

**Oil Change International • Natural Resources Defense Council • CREDO•  
League of Conservation Voters • Sierra Club • 350.org • Bold Nebraska**

***Now More Than Ever  
The Proposed Keystone XL Tar Sands Pipeline  
Fails the “Presidential Climate Test”***

*Allowing the Keystone pipeline to be built requires a finding that doing so would be in our nation’s interest. And our national interest will be served only if this project does not significantly exacerbate the problem of carbon pollution. The net effects of the pipeline’s impact on our climate will be absolutely critical to determining whether this project is allowed to go forward.*

-President Barack Obama, June 25, 2013

The case for rejecting the Keystone XL tar sands pipeline is stronger now than ever. New information and analysis of the economics of the oil market and the latest climate science makes it clear that regardless of any other ongoing process, the proposed Keystone XL tar sands pipeline fails the Climate Test that the President laid out at Georgetown University last year.

Proponents of the pipeline have consistently argued that Keystone XL will not significantly impact carbon pollution primarily because the carbon in the tar sands will inevitably find its way to market, whether through another pipeline, or via rail. However, any facts to support this case have simply not borne out over the past year.

*The evidence is now clear that the construction of the Keystone XL pipeline would have a very significant impact on carbon pollution – primarily due to the pipeline’s economic impact on tar sands production in Alberta.*

The tar sands industry is planning a dramatic expansion of production in the next decade.<sup>1</sup> In order to achieve this expansion profitably, the industry will need access to cheaper pipeline transportation, high oil prices, and manageable production costs. Without the Keystone XL pipeline, fewer tar sands projects will be profitable, and thus more bitumen – and carbon - will be left in the ground. This fact has recently emerged with greater clarity, driven primarily by three key points:

- 1) **Oil prices have fallen dramatically**, the global oil market has changed and previous assumptions about OPEC’s response to falling prices are proving wrong;
- 2) **Other transport options are not working** as predicted for tar sands. The costs and limitations of rail transportation for tar sands crude have become clearer, demonstrating that only pipelines can support the scale of the planned

---

<sup>1</sup> 4.8 million barrels per day by 2030, from a current production level of 1.9 mbpd. See: Canadian Association of Petroleum Producers. “2014 crude oil forecast, markets and transportation.” June 2014. <http://www.capp.ca/forecast/Pages/default.aspx>

- expansion of tar sands production. However, pipeline construction is far from certain, and virtually all other proposed pipelines face stiff opposition;
- 3) A November 2014 report from the Intergovernmental Panel on Climate Change makes it clear that 75-86% of existing proven fossil fuel reserves will have to be left in the ground in order to achieve our national and international climate goal of limiting global warming to less than 2 degrees Celsius.<sup>2</sup> Given this, it makes no sense to enable the construction of infrastructure that will facilitate exploration for more reserves and the extraction of some of the dirtiest most carbon intensive existing reserves. **This high cost, high pollution crude is clearly among those reserves that must be left in the ground if we are to achieve our climate goals.**

Each of these points is explained in detail below.

### **Falling Oil Price in a Changing Market**

The profitability of tar sands production is closely linked to the price of oil. Driven by the surge in U.S. light tight oil production and slowing demand growth, the dramatic drop in oil price since July of this year has already begun to have a significant impact on the profit margins of the tar sands sector.<sup>3,4,5</sup> Currently, futures markets predict that West Texas Intermediate (WTI) oil will remain in the \$65-75/barrel range to the end of the current decade.<sup>6</sup>

Even before the recent drop in oil prices, tar sands producers struggled to remain profitable due to extremely high costs and narrow profit margins. Nine out of ten of the top tar sands producers have underperformed the market in the last five years, and three major projects were canceled in 2014.<sup>7</sup>

---

<sup>2</sup> Intergovernmental Panel on Climate Change. "Climate change 2014 synthesis Report." 2014. p 67. [http://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR\\_AR5\\_LONGERREPORT.pdf](http://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_LONGERREPORT.pdf)

<sup>3</sup> WTI has lost around 40% since June. Many tar sands producers are cutting back capital expenditure as a result.

