



TAR SANDS:

EUROPE'S COMPLICITY IN
CANADA'S CLIMATE CRIMES



**Friends of
the Earth
Europe**



GLOSSARY:

GHG - greenhouse gases

UNFCCC - United Nations For Climate Change Conference

bpd - barrels per day

CERI - Canada Energy Research Institute

CCS - Carbon Capture and Storage

INDC - Intended Nationally Determined Contributions

FQD - Fuel Quality Directive

MEP - Member of European Parliament

INTRODUCTION

Climate change is a crisis like no other the world has ever faced. Few issues in human history have demanded such widespread international response. Few times in human history has there been so much at stake.

After two decades of international climate negotiations the world is still faced with catastrophic climate change. Despite a mountain of peer-reviewed scientific data showing emissions that cuts are vital to avoid a dangerous rise in the planet's temperature of more than 1.5 degrees or the globally agreed target of two degrees, the production of global warming greenhouse gases (GHG) emissions continues to rise. This failure to face up to the scale of action needed to avoid climate catastrophe threatens the lives and livelihoods of billions of people around the world.

Representatives of 196 nations will meet this November and December under the United Nations Framework Convention on Climate Change (UNFCCC) in Paris. They will negotiate and aim to decide on a new international climate agreement that should bring the world back from the brink of climate crisis. The conference, also known as COP 21, carries with it a great deal of hope, but there is cause to be pessimistic about its outcome.

Earlier this year, countries submitted their national climate pledges to lay the groundwork for the upcoming climate conference. Friends of the Earth Europe and other civil society groups have analyzed the Intended Nationally Determined Contributions (INDCs) and concludes - taken as a whole - the INDCs are not nearly adequate enough and

those most responsible for climate change are putting us on course for irreversible and evermore devastating climate change impacts, instead of taking the urgently needed transformational action to reduce their carbon emissions. Even if all countries meet their INDC commitments, the world is likely to warm by a devastating 3 degrees or more.

The European Union is committing to 40% cuts below 1990 levels by 2030¹. The U.S. commitment is to make 26-28% cuts from 2005 levels by 2025. The INDCs of both countries is an improvement on their previous GHG reduction targets, but far away from tackling the climate crisis. Rich industrialised nations, those most responsible for and capable of responding to the climate crisis, including the EU and U.S. need to live up to their responsibility to tackle it.

Canada has so far failed to deliver on climate action. Unlike the EU it has abandoned its commitments to the Kyoto Protocol and the country is currently on track to exceed 1990 levels by at least 18%. The Canadian government has now announced it would reduce its GHG emissions by 30% based on 2005 levels by 2030 but this target is only 14% below 1990 levels. Canada's response to climate change is still not convincing.

Nature, the world's leading scientific periodical, published a scathing report² earlier this year that 85% of Canadian tar sands reserves must stay in the ground to hold the rise in global temperatures below two degrees.³

SO WHAT IS GOING ON WITH CANADA?

This report will argue that tar sands and the tar sands industry (also known as oil sands) are at the heart of Canada's failure to live up to its responsibilities to tackle climate change. This unconventional oil, found in the northern wilderness of western Canada, is the fastest growing source of GHG emissions in the country and has been primary focus of the pro-tar sands Canadian government under former Prime Minister Stephen Harper for the last decade.

Nature, the world's leading scientific periodical, published a scathing report² earlier this year that 85% of Canadian

tar sands reserves must stay in the ground to hold the rise in global temperatures below two degrees.³ Despite these warnings, the Canadian government under Harper plunged the country down the path of rapid expansion of the tar sands industry. The Canadian government remained a cheerleader for tar sands even at the risk and expense of climate destruction to the bitter end.

Canada is now at a turning point. Canadians voted Harper's government out of office in October and Canada's new Prime Minister, Justin Trudeau, has pledged Canada will meet its international obligations to cut GHG emissions. Unfortunately, Trudeau, although expressing more concern about the climate than his predecessor, is also a supporter of tar sands development.

THE WORLD MUST DRAW A LINE IN THE SAND AGAINST THIS 'DIRTY OIL' INDUSTRY

The EU has been thus far quietly complicit in Canada's climate crime. European banks and oil companies reap great profits from tar sands development, despite the recent drop in oil prices⁴ and even EU legislation has been rewritten to cater to the industry's demands. All of this is at the expense of the people, environment and climate directly impacted by tar sands development.

Ultimately, Canadians, not Europeans, will decide the fate of the tar sands. But the European Union cannot give Canada a free pass and allow this dirty oil to be exported to the EU. Europeans fuelling their cars with tar sands oil is completely at odds with the EU's own climate policy.

This report recommends the European Union ban the import of tar sands oil to keep in line with the EU's own measures to reduce GHG emissions. The EU and Canada cannot continue to keep their 'heads in the tar sands' and ignore the threat this GHG-intensive industry poses for the planet. Furthermore, with change in the air in Canada, a EU ban on tar sands imports would send a clear message to the new Canadian government it needs to break with its recent past as a tar sands champion and help ensure it stays in the ground.

Canada has failed to live up to its responsibilities to tackle climate change

Canada, once admired worldwide for its environmental stewardship, has consistently failed to meet its global responsibility to mitigate the impact of climate change. Despite a relatively small population and domestic hydroelectricity generating a whopping 59% of the country's electricity⁵, Canada still ranks among the world's top 10 heaviest GHG emitters.⁶

Canada's current international commitment (Cancun Agreements, 2010) is to reduce emissions to 17 per cent below 2005 levels by 2020.⁷ There is every indication that the country will miss this target by a wide margin. Environment Canada, the country's environment ministry, reports that Canada's GHGs continued to rise through 2013,⁸ putting those targets firmly out of reach.⁹

Countries were asked to submit their climate action plans in the lead up to the UN climate change conference in Paris this November. The Intended Nationally Determined Contributions (INDC) plans, though focused only on mitigation and not dealing with financial support, will serve as the primary indicator of a country's level of ambition toward tackling climate change. Accordingly, Canada announced in May that it would reduce its carbon emissions by 30% below 2005 levels by 2030.

The announcement was widely condemned.

It was quickly noted that this target was only 14% below 1990 levels¹⁰, with the country already exceeding 1990 levels by 18%¹¹. When compared to commitments made by other high-emission countries, the target looks even worse. The US commitment is to 26-28% cuts from 2005 levels by **2025** - a challenge more ambitious than Canada's. The European Union, meanwhile, is committing to 40% cuts below 1990 levels by 2030.¹² Canada is far behind and slipping.



