Investor Briefing
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GREENPEACE

Problematic Pipelines

Investor risk from bank financing of tar sands pipelines

A number of banks including JPMorgan Chase, Royal Bank of Canada, TD Bank Group, Barclays, and Wells Fargo risk opposition from Indigenous communities, pressure from civil society groups, and scrutiny from investors as a result of their actual and/or potential involvement in climate damaging and controversial tar sands pipeline projects in Canada and the U.S.

These projects carry many of the same potential risks for banks as arose with the Dakota Access Pipeline (DAPL) including a lack of and/or poor process around Free Prior and Informed Consent from all Indigenous Nations and Tribes along or impacted by the pipeline routes and the risk of contamination of drinking water in the event of a spill. Some of the banks caught up in DAPL appear to be learning lessons from that controversy. Dutch bank ING which divested from the DAPL project loan has confirmed its tar sands exclusion policy will extend to a prohibition on financing any of the tar sands pipelines. Some lenders who were subject to criticism over DAPL and were participants in previous syndicated credit facilities to Kinder Morgan did not participate in the recent deal to fund the Trans Mountain Expansion project.

However, the willingness of many banks to arrange and/or provide financing for tar sands pipelines suggest that they have failed to learn from the media, investor, and consumer criticism arising from DAPL and appear to be relying on outdated or inadequate risk assessment and mitigation frameworks.

These lending decisions will facilitate the expansion of Canada's tar sands and thereby risk undermining other work by investors, regulators, and some of the same banks to address climate risk.

This briefing outlines the financial and reputation risks banks could face in arranging and providing finance for companies intending to build tar sands pipelines. We suggest questions investors should ask banks to understand whether the various risks are being adequately assessed, mitigated, and managed.

Major risks for bank shareholders

- Lack of Free Prior and Informed Consent from all impacted Indigenous Nations and Tribes
- Need to ensure adequate environmental & human rights impact assessments
- Pipeline spills impacting waterways
- Lending decisions incompatible with transition to low carbon economy
- Consumer backlash at retail banks

The pipelines

Company[1]	Pipeline	Status	Role in system	Potential funders
Kinder Morgan	**Kinder Morgan Trans Mountain Expansion**	Facing increasing opposition and legal challenges from First Nations, the public and large municipalities (including the city of Vancouver). Additional opposition driven by concerns related to tanker traffic. The Trudeau government approved the pipeline in December 2016, but in August 2017 the newly-elected provincial government in British Columbia said it would be illegal for Trans Mountain to proceed with construction on public land at this time, because it has not yet met existing conditions on its BC environmental assessment certificate related to Indigenous consultation. Multiple First Nations legal challenges could block the project even if formally approved.	A twin pipeline that would add 590 kbpd between the tar sands and the Southern BC coast for Pacific access to international markets.	**Credit facilities advanced in June 2017 including a CDN$4BN facility to finance the construction of the pipeline[2]** **Lead banks:** Royal Bank of Canada Canadian Imperial Bank of Commerce: Scotiabank Toronto-Dominion Bank **Banks named as lenders on the pipeline construction loan:** Bank of America Bank of Montreal Barclays JPMorgan Chase Mitsubishi UFJ Financial Group Mizuho Financial Group National Bank of Canada China Construction Bank HSBC Sumitomo Mitsui Financial Group Suntrust Bank Alberta Treasury Branches FIPPGV/PX Caisse centrale Desjardins[3] Bank of China Siemens United Overseas Bank Canadian Western Bank Industrial & Commercial Bank of China[4]

The pipelines

Company	Pipeline	Status	Role in system	Potential funders
Enbridge	Line 3	The 18-mile cross border section is complete but currently in use for the Clipper expansion; the rest of the line's permits are being reviewed by the Minnesota Public Utilities Commission and the U.S. federal government. Opposition centres around the sensitivity of the new route, plans for abandonment of the old Line 3, and the lack of application of climate criteria as per Keystone XL. The National Energy Board approved the replacement/expansion on the Canadian side in April, 2016. The project continues to face opposition from First Nations communities and environmentalists.	Initially increase capacity from 390,000 to 760,000 kpbd, but in its filing with the Minnesota Public Utility Commission, Enbridge indicated that total capacity would ultimately be 915,000 kbpd. Total Enbridge expansions (including Line 3), if completed, would equal some 1.1mbd of tar sands capacity.	**No project specific credit facilities have yet been advanced but the following banks currently provide revolving credit facilities to relevant companies in the Enbridge corporate group and who have not confirmed to Greenpeace that they will not fund tar sands pipelines[5]:** Bank of Tokyo Mitsubishi UFJ Mizuho Bank Citibank Export Development Canada Credit Suisse HSBC Bank National Bank of Canada Bank of America/Merrill Lynch Bank of Nova Scotia Royal Bank of Canada BNP Paribas Toronto Dominion (TD) Deutsche Bank Barclays Canadian Imperial Bank Sumitomo Mitsui Bank Wells Fargo Bank of Montreal Morgan Stanley DNB Capital/ASA JP Morgan Chase Credit Agricole Caisse centrale Desjardins[6] Societe Generale Alberta Treasury Branches Bank of China China Construction Bank Corp/Tor Industrial and Commercial Bank of China UBS United Overseas Bank Limited China Merchants Bank Co Ltd/New Huntington National Bank