<sup>4</sup> Van Loon, J. and Penty, R. "Canada's oil dividends threatened as \$70 crude hurts cash." *Bloomberg*. December 4, 2014. <http://www.bloomberg.com/news/2014-12-03/canada-s-oil-dividends-threatened-as-70-crude-hurts-cash.html?hootPostID=904fad45eebfe8c04599995acbbb56ba>

<sup>5</sup> Jones, J., Lewis, J., and Tait, C. "Alberta energy firms face harsh new reality as oil's slide steepens." *The Globe and Mail*. November 27, 2014. <http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/alberta-energy-firms-face-harsh-new-reality-as-oils-slide-steepens/article21821460/>

<sup>6</sup> CME group. "Crude oil futures quota." <http://www.cmegroup.com/trading/energy/crude-oil/light-sweet-crude.html>

<sup>7</sup> Oil Change International and the Institute for Energy Economics and Financial Analysis. "Material Risks: How Public Accountability is Slowing Tar Sands Development". October 2014. <http://priceofoil.org/content/uploads/2014/10/IEEFA.OCI.Material-Risks-FINweb2-1.pdf>

Since the State Department released the Keystone XL Final Supplemental Environmental Impact Statement (FSEIS) earlier this year, multiple analyses have concluded that contrary to State's findings, the construction of Keystone XL would indeed trigger significant additional tar sands production and thus emissions.<sup>8,9,10</sup> The clear difference between all of these analyses and the State Department FSEIS was the fact that the FSEIS found that building Keystone XL would make little or no difference to tar sands production in Alberta. In particular, State's finding rested on a range of possible oil prices from \$92/barrel to \$145/barrel. This range is far from the current price of \$59.95<sup>11</sup> or most current projected future outlooks.

The State Department understood the need for presenting alternative scenarios in its analysis stating a caveat that, "[oil] prices are difficult to predict and could also evolve in the other direction."<sup>12</sup> It is notable that the State Department did model a scenario, which it thought unlikely, in which (WTI) oil prices were between \$65 and \$75. *Under that scenario, the State Department concluded that building Keystone XL would have "substantial impact on oil sands production levels".*<sup>13</sup> WTI has been trading for the last six weeks in this range or below it and many mainstream analysts and the futures markets predict that it could stay in this range for several years.<sup>14,15</sup>

***In short, even the State Department's FSEIS finds significant climate impact under a scenario that reflects the current market conditions.***

Of course, it is always possible that oil prices will go back up again. But the assumption that OPEC led by Saudi Arabia will always adjust production to keep

---

<sup>8</sup> Erikson, P. and Lazarus, M. "Impact of the Keystone XL pipeline on global oil markets and greenhouse gas emissions." *Nature Climate Change* 4, 778–781. 2014.

<http://www.nature.com/nclimate/journal/v4/n9/full/nclimate2335.html>

<sup>9</sup> Carbon Tracker Initiative "Keystone XL Pipeline (KXL): The "Significance" Trap." March 2014. <http://www.carbontracker.org/wp-content/uploads/2014/03/Kxl-The-Significance-Trap-FINAL-03-03-20141.pdf>

<sup>10</sup> Oil Change International and the Institute for Energy Economics and Financial Analysis. "Material risks: how public accountability is slowing tar sands development." October, 2014. <http://priceofoil.org/2014/10/29/material-risks-how-public-accountability-is-slowing-tar-sands-development/>

<sup>11</sup> Closing Price on December 11, 2014. Financial Times Market Data.

