What do we know about this proposed pipeline?

In August, 2013, TransCanada made their official announcement that they intend to build a $14.4 billion pipeline across 4,500 km that would carry 1.1 million barrels a day (that’s over 175 million litres a day). The pipeline would stretch from Alberta all the way to New Brunswick, crossing through the city of Ottawa and through the Rideau River. 3,000 km of the pipeline would be converted from an existing natural gas pipeline, which varies in age between 20 and 40 years, while 1,500 km of the pipeline would need to be built new.

Why should we be concerned?

There are a number of reasons. First, we know that pipelines spill. Constantly. It’s not a question of if, but when, and where.

If there were a pipeline spill in or near the Ottawa area (or anywhere in the country, really), it could have devastating impacts on
anyone who lives nearby, on groundwater and drinking-water sources, on local streams, rivers, lakes, the ocean, on agricultural lands, on wildlife, and could render other areas uninhabitable.

It’s a fundamental risk to the Rideau River, a vital waterway that passes through the middle of Ottawa and feeds into the Ottawa River - our major source of drinking water. Before the oil even reaches Ottawa it travels alongside the Ottawa River for a significant stretch, so if there was a spill before the oil reaches Ottawa, it could pose a risk for our drinking water supply.

In addition to the spill risk, we would still oppose this pipeline for the threat it poses to a stable climate. The main impetus for this project is to allow for an expansion of the Alberta tar sands, which are constrained from growing because not enough oil can get to tanker ports at this time.

The Alberta tar sands (and the oil and gas industry generally) are our fastest growing source of greenhouse gas emissions, and the tar sands alone will make Canada unable to meet our international obligations on reducing our emissions.

For this reason, we can’t support this project, whose contribution to climate change has been estimated at over 30 million tons of greenhouse gas every year – approximately the amount saved by shutting down Ontario’s coal power plants, or the amount that adding seven million new cars to the road would create.

How likely is a spill?

Recently released files show that in Alberta alone, there have been an average of two spills every single day, going back 37 years. Nearly all of these go unreported to the public. We don’t even have numbers on the rest of the country.

This current pipeline, which exists as a gas pipeline, hasn’t been without its own problems. In the past decade alone, there have been two natural gas explosions on this same pipeline in Ontario. In the past year, there have been five catastrophic pipeline failures, including a major explosion in Alberta. In fact, TransCanada has had more ruptures than any other pipeline company.1

It’s no surprise then that TransCanada has come under scrutiny for its safety practices.

A whistleblower recently came forward who was an engineer within TransCanada. He stated that many times he had tried to raise safety concerns with management, but they were

1 http://globalnews.ca/news/571494/
2 http://canadians.org/blog/transcanadas-very-explosive-year
ignored. In the end, he went to the National Energy Board of Canada (the federal body that oversees pipelines nationally) and stated that TransCanada was not following its own safety guidelines, let alone those established by the government, and that the company was likened on one engaged in ‘organized crime’.4

In response, he was fired from TransCanada, even though his claims were investigated and confirmed by the National Energy Board. A recent investigation found TransCanada had failed in 4 out of 9 safety regulations, all significant, ranging from construction all the way up to management.5

Industry makes claims like ‘we successfully ship 99.99% of our oil’ or ‘pipelines only fail once per 1,700km’ which are very misleading (and hard to understand) statements. What these numbers do show, however, is that spills do happen and are expected.

Of course, we want to see safer pipelines, but we also have a duty to convey the risks behind a pipeline.

Why would it matter if the pipeline carries tar sands oil?

Tar sands oil is not the same as the light crude (sometimes called conventional crude) that most people are familiar with - it’s thicker, more toxic, and worse for the environment. All of these are important.

Tar sands oil (otherwise known as bitumen) is thicker than conventional oil and must have extra chemicals added to it to let it move through a pipeline. Once these chemicals (known as diluent) are added, the resulting mix is known as “dilbit” or diluted bitumen. There is some research indicating this dilbit mixture is more acidic and corrosive to the pipelines, leading to more spills.6

If and when a spill does happen, these chemicals get released into the air, ground, or water. A number of them are known toxins, including things like benzene. In the US, dilbit spills have caused adverse health effects for people that live in the area.