Canada's new Environment Minister, Catherine McKenna, recently stated the current Canadian government wants to improve on Canada's previously submitted GHG reduction target, but did not elaborate what a revised target for the country would look like. Canada will thus be taking the former Conservative government's climate game plan to the Paris climate talks.¹³

Canada does not have a strong history of meeting its climate commitments, suggesting that this latest failure to make emissions progress is not merely an aberration. Canada originally signed the Kyoto Protocol - the world's first greenhouse gas reduction treaty - in 1997 under a Liberal government, but failed to meet its targets. Under the Harper government, the country withdrew in 2011 with emissions actually going up. The Canadian government's 2008 Turning the Corner¹⁴ plan was also supposed to see the country reduce emissions by 20%, relative to 2006 levels by 2020, but the government abandoned this plan within a year.¹⁵

Having consistently set low targets and failed to meet them, Canada has demonstrated a firm unwillingness to lead on international climate action and a reluctance to even keep pace with its peers, despite the country's large carbon footprint. Its recent refusal to participate in global efforts to stop climate change stems from a clear and deliberate set of national policies and objectives directly at odds with international climate change action. Mainly, those policies seek to exploit one of the most GHG-intensive forms of oil on the planet: the tar sands.

Canada's Mordor: Environmental Impacts of Tar Sands Development

The fact anyone has gone to the enormous effort of developing tar sands oil speaks to how desperate the world's addiction to oil has become. This unconventional oil is a tar-like form of petroleum mixed with clay, sand and water.¹⁶ The tar sands require immense amounts of capital, energy and water to extract and process.

Found in western Canada (primarily in the province of Alberta), the Canadian tar sands are the world's third largest oil reserve behind only Saudi Arabia and Venezuela and their respective oilfields. The vast majority of 166 billion barrels¹⁷ of proven Canadian tar sands reserves are still untouched, lying beneath pristine boreal forests. With the sudden surge in oil prices in the early 2000's and a low royalty¹⁸ and taxation regime¹⁹ that favours industry, it became economically viable to develop what opponents often refer to as "dirty oil".

Fossil fuels extraction is typically extremely invasive, and the tar sands are no exception. Tar sands development has and is taking a tremendous toll on the environment and the people (mainly Indigenous Peoples) living downstream from the industry.

Extraction Methods: Two methods are commonly used by industry to extract tar sands oil: surface mining and onsite or in-situ water injections to 'steam' tar sands crude to the surface. Both methods are detrimental for the local environment.

Surfacing mining involves clearing away entire forests (considered overburden by industry) with some of the world's largest construction equipment²⁰ to remove and transport freshly extracted tar sands oil in heavy-haul trucks (the trucks can be as large as a two-story house²¹). A tar sands open-pit mining operation leaves behind a landscape devoid of vegetation. It is for this reason the tar sands have often been called by critics "Canada's Mordor",²²

The tar sands take up an area the size of England or Belgium.

Industry is required to 'reclaim' the land, that is, return the land to a natural state. The idea itself is highly questionable, since returning an ecosystem that has developed over centuries back to its original state is likely impossible. The Government of Alberta defines reclamation as:

"The ability of the land to support various land uses after conservation and reclamation is similar to the ability that existed prior to any activity being conducted on the land, but that the individual land uses will not necessarily be identical."²³

Only 0.15% of the land damaged by tar sands projects has actually met this vague criteria of being reclaimed.²⁴

With such a low remediation rate the potential for full scale, and permanent degradation of the land is immense - the tar sands take up an area of Alberta around the size of England or Belgium (142,200 kilometre sq.).²⁵ That being said, roughly 97% of tar sands deposits are too deep below ground for open-pit mining.²⁶ Still, the area that could be surface-mined and irreparably altered is nearly five times the size of Berlin.

In-situ or onsite methods are used to extract tar sands oil when open-pit mining is not possible. In-situ methods require more energy (usually natural gas) than surface mining and are largely the reason tar sands oil requires 3 to 4 times more GHG to extract than conventional oil, on average.²⁷

Well pads covering an area larger than a soccer field²⁸ are constructed to blast high temperature steam underground in order to melt tar sands deposits at depths of up to 500 meters (as hard as a hockey puck at this depth).²⁹ Once liquefied, the tar sands crude is pumped to the surface.

In-situ extraction takes its own toll on the land. Forests are cut and dissected to make way for well pads and a supporting network of pipelines, service roads and power lines. In 2013, an in-situ project gone wrong resulted in a tar sands emulsion, where tar sands crude mixed with water came gushing to the surface polluting the land and waterways in the surrounding area.³⁰ It remained unclear for a long time if the company had successfully brought the emulsion under control.

WATER: As an unconventional oil, the tar sands require vast volumes of water to extract and process. Much of this water is drawn from the Athabasca River, part of the Mackenzie River Watershed, Canada's largest river system.³¹

The oil industry is devouring water at an alarming rate.

In 2011 alone, tar sands operations consumed 170 million cubic metres of water,³² equivalent to the annual usage of Barcelona.³³ Most of this water is too toxic to be returned to rivers and aquifers and is permanently removed from the water cycle.

Dealing with this wastewater is a dilemma industry has yet to solve. The most commonly practiced method of dealing with this tar sands toxic sludge is to store it in massive dams made of earth. Canada is now home to two of the world's three largest dams because of tar sands development. Both dams (referred to as tailings ponds by industry) store tar sands wastewater and can be seen from outer space.³⁴

Per barrel of tar sands oil, surface-mining consumes more water than in-situ operations and three times more freshwater when compared to conventional oil.³⁵ It takes on average three barrels of water to produce one barrel of mined tar sands oil.³⁶ After being trucked to extraction facilities, mined tar sands crude is heated with hot water to separate the oil (called bitumen) from the clay, and sand.

Eleven million litres of toxic water seeps from tar sands dams (comprising an area 176 kilometres sq.) everyday.³⁷ The Canadian government long denied the dams leaked, but an Environment Canada study released in 2014 found the tailings dams are seeping toxic water into the Athabasca River.³⁸ Environment Canada in its report cited previous studies indicating a one dam alone is leaking 6.5 million litres a day.

The ongoing leaching of toxins into the freshwater system surrounding the tar sands industry may also be affecting local wildlife and local communities.³⁹



INDIGENOUS PEOPLES ARE THE FRONTLINE COMMUNITIES IN THE STRUGGLE AGAINST THE TAR SANDS:

The communities living downstream from tar sands development are largely Indigenous Peoples who have lived on the land for thousands of years. Their ways of life, health and cultures are put at risk by tar sands development.

TAR SANDS ON TRIAL: The Beaver Lake Cree or “Amisk Sakahikan Nehiyaw” in the Cree language filed a lawsuit against the governments of Alberta and Canada in 2008⁴⁰ for the 19,000 tar sands and other energy projects taking place on their traditional territory.⁴¹ They argue in their case⁴² that the cumulative impacts of all these industrial developments infringe upon their constitutionally protected treaty rights to hunt, trap and fish on their traditional territory.⁴³

Front and centre in this case are the declining numbers of woodland caribou (a traditional food source and resource for the Beaver Lake Cree) in the area of tar sands development. Loss of habitat to tar sands projects is widely believed to be one of the main causes of the population decline.⁴⁴

When the Federal Court of Canada ruled in 2011 Canada had the legal duty to protect the caribou population⁴⁵ the federal government’s response, instead of restricting the tar sands industry was to begin culling wolves in northern Alberta.⁴⁶

This tiny First Nation of a little over 900 members continues to battle the Canadian government in court to this day. The Canadian government has fought fervently against the claim every step of the way demanding the courts dismiss the case outright and not even hear a word of what the Beaver Lake Cree have to say.⁴⁷

The local Athabasca Chipewyan First Nation also took the Canadian government to court over tar sands development on their traditional territory, but lost the case earlier this year.⁴⁸

CANCER IN FORT CHIPEWYAN:

Fort Chipewyan is a small town of one thousand residents, who are predominantly Indigenous Peoples (Cree, Dene and Metis). Fort Chip, as the locals call it, has been at the centre of an unresolved tar sands controversy for more than decade.