<sup>12</sup> U.S. Department of State. "Final Supplemental Environmental Impact Statement for the Keystone XL Project." January 2014. Market Analysis, 1.4.5.2. <http://keystonepipeline-xl.state.gov/finalseis/>

<sup>13</sup> Ibid. Critical price range: \$65 to \$75/BBL: "Oil sands production is expected to be most sensitive to increased transport costs in a range of [WTI] prices around \$65 to 75 per barrel. Assuming prices fell in this range, higher transportation costs could have a substantial impact on oil sands production levels—possibly in excess of the capacity of the proposed Project—because many in situ projects are estimated to break even around these levels." (p. 1.4-8)

<sup>14</sup> CME group. "Crude oil futures quota." <http://www.cmegroup.com/trading/energy/crude-oil/light-sweet-crude.html>

<sup>15</sup> Resnick-Ault, J. "Oil drops \$2 to five-year low on oversupply". *Reuters*. December 8, 2014. <http://www.reuters.com/article/2014/12/08/us-markets-oil-idUSKBN0JM03P20141208>

prices high is clearly a thing of the past. Therefore it looks significantly less likely that long term oil prices will stay high enough to support expanded tar sands production than it did earlier this year.

Finally, throughout this year it has been clear that increasing production costs have further eroded the economic feasibility of tar sands expansion. In the FSEIS, the State Department acknowledged that the profitability of future production would depend in part on pipeline constraints but also production costs.<sup>16</sup>

In fact, production costs for tar sands projects have increased significantly since the State Department prepared its FSEIS, using 2013 data. Current data from the Canadian Energy Research Institute reveals that the reported cost of producing a barrel of tar sands crude from the cheapest tar sands projects has increased by over \$20 per barrel this year.<sup>17,18,19</sup> Production costs and lack of pipeline transportation have been explicit factors for the cancellation or shelving of three major tar sands projects in 2014 alone – Shell’s Pierre River, Total’s Joslyn North, and Statoil’s Corner project.<sup>20,21</sup> These three projects had the potential to produce 4.7 billion barrels of bitumen over their lifetime which would have 2.8 billion metric tons of carbon dioxide.<sup>22</sup>

It is notable that rising costs and infrastructure constraints caused the cancellation of these projects even before oil prices declined below \$90 per barrel - much less than

---

<sup>16</sup> U.S. Department of State. “Final Supplemental Environmental Impact Statement for the Keystone XL Project.” January 2014. Market Analysis, 1.4. Pg. 1.4-8, stating: “the price threshold above which pipeline constraints are likely to have a limited impact on future production levels could change if supply costs or production expectations prove different than estimated in this analysis.” <http://keystonepipeline-xl.state.gov/finalseis/>.

<sup>17</sup> CERI found that the plant gate costs, or the costs of production without transport or blending, or for the lowest cost tar sands projects – SAGD or in situ – has increased from \$30.32 per barrel to \$50.89 per barrel between 2013 and 2014. The breakeven costs of these projects (with plant gate costs of \$30.32 per barrel) were what State relied on when developing the \$65-\$75 threshold oil price.

<sup>18</sup> Canadian Energy Research Institute. “Canadian Oil Sands Supply Cost and Development Projects (2012-2046).” May 2013. Pg. 31. [http://www.ceri.ca/images/stories/2013-06-10\\_CERI\\_Study\\_133\\_-\\_Oil\\_Sands\\_Update\\_2012-2046.pdf](http://www.ceri.ca/images/stories/2013-06-10_CERI_Study_133_-_Oil_Sands_Update_2012-2046.pdf)

<sup>19</sup> Canadian Energy Research Institute. “Canadian Oil Sands Supply Cost and Development Projects (2014-2048).” July 2014. Pg. 32. [http://www.ceri.ca/images/stories/2014-07-17\\_CERI\\_Study\\_141\\_Oil\\_Sands\\_Supply\\_Cost\\_Update\\_2014-2048.pdf](http://www.ceri.ca/images/stories/2014-07-17_CERI_Study_141_Oil_Sands_Supply_Cost_Update_2014-2048.pdf)

<sup>20</sup> Droitsch, D. “Coincidence? Massive tar sands mine put on hold as stalled tar sands pipelines like Keystone XL choke industry.” *Natural Resources Defense Council*. May 30, 2014.