In looking at the proposal for TransCanada’s Keystone XL pipeline, the US government stated that pipelines that carry tar sands oil should NOT be treated like pipelines that carry any other oil.

If a spill occurs near water, the results would be disastrous. This was only discovered after a dilbit spill near the Kalamazoo River in Michigan. Normally, oil floats on the surface of a water body. Diluted bitumen is different, as it is so thick that much of it sinks to the bottom. This can make it next to impossible to clean up without destroying the bed of the water body.

3 http://www.thestar.com/business/2012/10/12/transcanada_whistleblower_sparks_neb_audit.html?app=noRedirect
4 http://www.digitaljournal.com/article/352019
6 http://www.nrdc.org/energy/files/tarsandssafetyrisks.pdf
In Kalamazoo, Michigan, a 2010 pipeline rupture (Enbridge’s Line 6B) let loose 4.2 million litres of dilbit, the largest spill ever on land in the US. The pipeline was close to the Kalamazoo River, where the oil eventually flowed and collected.

The results of that spill were:
• 50 kilometres of the river were shut down (parts were opened a year later).
• People were evacuated from the area
• Homes had to be abandoned.
• Over $950 million dollars was spent to clean up the oil.
• Nearly 600,000 litres of oil remains stuck at the bottom of the river.

The US government at the time discovered they didn’t know how to deal with a dilbit spill, and neither they nor Enbridge (the pipeline operator) had the technology required to clean it up. Today, over three years later, residents are still waiting for a clean-up they’ve been told is nearly impossible. Enbridge was fined only $3.7 million dollars and ordered again to clean up the remaining oil from the river. 7

It was also revealed that, despite ‘state-of-the-art’ spill detection technology, the spill was ongoing for 17 hours before the company isolated and stopped it. 8

In March of 2013, in Mayflower, Arkansas, another dilbit pipeline (the Pegasus, operated by ExxonMobil) erupted in a suburban neighbourhood. Residents awoke to find their yards and driveways flooded with tar sands oil. Approximately 1.9 million liters of oil were later recovered from the spill site.

A number of homes were evacuated immediately. For weeks, residents had symptoms of exposure to harmful chemicals. Residents and later the government began a lawsuit against the company for damages and breaking the law. 9

These examples illustrate the extreme nature of dealing with tar sands oil, and the potential health and water impacts that need to be understood.

Are we sure this pipeline will carry tar sands oil?

Yes, at this point TransCanada hasn’t fully disclosed all that will be in the pipeline, but we know that the government of Alberta has committed to shipping 100,000 barrels a day of tar sands bitumen through the pipelines. In public statements, TransCanada has said

the pipeline may carry 50% diluted bitumen, with other oil being made up of conventional crude, synthetic crude (upgraded bitumen), and Bakken-sourced, fracked light oil.

Additionally, we know looking to the future that reserves and production of lighter crude is in decline, while the only expanding source of oil in Alberta is from the tar sands, so it seems more than likely that this pipeline will end up handling large quantities of tar sands bitumen.

**Don’t you mean oil sands?**

No, actually - the term tar sands predates the term oil sands, and was used by everyone in the industry until the 1960s, when the term oil sands was introduced. It was only in the last decade, however, that the term became politicized. Oil companies and their champions in government decided the term tar sands sounded too dirty, and began a largely successful campaign to have them referred to as the friendlier-sounding ‘oil sands’.

Even the New York Times has refused the push to call them ‘oil sands’. However, the material itself is nothing at all like conventional oil, and is known more technically as bituminous sands, ‘a mixture of sand, clay, water and an extremely viscous form of petroleum called bitumen, which itself contains a noxious combination of sulphur, nitrogen, salts, carcinogens, heavy metals and other toxins’ that is about as thick and viscous as fresh asphalt when it is mined. ¹⁰

**But aren’t pipelines safer than rail?**

This is a particularly dangerous line of questioning/reasoning that needs to be dealt with delicately.

The question of which method of transporting oil is safer than the other largely comes down to a question of ‘what do you mean by safe?’