In 2006, Irish-born physician Dr. John O'Connor raised the alarm about a possible link between tar sands pollutants and a rare type of cancer he had discovered in the population of Fort Chip.

O'Connor, who had been serving the community since 2000⁴⁹, found four cases in Fort Chipewyan of a type of bile duct cancer that usually appears in one in every 200,000 people. Other unusual diseases such as lupus and renal failure also afflicted residents at a higher-than-average rate.⁵⁰

The actual cause of this aggressive type of cancer is not known, but the medical community does speculate it is linked to exposure to industrial toxins.⁵¹ Toxins like polycyclic aromatic hydrocarbons (PAH) are one of the pollutants associated with tar sands extraction⁵² and have been known to cause cancer.⁵³

O'Connor pressed the Alberta government to conduct a long-term cancer study on the community of Fort Chip to determine what was causing the cancer. O'Connor himself did not directly blame the tar sands industry for causing the cancers. He was simply looking for answers.

After O'Connor took his concerns to the media, Health Canada, the Canadian federal health department, accused him of causing "undue alarm" in the community and filed formal complaints against him.

After O'Connor took his concerns to the media, Health Canada, the Canadian federal health department, accused him of causing "undue alarm" in the community and filed formal complaints against him.⁵⁴ He was absolved of all charges except one after a health study concluded cancer rates from 1995 - 2006 in the local population were 30% higher than expected.⁵⁵ The report did not bring the matter to a close.

A 2014 health study by the Government of Alberta found Fort Chipewyan did not have significantly higher rates of cancer than the rest of the province.⁵⁶ Mere months later, Canadian scientists from the University of Manitoba released their findings showing a link between tar sands pollutants and cancers among the Athabasca Chipewyan and the Mikisew Cree First Nation by documenting the elevated levels of heavy metals in traditional foods such as moose, muskrat, duck and beaver.⁵⁷

Fort Chip is still without answers as to what is causing the cancer. Residents remain fearful about drinking the water and eating the traditional foods Indigenous Peoples in the area have lived off of for generations.⁵⁸

As for Dr. O'Connor, the local regional health board abruptly dismissed him earlier this year. He was given no explanation as to why and was simply told his services were no longer required in the remote northern Albertan community.

The Athabasca Fort Chipewyan First Nation is also engaged in a multi-prong legal strategy to, "challenge publicly policy, individual tar sands projects and inadequate environmental protection in Alberta's Athabasca tar sands region."⁵⁹

TAR SANDS IMPACTS ON WILDLIFE:

Tar sands development is having a profound effect on wildlife living in this ecologically diverse area. The majestic woodland caribou numbers are dropping so dramatically in Alberta they are expected to die out if tar sands development continues.⁶⁰ Wolves have taken the brunt of the blame for the declining numbers and now are being killed as part of government policy.⁶¹

Yabitat loss is the main driver behind the caribou's decline⁶², but the pace and scale of tar sands development continues unabated.

One of the first incidents to alert the Canadian public and world of the dangers tar sands development poses for wildlife took place in 2008. A group of 1600 migratory ducks landed and subsequently drowned in a tailings pond. Syncrude, the tar sands company operating the tailings pond, had failed to put in place the preventive equipment (air canons, scarecrows, etc) used to scare of birds and other animals.⁶³



In addition to waterfowl and land birds that will be directly killed by oil sands pollution and infrastructure, habitat loss, alteration, and fragmentation caused by oil sands extraction will result in the prevention of millions of birds from being born in the future

Birds falling victim to tar sands pollution, drowning in tailings ponds and habitat loss to the tar sands industry could result in a loss of 30 million birds over the next twenty years if the rapid expansion of tar sands development is allowed to continue.⁶⁴

In 2010, “mutant fish”⁶⁵ headlines adorned the pages of Canadian newspapers after a group of Indigenous and non-Indigenous scientists, fishermen, and politicians displayed deformed fish caught in Lake Athabasca, a body of water downstream from the tar sands industry, at a press conference in Edmonton. The fish had developed golf-ball sized tumors, lesions, and were missing parts of the tails.⁶⁶

The group headed by distinguished water ecologist Dr. David Schindler demanded the Canadian government vastly improve water monitoring around tar sands operations to determine if toxins from the industry posed a severe threat to fish in local lakes and rivers.⁶⁷ Even pro-tar sands Canadian Environment Minister (later premier of Alberta) Jim Prentice expressed his disgust at the sight of the fish, adding to a general recognition that the environmental impact of the tar sands is not being well contained.⁶⁸

The Canadian government turning a blind eye to the environmental impacts and the plight of Indigenous Peoples living downstream are only a few of many glaring examples of the lengths to which the government has been willing to go in the recent past to continue the extraction of tar sands oil.

Tar Sands Are At the Heart of Canada's Climate Action Failures

In 2006, a newly elected Canadian Prime Minister Stephen Harper delivered a speech to the Canada-UK Chamber of Commerce in London that would set the tone for Canadian policy towards the tar sands for the next nine years.

In the speech, Harper declared Canada to be “an emerging energy superpower”⁶⁹ and described the tar sands as a great endeavour “akin to the building of the pyramids or China’s Great Wall.”⁷⁰ It was one of his first international speeches as prime minister.

At a production rate of 2.3 million barrels per day⁷¹ (bpd) the tar sands account for more than half of Canada’s total oil production.⁷² If the tar sands themselves were a country, they would be the 56th largest GHG emitter in the world.⁷³

Since tar sands oil is trapped in sand and clay, it requires more energy than regular crude oil to process. The oil and gas sector is responsible for 67% of Canada’s carbon pollution since 1990, with the tar sands almost entirely to blame.⁷⁴

Moreover, those emissions are growing. By 2020, tar sands emissions are expected to be three times their 2005 level.⁷⁵ That would mean an additional 45Mt of greenhouse gases rising into the atmosphere.⁷⁶ The Canadian government’s political support for tar sands production has been a major factor in spurring on this enormous growth over the last decade. This commitment is demonstrated most compellingly by oil industry subsidies for a variety of pre-production expenses – making it very easy to begin new projects.⁷⁷ Recent estimates pegged Canadian government subsidies for fossil fuels at \$2.7 billion annually, most of which went to the oil and gas sector.⁷⁸

Canada has put very few national regulations in place to mitigate the environmental impact or rate of tar sands production. In 2008, the government promised to implement a carbon capture and storage requirement on all new projects. As of November 2015, only one new project has ever used CCS and that promising, at best, to capture only one-third of emissions from just that facility.⁷⁹

⁸⁰The Canadian Association of Petroleum Producers has acknowledged that the tar sands industry in Alberta does not possess the technology necessary to make a dent in its emissions.⁸¹

The tar sands industry is not compelled to invest in technologies to clean up production either. Lobbying by industry has effectively pushed back against all proposed federal regulations on oil and gas pollution.⁸² Last December, while many countries were negotiating for a climate treaty

at the UN climate summit in Peru, Harper as Prime Minister publicly stated himself it would be “crazy” to introduce GHG regulations for the oil and gas sector given the sharp fall oil prices had taken.⁸³

Canada has not only refused to implement the necessary measures to rein in the tar sands soaring GHG production, the government has actually removed existing environmental regulations.

