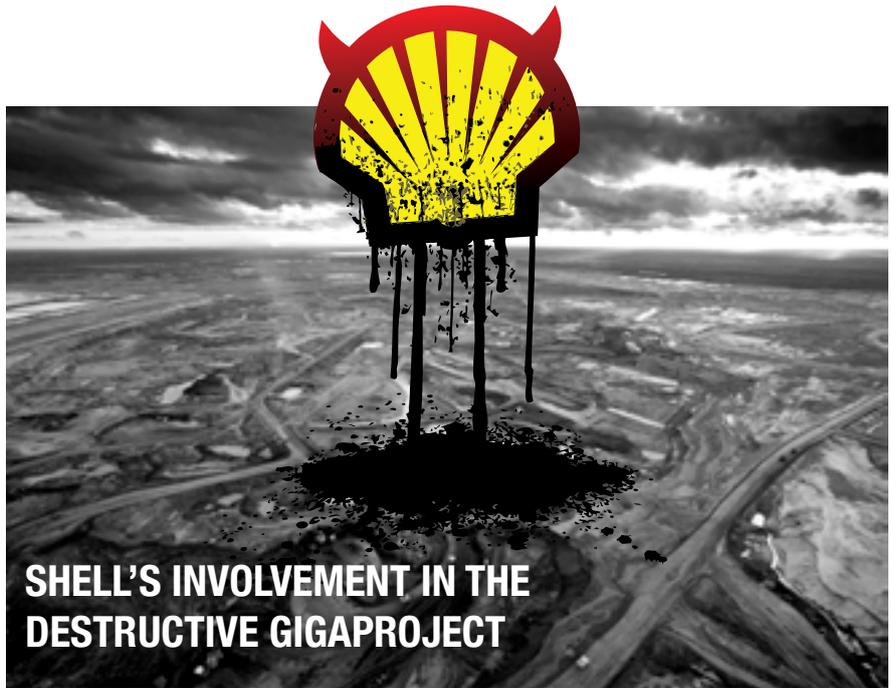


GET THE SHELL OUT OF THE TAR SANDS



SHELL'S INVOLVEMENT IN THE DESTRUCTIVE GIGAPROJECT

The tar sands gigaproject is the largest industrial project on earth and has been termed 'a slow industrial genocide' by First Nations communities downstream from operations. Royal Dutch Shell is one of the largest players in tar sands, producing approximately 276 000 barrels per day or roughly 20% of total exports from Alberta. Shell has put forth applications to expand its capacity through new mines and *in situ* projects, to a projected 770 000 barrel per day capacity. However, strong community resistance to Shell has damaged their reputation with both shareholders and the public. Indeed, Shell has been named in five lawsuits related to tar sands developments and has faced shareholder resolutions demanding greater clarity over the risk of tar sands investments.



About IEN

Established in 1990 within the United States, and working in North America and internationally, 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.

About UK Tar Sands Network

The UK Tar Sands Network campaigns in partnership with Indigenous communities affected by the Tar Sands oil developments in Canada. We target governments, UK companies, banks and investors operating in the Alberta Tar Sands. We work with climate activists, environmental NGO's, student campaigning groups, and anyone else who is concerned about the impacts of Tar Sands. We are also linking up with other EU groups, to keep Europe out of the world's most destructive project.



What are the Tar Sands?



The tar sands or bitumen (a mixture of sand, clay and heavy crude oil) underlie 140,000 km² 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 2030.¹



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



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

Extraction Methods



There are two main extraction methods to separate 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 2017.²

Surface Mining Operations

Shell operates the Albian Sands Mine, Muskeg River Mine, Jackpine Mine and the Scotford Upgrader. 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, 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 km², holding 720 billion litres of toxic waste. Each day, 11 million litres of waste³ leaks into the Athabasca River from tar sands operations, representing approximately 4 billion litres of contamination each year.⁴

Shell's tailing ponds cover 12 km², or approximately 2200 football fields.⁵ In 2009, Shell reported 359 spills from its operations.⁶ In December 2010, Shell was unable to contain a spill at its Muskeg River Mine, where tailings waste mixed with deep underground



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

aquifers. Spills from surface mining operations are particularly concerning as already high levels of arsenic, cadmium, lead and nickel found in tailings ponds has increased by 30% over the past four years according to Environment Canada.⁷ These toxins are known carcinogens and leaks have had devastating impacts on human and ecological health. In 2006, unexpectedly high rates of rare cancers were reported in the community of Fort Chipewyan, located downstream from Shell operations. 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.⁸

"Our community of Fort Chipewyan is in direct threat of becoming extinct because of the fact that the tar sands are polluting the water. I want the whole world to know we have a crisis going on in our town. Kids are wary about swimming in the lake and eating fowl or fish from the area which could be contaminated with arsenic and mercury due to oil sand production. Our whole tradition and way of life is in jeopardy."