The pipelines

Company	Pipeline	Status	Role in system	Potential funders
TransCanada	Energy East	Delayed for two years due to environmental concerns over beluga whale habitat and the need to replace the members of the review panel and restart the process following allegations of a potential conflict of interest relating to a private meeting with a TransCanada lobbyist.[7] Facing mounting opposition from the public, significant municipal opposition (including the city of Montreal and the Montreal Metropolitan Community), official opposition from the Quebec Assembly of First Nations, and growing political hesitancy in support from provincial governments including an injunction from the province calling for a provincial environmental assessment of the project. The National Energy Board hearings that began in June 2016 have been annulled, and no new timeline for the hearings had been established as of August 2017.	A proposed 1.1 mbpd new eastward pipeline from the tar sands to refineries in Eastern Canada and an export terminal in St John, NB for Atlantic access to international markets.	**No project specific credit facilities have yet been advanced but the following banks currently provide revolving credit facilities to relevant companies in the Enbridge corporate group and who have not confirmed to Greenpeace that they will not fund tar sands pipelines:** Bank of Tokyo Mitsubishi UFJ Mizuho Bank Toronto Dominion (TD) JP Morgan Chase Citibank Credit Suisse Deutsche Bank Credit Agricole HSBC Bank National Bank of Canada Bank of America/Merrill Lynch Bank of Nova Scotia Royal Bank of Canada Barclays Canadian Imperial Bank Sumitomo Mitsui Bank Wells Fargo Bank of Montreal Export Development Canada Alberta Treasury Branches Caisse centrale Desjardins[8]

The pipelines

Company	Pipeline	Status	Role in system	Potential funders
TransCanada	KXL	President Obama rejected TC's application for a Presidential permit, but President Trump revived the project via EO in his first few weeks in office. The Presidential permit was granted in March 2017. The Trump Admin's approval of the permit faces litigation by a coalition of environmental groups. Filed in federal district court in MT, the first hearing has been delayed until mid-October. The pipeline still requires approval from the Nebraska Public Service Commission, which held hearings on the matter in August 2017. A final permit decision is expected in November 2017. If approved, TC has said it will assess the financial viability of the pipeline in November and construction could start 6-9 months after that.	Proposed 830 kbpd new pipeline to Cushing OK for access to Gulf Coast & international markets	As above

In June 2017, a syndicate of banks signed a credit agreement with Kinder Morgan which included a CDN$4bn pipeline construction loan. TransCanada (KXL and Energy East pipelines) and Enbridge Inc. (Line 3 pipeline expansion) have yet to finalise funding arrangements.

Human rights impact: Indigenous rights

The proposed tar sands pipeline projects do not have the Free, Prior, and Informed Consent (FPIC) of all Indigenous Nations and Tribes along or impacted by the pipeline routes as called for in the United Nations Declaration on the Rights of Indigenous Peoples. Over 150 First Nations and Tribes across Canada and the U.S. have signed the Treaty Alliance Against Tar Sands Expansion.[9] The Treaty is an expression of Indigenous Law and opposes the use of the signatories' Indigenous territories and coasts for new or expanded pipeline infrastructure projects that would facilitate the expansion of the tar sands.

