Tar sands mine in Alberta, *photo Pembina Institute*

HEADS IN THE SAND?

The Insurance Industry, Tar Sands and Pipelines

May 2018

Unfriend COAL

Tar sands mine in Alberta, *photo Pembina Institute*

EXECUTIVE SUMMARY

As professional risk managers, insurance companies act as a hidden hand shaping the direction of modern society, including in the energy sector. Without insurance against their serious physical, technical, legal, political and management risks, large fossil fuel projects such as mines, pipelines, refineries and power plants will not receive finance or government permits.

In a welcome trend, five global insurance companies have decided to stop or limit insuring coal projects or are about to do so, and at least 17 major insurers have divested an estimated $23 billion from coal companies in recent years and months. So far, only two insurers – AXA and Swiss Re – have taken action to stop or limit insuring tar sands projects.

Extracting and producing tar sands causes very high carbon emissions, poses massive risks to ecosystems and public health, and almost invariably violates Indigenous rights. Expanding tar sands extraction is incompatible with pathways to achieving the goals of the Paris Agreement. Insurers serious about their commitments to the Paris Agreement, Indigenous rights and broader ESG guidelines need to stop insuring tar sands projects, including the pipelines associated with them, and divest from specialized tar sands and pipeline companies.

Using the Trans Mountain Expansion Project in Western Canada as an example, this briefing paper introduces the problems with tar sands and pipelines and the role of insurance companies in the sector.

TAR SANDS AND CLIMATE CHANGE

Tar sands (known by the industry as oil sands) are a mixture of sand, clay and water saturated with bitumen, a highly viscous form of petroleum that is too thick to flow on its own. Because of the processes required to extract and refine tar sands, they emit significantly more carbon per barrel than conventional oil.

Just over 70% of global tar sands reserves are located in Alberta, Canada, particularly along the Athabasca River. Other large reserves are found in Kazakhstan, Russia, and Venezuela. This briefing paper focuses on tar sands in Alberta.

Canada's National Energy Board in its latest reference case expects tar sands production in Alberta to increase by 77% from 2016 to 2040, from 2.5 to 4.5 million barrels per day.[1] Such an increase in extraction will depend on two factors: Developers need to be confident that oil prices can be sustained at a level of at least USD 70 per barrel over the long term (which has not been the case since 2014), and new pipelines beyond those currently under construction need to be built.

With an emission intensity of 174 kg CO2e per barrel of crude oil, extracting and processing tar sands on average creates 2.2 times more carbon emissions per barrel than the average crude extracted in North America. If the full lifecycle of Canadian tar sands from extraction to combustion is assessed, their greenhouse gas emissions per barrel are 31% higher than the weighted average of North American crude oils.[2]

There is no credible path to achieving the climate goals of the Paris Agreement while locking in massive new emissions for decades by developing additional tar sands and pipeline projects. Oil Change International has calculated that an unrestricted expansion of Canada's oil production, most of which depends on tar sands, would exhaust 16% of the planet's carbon budget for staying below an average temperature increase of 1.5 degrees Celsius, and 7% of the carbon budget for staying below 2 degrees Celsius. (Canada accounts for less than 0.5% of the global population.) [3]

Extracting, processing and transporting tar sands is highly capital intensive. Even more than with most other fossil fuel infrastructure projects, investing in (and underwriting) tar sands projects locks in capital and high greenhouse gas emissions for decades at a time when the planet needs to rapidly transition to a low-carbon economy.

> As the Canadian government throws ever more tax dollars at destructive fossil fuel projects, responsible insurers need to make clear the age of tar sands is over.

Boreal forest along the Athabasca River in Alberta, *photo Pembina Institute*

PIPELINES - THE KEY TO UNLOCKING TAR SANDS EXTRACTION

Assuming other market conditions are aligned, below an oil price of USD 90 per barrel, pipelines are the only economic way of transporting large amounts of tar sands from Alberta to the refineries in the U.S. and to ports that serve overseas markets. Currently, three major new tar sands pipelines are proposed:

KINDER MORGAN'S TRANS MOUNTAIN EXPANSION PROJECT running to the coast of British Columbia (with a capacity of 590,000 barrels per day);

TRANSCANADA'S KEYSTONE XL pipeline running to Nebraska (830,000 barrels per day);

ENBRIDGE'S LINE 3 REPLACEMENT PROGRAM to Lake Superior (up to 525,000 barrels per day).

If no new pipelines are built, under current market conditions, tar sands extraction will not be able to increase beyond the limited space that can be created in pipelines already in use. Greenpeace and Oil Change International estimate that by bringing tar sands to the market, the three pipelines above would unlock a total of more than 400 million tons of $CO2$ emissions per year.[4]

TAR SANDS, ECOSYSTEMS AND INDIGENOUS RIGHTS

Extracting tar sands destroys large swathes of boreal forest, strip-mines the ravaged land or drills it through hugely polluting, energy and water-intensive processes. Tar sands also threaten ecosystems and public health through frequent pipeline spills. Tar sand spills in water are almost impossible to clean up because in contrast to other oils, bitumen sinks in water.