The Canadian Environmental Assessment Act (CEAA) is Canada’s primary legislation governing the regulations for new projects requiring government funding, permits or licensing. The Canadian government changed this legislation offering fewer restrictions and avenues for complaint against industrial projects.⁸⁴ Some tar sands projects have been removed entirely from lists of project requiring environmental screening,⁸⁵ when it appeared the findings would indicate adverse effects on the local environment.

The National Energy Board Act, the Fisheries Act and the Species at Risk Act are other examples of environmental regulations that were gutted by recent revisions.⁸⁶ In 2012, the National Round Table on the Economy and the Environment was closed down and the Canadian Foundation for Climate and Atmospheric Science found its funding discontinued.⁸⁷ Both advisory bodies had played important roles in developing Canadian environmental and climate policies.

The common theme in the complete overhaul of Canadian environmental regulations under former Prime Minister Harper is that decision-making on resource projects now has many fewer barriers for developers. Federal Ministers now have much more discretion over the review process.⁸⁸ Documents obtained by Greenpeace Canada under access to information requests reveal the Canadian oil and gas industry asked the Canadian government for the legislative changes.⁸⁹

With these changes, the Canadian government has done its best to remove all domestic impediments to the rapid expansion of tar sands production. It is a continuation of these policies that has seen the attacks on international efforts to regulate tar sands exports like the EU’s Fuel Quality Directive.

The Harper government claimed at the time these rather extreme measures were done to protect Canadian economic interests. In fact, this over-emphasis on the tar sands production, which account for just 2% of Canadian GDP⁹⁰, is likely to blame for many Canadians assuming the industry has a larger economic importance than it actually does.⁹¹

The political emphasis on tar sands production has successfully oversold its economic benefits to the Canadian people.

Attacks on civil society and muzzling of scientists

The Canadian government has been muzzling scientists, spying on pipeline opponents and generally working to undermine and remove groups and individuals who have spoken out against the tar sands. All are worrying examples of how the government's fixation with tar sands development has eroded Canadian democracy.

In 2010, scientists at the University of Alberta published research showing that the oil sands industry releases dangerous pollutants into the surrounding environment.⁹² The federal government attempted to suppress the results, first by preventing government scientists from corroborating the results for the media and then by attempting to publicly discredit lead author, David Schindler.⁹³

The attack on Dr. Schindler was a particularly egregious example of the previous government's federal policy to prevent and deter scientists from communicating their results to the media.⁹⁴ New rules introduced in 2007 require federal government scientists to both seek permission from their minister's office before giving interviews and to receive approval for their answers before delivering them, especially if they relate to the tar sands or climate change.⁹⁵ Environment Canada reports that media coverage of climate change science dropped by 80% between 2007-2010.⁹⁶ The policy to silence government scientists was in many ways quite effective.



The muzzling of Canadian scientists was so indiscreet and transparent that even the New York Times found it worth noting: "The government is doing all it can to monitor and restrict the flow of scientific information, especially concerning research into climate change, fisheries and anything to do with the Alberta tar sands – source of the diluted bitumen that would flow through the controversial Keystone XL pipeline."⁹⁶

Canadian citizens who oppose tar sands expansion were explicitly labeled as 'enemies' by the former federal government. In 2012, Canada's Natural Resources Minister infamously accused "environmental and other radical groups" of attempting to hijack the regulatory system that governs resource development projects.⁹⁷ A leaked Royal Canadian Mounted Police internal report paints anti-oil and gas extraction activism as a "growing and violent threat to Canada's national security".⁹⁸ RCMP documents also indicate the federal police agency spied on tar sands pipeline opponents in the province of British Columbia.⁹⁹

Given the strength of this rhetoric, it is not surprising that environmental groups have found themselves targeted by the Canadian government during the Harper years.¹⁰⁰ Charitable organizations opposing tar sands pipelines were made the subject of Canada Revenue Agency audits, searching for possible abuse of their charitable status.¹⁰¹ These investigations were disproportionately focused on environmental non-profits.¹⁰² With the addition of \$8 million¹⁰³ in the federal budget set aside for auditing environment groups, there is little doubt a concerted effort by the Canadian government to impede the capacity of tar sands opponents to operate was underway.¹⁰⁴

These attacks are unprecedented in Canadian political history and, taken together, suggest that the previous federal government's efforts to undermine action abroad to tackle climate change is part of a larger, cohesive campaign to silence and remove criticism of tar sands both at home and abroad.

The recently elected Canadian Prime Minister, Justin Trudeau, has promised to undo much of the damage Harper's government did to the country's environmental regulations and democracy. He has already un-muzzled federal scientists¹⁰⁵ and, in his mandate letters to Ministers, affirmed changes are coming to the Environmental Assessment and National Energy Board processes and ended the political attacks on charities.¹⁰⁶ But the devil will be in the details. Foreign Affairs Minister Stéphane Dion, in responding to a recent non violent civil disobedience action¹⁰⁷ demanding a freeze on tar sands expansion, explained he disagrees with environmentalists, instead calling for so-called 'sustainable development' of the tar sands. And despite promises to overhaul the environmental review process for tar sands pipelines, the Minister of Natural Resources more recently suggested that pipelines currently under review, will not be stopped while these changes happen.¹⁰⁸

The Fall of the EU Fuel Quality Directive

Transportation - road, rail, air, and water - is responsible for 24% of the European Union's GHG emissions, second only to the energy industries (29%). The sector is one of the only sectors in the EU to have grown its emissions since 1990. Most other sectors have managed to decrease their GHG-output.¹⁰⁹

To rein in the EU's soaring transportation emissions, the European Union's Fuel Quality Directive (FQD) went under revision in 2008 and 2009. The revisions to the FQD would have required EU transport fuel suppliers to reduce the GHG emissions of their product by 6% by 2020 (2010 baseline).¹¹⁰

Due to the extremely energy intensive process to extract and upgrade tar sands crude, fuels from tar sands were, under initial proposals, to be classified as producing more GHG emissions than conventional oil. Thus, to meet the requirements of the FQD, fuel suppliers would be discouraged from selling high GHG emitting fuels like those from oil shale or the tar sands in the EU. The Canadian government caught wind of the proposed changes and moved quickly.

