Tar Sands and Indigenous Rights

About IEN

Established in 1990 within the United States, IEN was formed by grassroots Indigenous peoples and individuals to address environmental and economic justice issues (EJ). IEN's activities include building the capacity of Indigenous communities and tribal governments to develop mechanisms to protect our sacred sites, land, water, air, natural resources, health of both our people and all living things, and to build economically sustainable communities.

IEN accomplishes this by maintaining an informational clearinghouse, organizing campaigns, direct actions and public awareness, building the capacity of community and tribes to address EJ issues, development of initiatives to impact policy, and building alliances among Indigenous communities, tribes, inter-tribal and Indigenous organizations, people-of-color/ethnic organizations, faith-based and women groups, youth, labor, environmental organizations and others. IEN convenes local, regional and national meetings on environmental and economic justice issues, and provides support, resources and referral to Indigenous communities and youth throughout primarily North America - and in recent years – globally

Indigenous peoples (known as First Nations) in Canada are taking the lead to stop the largest industrial project on Mother Earth: the Tar Sands Gigaproject. Northern Alberta is ground zero with over 20 corporations operating in the tar sands sacrifice zone, with expanded developments being planned. The cultural heritage, land, ecosystems and human health of First Nation communities including the Mikisew Cree First Nation, Athabasca Chipewyan First Nation, Fort McMurray First Nation, Fort McKay Cree Nation, Beaver Lake Cree First Nation, Chipewyan Prairie First Nation, and local Metis peoples, are being sacrificed for oil money in what has been termed a "slow industrial genocide". Infrastructure projects linked to the tar sands expansion such as the Enbridge Northern Gateway pipeline and the Keystone XL pipeline, threaten First Nation communities in British Columbia, Canada and American Indian communities throughout the United States. Community resistance is growing and Indigenous peoples throughout North America have mounted substantive challenges to tar sands expansion.

The tar sands are one of the largest industrial project on Earth

Just a few years ago, people in Canada, U.S. and Europe heard little to nothing about the Canadian tar sands. Today, the tar sands have become a topic of national and international discussion as stories of cancer epidemics in the community of Fort Chipewyan, massive wildlife losses related to toxic contamination, environmental degradation and increased vocal resistance from impacted communities have shattered the 'everything is fine' myth propagated by the Canadian and Alberta governments. A poll conducted in 2010 found that 50% of Canadian citizens believe the risks involved with tar sands projects outweighed the benefits.[1] Yet, tar sands expansion continues. Already the Athabasca delta has been completely altered from a pristine boreal forest, clean rivers and lakes to a devastated ecosystem of deforestation, open pit mines and watershed where fish regularly exhibit tumors and birds landing on contaminated tailings ponds die instantly.

What are the Tar Sands?

The tar sands or bitumen (a mixture of sand, clay and heavy crude oil) underlie 140,000 km^2 of Alberta's boreal forest, an area approximately the size of the entire state of New York. These deposits are the second largest source of oil in the world, eclipsed only by Saudi Arabia. Currently, the tar sands operations produce about 1.5 million barrels of crude oil each day, the majority (97%) of this oil is exported to the U.S. In the next decade, if the government and industry get their way, production is expected to double and reach 5 million barrels of crude oil each day by 2030.[2]

The deposits of Tar Sands in Alberta cover a surface area approximately the size of New York

Impacts:

- Currently, tar sands operations are licensed to divert 652 million cubic meters of fresh water each year, 80% from the Athabasca River. In comparison, this amounts to approximately 7 times the annual water needs of the city of Edmonton. About 1.8 million cubic metres of this water becomes highly toxic tailings waste each day.[3]
- In 2008, tar sands operations produced 37.2 megatonnes of greenhouse gas emissions, an increase of 121% between 1990 and 2008. Planned tar sands growth indicates a near tripling of emissions between 2008 and 2020, to a projected 108 megatonnes.[4]
- In 2006, unexpectedly high rates of rare cancers were reported in the community of Fort Chipewyan. In 2008, Alberta Health confirmed a 30% rise in the number of cancers between 1995-2006. However, the study lacks appropriate data and is considered a conservative estimate by many residents.[5]
- Caribou populations have been severely impacted by tar sands extraction. The Beaver Lake Cree First Nation has experienced a 74% decline of the Cold Lake herd since 1998 and a 71% decline of the Athabasca River herd since 1996. Today, just 175 – 275 caribou remain. By 2025, the total population is expected to be less than 50 and locally extinct by 2040.[6]

Extraction Methods

There are two main extraction methods to separate the crude oil from bitumen: surface mining and in situ technologies. In 2010, surface mining accounted for 52% of tar sands extraction. However, 80% of tar sands deposits are accessible only by in situ, whose production rates are expected to surpass mining by 2017.[7]

