



The Global Significance of a New Kinder Morgan Pipeline

Analysis by Conversations for Responsible Economic Development

Building informed discussion about long-term prosperity on Canada's West Coast

November 2016

About CRED

Conversations for Responsible Economic Development (CRED) is a not-for-profit business research and advocacy organization based in Vancouver, B.C. We are an association of academics, professionals and BC business leaders interested in a fact-based conversation around energy development and opportunities for long-term prosperity on BC's West Coast.

CRED is fiercely pro-business and pro-economic development. Our focus is on sharing facts and original research – backed up by reliable data – on BC economic issues, speaking to the need to protect our regional economy from threats, and promoting and advocating for economic sectors that leverage BC's creativity, innovation and natural beauty.





Introduction

CRED is interested in fact-based conversations about the changing role of energy in our economy, and thus has compiled much research around the economic benefits and risks of Kinder Morgan's proposed oil pipeline in Canada. In light of recent national climate targets, such as the Paris Agreement and national climate plan, we have analyzed the effect that the proposed pipeline would have on those emissions goals and the impact to climate change around the world.

Why Building a New Kinder Morgan Pipeline Would Have Global Climate Impacts

In late 2015, Canada's new Liberal government committed to international climate targets at the Paris climate talks. In 2016, the government ratified the agreement and announced a national climate plan. Any economic development strategy or major infrastructure project must also consider how it will fit with these commitments.

Building the Kinder Morgan pipeline not only commits BC's west coast to a specific economic development path, it also jeopardizes our international and national climate commitments. If Canada is truly attempting to honour its commitment to cut emissions by 30% by 2030 as part of the Paris Agreement, then it must make decisions that work toward carbon reduction.

It is counterproductive to build these pipelines and, at the same time, attempt to lower emissions. There are individuals who believe that we should use the wealth of the old economy to finance the new energy economy, but at some point we need to recognize the shortcomings of this outlook: once the infrastructure is built, it will be used. The Kinder Morgan pipeline, for instance, will likely be operational for at least 75 years.

In theory, 'using the old economy' sounds reasonable. But what this means in reality is off-loading the necessary reductions in greenhouse gas emissions to further decades, guaranteeing that the climate catastrophe will grow worse and worse and will likely be irreversible. Any policy based on the assumption

that we will remain dependent on carbon fuels for the next several decades is condemning Canadian working people, all Canadians, and indeed the entire world to a fate worse than humanity has ever known.

Some argue that pipeline infrastructure is innocuous, and does not contribute to climate change. This position, however, ignores the fact that more pipeline infrastructure will, by necessity, lead to continued expansion of the fossil fuel economy. The most obvious, important realities are often the ones that are hardest to see and to talk about

More pipeline infrastructure will, by necessity, lead to continued expansion of the fossil fuel economy.



THE GLOBAL SIGNIFICANCE OF A NEW KINDER MORGAN PIPELINE

The Transition to a Low Carbon Economy

According to a recent study from City Bank, the energy industry is faced with two scenarios: 1) a business-asusual, or 'Inaction,' on climate change, and 2) taking action on a different energy mix that offers a lower carbon alternative. With both scenarios, the levels of spending are remarkably similar in the short term (up to 2040). The 'Action' scenario actually results in an undiscounted saving of \$1.8 trillion over the period. If we spend more on renewables and energy efficiency in the early years, the savings in fuel costs in later years will offset the expense of earlier investment.

The potential liabilities of not acting are vast. The cumulative 'lost' GDP from the impacts of climate change could be significant, with a central case of 0.7%-2.5% of GDP to 2060, equating to \$44 trillion on an undiscounted basis. Set against a backdrop of secular stagnation, the extra investment in renewables may actually help to boost growth.



A 2012 National Round Table on the Economy and Environment (NRTEE) report warns that by failing to develop a low-carbon economy, Canada risks losing its global competitiveness. As carbon-intensive products become subject to trade restrictions, we risk harming our international reputation and losing out on a first-mover advantage in the rapidly growing international market for low-carbon goods and services. The report concludes that Canada is well placed to build upon existing strengths and innovate in other areas, stressing that we need to act fast in order to build these industries.