Fearing the FQD would set another international precedent that tar sands oil is "dirty oil", the Canadian government began lobbying against the FQD almost immediately. Internal documents released in 2011 revealed the Canadian lobby against the FQD was part of a larger "pan European oil sands advocacy strategy" Canada had launched through its European embassies "to protect and advance Canadian interests related to the oil sands and broader interests in Europe including a Canada's [sic] brand in Europe."¹¹¹ In 2010 alone, at least 110 lobby meetings took place between Canadian officials and EU decision makers about the FQD.¹¹²

"There have been massive lobbying campaigns by the car industry, by the chemicals industry, banks, food giants, etc. But so far I have not seen such a lobbying campaign by any state."¹¹³

SATU HASSI, A FINNISH MEMBER OF EUROPEAN PARLIAMENT (MEP) TOLD REUTERS IN 2012 ABOUT THE CANADIAN LOBBYING EFFORTS.

A European Commission report in 2011 by Adam Brandt of Stanford University found GHG emissions from tar sands oil were 12-40% higher than conventional oil.¹¹⁴ Despite this and after an intensive lobbying campaign by Canada and the oil industry, the FQD revisions failed in February 2012 to obtain the necessary three quarters majority for the draft legislation to pass.

By autumn 2014, a re-revised proposal for the FQD was released. It was a watered down version of the original draft legislation. All crudes, no matter how much GHG emissions they produce, were to be treated the same under the FQD. The tar sands lobby offensive had won.

European Commission documents obtained by Friends of the Earth Europe revealed the U.S. trade missions also had “substantive concerns” with the Fuel Quality Directive singling out fuels produced from tar sands as having a higher carbon footprint than conventional oil.¹¹⁵ Like Canada and the oil industry, the U.S. wanted all oil - regardless of GHG emissions - to be treated the same as conventional oil in the Directive. It seems that the EU, at the time, negotiating trade deals with both the US and Canada could not or would not resist.

The European Union’s one and only attempt to keep dirty tar sands oil out of the EU failed. In the absence of any adequate legislation to clean up European transportation fuels, tar sands oil has landed on European shores.

Tar Sands Threat to Europe and Pipeline Opposition

In May 2014, an oil tanker carrying between 500,000 - 600,000 barrels of Canadian tar sands crude arrived in Bilbao, Spain.¹¹⁶ Spanish oil company, Repsol, having made significant investments in its refining facilities to process heavy crudes, had purchased the cargo.

Repsol’s purchase was the first large shipment of tar sands oil to arrive in the EU. It has not been the last. An analysis by the U.S.-based energy think tank Natural Resources Defense Council in 2014 estimates tar sands imports to the EU could skyrocket from 4,000 barrels per day (bpd) to 700,000 bpd by 2020 given the weakened state of the FQD.¹¹⁷ NRDC in its analysis pointed to two tar sands proposed pipeline with massive payloads in North America as the causes of this bleak outlook.

WALL OF OPPOSITION AGAINST PIPELINES ON CANADA'S WEST COAST

British Columbia (B.C.), Canada's westernmost province, is an industry-coveted potential thoroughfare for tar sands shipments. The tar sands in Alberta are landlocked and the closest marine access for exports is neighboring British Columbia's coastline. British Columbia is also the province where Canadian opposition to the tar sands has arguably been the most intense.

Enbridge's Northern Gateway (520, 000 bpd)¹¹⁸ and Kinder Morgan's Trans Mountain Expansion pipeline projects (890, 000)¹¹⁹ would both transport tar sands oil through British Columbia to marine terminals on Pacific Ocean. From there, tar sands shipments would likely be exported to the markets in Asia and the west coast of the U.S. The Canadian subsidiaries of British Petroleum and Total S.A. have financial stakes in the Trans Mountain¹²⁰ and Gateway¹²¹ projects respectively.

Public opposition to both pipelines has been staunch. The B.C. First Nations of the influential Yinka Dene Alliance¹²² declared an "unbroken wall of opposition"¹²³ against the Northern Gateway pipeline, arguing an oil pipeline spill would contaminate waterways and land, and a tanker spill threaten pristine Coastal waters on which they depend. The mayors of Vancouver and Burnaby have publicly voiced their opposition to the Trans Mountain project passing through their cities.¹²⁴ The Tsleil-Waututh **First Nation** located at the proposed expanded export port are strongly opposed to the expansion project¹²⁵ and over 100 people were arrested in a civil disobedience action against the pipeline in 2014.¹²⁶ There are Indigenous-led legal battles against both pipelines in court.¹²⁷

Canada's new government may have killed the Northern Gateway pipeline proposal earlier this month when it announced an oil tanker ban for British Columbia's northern coast.¹²⁸ The Trans Mountain project on the southern portion of the coast is still under regulatory review.¹²⁹



KEYSTONE XL:

The battle over the Keystone XL tar sands pipeline in the U.S. is perhaps the best-known tar sands struggle internationally. Domestic opposition to the pipeline made headlines worldwide when close to 1,000 protesters were arrested in front of the White House in 2011.¹³⁰ Keystone XL, unintentionally, reignited the American environmental movement.

The 830,000 bpd pipeline project would connect the tar sands with oil refineries on the U.S. Gulf Coast.¹³¹ The Gulf is a major oil refining area of the U.S. and also an important export hub to Europe and other international markets. Over 1.2 million barrels of tar sands oil were shipped from ports on the Gulf Coast to Spain, Italy, Singapore and Switzerland in July and August 2014 alone.¹³² This is without the massive supply of tar sands crude Keystone XL could potentially deliver to export terminals if the pipeline is ever constructed.

U.S. crude oil supply has also drastically changed in the last five years with vast quantities of light oil from shale oil available. Gulf refineries now have an abundant source of easy-to-refine oil, requiring less energy and less capital to refine than tar sands crude.

It appears less and less likely an operating Keystone XL will supply Gulf refineries and only Gulf refineries with tar sands oil. More probable is that much of this tar sands oil will be shipped out of North America to destinations like the EU.¹³³

For the moment, Keystone XL is dead due to U.S. public opposition against the pipeline, and U.S. President Barack Obama finally rejecting the pipeline proposal earlier this month.¹³⁴ Republicans have already vowed to revive the project if they win the 2016 U.S. elections.¹³⁵ The Keystone XL pipeline battle may not yet be over.



ENERGY EAST:

The tar sands industry facing difficulties moving their product south and west is now gambling on a new pipeline project - Energy East - the largest proposed pipeline in North America. Energy East appears, even more so than Keystone X, to be an export pipeline with aims of delivering tar sands oil to Europe.

The behemoth pipeline project - 4,600 kilometres in length - is set to deliver up to 1.1 million barrels of oil, including tar sands, per day to Canada's eastern coast. Although the project's proponent (TransCanada, the same company behind Keystone XL) has attempted to sell the Energy East project pipeline as a project to supply eastern Canadian refineries with western Canadian tar sands crude,¹³⁶ it will likely be predominantly an export pipeline if constructed.

A 2014 report by Canadian Environmental NGO's revealed much of the oil refining demands in eastern Canada will already be met by another pipeline, cheaper U.S. imports and the offshore oilfields off of Canada's Atlantic Coast¹³⁷ by the time Energy East comes on-line. TransCanada also originally proposed to construct two massive marine export terminals as part of the Energy East project.