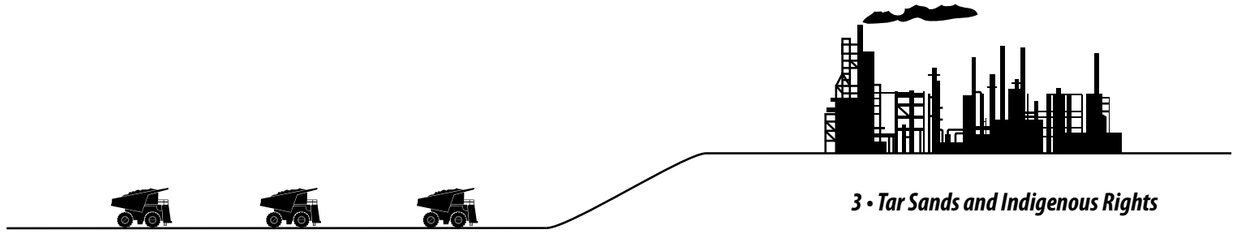
Surface Mining Method

Surface mining operations occur when tar sands are located within 100m of the ground surface. First, the 'overburden' (boreal forest) is removed by clearcutting, then the bitumen is stripped and transported using 'heavy hauler' trucks (over 3 storeys high) to industrial "cookers" where steam and chemicals separate the heavy crude from bitumen. To date, surface mining has been the primary method to extract tar sands. Currently, 4,800 km^2 of land are leased for surface mine operations.

Mining operation after the overburden (boreal forest) has been removed

Impacts:

- Each barrel of oil from surface mining requires 2-4 barrels of freshwater and produces about 1.5 barrels of toxic waste. This waste is held in 'tailings ponds', which in 2009 covered 130 km^2, holding 720 billion litres of toxic waste.[8] Each day, 11 million liters of waste leaks into the Athabasca River, representing approximately 4 billion liters of contamination each year.[9]
- Approximately 9.4 hectares of land or 18 football fields are consumed for each million barrels of oil mined. At current production rates, that represents 13 football fields of pristine boreal lost each day.[10]
- As of 2009, 686 km^2 of land had been lost to surface mining (up from 470 km^2 in 2007). Both industry and government claim these lands can be returned to natural landscapes through reclamation. After 50 years of operations, only 0.16% of land has been certified as reclaimed. The Alberta government does not have sufficient funds to reclaim lands. In 2010, the treasury held approximately $12,000 per hectare for reclamation, although the anticipated cost is much higher at $220,000 to $320,000 per hectare.[11]

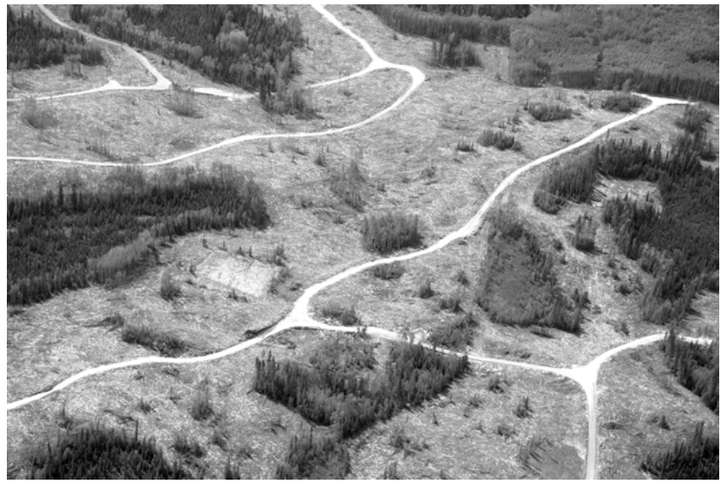


In Situ Method

In situ operations occur when tar sands deposits are located 100m under the ground or deeper. There are two main technologies for in situ: SAGD (Steam Assisted Gravity Drainage) and CSS (Cyclic Steam Simulation). Both technologies inject steam directly into the ground to separate the crude oil from bitumen, which is then pumped to the surface for processing. Currently, 79,000 km^2 (an area larger than Ireland) is leased for development.

Impacts:

- *In situ* requires vast amounts of natural gas and energy for extraction. In total, the tar sands use over 1 billion m3 of natural gas each year. The carbon footprint of *in situ* technology is three times that of surface mining (91 kg per barrel of crude oil for in situ vs. 36 kg per barrel of crude oil for mining). With in situ slated to replace mining as the primary source of tar sands oil, associated greenhouse gas emissions will make an already climate nightmare a climate disaster.[12]
- *In situ* requires 0.5 – 5 barrels of water for each barrel of oil produced, drawing largely from groundwater sources. Each barrel of oil produces about 0.5 barrels of waste. Generally, this waste is not treated and instead injected into the ground.[13] Both First Nations and farmers in the Cold Lake region adjacent to in situ operations have reported mysterious ponds smelling heavily of chemicals and oil after operations began.
- Industry and government promote in situ as having less impact on lands. However, when a full life cycle assessment of land disturbance is considered (including roads, pipelines and land fragmentation), in situ is projected to disturb 6,500 km^2 compared to 4,800 km^2 for surface mining methods.[14]



SAGD operations at the Long Lake Project cuts a network of paths through the Boreal Forest.