Many tar sands extraction and pipeline projects have been built and continue to be proposed on the traditional lands of First Nations and tribes without their free, prior and informed consent. These projects violate Indigenous Peoples' rights and irreparably damage their lands, water, and livelihoods. In the Treaty Alliance Against Tar Sands Expansion, over 150 Indigenous Nations have united to oppose the tar sands pipelines impacting their traditional territories. Through the Mazaska Talks campaign they have also targeted the financiers of the pipeline with a boycott.

THE TRANS MOUNTAIN PIPELINE EXPANSION PROJECT

Running parallel to an existing pipeline, the proposed Trans Mountain Pipeline Expansion Project would lead from Edmonton to Burnaby, close to Vancouver. The project has been proposed by Kinder Morgan, and could carry 590,000 barrels per year. After spinning off its Canadian projects including the Trans Mountain pipeline through an IPO, Kinder Morgan raised CDN $4 billion for the project through a syndicated loan, but still needs to raise about CDN $2 billion.[5]

The proposed expansion project would cross more than 1,300 water courses and threaten the drinking water of several communities and a city of 83,000.[6] It would also pass through Jasper National Park. Since its construction in 1961, the existing Trans Mountain pipeline has reported 82 spills.[7]

At the terminal the tar sands carried by the expansion project would be loaded onto 348 tankers per year and shipped through the Salish Sea. Fisheries experts at the University of British Columbia estimate that a large tanker spill could create damages of CDN$ 9.6 billion to marine businesses, not including clean-up costs.[8]

The Canadian government approved the expansion project, subject to numerous conditions, in November 2016. First Nations whose lands would be affected are opposing the pipeline, which they have called "Standing Rock of the North", through a variety of tactics.[9]

Indigenous claimants and their allies have filed 19 separate legal proceedings against the project.[10] The government and people of British Columbia are strongly opposed to the pipeline. In March 2018, as many as 10,000 people marched in Burnaby to protest the project.

On April 8, 2018, Kinder Morgan announced that it would "consult with various stakeholders" on the Trans Mountain Pipeline Expansion Project, and would suspend non-essential expenditures until 31 May. The First Nations of interior British Columbia have never ceded their lands to the Canadian government, and as the Indigenous Network on Economies and Trade commented, "Indigenous Peoples are not stakeholders, they are rights holders".[11] The failure to reach their free, prior informed consent will put the pipeline project at great risk.

> Insurance companies will tar their reputations if they underwrite some of the most destructive fossil fuel projects on the planet.

> Unsustainable business will become un-investable and uninsurable business.

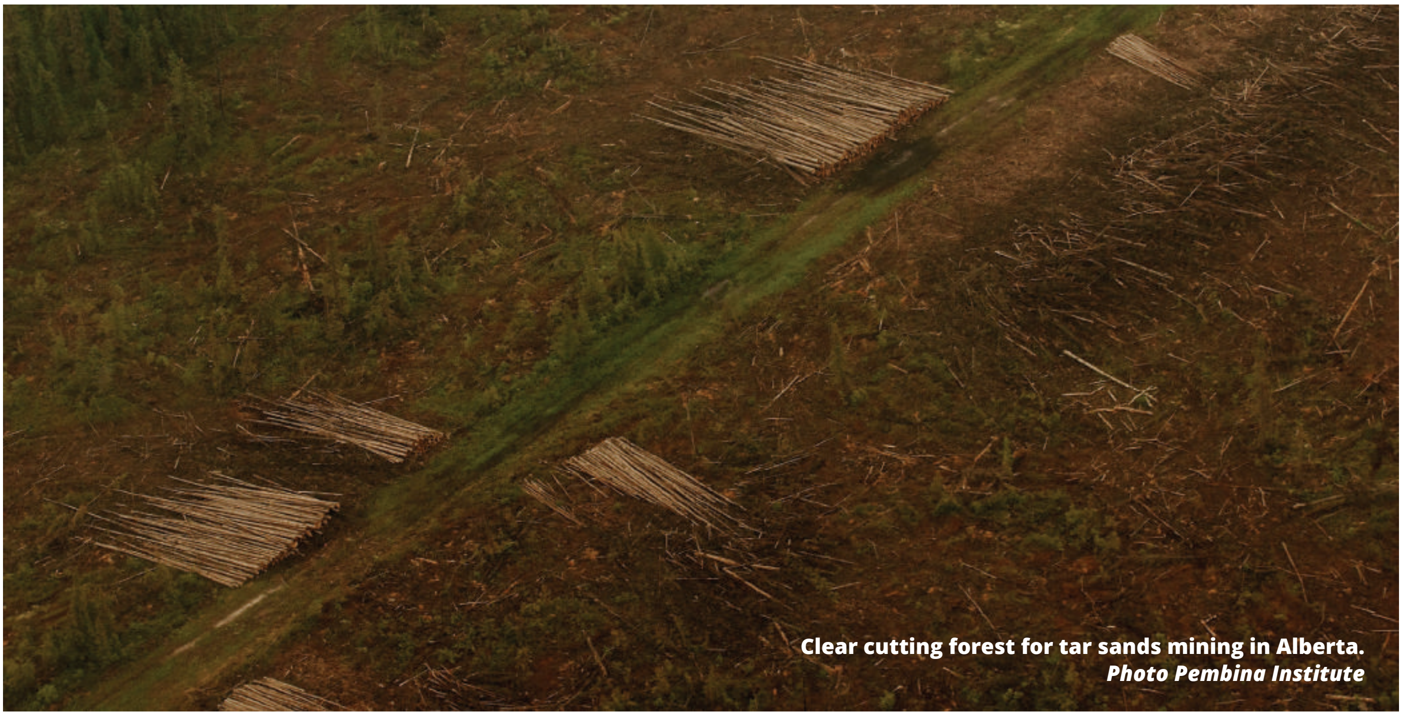
(Thomas Buberl, CEO AXA)