Furthermore, no refinery in eastern Canada possesses the equipment to refine large amounts of tar sands crude and it is very unlikely they will make the \$1 billion¹³⁸ investment to upgrade their facilities to do so with North America currently awash with light oil.

Energy East, like Keystone XL, has also been delayed because of public opposition, particularly in the province of Quebec, where the majority of the population opposes the pipeline.¹³⁹ Opposition to the project is also growing in other Canadian provinces like Ontario, Manitoba and New Brunswick.

Opposition in Quebec has revolved around the previously proposed location of the oil tanker terminal being adjacent to the breeding grounds of Canada's iconic and endangered beluga whales. TransCanada's disregard for these majestic creatures while conducting seismic testing and exploratory drilling for the proposed terminal generated so much public anger that even the premier of Quebec, who is not opposed to the pipeline, publicly stated TransCanada should look somewhere else for their terminal.¹⁴⁰

This month, TransCanada axed its plans for building a terminal anywhere in Quebec for the Energy East project.¹⁴¹

This resistance to pipelines is part a broader willingness on the part of the Canadian people to be part of the movement against climate disaster. When polled, the majority of Canadians consistently say they want their government to take action on climate change. Canadian provincial governments appear to be acting more responsibly than the national government. British Columbia's has a carbon tax, Ontario phased out all coal-fired power generation from its electrical grid and Quebec's GHG reduction targets are nearly on par with the EU's. Even Alberta, under newly-elected Premier Notley has now produced a climate plan including restrictions on tar sands emissions and a carbon tax. However, all this is still not enough as it still allows for an expansion of tar sands production beyond the limits the climate can bear to avoid catastrophic global warming.

Conclusion

Indigenous peoples, and the citizens of Canada and the U.S. deserve much of the credit for keeping Energy East, Keystone XL and the rapid development of the tar sands at bay. Sadly, the expansion of the tar sands still marches on.

Canadian opposition to the tar sands has grown considerably during the Harper years, but the industry is still producing over 2 million barrels per day. Today, North America has a vast web of transportation routes - existing pipelines, oil-by-rail, and marine terminals - to ensure that tar sands oil will continue to leak out as long as their markets like the EU are willing to accept dirty oil.

Tar sands development undermines the efforts by individual Canadians and the country's provinces to act on climate change and is one of the most significant dangers to the planet's climate - threatening billions with the effects of climate catastrophe. Though the new Liberal government has taken a more positive approach to contributing to the fight against climate change while they continue to back tar sands they will fail all those people, including Canadians, whose lives are and will be affected by climate change.

The European Union, unwilling so far to resist the oil industry can either continue to undermine Canadian citizen's efforts by leaving the gates of Europe open to dirty oil, or the EU could end its complicity once and for all in Canada's climate crime and ensure tar sands are not part of Europe's fuels. The choice for the EU and for the planet, is simple.

RECOMMENDATIONS

The European Union should:

- Ban the use of tar sands fuel in Europe's fuel supply.
- Urgently invest in transport efficiency and sustainable transport solutions
- EU member states should immediately make public the source of all imports of oil fuel source

The Canadian Government should:

- Should back an immediate freeze on tar sands expansion
- Stop any new tar sands pipelines that facilitate expansion
- Plan for just transition from tar sands, in line with science stating we need to keep 85% in the ground and the shift to a fossil free Canada by 2050

The European and Canadian governments should ensure the Paris climate talks:

- Catalyse immediate, urgent and drastic emission reductions in line with what science and equity require,
- Provide adequate support for transformation - ensure that the resources needed, such as public finance and technology transfer, are provided to support the transformation, especially in vulnerable and poor countries.

NOTES

- 1 http://ec.europa.eu/clima/policies/strategies/2030/index_en.htm
- 2 <http://www.nature.com/nature/journal/v517/n7533/full/nature14016.html>
- 3 <http://www.theglobeandmail.com/news/national/study-backs-argument-keystone-would-contribute-to-climate-change/article22335591/>
- 4 <http://www.cbc.ca/news/business/bp-profit-drops-26-total-sa-down-20-as-oil-price-bites-1.3052206>
- 5 <http://www.nrcan.gc.ca/energy/renewable-electricity/7295>
- 6 <http://www.globalcarbonatlas.org/?q=en/emissions>
- 7 <http://ec.gc.ca/doc/publications/cc/COM1410/p2-eng.htm>
- 8 <https://www.ec.gc.ca/indicateurs-indicators/default.asp?lang=en&n=CCED3397-1>
- 9 <http://www.theglobeandmail.com/news/politics/canadas-ghg-emissions-rose-in-2013-leaving-little-room-to-meet-2020-target/article24039176/>
- 10 <http://www.cbc.ca/news/politics/canada-sets-carbon-emissions-reduction-target-of-30-by-2030-1.3075759>
- 11 <https://www.ec.gc.ca/indicateurs-indicators/default.asp?lang=en&n=FBF8455E-1>
- 12 [The EU's pledge is itself far from adequate in delivering it's fair share of climate action in line with science https://www.foeeurope.org/2030_climate_energy_plan_220114](https://www.foeeurope.org/2030_climate_energy_plan_220114)
- 13 <http://www.cbc.ca/news/politics/catherine-mckenna-paris-talks-tory-target-1.3311482>
- 14 http://publications.gc.ca/collections/collection_2009/ec/En88-2-2008E.pdf
- 15 <http://environmentaldefence.ca/reports/tale-two-countries-comparing-united-states-and-canada-s-clean-energy-spending-and-progress->
- 16 <https://www.foeeurope.org/node/615>
- 17 <http://www.energy.alberta.ca/oilsands/791.asp>
- 18 <http://theyee.ca/News/2015/05/02/Royalty-Miscalculation-Cost-Alberta-Billions/>
- 19 <https://www.policyalternatives.ca/newsroom/updates/why-are-canadian-corporate-taxes-so-low>
- 20 <http://www.mining.com/oil-sands-mining-equipment-built-tough/>
- 21 http://history.alberta.ca/oilsands/resources/docs/facts_sheets09.pdf
- 22 <http://theyee.ca/Blogs/TheHook/Environment/2009/12/14/TarSands/>
- 23 http://www.qp.alberta.ca/1266.cfm?page=1993_115.cfm&leg_type=Regs&display=html
- 24 <http://oilsandsrealitycheck.org/facts/land-and-species-2-2/>
- 25 <http://www.energy.alberta.ca/oilsands/791.asp>
- 26 <http://www.energy.alberta.ca/oilsands/791.asp>
- 27 <http://www.pembina.org/oil-sands/os101/climate>
- 28 http://www.grizzlyoilsands.com/upload/media_element/65/01/section-4---process-description.pdf
- 29 <http://www.cenovus.com/operations/technology/sagd.html>
- 30 <http://desmog.ca/2013/07/05/tar-sands-css-blowout-whole-new-kind-oil-mess>
- 31 <http://www.waterforlife.alberta.ca/03330.html>
- 32 <http://environmentaldefence.ca/realitycheck>
- 33 <http://geographyfieldwork.com/barcelonawatersupply.htm>
- 34 <http://news.nationalgeographic.com/news/energy/2011/12/pictures/111222-canada-oil-sands-satellite-images/>
- 35 <http://www.pembina.org/reports/beneath-the-surface-oilsands-facts-201301.pdf>
- 36 <http://business.financialpost.com/news/energy/the-price-of-a-barrel-of-water>
- 37 <http://environmentaldefence.ca/reports/11-million-litres-day-tar-sands-leaking-legacy>
- 38 <http://globalnews.ca/news/1162061/federal-study-confirms-oilsands-ponds-leaking/>
- 39 <http://www.theguardian.com/environment/2013/jul/29/alberta-oil-spills-tar-sands-canada>
- 40 <http://www.theguardian.com/environment/keep-it-in-the-ground-blog/2015/apr/08/life-above-alberta-tar-sands-why-were-taking-government-to-court>
- 41 <http://raventrust.com/tar-sands-trial/>
- 42 http://raventrust.com/wp-content/uploads/2014/04/Beaver-Lake-Cree-Amended-Further-Amended-Statement-of-Claim_filed_13-july-2012.pdf
- 43 <http://raventrust.com/tar-sands-trial/http://oilsandsrealitycheck.org/factcategory/human-rights/>
- 44 <http://o.canada.com/news/elevated-risk-of-caribou-disappearing-from-oilsands-region-memo-tells-peter-kent>
- 45 <https://secure.globeadvisor.com/servlet/ArticleNews/story/CNW/20110803/C9195>
- 46 <http://calgaryherald.com/business/energy/bc-caribou-wolf-cull>
- 47 <http://www.desmog.ca/2013/05/23/beaver-lake-cree-judgment-most-important-tar-sands-case-you-ve-never-heard>
- 48 <http://norj.ca/2015/01/courts-hold-one-victory-one-loss-for-fort-chipewyan-first-nations/>
- 49 <http://theyee.ca/News/2015/05/11/John-OConnor-Fired/>
- 50 http://www.ualberta.ca/~swfc/images/20090202_fort_chipewyan_study.pdf
- 51 <http://www.cancer.net/cancer-types/bile-duct-cancer/risk-factors>