Expansion of a National Infrastructure:

The Enbridge Northern Gateway Pipeline

The impacts of tar sands extend beyond ground zero. Pipeline infrastructure and refineries threaten landscapes throughout North America, primarily in Indigenous, rural, poor and people-of-color communities. One of the large infrastructural developments in western Canada is the Enbridge Northern Gateway pipeline that would transport 525,000 barrels of oil from the tar sands in Alberta to tanker ports in Kitimat, British Columbia using two parallel 1,200 kilometre pipelines.[15]

Impacts:

- The project would cross 785 waterways, fragment wildlife habitat and impact fragile salmon fisheries.[16]
- The project would produce greenhouse gas pollution equivalent to the annual emissions of 1.6 million cars and consume the amount of natural gas used by 1.3 million households in Canada each year.[17]
- In 2010, Enbridge was responsible for a 1 million gallon spill of tar sands crude into the Kalamazoo River in Michigan, the second largest spill in US history. Enbridge has a long history of spills. Between 1999 and 2008, Enbridge operations were responsible for 610 spills that released close to 21 million litres of hydrocarbons into the environment. That's approximately half the volume of the Exxon Valdez spill in Alaska in 1988.[18]
- Pipelines fail. In Alberta, the oil and gas industry had 377,000 kilometres of pipeline in 2005 and averaged 762 pipeline failures per year between 1990 and 2005 for a total of 12,191 failures. Six percent of these (758) were ruptures and 94% (11,433) were leaks. The estimated life of the Northern Gateway pipeline is 28 years before a spill given geography, corrosion and potential for natural disasters through mountain ranges. [19] A spill is almost inevitable.

The Problem – An Environmental Justice Issue

Environmental racism is a reality of Canadian development projects and with tar sands in particular. In 2001, 1,200 First Nation communities lived within 200 km of mining operations nationally. Further, the Assembly of First Nations reported (2001) that 36% of all First Nation communities lived within 50 km of mining developments and associated pollution zones. This number has grown substantially over the past decade creating disproportionate impact and higher health risks as compared to the general population. Permitting and environmental assessment processes in Canada fail to recognize cumulative effects and lack indicators that assess cultural and spiritual impacts for First Nation communities. The Alberta tar sands developments have been fast-tracked through the weak regulatory process and have had inadequate consultation with First Nations leadership and communities. Rather, the Alberta and Canadian government rely on junk science put forth by industry and ignore the real concerns and well-being of First Nation peoples. As such, the battle over the tar sands mining comes down to the fundamental right to exist as Indigenous peoples. The tar sands are a human rights issue.

At ground zero, First Nation Treaties 1, 4, 6, 7, 8 and 11 state that the lands of First Nations cannot be compromised by uncontrolled development or threaten First Nations culture and traditional ways of life. Until recently, the remote community of Fort Chipewyan relied on an 80% subsistence diet. But now, pollution, boreal forest and ecosystem loss and habitat fragmentation is a direct threat to the cultural survival of Fort Chipewyan and other First Nation peoples living within the tar sands sacrifice zone. People are simply too afraid to drink the water or harvest plants and animals. Some do so anyways, to ensure the preservation of knowledge, though the risks are great. In BC, pipeline projects would cross already devastated salmon aquatic habitat and ecologically sensitive landscapes with potential spills that would further decimate the cultural heritage of First Nations peoples. The lands crossed by pipelines in BC are located on unceded territory, creating jurisdictional concerns for the governments of BC and Canada who have no legal right to grant permits for pipeline projects within these unceded lands, but they do so anyway.

The government of Canada has legally been forced by First Nations to consult with Indigenous communities about development projects. But consultation is just that, telling a community a project is being proposed that may or may not have impacts to a First Nation and the recognition of its Treaty rights. As of yet, there is no legal framework within the Constitution of Canada that recognizes the principles of Free, Prior and Informed Consent (FPIC) for the right of First Nations to say "No" to a proposed development In 2010, Canada signed the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), however with qualification, objecting to the FPIC principles, as central tenets of the Declaration.

Government and industry spend vast amounts of money on public relations campaigns with promises of jobs, environmental cleanup and carbon offset markets to create the illusion of an 'ethical, clean oil sands' industry.