INSURANCE COMPANIES, TAR SANDS AND PIPELINES

Without insurance, tar sands and pipeline projects would not get funded and could not be operated.

The underwriters of specific projects are almost never disclosed, but many large insurers such as Allianz, Lloyds, QBE, Zurich and a number of U.S. and Canadian insurers are known to offer corporate insurance for tar sands and pipeline projects. In an unusual step, Kinder Morgan as part of the application for the Trans Mountain Expansion Project informed Canada's National Energy Board about the 25 companies which were insuring its ongoing operations with a $600 million General/ Excess Liability program in 2014. The list includes several large multiline and reinsurance companies as well as smaller insurers specializing in underwriting fossil fuel businesses as follows:

INSURANCE GROUP	NOTES
ACE	meanwhile operating under the Chubb brand, headquartered in Switzerland
AIG Cat Excess	U.S.A.
Alterra	a part of Markel, U.S.A.
Amlin	a Lloyd's syndicate, meanwhile acquired by Mitsui Sumitomo, U.K./Japan
ANV	a Lloyd's syndicate, part of AmTrust Group, U.K./U.S.A.
Arch	U.K./Bermuda
Argo	Bermuda
AXIS	Bermuda
AXIS	U.S.A.
Endurance	meanwhile acquired by Sompo, Bermuda/Japan
Great Lakes	part of Munich Re, Germany
Ironshore	meanwhile acquired by Liberty Mutual, U.S.A.
Ironstarr	Bermuda
Lancashire	U.K.
Lexington	part of AIG, U.S.A.
Liberty International	part of Liberty Mutual, U.S.A.
OCIL	Bermuda
O'Farrell	a Lloyd's syndicate managed by QBE, U.K./Australia
SCOR	France
Starr Surplus Lines	U.S.A.
Swiss Re	Switzerland
Torus	meanwhile acquired by Enstar Group and rebranded as StarStone, U.K.
Westchester	meanwhile acquired by Chubb, U.S.A./Switzerland
XL Insurance	under acquisition by AXA, Bermuda/France
Zurich	Switzerland


Clear cutting forest for tar sands mining in Alberta.
Photo Pembina Institute

With an estimated $31 trillion under management, insurance companies also belong to the world's largest institutional investors, including in the fossil fuel sector.[12] The Unfriend Coal company is currently researching the investment of leading insurers in coal and tar sands companies.

On May 22, 2018, 12 NGOs engaged in the Unfriend Coal campaign wrote to the CEOs of 25 leading energy insurers asking them:

NOT TO UNDERWRITE coal, tar sands and associated pipeline companies and projects;

TO STAY AWAY FROM the Trans Mountain, Keystone XL and Line 3 pipeline projects in particular;

TO DIVEST from coal, tar sands and associated pipeline companies; and

TO INCREASE their investments in and insurance services for clean energy companies accordingly.

In 2016 Swiss Re, the world's second-biggest reinsurance company, adopted a Sustainability Risk Framework which states: "In respect to oil sands transactions, we do not support operators and engineering contractors involved in oil sands greenfield mining." [13]

In December 2017, the world's second biggest direct insurer AXA announced that "because oil sands are also an extremely carbon-intensive form of energy and a serious cause of environmental pollution" it will divest "over Euro 700 million from the main oil sands producers and associated pipelines" and will no longer invest in these businesses. At the same time, AXA will "stop insuring the main oil sands and the associated pipeline businesses". [14]

"With all the decisions we announced today, we send a strong signal to everyone that, while this topic is complex, it can nonetheless be tackled", AXA CEO Thomas Buberl commented on the new policies. "Unsustainable business will become un-investable and uninsurable business." [15]

Other insurers who take their responsibility for mitigating climate change and their public reputation seriously need to exit the coal, tar sands and pipeline business as well. In November 2018, the Unfriend Coal campaign will publish a scorecard scoring insurance companies on their coal and tar sands policies, among other issues.

ENDNOTES

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