- Lionel Lepine of Athabasca Chipewyan First Nation



In Situ Operations

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

reported mysterious ponds smelling heavily of chemicals and oil after operations began.

Melina Laboucan-Massimo, Greenpeace Climate and Energy Campaigner and member of the Lubicon Cree First Nation observes,



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

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, Shell operates in both the Peace River and Cold Lake regions through the Peace River Complex, Cliffdale Battery operation, Seal Battery operation and Orion Complex. *In situ* requires 0.5 – 5 barrels of water for each barrel of oil produced, drawing largely from groundwater sources. 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 km² compared to 4,800 km² for surface mining methods.⁹ Each barrel of oil produces about 0.5 barrels of waste. Generally, this waste is not treated and instead injected into the ground.¹⁰ Both First Nations and farmers in the Cold Lake region adjacent to *in situ* operations have

“While open pit mines are visually horrifying, the *in situ* method of extraction is far more carbon-intensive, water-intensive, and energy-intensive. *In situ* completely fragments the boreal forest in Canada, which is the largest terrestrial carbon sink in the world. Local communities are continually bearing the brunt of the detrimental effects of Shell’s tar sands projects whether it be from toxic emissions and water contamination to the complete fragmenting and decimation of the boreal forest - tar sands development is completely altering our homelands and destroying the very foundation of who we are as Indigenous peoples.”

The Peace River complex, Shell’s largest *in situ* project, has received heavy criticism from local communities, who report chronic emission concerns and impacts on lands. In February, 2011, Shell confirmed a sour gas leak at the Peace River complex after residents up to 40 km away reported smells of rotten eggs. The plant was unable to control the vent for 52 minutes.¹¹

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-Melina Laboucan-Massimo, Greenpeace Climate and Energy Campaigner and member of the Lubicon Cree First Nation



The Little Buffalo Cree Nation shares their community sign with Shell corporation. Shell’s operations continue to devastate the lives, ecology and health of local communities in Alberta Canada

Canada’s Tar Sands on Shaky Legal Ground



Today, the legal basis for Canada’s tar sands developments rests on shaky foundations. The Government of Canada holds a unique legal relationship with Aboriginal (First Nation, Metis and Inuit) Peoples. In the past, Aboriginal Rights were largely ignored in development projects. However, over the past 30 years Canadian courts have recognized a ‘nation to nation’ relationship between Aboriginal peoples and the Canadian state. Moreover, they have ruled against the state several times in cases where Aboriginal Rights were undermined or ignored.

In 1973, the Supreme Court of Canada ruled in *Calder vs. British Columbia*, that Aboriginal peoples in Canada held title to the lands of North America prior to the colonization period. The case had huge ramifications for Canada as any lands not clearly ceded through Treaties could be legally considered Aboriginal and not Crown land, representing huge areas in the North, Ontario, Quebec, East Coast and almost all of British Columbia. The precedent set an important context for Aboriginal peoples: that the Crown would have to negotiate and settle outstanding land claims.

In 1982, following the *Calder* case, the Canadian government ratified Section 35 of the Canadian Charter of Rights and Freedoms, which states, “The existing aboriginal and treaty rights of the aboriginal peoples of Canada are hereby recognized and affirmed.” Legally applied, Section 35 has meant that there is a duty for government to both consult Aboriginal peoples on development projects and accommodate their concerns. Subsequent cases have demonstrated that Aboriginal peoples have two types of rights: substantive rights (to hunt, fish or harvest) and procedural rights (the right to be honourably consulted). Today, consultation remains a grey area in law as the courts have failed to clearly define what consultation means.

Jurisdictional issues between the provincial and federal governments further complicate consultation processes. In 1930, the Federal government transferred responsibilities for natural resource management to provinces under the Natural Resources Transfer Agreements. Essentially, the provinces would be responsible for setting environmental and development policies. However, with respect to Aboriginal peoples, the Federal Government holds fiduciary duty, which means any consultation or accommodation of Aboriginal concerns rests solely with the Federal government. In practice, provincial governments and even industry have been ‘designated’ as representatives of the Federal government.