Decades ago, the Alberta government enticed impoverished First Nations band councils to lease treaty reserve lands to the tar sands industry as a means for economic development and jobs. This allowed the first experiments with tar sands operations in the 1960's and 1970's on lands inhabited mostly by Dene, Cree and Métis people. Companies such as Exxon, Shell, Syncrude Canada, BP/Husky, CNRL and Suncor Energy moved into the area with well funded public relations campaigns targeting First Nation communities, schools, and senior citizens on how tar sand expansion would be good for its Indigenous neighbors. However, after decades, First Nation communities in Northern Alberta continue to suffer chronic unemployment. Many of the existing jobs for First Nations in the tar sands industry tend to be menial labor, not management level positions or monitoring positions. But with a rapidly growing population (80,000 Aboriginal people today as compared to 1,200 in 1960's), many communities are forced to choose between a paycheck and their health.

First Nation communities and citizens impacted by tar sands have observed that the governments of Canada and Alberta have largely handed responsibility for environmental monitoring and enforcement to corporations. But in fact, no real monitoring of tar sands has taken place. In December 2001, the Federal Environment Commissioner reported that for the last 20 years, water monitoring stations in Alberta had not been testing for pollutants associated with the tar sands. Instead, they had been testing for pollutants associated with the pulp and paper industry. The government has repeatedly ignored the concerns of both First Nations and scientists regarding tar sands, instead favoring unproven technological theories from industry and prioritizing trade ties with the US. Yet as evidence has mounted of the severe and irreversible impacts of tar sands, communities have organized strong opposition.

Resistance

As projects have grown, so too has resistance to tar sands. In Alberta, affected First Nations have launched a number of lawsuits to challenge tar sands developments and have built a substantial network of allies who together use education, civil disobedience, direct actions, and social networking to end tar sands exploitation. In 2008, the Beaver Lake Cree First Nation filed a lawsuit against the Government of Alberta based on 17,000 infringements of their treaty rights related to extraction in general and tar sands specifically. Similarly, in 2008 the Prairie Chipewyan First Nation filed suit against the Government of Alberta for not properly consulting the community about a tar sands project located on their traditional territory. In 2006, Athabasca Chipewyan First Nation (ACFN) filed suit for a similar lack of consultation, however the case was dismissed over a small technical issue. Had the case succeeded, it would have radically altered the ability of the Alberta Government to grant leases. ACFN has continued to be a leading voice in tar sands resistance at both the national and international level.

In BC, 61 First Nations signed a resolution in December, 2010 to oppose the Enbridge Northern Gateway pipeline. Building on this resolution, in Feburary 2011 the Yinka Dene Alliance rejected an offer from Enbridge for 'revenue sharing' benefits representing more than $1.5-billion in cash, jobs, business opportunities during the next 30 years, as well as a 10% stake in the project stating that water, land and cultural heritage were more important than short-term financial gain. Similarly, in August of 2010, the indigenous hereditary chiefs of the *Wet'suwet'en* First Nation issued a final notice of trespassing to Enbridge, stating the company was no longer welcome on their territory. Since then, community members have constructed a traditional long house directly in the path of the proposed pipeline and are resolute that pipelines will not cross their territory.

The Indigenous Environmental Network has been an effective Indigenous-based network lifting up the collective voices of Indigenous grassroots and concerned elected First Nation leadership affected by the tar sands. Effective organizing on the tar sands campaign must directly involve impacted First Nation and Métis communities. Aboriginal title, a legal term that recognizes Aboriginal rights to land, encompasses large areas of land of Alberta and throughout Canada. First Nations and their Indigenous members are not mere stakeholders, but are rights-holders that have treaty rights and who maintain nation-to-nation political and legal relations with Canada.

Protest oustside of Parliament building

The Indigenous Environmental Network, Canadian Indigenous Tar Sands Campaign works with Indigenous and non-Indigenous supporters and environmental organizations, social justice organizations and unions for a coordinated and collective response led by concerned First Nations and Métis opposing the expansion of the tar sands.

Take Action!

- Respect our Original Instructions, traditions and responsibility to protect the sacredness of our Mother Earth.
- Demand the Alberta government halt tar sands expansion, address environmental damages and remediation and address human health issues impacting the First Nations, as a result of tar sands operations.
- Demand the Canadian and U.S.A federal government recognize Aboriginal Treaties 1, 4, 6, 7, 8, and 11 and all U.S.A Indian Treaties obligations of the concerns of the First Nations and American Indians pertaining to the treaty and human rights abuses, the human and ecological health crisis, the climate change impacts, the damages to water and air quality and the recognition of First Nations and American Indian sovereign rights to implement their own environmental and health infrastructure to regulate and enforce their own laws within their lands and territories.
- Demand Enbridge stop the Northern Gateway Project and that the Government of Canada negotiate in good faith with Indigenous communities in BC.
- Demand the national and international financial and banking institutions immediately Divest from the tar sands expansion and operations.

For more information:

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