity):** The Debt-to-Capital ratio measures the amount of financial leverage in a company. This tells us whether a company is prone to using debt financing or equity financing. A company with a high Debt-to-Capital ratio, compared to a general or industry average, may be impaired due to the cost of servicing debt and therefore increasing its default risk.
- **Debt-to-Equity Ratio = Total Debt / Total Shareholder's Equity:** A high Debt-to-Equity ratio generally indicates that a company has been aggressive in financing its growth with debt. This can result in volatile earnings as a result of additional interest expense. If the company's interest expense grows too high, it may increase the company's chances of a default or bankruptcy.
- **Debt-to-Assets Ratio = Total Debt / Total Assets:** The Debt-to-Assets ratio shows the degree to which a company has used debt to finance its assets. This ratio can be used to evaluate whether a company has enough assets to meet its debt obligations. A ratio greater than 1 indicates that the entire company's assets are worth less than its debt.

Disclosures

CONFLICT OWNERSHIP RELATED DISCLOSURES

Does the Analyst or any member of the Analyst's household have a financial interest in the securities of the subject issuer?

No

Does the Analyst or household member serve as a Director or Officer or Advisory Board Member of the issuer?

No

Does NXTanalytic or the Analyst have any actual material conflicts of interest with the issuer?

No

Does NXTanalytic and/or one or more entities affiliated with NXTanalytic beneficially own common shares (or any other class of common equity securities) of this issuer which constitutes more than 1% of the presently issued and outstanding shares of the issuer?

No

Has the Analyst had an onsite visit with the Issuer within the last 12 months?

No

Has the Analyst been compensated for travel expenses incurred as a result of an onsite visit with the Issuer within the last 12 months?

No

Has the Analyst received any compensation from the subject company in the past 12 months?

No

U.K. DISCLOSURES

This research report was prepared by NXTanalytic Inc., which is not a member of the Investment Industry Regulatory Organization of Canada and the Canadian Investor Protection Fund. NXTANALYTIC IS NOT SUBJECT TO U.K. RULES WITH REGARD TO THE PREPARATION OF RESEARCH REPORTS AND THE INDEPENDENCE OF ANALYSTS. The contents hereof are intended solely for the use of, and may only be issued or passed onto persons with which NXTanalytic has given consent. This report does not constitute advice, an offer to sell or the solicitation of an offer to buy any of the securities discussed herein.

CANADIAN & U.S. DISCLOSURES

This research report was prepared by NXTanalytic, which is not a registrant nor is it a member of the Investment Industry Regulatory Organization of Canada. This report does not constitute advice, an offer to sell or the solicitation of an offer to buy any of the securities discussed herein. NXTanalytic is not a registered broker-dealer in the United States or any country. The firm that prepared this report may not be subject to U.S. rules regarding the preparation of research reports and the independence of research analysts.

INFORMATION & INTELLECTUAL PROPERTY

All information used in the publication of this report has been compiled from publicly available sources that NXTanalytic believes to be reliable. The opinions, estimates, and projections contained in this report are those of NXTanalytic Inc. (“NXT”) as of the date hereof and are subject to change without notice. NXT makes every effort to ensure that the contents have been compiled or derived from sources believed to be reliable and that contain information and opinions that are accurate and complete; however, NXT makes no representation or warranty, express or implied, in respect thereof, takes no responsibility for any errors and omissions which may be contained herein and accepts no liability whatsoever for any loss arising from any use of or reliance on this report or its contents. Information may be available to NXT that is not herein. This report is provided, for informational purposes only and does not constitute advice, an offer or solicitation to buy or sell any securities discussed herein in any jurisdiction. Its research is not an offer to sell or solicitation to buy any securities at any time now, or in the future. Neither NXT nor any person employed by NXTanalytic accepts any liability whatsoever for any direct or indirect loss resulting from any use of its research or information it contains. This report may not be reproduced, distributed, or published without any the written expressed permission of NXTanalytic Inc. and/or its principals.