While trains on average have more spills, the actual amount spilled each time is on average smaller than what is spilled by pipelines. Looking closely at the numbers shows that both pipelines and rail transport are nearly as safe - or unsafe. They all inevitably spill, and can cause devastating effects to communities, water sources, and wildlife. We’re pointing out that all methods of transporting oil are inherently unsafe, and those risks need to be understood. ¹¹

While we were all shocked by the tragic deaths associated with the Lac-Mégantic disaster, it’s only fair to point out that, in under 30 years in the US, pipeline spills have resulted in over 500 deaths (equivalent numbers are harder to gather across Canada). The people who have lost their lives from the transportation of oil shouldn’t stand just as a statistic, but as a reminder of the very real costs and risks of all kinds of oil transportation.

Lastly, our research has uncovered the fact that building this pipeline would actually lead to more dangerous elements being shipped by train. Here’s why:


1. To get the very viscous bitumen (tar sands crude) to flow through pipelines in the first place, a number of chemicals and light hydrocarbons (called diluents) have to be added to the mixture.

2. Once the diluted bitumen (dilbit) arrives at a tanker port or refinery, it doesn’t need to be diluted, so the diluents are removed from the mixture. Because they’re constantly necessary to keep the crude flowing, they need to be shipped back to Alberta. Here’s the problem: this pipeline flows only one way.

3. To get these very light, highly flammable, possibly explosive chemicals to Alberta, the only option is to move them by train. (The proposed Northern Gateway pipeline would involve twin pipelines, one shipping diluted bitumen to the coast, with the other bringing diluents back to Alberta.)

4. Which would mean an increase in nearly 300-400 train cars – every single day – if this pipeline was carrying dilbit at full capacity.¹²

We really want to emphasize that this is a false choice, and one that was created by industry - the question is not how we send the oil, it’s about whether we ship the oil in the first place. If we don’t feel the costs and risks are worth it as a society, then we shouldn’t ship it.

This is part of a larger, necessary discussion on how we power our communities, how we transport ourselves, and how we can be working to make these options sustainable and renewable.¹³

Meanwhile, we have to debunk the idea that this pipeline is necessary. It is simply not necessary to bring this tar sands oil to the east coast where it would be shipped abroad. People across British Colombia, Ontario, Quebec, and the United States have already rejected pipelines being built through their communities. Energy East is just another export pipeline.

This pipeline also wouldn’t stop the shipment of oil by train from unconventional sources like North Dakota (oil by fracking), where the train that crashed in Lac-Mégantic sourced its oil. This pipeline only encourages the fossil fuel industry and extreme energy extraction that puts all our communities at risk.

In the US as well, TransCanada argued that their pipeline wouldn’t have any impacts on our dependence on fossil fuels or tar sands, saying they would just ship it by train if the government didn’t permit their pipeline. That

Does that mean you want to see more oil sent by train? Because that’s the only alternative.

That’s not what we want to convey, nor is it something we believe. We don’t believe we should be asked to pick our poison, or that it’s our job to find the cheapest way for oil to be shipped. However, it’s unfortunate that this is how the question is so often framed and understood, so let’s break this down.

¹² http://ecologyottawa.ca/2013/10/31/new-research-on-rail-risks-of-energy-east-pipeline/

¹³ http://www.theglobeandmail.com/commentary/lac-megantic-its-not-trains-vs-pipelines-but-why-were-relying-on-oil/article13105827/
position was widely criticized by environmentalists and financial analysts, who pointed out that the train infrastructure doesn’t exist to rival even one pipeline.

**What about the concerns around climate change?**

For us, this is the other major concern about the pipeline.

The tar sands in Alberta are presently the third largest source of oil that we have on this planet, lying beneath a vast stretch of boreal forest and wetlands, in the backyards of a number of Native communities.

We’re currently extracting 2 million barrels of tar sands oil every day, while this pipeline would allow 1.1 million barrels to be shipped out of Alberta if completed.

Since the massive expansion of tar sands extraction began about ten years ago, it has already resulted in thousands of acres of land being converted into an industrial wasteland. As opposed to more conventional oil drilling, the process for tar sands extraction more closely resembles surface mining, where vast stretches of land are dug up, sometimes to hundreds of feet below the ground, to scrape away the bitumen - the stuff that looks like asphalt.