130 First Nations and their allies have signed the Save the Fraser Declaration[10] outlining their opposition to the (now abandoned) Northern Gateway pipeline and to other similar tar sands projects crossing their lands, territories and waterways – which would include Kinder Morgan's Trans Mountain Expansion project[11] which is also currently the subject of 11 legal challenges from First Nations in Canada alleging infringements of their rights.[12]

NGO research[13] has pointed out that "KXL would cross through tribal lands and sacred sites, as well as ranches and farms, and TransCanada has failed to secure consent from tribes along the route and the communities that stand to lose their source of drinking water. For instance, KXL would cut through the land of the Rosebud Sioux of South Dakota, whose president Cyril Scott said in 2014, "Authorizing Keystone XL is an act of war against our people."[14]

JPMorgan Chase, Royal Bank of Canada, TD, Barclays, and Wells Fargo are all signatories to the Equator Principles[15] which prohibit the provision of finance when Indigenous peoples do not grant FPIC in line with the IFC (International Finance Corporation) Performance Standards on Environmental and Social Sustainability. The Equator Principles allow banks to forego this FPIC requirement in countries like the U.S., and Canada (which the principles define as "Designated Countries") assuming that in such countries adequate protections exist under law for rights of Indigenous peoples.

As the DAPL controversy demonstrated in stark and unacceptable terms, national regulatory review processes in Designated Countries do not provide a failsafe guarantee that a project has obtained the FPIC of communities impacted by a project. Bank risk departments can no longer assume that compliance with the Equator Principles will, in itself, mitigate reputation risks for alleged complicity by banks in potential human rights violations. In line with both the spirit of the Equator Principles and their role in determining and mitigating risk, banks should refuse to fund projects lacking FPIC regardless of the jurisdiction in which they occur. Ten Equator Principles banks have recently called for the IFC FPIC standard to be applied in all countries.[16]

Questions for Banks

- Does the bank have specific published policies on tar sands finance, FPIC, and climate risk mitigation?
- Does the bank intend to advance credit facilities which might be used directly or indirectly to fund the construction and/or operation of any of the proposed tar sands pipeline projects?
- What changes has the bank made to its due diligence and risk assessment processes following the criticism suffered by it and/or peers following the DAPL controversy?

- Does the bank require enhanced due diligence to be carried out for tar sands projects including pipelines? If so, what are the additional issues considered in an enhanced due diligence process?
- If the bank has or intends to provide finance in connection with a tar sands pipeline project, is the approval by the Lead Banks of a thorough and independent human rights impact assessment of the project in line with the UN Guiding Principles on Business and Human Rights Reporting Framework a condition precedent to financial close?
- Will the terms of reference of the independent human rights impact assessment be finalised after consultation with other stakeholders and will they be published?
- Does the bank have plans to engage directly with potentially affected Indigenous Nations and Tribes and local communities along the proposed pipeline routes, independent experts, and with other stakeholders prior to financial close to ensure the bank's decision-making is based on information from a range of sources rather than just the borrower(s)?
- If due diligence identifies the relevant tar sands pipeline project as high risk, what steps will be taken by the bank to mitigate the potential legal, financial, and reputational risks and to ensure that the rights of the people potentially affected by the pipeline project are protected?
- Does the bank agree with the call by some Equator Principles banks to apply the FPIC standard in all countries?

Environmental Impact: pipeline spills and water contamination

The proposed tar sands pipeline projects carry a risk of negative environmental impacts including contamination of drinking water from leaks. Analysis of public data from the Pipeline and Hazardous Materials Safety Administration (PHMSA)[17] for the period from 2010 to date shows that the three companies proposing to build four tar sands pipelines - TransCanada, Kinder Morgan, Enbridge, and their subsidiaries -- have seen 373 hazardous liquid spills from their U.S. pipeline networks from 2010 to present.

These spills released a total of 63,221 barrels of hazardous liquids during that time period - including Enbridge's 20,082 barrel diluted bitumen spill into the Kalamazoo River in 2010. The U.S. crude oil pipeline system as a whole has averaged one significant incident and a total of ~570 barrels released per year per 1000 miles of pipe, over the past 10 years.

Assuming these rates, the Keystone XL pipeline could expect 59 significant spills over a 50-year lifetime. TransCanada reported a much a lower estimate of 11 significant spills[18] but an independent scientific assessment concluded that they relied upon overly-optimistic assumptions.[19] Similarly, the Line 3 Expansion could see 51 significant spills over a 50-year lifetime.

An incident is considered "significant" by PHMSA if it involved a fatality, a hospitalized injury, $50,000 or more in costs, more than 50 barrels (or >5 barrels of HVL) spilled, or resulted in an unintentional fire or explosion.