[http://switchboard.nrdc.org/blogs/ddroitsch/coincidence\\_massive\\_tar\\_sands.html](http://switchboard.nrdc.org/blogs/ddroitsch/coincidence_massive_tar_sands.html)

<sup>21</sup> Swift, A. “Citing pipeline constraints, Statoil postpones tar sands expansion project.” *Natural Resources Defense Council*. September 25, 2014.

[http://switchboard.nrdc.org/blogs/aswift/citing\\_pipeline\\_constraints\\_st.html](http://switchboard.nrdc.org/blogs/aswift/citing_pipeline_constraints_st.html)

<sup>22</sup> Oil Change International and the Institute for Energy Economics and Financial Analysis. “Material risks: how public accountability is slowing tar sands development.” October, 2014. Pg. 18. <http://priceofoil.org/2014/10/29/material-risks-how-public-accountability-is-slowing-tar-sands-development/>

the \$75 per barrel threshold below which State concluded Keystone XL would have a substantial impact on tar sands expansion.

### **Rail Cannot Replace Pipelines & Even Pipelines are Proving Problematic**

The assumption that rail transport can deliver tar sands crude to markets at a similar scale to the currently proposed pipelines, including Keystone XL, has proven false. According to the State Department's analysis, the cost of transporting tar sands crude to the Gulf Coast by rail is between 40 percent and up to 150 percent greater than pipeline transport.<sup>23</sup> In the new reality of depressed oil prices, the additional cost of rail transport makes even less economic sense for tar sands producers than it did previously.

Prices for heavy crude on the Gulf Coast are below the cost of producing tar sands and transporting it by rail to the Gulf Coast. This is why rail shipments of tar sands crude to the Gulf Coast have been losing money for traders for much of 2014.<sup>24</sup> A situation that is highly unlikely to improve any time soon.

Additionally, as more crude is pushed onto the rail system costs can only rise further as declining rail capacity increases the marginal costs of shipping by rail.<sup>25</sup> This is in stark contrast to the stability of pipeline contracts that lock in low prices for decades.

It is clear that moving tar sands by rail is fraught with challenges as evidenced by the dismal performance of the first unit train terminal to have access to tar sands crude in Alberta. The Canexus terminal at Bruderheim near Edmonton came on line just under one year ago. In that time it has operated at around 30 percent of its capacity, was shut down for over two months, and is currently looking for a buyer.<sup>26</sup>

The emerging low oil price environment can only add to the challenges faced by tar sands producers forced to ship by rail rather than pipeline. As most industry commentators have noted, rail can only serve as a niche transport option for tar

---

<sup>23</sup> U.S. Department of State. "Final Supplemental Environmental Impact Statement for the Keystone XL Project." January 2014. Market Analysis, 1.4-129. <http://keystonepipeline-xl.state.gov/finalseis/>

<sup>24</sup> Crude oil traders interviewed in the Genscape PetroRail Report and quoted in, Lorne Stockman, Oil Change International, (Sept. 2014) "Wrong Side of Tracks: Why rail is not the answer to the tar sands market access problem." P.13. [http://priceofoil.org/content/uploads/2014/09/OCI-Wrong-Side-of-the-Tracks\\_Final.pdf](http://priceofoil.org/content/uploads/2014/09/OCI-Wrong-Side-of-the-Tracks_Final.pdf) Since "Wrong Side of the Tracks" was published Genscape has continued to report that Canadian Heavy crude by rail to the Gulf Coast has not been making money for traders. PetroRail Report is a subscription only publication.

<sup>25</sup> "Additionally, what's really important to note here is that for every barrel that you have to put on the railroad, that's that much more congestion on North American railways. And at some point the congestion will become so great it will no longer be economic to even rail your barrels" Daily Oil Bulletin December 02, 2014.