To begin to process the bitumen, and get it closer to the oil products we’re more familiar with, it must then undergo different processes of ‘upgrading’ and refining. These in turn use up vast amounts of energy and water, with much of the water becoming polluted with hydrocarbons and heavy metals, and sent out to tailings ponds so large they resemble lakes from space.

The tar sands are also the biggest single source of greenhouse gas emissions in Canada, and their expansion alone will make Canada unable to meet our greenhouse gas emissions targets, even as every other industry in Canada reduces their emissions levels.

By allowing for the expansion of the tar sands, and beyond that, by locking into place a massive piece of infrastructure that forces us to accept tar sands oil, we are committing ourselves to an unprecedented and dangerous level of global climate change.

James Hanson, the former head of NASA’s climate program, called the tar sands ‘the biggest carbon bomb’ on the planet, noting that it would be ‘game over’ for the planet if that bomb was released by tying it to the ticking time-bomb of a massive pipeline.14

Climate change is a serious threat that is already costing over 60,000 lives every year. If we allow it to worsen, we may see our planet dealing with unprecedented levels of species loss (as much as 60% by the year 2100), rising sea levels that threaten entire countries, weather changes that dramatically reduce our ability to feed ourselves and have secure water resources, and much more.15

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15 For more information on the science of climate change and the long-term impacts, please see the latest report of the Intergovernmental Panel on Climate Change at [http://www.ipcc.ch/report/ar5/wg1/](http://www.ipcc.ch/report/ar5/wg1/)
Lastly, we have our vision. Ecology Ottawa and many of those we work with want to do all we can to make the city the greenest in Canada, to make it the best place to raise our families, to have vibrant communities and neighbourhoods, to see viable options for public transit, cyclists, and pedestrians, to have clean rivers, local food, and to be safe from the threats of climate change.

This pipeline fundamentally threatens that vision, and could put all we work for in jeopardy. For that reason as well we oppose the pipeline, and instead pledge to work towards implementing this vision we have for the city.

What about getting oil to the East Coast?

Let’s make this clear - this pipeline is not a humanitarian project to ensure people on the East Coast get cheaper gasoline. It’s about selling oil to the highest bidder, and that highest bidder will likely not be the consumer in the Maritimes that TransCanada says is the reason they want to pursue this project.

The goals of this project are much more basic - it’s about the money. Right now, with no new pipelines, there will soon be more oil produced in Alberta than the industry can sell. At that point, companies will have to sell it for less, or produce less, either way, losing money. This pipeline is about trying to give those companies a lifeline to other buyers.

Who might those buyers be? There are a few refineries in Quebec and another massive refinery in Saint John, New Brunswick that could potentially buy the oil. However, the current capacity of those refineries shows that they could not process the proposed 1.1 million barrels of oil per day this pipeline would host.

Additionally, those refineries on the East Coast are not the right kind of refineries for processing bitumen, meaning that much of that oil can’t even stay in Canada. In fact, a recent analysis showed that of the 1.1 million barrels a day in the pipe, 700,000 barrels minimum would have to be shipped for export – but it would likely be much more.16

Instead, the focus is on shipping that oil. TransCanada is proposing to use Saint John, New Brunswick and Cacouna, Quebec as tanker ports. Saint John is also the host of a deep-water port, which allows for the biggest tankers on the planet to pass through.

What TransCanada has been saying - mostly to investors - is that this is the perfect opportunity to ship some of Canada’s tar sands around the world. Most likely it would flow to Texas, Europe, India and China.17

We also know that about 75% of the oil that currently reaches New Brunswick from abroad is sold south of the border. If there was a real

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concern for people in the Maritimes not having enough gas to get around, couldn’t they just export less gas south of the border? But, as stated already, it’s not your average citizen who gets to make that choice, as the oil is sold to the highest bidder, which will likely be other oil distributors - most likely abroad.

Lastly, since this is a proposal to convert an existing gas pipeline into an oil pipeline, gas companies from Ontario eastwards have already raised concerns that this project may raise the price of natural gas for consumers in the east, which may also result in more of the controversial fracking process. This may end up costing those of us living in Eastern Canada more money for natural gas, while not necessarily lowering the price of gas at the pumps, as is so often promised.