52 <http://www.cbc.ca/news/politics/alberta-lakes-show-chemical-effects-of-oilsands-study-finds-1.1331696>

53 <http://www.atsdr.cdc.gov/csem/csem.asp?csem=13&po=11>

54 http://www.nationalreviewofmedicine.com/issue/2008/01_15/5_patients_practice02_1.html

55 <http://www.cbc.ca/news/canada/edmonton/fort-chip-cancer-rates-higher-than-expected-report-1.796418>

56 <http://business.financialpost.com/news/energy/oil-sands-foes-ignore-the-facts-as-cancer-claims-dealt-a-blow-by-study>

57 http://www.thestar.com/news/canada/2014/07/07/student_links_oilsands_pollution_to_higher_cancer_rates.html

58 <http://edmontonjournal.com/news/local-news/trail-blazing-aboriginal-doctor-worries-fort-chipewyan-residents-not-ready-for-major-lifestyle-change>

59 <http://www.honourtheacfn.ca/>

60 <http://o.canada.com/news/elevated-risk-of-caribou-disappearing-from-oilsands-region-memo-tells-peter-kent>

61 <http://www.nwf.org/News-and-Magazines/Media-Center/News-by-Topic/Wildlife/2012/02-06-12-Tar-Sands-Development-to-Lead-to-Poisoning-of-Wolves.aspx>

62 <http://www.pc.gc.ca/eng/nature/eep-sar/itm3/eep-sar3caribou.aspx>

63 <http://www.cbc.ca/news/canada/edmonton/syncrude-to-pay-3m-penalty-for-duck-deaths-1.906420>

64 <http://oilsandsrealitycheck.org/facts/land-species-3/>

65 <http://www.theglobeandmail.com/news/national/mutant-fish-lead-to-calls-for-ottawa-to-monitor-oil-sands/article1380106/>

66 <http://www.theglobeandmail.com/news/national/mutant-fish-lead-to-calls-for-ottawa-to-monitor-oil-sands/article1380106/>

67 <http://theyee.ca/News/2010/09/17/AthabascaDeformedFish/>

68 <http://www.digitaljournal.com/article/297792>

69 <http://ojs.unbc.ca/index.php/cpsr/article/view/250>

70 <https://www.wilsoncenter.org/sites/default/files/HesterBackgroundunderCDFAIConference2007.pdf>

71 <http://www.energy.alberta.ca/oilsands/791.asp>

72 [The International Energy Agency forecasts Canadian total oil production will reach 4.37 million bpd by the end of 2015 https://www.iea.org/oilmarketreport/omrpublic/currentreport/#Supply](https://www.iea.org/oilmarketreport/omrpublic/currentreport/#Supply)

73 <http://www.pembina.org/pub/2404>

74 <http://environmentaldefence.ca/reports/digging-big-hole-how-tar-sands-expansion-undermines-canadian-energy-strategy-shows-climate-1>

75 <http://environmentaldefence.ca/reports/digging-big-hole-how-tar-sands-expansion-undermines-canadian-energy-strategy-shows-climate-1>

76 https://ec.gc.ca/ges-ghg/E0533893-A985-4640-B3A2-008D8083D17D/ETR_E%202014.pdf

77 <http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/canadas-oil-industry-frets-as-pressure-mounts-to-cut-fossil-fuel-tax-incentives/article27240254/>

78 http://priceofoil.org/content/uploads/2015/11/Empty-promises_main-report.2015.pdf

79 <http://environmentaldefence.ca/reports/tale-two-countries-comparing-united-states%E2%80%99-and-canada%E2%80%99s-clean-energy-spending-and-progress->

80 <http://www.shell.ca/en/aboutshell/our-business-tpkg/upstream/oil-sands/quest.html>

81 <http://environmentaldefence.ca/realitycheckclimate>

82 <http://environmentaldefence.ca/realitycheckclimate>

83 <http://www.theglobeandmail.com/news/politics/harper-it-would-be-crazy-to-impose-climate-regulations-on-oil-industry/article22014508/>

84 <http://www.ecojustice.ca/pressrelease/budget-bill-puts-environmental-laws-on-chopping-block/>

85 http://business.financialpost.com/news/energy/harper-government-nixed-reviews-for-oil-sands-projects-following-warnings-of-water-disruption?__lsa=7269-cc1f

86 <http://theyee.ca/Opinion/2012/05/10/Bill-C38/>

87 http://www.thestar.com/opinion/editorialopinion/2012/03/04/ottawa_squanders_canadas_research_advantage_in_environmental_studies.html

88 <http://www.theglobeandmail.com/news/politics/budget-bill-gives-harper-cabinet-free-hand-on-environmental-assessments/article2428091/>

89 <http://www.cbc.ca/news/politics/energy-industry-letter-suggested-environmental-law-changes-1.1346258>

90 <http://business.financialpost.com/news/economy/the-alberta-wildfires-that-are-shutting-down-the-oilsands-could-wallopp-canadas-gdp>