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A history of spills

In July 2010, Enbridge's Line 6B pipeline ruptured, spilling 20,000 barrels of dilbit into the Kalamazoo River near the town of Marshall, Michigan.[24] The spill impacted hundreds of families, polluted 36 miles of river, and only narrowly avoided contaminating Lake Michigan. The spilled bitumen sunk to the bottom of the river triggering a years-long, billion dollar clean-up operation that required dredging the river bottom. It has left the river degraded years later. [25]

TransCanada and its subsidiaries had 13 spills totaling 829 barrels of crude oil (mostly from two significant 400 barrel spills in 2011[20] and 2016).

Kinder Morgan and its subsidiaries and joint ventures had 213 spills totaling 21,598 barrels of hazardous liquids. In total, Kinder Morgan saw 22 significant spills during this time.

Enbridge and its subsidiaries and joint ventures had 147 spills totaling 40,794 barrels of hazardous liquids. Around half of Enbridge's total comes from a catastrophic 20,082 barrel diluted bitumen spill into Michigan's Kalamazoo River in 2010.[21] In total, Enbridge saw 17 significant spills during this time period, all crude oil spills.

Cleaning up oil spills in water is an inherently difficult task. In typical situations only a fraction of the spilled oil can be recovered by deploying booms and skimmers, or via other methods. Diluted bitumen (dilbit) spills pose an especially difficult clean-up challenge due to the properties of the oil. A 2015 study conducted by the National Academies of Science[22] identified unique problems associated with a dilbit spill. The dilbit mixture separates quickly after a spill, with the lighter volatile diluents evaporating and leaving behind the denser bitumen, which will sink in water. This complicates most oil spill response techniques designed to handle oil floating on the surface.[23]

Questions for Banks

- If the bank has or intends to provide finance in connection with a tar sands pipeline project, is the approval by the Lead Banks of a thorough and independent environmental impact assessment – including the impact of any spills along the route – of the relevant tar sands pipeline project a condition precedent to financial close?
- Will the terms of reference of the independent environmental impact assessment be finalised after consultation with other stakeholders and will they be published?

Climate action incompatibility

Banks and their investors run the risk that their short-term lending decisions - on projects such as tar sands pipelines - will, through the carbon lock-in they enable, undermine their other medium to long-term actions on climate.

An analysis of 27 of the tar sands projects cancelled since 2010, found that 14 - including BP's Sunrise and Shell's Carmon Creek - were rendered uneconomic by the combination of 2015 oil prices *and* the additional cost of rail. It was lack of pipeline access that pushed them over the edge, as the additional cost of rail rendered these projects uneconomic. These 14 projects are associated with over 60% of the reserves held in all 27 projects.[26]

If no new pipelines are built there will be no pipeline space available for tar sands production growth beyond that which arises from the projects already under construction. Conversely, it is estimated that the Keystone XL pipeline and the Trans Mountain Expansion project could add 830,000[27] and 590,000[28] barrels per day capacity respectively. Energy East would add 1.1 million[29] barrels per day capacity. Enbridge's Line 3 would initially increase capacity from 390,000 to 760,000 barrels per day, but in its filing with the Minnesota Public Utility Commission[30], Enbridge indicated that total capacity would ultimately be 915,000 barrels per day, resulting in a 525,000 barrels per day increase. Facilitating the expansion of the tar sands is incompatible with the ambitions of the Paris Agreement and with an orderly transition to a low carbon economy.[31]

Financial deals supporting tar sands pipelines also appear to be at odds with some of the banks' own statements and actions. For example, it is difficult to reconcile Royal Bank of Canada's, TD's and Barclays' decision to fund the Kinder Morgan Trans Mountain Expansion project with their newly-announced work with the United Nations to "*develop analytical tools and indicators to strengthen their assessment and disclosure of climate-related risks and opportunities.*"[32]

Likewise Barclays' lending decision on the Kinder Morgan Trans Mountain Expansion project raises questions about the timing and long-term effectiveness of its plan "*to develop a strategic approach that is sustainable in the long-term*" for its global energy client portfolio.[33]

In its public statements, JPMorgan Chase has acknowledged the responsibility of the financial sector in safeguarding the global climate and protecting human rights. The bank's "Environmental and Social Policy Framework" recognizes the global consensus supporting the goal of the Paris Agreement to pursue efforts to limit global warming to 1.5 °C.[34] Yet, it previously acted as Lead Agent on two revolving credit facilities provided to subsidiaries of TransCanada, and on a revolving credit facility provided to a subsidiary of Enbridge Inc. It also participated as a lender in seven other relevant credit facilities to TransCanada, Enbridge, and Kinder Morgan. JPMorgan Chase was also a member of the syndicate for the recent construction loan for Kinder Morgan's Trans Mountain Expansion project.