Past NRTEE reports—in addition to the 2006 Stern Review—make a strong business case for addressing climate change on the basis of cost-benefit analysis. Simply put, it will cost far more to deal with the impacts of climate change than it will to build a low-carbon economy. But it takes vision to get there.

It will cost far more to deal with the impacts of climate change than it will to build a lowcarbon economy.

The root of the problem is often accountability paired with apathy. As economist Mark Jaccard said in a recent interview: "Anyone contributing to a problem loves to point out that their contribution, by itself, is only one link in the chain and therefore they're not causing the problem. That's the incrementalist approach." He makes a strong argument that every piece of the puzzle counts.





The Bust in Boom and Bust Cycles

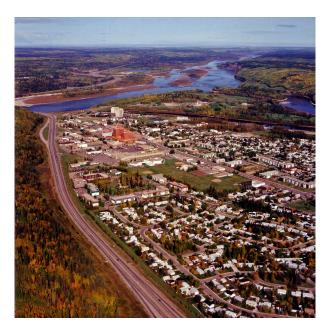
Recent downturns in Alberta's fossil fuel economy mean that more people are looking for a plan B when it comes to employment. Faced with lay-offs and job uncertainty, the province as a whole is pushing toward greater economic diversity. The fossil fuel imprisonment has been so total that the prisoner has not even realized that he has been locked up.

Job loss from the plunge in world oil prices has highlighted the need for real diversification, and this is certainly the case in Alberta. The question is: How? There are many positive approaches to the question, but at the very least, the solution requires us to stop building more oil and gas infrastructure.

Overall oil prices will only decline as climate change forces global industry toward new energy sources.

In the fall of 2011, when oil was trading at \$100 a barrel, the Canada West Foundation penned a report around diversifying Western Canada's economy. The report was called "Who Cares about Baskets, We've Got Eggs!" – a clever title that neatly sums up how quickly we forget about the bust in the boom-and-bust cycle that comes with an economy reliant on the whims of the fossil fuel industry.

This isn't like the old days: while prices may improve in a couple of years, overall oil prices will only decline as climate change forces global industry toward new energy sources.



A recent analysis by economist Robyn Allan found that constrained oil production in the oil sands is exclusively the result of low oil prices, not restricted pipeline capacity. When climate change regulations start to take affect around the globe, the bust will never turn into a boom again.

Canada and its fossil fuel industry need to get ahead of the coming changes. Hydrocarbons, for instance, have many more uses than just as fuel. We need to develop these industries now in order to better position ourselves for the future.



THE GLOBAL SIGNIFICANCE OF A NEW KINDER MORGAN PIPELINE

The True Cost Of A Pipeline – The Climate Test

Downstream Greenhouse Gases

Canada's emissions growth between 1990 and 2014 was driven primarily by increased emissions from mining and upstream oil and gas production and transport.¹ Alberta's oil sands was a key contributor. Refined oil from this region releases 17% more greenhouse gas emissions than other types of oil.

Currently, Environment and Climate Change Canada (ECCC) is only planning to consider 'upstream' GHGs – from drilling and exploration in the oil sands – in their climate assessment (Climate Test) of oil and gas pipelines.

In a similar analysis, the City of Vancouver found that excluding downstream GHGs in assessing the Trans Mountain pipeline expansion would have major ramifications for climate change. The City argued that the pipeline's true environmental cost should take into account the significant risk of an oil spill, as well as the significant risk around climate change.

University of British Columbia climate policy expert, Kathryn Harrison, says Ottawa is effectively exporting the climate change problem to other countries by ignoring downstream emissions. Canada, she says, is contributing to the end-user's GHG emissions while at the same time making money from it.

Just because most downstream emissions will occur abroad doesn't mean they do not contribute equally to the total global concentration of GHGs. This is an obvious point, but one that still needs to be emphasized in the context of Canada's leadership role in the COP21 negotiations. The eyes of the world are upon us, and if we wish to regain our reputation on the global stage, it cannot just be words. Assertions that "Canada's back" must be accompanied with concrete action.