91 <https://businessincanada.com/2014/07/04/poll-canadians-perception-of-oil-sands-industry-environmental-defence/>

92 <http://www.pnas.org/content/107/37/16178.long>

93 <http://www.desmog.ca/2012/11/08/stephen-harper-hates-science-federal-government-muzzles-scientists-protect-tar-sands-reputation>

94 <http://www.cbc.ca/news/technology/faq-the-issues-around-muzzling-government-scientists-1.3079537>

95 <http://www.cbc.ca/news/technology/faq-the-issues-around-muzzling-government-scientists-1.3079537>

96 <http://news.nationalpost.com/news/canada/canadian-politics/new-york-times-criticizes-harper-governments-alleged-muzzling-of-scientists-to-protect-oil-sands>

97 <http://www.cbc.ca/news/politics/radicals-working-against-oilsands-ottawa-says-1.1148310>

98 <http://www.counterpunch.org/2015/02/27/the-new-criminalization-of-dissent/>

99 http://www.thestar.com/news/canada/2012/05/09/rcmp_spied_on_bc_natives_protesting_pipeline_plan_documents_show.html

100 <http://insideclimatenews.org/news/20140214/harper-govt-makes-moves-silence-canadas-leading-environmental-groups>

101 <http://www.theglobeandmail.com/news/politics/canada-revenue-agencys-political-targeting-of-charities-under-scrutiny/article19900854/>

102 <http://www.theglobeandmail.com/news/national/broadbent-institute-raises-new-questions-about-cras-auditing-of-charities/article26554697/>

103 <http://oilsandstruth.org/oil-industry-witch-hunt-canada-threatens-us-all>

104 <http://oilsandstruth.org/tar-sands-campaigners-are-canadas-new-terrorists>

105 <http://www.theglobeandmail.com/news/british-columbia/federal-scientists-eager-to-share-their-research-now-that-muzzles-are-off/article27171269/>

106 <http://www.desmog.ca/2015/11/18/trudeau-instructs-minister-finance-free-charities-political-harassment>

107 www.climatewelcome.ca

108 <http://www.bloomberg.com/news/articles/2015-11-18/canada-pipeline-reviews-won-t-stop-amid-changes-at-regulator>

109 http://ec.europa.eu/clima/policies/transport/index_en.htm

110 https://www.foeeurope.org/sites/default/files/publications/foee-fqd-trade-ttip-170714_0.pdf

111 <http://www.dominionpaper.ca/articles/3991>

112 http://climateactionnetwork.ca/wp-content/uploads/2012/03/CAN_Dirty_Oil_Diplomacy.pdf

113 <http://www.reuters.com/article/2012/05/10/us-oil-sands-idUSBRE84900L20120510>

114 https://circabc.europa.eu/d/d/workspace/SpacesStore/db806977-6418-44db-a464-20267139b34d/Brandt_Oil_Sands_GHG_Final.pdf

115 https://www.foeeurope.org/sites/default/files/publications/foee-fqd-trade-ttip-170714_0.pdf

116 <http://blogs.platts.com/2014/05/13/canada-oil-exports-keystone/>

117 <https://www.foeeurope.org/flood-tar-sands-imports-Europe-240114>

118 <http://www.gatewayfacts.ca/About-The-Project/Project-Overview.aspx>

119 http://www.kindermorgan.com/business/canada/tmx_expansion.aspx

120 <http://www.transmountain.com/why-expand>

121 <http://gatewaypanel.review-examen.gc.ca/clf-nsi/dcmnt/rcmndtnsrprt/rcmndtnsrprtvlm2chp10-eng.html>

122 <http://yinkadene.ca/>

123 <http://www.holdthewall.ca>

124 <http://www.cbc.ca/news/canada/calgary/trans-mountain-pipeline-expansion-disastrous-says-mayor-gregor-robertson-1.3090501>

125 <http://twnsacredtrust.ca/>

126 <http://www.vancouverobserver.com/news/huge-victory-burnaby-mountain-protesters-court-rejects-kinder-morgan-contempt-charges>

127 <http://twnsacredtrust.ca>

128 <http://www.nationalobserver.com/2015/11/13/news/trudeau-orders-oil-tanker-ban-could-kill-northern-gateway>

129 <http://news.gc.ca/web/article-en.do?mthd=tp&crtr.page=1&nid=1018579&crtr.tp1D=1>

130 <http://www.npr.org/2011/09/01/140117187/for-protesters-keystone-pipeline-is-line-in-tar-sand>

131 <http://keystone-xl.com/about/the-keystone-xl-oil-pipeline-project/>

132 <http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/oil-sands-crude-reaching-europe-asia/article21419972/>

133 <http://switchboard.nrdc.org/blogs/aswift/NRDC%20Tar%20Sands%20Threat%20to%20Europe%20Memo%20FINAL%20January%202014%20FINAL.pdf>

134 <http://www.reuters.com/article/2015/11/09/us-usa-keystone-idUSKCNOSV28P20151109>

135 <http://www.usatoday.com/story/news/politics/2015/11/06/republicans-blast-obama-rejection-keystone-pipeline/75295838/>

136 <http://www.energyeastpipeline.com/home/need-for-a-pipeline/>

137 <http://environmentaldefence.ca/reports/transcanada's-energy-east-export-pipeline-not-domestic-gain>

138 <http://www.albertaoilmagazine.com/2015/01/nation-building/>

139 <http://montrealgazette.com/news/local-news/poll-shows-few-quebecers-support-energy-east-pipeline>

140 <http://www.bloomberg.com/news/articles/2014-12-01/transcanada-halts-terminal-work-as-beluga-seen-endangered>

141 <http://business.financialpost.com/news/energy/transcanada-corp-suffers-another-setback-as-it-scrapes-quebec-port-for-energy-east>



Friends of the Earth Europe

Friends of the Earth Europe is the largest grassroots environmental network in Europe, uniting more than 30 national organisations with thousands of local groups. We are the European arm of Friends of the Earth International which unites 74 national member organisations, some 5,000 local activist groups, and over two million supporters around the world.

We campaign on today's most urgent environmental and social issues. We challenge the current model of economic and corporate globalisation, and promote solutions that will help to create environmentally sustainable and socially just societies.

This report was written for Friends of the Earth Europe by Derek Leahy with additional contributions from Colin Roche and Andrea Harden.

This study and map have been produced with the support of the Heinrich Böll Stiftung e.V.



ACTING FOR SOCIAL JUSTICE / AGIR POUR LA JUSTICE SOCIALE

Founded in 1985, the Council of Canadians is Canada's leading social action organization, mobilizing a network of 60 chapters across the country.

Through our campaigns we advocate for clean water, fair trade, green energy, public health care, and a vibrant democracy. We educate and empower people to hold our governments and corporations accountable.

Friends of the Earth Europe

Mundo-b building
Rue d-Edimbourg 26
1050 Brussels
Belgium

Email: info@foeeurope.org

Phone: +32 (0) 2 893 1000

Contact: Colin Roche,
Extractive Industries Campaigner

twitter.com/FoEEurope

facebook.com/FoEEurope