**What about the jobs? Don’t we need the jobs?**

Another common refrain we hear is that TransCanada is just trying to create jobs. The truth of the matter is that this project will create some temporary jobs, but TransCanada has already cautioned people not to get their hopes too high. After the construction work is done, everyone will lose their jobs, except for a few dozen people in the company’s headquarters. Really, the only local long-term jobs that this project would create would be for clean-up if there’s an oil-spill, and those aren’t the kinds of jobs we want to create.

TransCanada has claimed this project would create a few thousand jobs. What they don’t say is that they mean person-years – so when they say it would create 1000 jobs over 40 years, they actually mean the project will create 25 jobs, times 40 years, so 1000 person-years total. It’s a confusing way to count jobs that isn’t used anywhere but here to inflate the numbers.

However, we think instead if we instead were to focus on creating good, long-term jobs in renewable energy (instead of in the fossil fuel industry), that money would be much better invested. In fact, in Canada on average two jobs are created for every $1 million invested in the oil and gas industry. By comparison, 15 jobs would be created in the clean energy industry with the same investment (think things like solar power, wind, and hydro).

These are the kinds of jobs that would benefit residents of Ottawa and move us forward to a green future. Instead of investing $12 billion to create 40 jobs, why not think about the amount of long-term, environmentally sustainable jobs that could be created by better investing that money?

**What is the timeline for this project?**
First off, TransCanada has engaged in a series of ‘consultations’ all across the pipeline territory, starting in July of 2013, and carrying through to November of 2014. They came to consult with residents of Ottawa in Stittsville in October of 2013, as well as in May of 2014 in North Gower.

These ‘consultations’ featured information packets and display screens, along with public relations representatives there to talk one-on-one. This was certainly not the kind of event to seriously engage with impacted communities. TransCanada conducted these consultations to be able to tell the government they had conducted the necessary consultations.

In October of 2014, TransCanada submitted a gargantuan 30,000-page application to the NEB to build the pipeline. As of December 2014, the NEB has not determined whether or not the application is complete, but many believe it will be seen as incomplete since the government of Quebec had recently stated the company will not be allowed to build a tanker port in Cacouna.

Once the NEB has declared the application is complete, they will issue a ‘hearing order’ which basically sets out the timeline for individuals and groups to comment on the project. The entire review process will be no longer than 15 months, because of the government’s 2012 Omnibus bills. Residents will be required to submit an application to the government if they would like to comment, but most people are usually rejected from commenting.

The Ontario government has also launched their own review of the pipeline, through the Ontario Energy Board. This has already resulted in one open consultation with residents across Ontario, including a meeting in Stittsville in 2014 where 200 residents showed up to express their opposition to the pipeline. The OEB is set to return in early 2015 to hear again from residents. We want the Ontario government to consider the climate change implications of the pipeline, and to take a stand against the pipeline.

We also want the City of Ottawa to conduct their own environmental assessment of the pipeline. As the pipeline goes under the Mississippi River and the Rideau River, while also passing over sensitive aquifers, we think the City of Ottawa has an obligation to look out for the residents of Ottawa and the water sources we rely upon in conducting this review.

We’d also want to see the City intervene at the National Energy Board to represent the interests and concerns of its residents. In doing so, Ottawa would be joining other municipalities across Ontario and the country who are reviewing the pipeline and speaking up about it at the NEB.18

Ultimately, if federally elected officials receive enough opposition, they too could stand against the pipeline, which would send the strongest signal that this pipeline is not supported by virtually anyone. Already we’ve seen the Green Party of Canada state their opposition to the pipeline.

18 Ecology Ottawa has prepared another document for reference: "Why the City of Ottawa Can – and Should – Take Action on the Proposed Energy East Pipeline"
There are still plenty of opportunities to intervene in this process and for elected representatives to bring forward the voices of those concerned. We need everyone to speak out to their elected officials.

**What are the technical details?**

What we’re dealing with is the conversion of 3,000 km of existing pipeline that was apparently built in 1973 (though some parts of the pipeline may differ in age). That pipeline is 42 inches in diameter, as would be the new portion of the pipeline. TransCanada would then build 1,500 km of new pipeline.