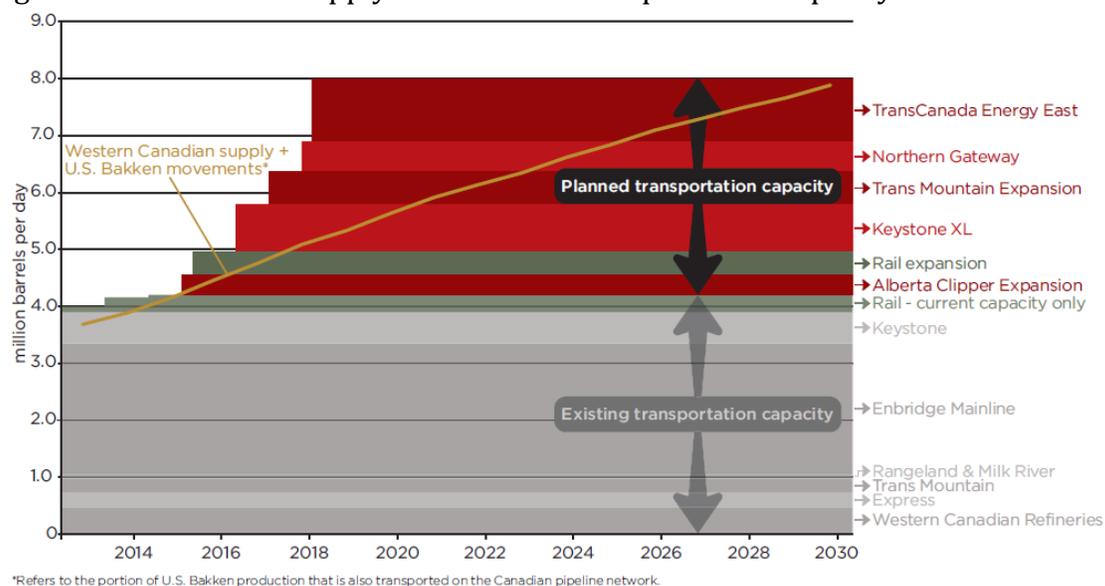
<sup>26</sup> Stockman, L. "The tar sands train that couldn't." *Oil Change International*. October 23, 2014. <http://priceofoil.org/2014/10/21/tar-sands-train-couldnt/>

sands and cannot replace pipelines for the majority of tar sands production.<sup>27</sup> Therefore, denying Keystone XL will clearly constrain carbon intensive tar sands production.

*Alternative pipelines facing significant opposition*

Other pipeline proposals in both the U.S. and Canada face significant opposition and are far from becoming a reality. Additionally, the conventional wisdom that industry could pursue its expansion plans with other pipelines instead of Keystone XL ignores the fact that industry clearly requires all of the currently proposed pipelines and rail to reach its expansion goals (see Figure 1). In other words, it is not a matter of building Keystone XL or Energy East or Northern Gateway. It is about each pipeline incrementally helping industry access new markets, opening new acreage and unlocking new fossil resources.

Figure 1: Canadian Oil Supply Forecast vs. Transportation Capacity<sup>28</sup>



But the significant public and political opposition to tar sands pipelines across North America – much of it motivated by the climate impacts of tar sands – combined with the factors cited in this memo have made most of these other projects highly uncertain. Pipeline projects facing significant opposition include:

- *Enbridge Northern Gateway:* First Nations in Canada have filed at least nine legal challenges to the Canadian government’s decision to approve the

<sup>27</sup> “Crude by rail is not a panacea. It’s not going to replace pipe.” Stewart Hanlon, President & CEO, Gibson Energy Inc. (a tar sands rail terminal operator). June 2, 2014. Quoted in: Oil Change International. “Wrong Side of the Tracks.” September 2014.