The government of Alberta has traditionally held little regard for consulting Aboriginal peoples on development projects. However, the Federal and Supreme Court have overturned several provincial decisions to ensure the protection of Aboriginal Rights.

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Company Conflict and Legal Complications



Shell has faced a series of legal issues over its tar sands operations. To date, four First Nations communities have named Shell in legal proceedings and the company faced a lawsuit in 2009 launched by Ecojustice.

In 2007, the Woodland Cree First Nation filed suit with the Alberta government and Royal Dutch Shell over inadequate consultation regarding an *in situ* expansion, located within 10 km of their Traditional territory. WCFN residents have expressed concern about respiratory illnesses, wildlife health and contamination of Cadotte Lake from existing tar sands operations. However, a change in leadership within the band council has prevented further pursuit of the challenge.

In 2008, the Athabasca Chipewyan First Nation also named Shell in a suit filed against the Government of Alberta over lack of consultation. Shockingly, the court of appeal ruled that a government post on an obscure website constituted consultation, rather than face-to-face (or rather, nation to nation) discussion. The decision is contested, as it ignores both technological divides and good faith negotiations on behalf of the Crown, and will likely be challenged at the Supreme Court of Canada.

In 2008, the Beaver Lake Cree First Nation named Shell in a lawsuit based on 17,000 infringements of their treaty rights related to extraction in general and tar sands specifically. Beaver Lake argues that they are unable to maintain their way of life due to the severe impacts tar sands operations have had on lands and wildlife. The Beaver Lake Cree have experienced a 74% decline of the Cold Lake caribou 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 2040.¹² Beaver Lake specifically is concerned about the Orion *in situ* project, which will further decimate caribou populations through habitat fragmentation.

In 2009, Ecojustice filed suit against Shell for breaching signed commitments with the Government of Alberta to reduce carbon emissions for the Jackpine and Muskeg River mines. When Shell failed to implement lower carbon emissions, the Alberta courts shockingly instructed regulators to ignore the breach. Alberta courts have dismissed the Ecojustice case. However, the ruling has prompted both politicians and Alberta residents to demand an overhaul of regulatory approval processes in Alberta.

In 2010, both the Duncan and Horse First Nations were granted intervener status in a Supreme Court of Canada case dealing with issues of consultation. The Duncan First Nation was not properly consulted about the impacts of the Peace River *in situ* complex, located on its traditional territory.¹³ The community reports massive losses of wildlife and habitat fragmentation. Duncan opposes the Carmon Creek expansion project, which would increase *in situ* production in the area ten fold.¹⁴



Warning of poisonous gas near extraction in Peace Region

Expansion and Investment Plans:



More Impacts and More Opposition

Shell is uniquely vulnerable to market fluctuations as 30% of its oil resources are classified as unconventional, requiring a consistently high oil price to remain viable. Shell has already cancelled plans for upgrader expansions and slowed its tar sands expansion plans. CEO, Peter Voser, stated in 2010 that the costs in the tar sands are making investment there less attractive and expansion is significantly slowed.

Still, current expansion plans will increase Shell's tar sands output by nearly 300%, exacerbating already devastating impacts on First Nation communities. The recently started Jackpine Mine operation is designed to produce 220 000 barrels per day and the proposed Pierre River Mine would add an additional 200 000 barrels per day. *In Situ* operations are expected to increase by 80 000 barrels per day.

Community resistance with allies has created a new wave of awareness about Shell's impact on Alberta's lands. During Shell's 2010 AGM, Co-operative Asset Management and 141 other institutional and individual shareholders raised "concerns for the long-term success of the company arising from the risks associated with oil sands." 11% of Shell shareholders supported a resolution asking Shell to publish details of the environmental, social and financial risks associated with their tar sands developments. While the resolution was not binding, many shareholders are now asking questions about the economic, social and environmental sustainability of tar sands projects.

Public opinion is shifting about tar sands and communities are gaining increased support from allies and the public. 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.¹⁵ Clearly, Shell will need to account not only to Canadian Courts, but the Canadian public.



Protest outside of Parliament building





- Shell needs to assess and disclose information through an independent review of the social, environmental and economic impacts of its operations in Alberta
- Shell must develop revised investment mandates drawing on expertise and guidance from independent sources and best practices in the financial sector to identify and mitigate the health impacts of tar sands on First Nation communities
- Shell must make the right to Free, Prior and Informed Consent of Aboriginal peoples a pre-condition of all projects.
- Shell needs to immediately stop expansion in the Canadian Tar Sands, and start phasing out its role in this development with a clear time frame for withdrawal.

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