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Questions for Banks

- If the bank has or intends to provide finance in connection with a tar sands pipeline project, how does the bank reconcile, from a climate risk mitigation perspective, its decision to lend on the one hand and its various statements and initiatives on climate on the other?
- Given the shifting fortunes of the tar sands as evidenced by the retreat by oil majors including Shell[35] and the tar sands' vulnerability from a wasted capital point of view to the impacts of climate policy and disruptive technology on global oil demand, what steps has the bank taken to assess its overall exposure to the sector? Does the bank have plans to reduce that exposure in the short-term?

Consumer backlash

Banks involved in the DAPL where these issues also arose faced intense civil society, media, investor, and consumer scrutiny with the closure of banks accounts with an estimated worth of $5bn.[36] Investors representing $653 billion in assets under management, including New York City pension funds and the California Public Employees Retirement System, signed an investor statement supporting a rerouting of the pipeline citing a need to "*protect the banks' reputation and consumer base and to avoid legal liabilities.*"[37]

Any financial institution associated with tar sands pipeline projects should expect to meet similar scrutiny and opposition from civil society around the world. Soon after President Trump approved the federal KXL permit, the Seattle City Council voted unanimously that it would not contract with any banks that finance TransCanada.[38] In May 2017, Native American leaders and activists occupied a number of Chase bank branches in Seattle forcing their temporary closure.[39]

Questions for Banks

- If the bank has or intends to provide finance in connection with a tar sands pipeline project, what steps will it take to mitigate the potential reputation risk and consumer backlash?

Conclusion

Despite the high-profile DAPL controversy, many banks risk now similarly face potential reputational and financial impacts through their decisions to fund one or more of the tar sands pipeline projects in the U.S., and Canada.

The expansion of the tar sands is incompatible with achieving the goals of the Paris Agreement. If no new tar sands pipeline projects are completed, there will be no pipeline export capacity for tar sands projects that have yet to break ground. In financing the construction of tar sands pipeline projects, banks therefore risk exacerbating climate change and climate risk.

Investors must question whether the banks are adequately assessing and addressing the full range of risks inherent in these controversial projects and whether the banks' decisions to lend are in the long-term best interests of shareholders.

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- Does the bank have plans to engage directly with potentially affected Indigenous Nations and Tribes and local communities along the proposed pipeline routes, independent experts, and with other stakeholders prior to financial close to ensure the bank's decision-making is based on information from a range of sources rather than just the borrower(s)?
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- Does the bank agree with the call by some Equator Principles banks to apply the FPIC standard in all countries?
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- Given the shifting fortunes of the tar sands as evidenced by the retreat by oil majors including Shell and the tar sands' vulnerability from a wasted capital point of view to the impacts of climate policy and disruptive technology on global oil demand, what steps has the bank taken to assess its overall exposure to the sector? Does the bank have plans to reduce that exposure in the short-term?
- If the bank has or intends to provide finance in connection with a tar sands pipeline project, what steps will it take to mitigate the potential reputation risk and consumer backlash?

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Endnotes

1 In this briefing 'Kinder Morgan', 'Enbridge', and 'TransCanada' are used to refer to Kinder Morgan Inc. Enbridge Inc. and TransCanada Inc. and to their relevant subsidiaries. Likewise, the short-form name of a bank is used to refer to the parent company and to their relevant subsidiaries.

2 Credit Agreement dated June 16 2017 between Kinder Morgan ULC as Principal Borrower, Trans Mountain Pipeline ULC as NEB Reserve Borrower, and the persons party thereto from time to time in their capacity as Lenders, and Royal Bank of Canada as Administrative Agent and with RBC Capital Markets, Canadian Imperial Bank of Commerce, the Bank of Nova Scotia and TD Securities as Co-Lead Arrangers and Joint Bookrunners. [https://www.sec.gov/Archives/edgar/data/1506307/000110465917040966/a17-15457_1ex10d1.htm]

3 Caisse Centrale Desjardins has subsequently confirmed in correspondence with Greenpeace that it has adopted a moratorium on future financing of energy pipelines until it completes a policy review.

4 In addition to this project credit facility, Kinder Morgan Inc. has existing revolving credit and term loan facilities under credit agreements dated September 9 2014 and January 26 2016 respectively which are scheduled to mature in 2019. There are a number of additional banks listed as lenders on one or both of those agreements who have not participated in the recent project facility. Accordingly, we have not not listed them. One of those is ING which has confirmed in correspondence with Greenpeace that its oil sands exclusion policy will extend to tar sands pipelines.

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