In different parts of Canada, the pipeline that is proposed to be converted travels in parallel with up to five other (gas) pipelines. The current pipeline was 9.42mm thick as of 20 years ago (there is nothing to suggest this has changed). The pipeline is currently buried underground.19

**Where exactly does the pipeline go?**

While the pipeline doesn’t go through downtown Ottawa, it does go through the boundaries of the City of Ottawa. The map below shows it fairly clearly, but the pipeline enters the city’s boundaries near Pakenham, continues southeast, passing very close to Stittsville, and eventually leaves the city’s boundaries when it passes under the Rideau River and into Kemptville (the Municipality of North Grenville). However, before it reaches Ottawa it travels extensively alongside the Ottawa River, and crosses over the Mississippi and Rideau Rivers, both of which flow into the Ottawa River.

**What can we do to stop this pipeline?**

**Even one person can do a lot.**

To start we encourage people to sign our petition (available online at our website - [TarFree613.ca](http://TarFree613.ca)) which demonstrates to local officials the thousands of people who have expressed their support of our work. This also lets us communicate with you and send you updates and opportunities to get involved.

Apart from that, we’re encouraging residents to begin conversations with their elected officials, with the city, province, and federal governments, to convey their concerns. You are encouraged to send a letter or email to your city councillors, to the mayor, to your Member of Provincial Parliament and Member of Parliament, letting them know you don’t support this project.

We’d also encourage people to talk to their neighbours, co-workers, friends, etc., with the petition, as well as through social media. You can follow the discussion with the #EnergyEast and #TarFree613 tags, as well as on the Facebook group: “[Tar Free 613 Sans Bitume - No Energy East Tar Sands Pipeline](https://www.facebook.com/TarFree613/)

The campaign also requires some people who are willing to go above and beyond, and get heavily involved with organizing.

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19 The rest of the technical details can be found in TransCanada’s application to the NEB, available at [https://docs.neb-one.gc.ca/ll-eng/lisapi.dll?func=ll&objId=2543426&objAction=browse&viewType=1](https://docs.neb-one.gc.ca/ll-eng/lisapi.dll?func=ll&objId=2543426&objAction=browse&viewType=1)
First, we want to try and find people across the city who support the campaign, so we can mobilize them to get involved and have a collective voice. We do this by engaging online and in social media, but we try to focus on having a physical presence at events and by going directly to people. We try to be present at many community events across the city, while also going door-to-door in key neighbourhoods to let people know directly about this proposed pipeline and to try to get them involved.

Second, we need assistance organizing creative outreach opportunities! Things like movie screenings, panels, debates, art shows, class presentations, etc. You can let us know if you’d like to invite someone from Ecology Ottawa to attend or speak at an event.

Third, we want to make sure that, during elections, candidates are hearing from us. We’ve gotten some of our critical successes during election seasons by having dedicated groups of people provide constant pressure on candidates. With federal elections in 2015, there is always a need to get out the word and get out the vote for candidates who are willing to speak out against the pipeline.

We want to know what passion/skills/interests people have in joining the movement for a Tar Free 613 and hope to find a way to work together. Contact ben.powless@ecologyottawa.ca about any of the opportunities in this section.

**Who are you?**

We are a diverse group of residents of the Ottawa area working to keep the City of Ottawa and the Rideau River free of dirty and dangerous tar sands oil.

The effort is being led by Ecology Ottawa, in coordination with other groups (including at this point 350.org, the Council of Canadians, and the Greenpeace Ottawa chapter), under the banner of Tar Free 613. Ecology Ottawa is the capital’s largest grassroots environmental organization, and has been working for years to make Ottawa the nation’s greenest city.

**Why is Ecology Ottawa involved in this effort?**

We believe we need to be. Ecology Ottawa has been active for many years building healthy communities, protecting our vital greenspace and waterways, helping to tackle big issues like climate change by focusing on local solutions.

This pipeline undermines and threatens our hard work to build sustainable neighbourhoods by threatening the very communities we live in and waterways we depend upon. We have to stop it if we want to have the chance to build the future we want.

**Contact Information**

**Ecology Ottawa**

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