1 Government of Canada website: https://ec.gc.ca/indicateurs-indicators/default.asp?lang=en&n=FBF8455E-1

Downstream greenhouse gas emissions are ten times higher than upstream emissions. Shifting the responsibility for those emissions to other countries (that may not necessarily be equipped to remediate them) would show a lack of leadership and a lack of understanding of the irreversible consequences of our actions.

The only acceptable climate test is one that examines a project's total climate impact in light of the global average temperature target of 1.5 degree Celsius set out in the Paris climate change agreement. Canada was a vocal advocate of this target during the Paris talks. Is it not hypocritical for us to institute a climate test that doesn't officially consider downstream emissions?

The assessment report by ECCC done on the Kinder Morgan pipeline expansion only counts GHG emissions out until 2030; a mere 14 years of its potential 150 year or longer lifespan. The important thing to understand is that the emissions get higher the further that you go into the future, because there is a point where crude oil and surface mineable bitumen gets scarce. From that point on the mix begins to include more and more steam assisted gravity drilling; the most GHG intensive form of oil extraction in Canada.

As well, the agreed upon reduction targets get steeper and steeper the further into the future we get. The emission profile goes up and up over time...and none of that is accounted for. Only magical thinking allows us to assume that this will not be the case. Calculations should be extrapolated out to at least 2050 based on BAU not on some mythical idea that "we'll figure it out" after 2030.

Considerations of the benefits of upstream and downstream activities are inherent in pipeline reviews and approval decisions. But if the benefits are considered, then deficits must also be considered. We cannot build new pipelines, expand the oil sands and meet our climate targets. These are incompatible goals.





Reducing Emissions is an Investment

Mitigation – taking strong action to reduce emissions – must be viewed as an investment, a cost incurred now and in the coming decades to avoid the risks of very severe consequences in the future. On a national level, climate change will cut revenues and raise spending needs, worsening public finances. But the money must be spent: if these investments are made wisely, the costs will be manageable, and there will be a wide range of opportunities for growth and development along the way.

Many developing countries are already struggling to cope with the climatic ramifications of warming. These countries are facing major setbacks to their economic and social development, even with temperature increases of less than 1°C. The impacts of unabated climate change – that is, increases of 3 or 4°C and upwards – will only increase the risks and costs of climatic shock.

We can see these effects emerging right now. 2015 was the hottest year on record. Rising sea levels, heat waves, forest fires, droughts, food shortages, tornadoes, floods – these destructive side-effects are not in some distant future, but right now.

Early action to reduce the impacts of GHG emissions could cost only 2% of GDP. The costs of delaying action will result in significantly higher economic costs - up to 20% of GDP.

Why is a single pipeline so important to this story? The pipeline will lock in our dependence on fossil fuels for decades to come and remove the pressure to convert to renewable alternatives. It is a small piece to the puzzle, but every piece has an impact on the look of our future.

The energy sector has made a major contribution to our quality of life and to the Canadian economy. It should be recognized and celebrated. The people that work in the industry should be proud of their history. But now it is time to recognize that our choices will have a resounding impact around the world. We no longer have the luxury of a slow transition. We've procrastinated for just a little too long.

But the future is bright if we act now.

Clean renewable energy and energy conservation are cheaper than new, unconventional fossil fuels. They are available right now. Many studies have shown that dollar-for-dollar they produce far more jobs, including jobs for the very workers who might otherwise find work on the Trans Mountain pipeline. If we are to halt climate change and secure more jobs, the best way to do it is to fight for a new energy economy that rapidly phases out carbon-emitting fossil fuels and even more rapidly replaces them with renewable energy and conservation.

The proposed Kinder Morgan pipeline will lock in our dependence on fossil fuels for decades to come and remove the pressure to convert to renewable alternatives.



Conversations for Responsible Economic Development

Contact

www.CredBC.ca info@CredBC.ca