<sup>28</sup> Based on Canadian Association of Petroleum Producers (CAPP), “Crude Oil: Forecasts, Markets & Transportation.” June 2014. <http://www.capp.ca/forecast/Pages/default.aspx>

Northern Gateway pipeline project.<sup>29</sup> These concerns have driven analysts to widely regard the project as being unbuildable.<sup>30</sup> This opposition is combined with unprecedented opposition from British Columbians, municipalities, and the provincial government.<sup>31</sup>

- *TransCanada Energy East*: The provinces of Quebec and Ontario have both placed challenging conditions on the project and public opposition is growing throughout hundreds of communities through which the pipeline would pass.<sup>32</sup> Communities on the proposed pipeline route include over 180 First Nations.<sup>33</sup> The proposed project's key export terminal has also been put on hold facing concerns around the potential impact to critical beluga whale habitat.<sup>34</sup>
- *Enbridge Line 9/ Portland-Montreal Pipeline*: Enbridge's plan to reverse and expand its Line 9 faces significant safety concerns and has led to ongoing delays despite federal approval in Canada.<sup>35</sup> This pipeline reversal would enable transport of up to 300,000 bpd of Canadian tar sands through the provinces of Ontario and Quebec. Some of this oil could then be exported via the United States using the Portland-Montreal pipeline. However, opposition is mounting on both sides of the border with the City of South Portland, Maine recently passing the Clear Skies Ordinance prohibiting the loading of crude oil into tankers in its port.<sup>36,37</sup>

---

<sup>29</sup> Lanellaa, M. "Northern Gateway pipeline: First Nations outline constitutional challenges." *CBC*, 2014. <http://www.cbc.ca/m/touch/news/story/1.2706376>

<sup>30</sup> Moore, D. "Despite federal approval, Northern Gateway faces legal and political hurdles." *The Canadian Press*, 2014.

<http://www.theprovince.com/business/waits+federal+decision+Northern+Gateway+pipeline+proposal/9947153/story.html>

<sup>31</sup> Environmental Defence. "Far from inevitable: the risks of and barriers to tar sands expansion." November 2014. <http://environmentaldefence.ca/reports/far-inevitable-risks-and-barriers-tar-sands-expansion>

<sup>32</sup> Paris, M. "Energy East Pipeline to face Ontario scrutiny." *CBC*. November 13, 2013. <http://www.cbc.ca/news/politics/energy-east-pipeline-to-face-ontario-scrutiny-1.2425544>.

<sup>33</sup> McCarthy, S. "Energy companies struggle with aboriginal needs on pipelines." *The Globe and Mail*. December 8, 2013. <http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/energy-companies-struggle-with-aboriginal-needs-on-pipelines/article15818477/>

<sup>34</sup> McCarthy, S. "Energy East faces new threat in Quebec." *The Globe and Mail*. December 1, 2014. <http://www.theglobeandmail.com/report-on-business/transcanada-suspends-terminal-construction-on-beluga-concerns/article21857017/>

<sup>35</sup> The Canadian Press. "Enbridge Line 9 reversal pushed back by energy watchdog." October 10, 2014. [http://www.thestar.com/news/canada/2014/10/10/enbridge\\_line\\_9\\_reversal\\_pushed\\_back\\_by\\_energy\\_watchdog.html](http://www.thestar.com/news/canada/2014/10/10/enbridge_line_9_reversal_pushed_back_by_energy_watchdog.html)

<sup>36</sup> CBC News. "South Portland, Maine, votes against crude oil export." July 22, 2014. <http://www.cbc.ca/news/canada/montreal/south-portland-maine-votes-against-crude-oil-export-1.2714101>.

<sup>37</sup> Environmental Defence. "Far from inevitable: the risks of and barriers to tar sands expansion." November, 2014. <http://environmentaldefence.ca/reports/far-inevitable-risks-and-barriers-tar-sands-expansion>

- *Kinder Morgan TransMountain*: Kinder Morgan's proposal to expand its TransMountain pipeline would enable the company to increase its tar sands shipments from 30,000 bpd to 890,000 bpd.<sup>38</sup> This expansion requires various new regulatory approvals, as well as public and First Nations consultations. The mayors of Vancouver, West Vancouver, Victoria, and Burnaby, British Columbia oppose the project.<sup>39,40</sup> The project faces growing public opposition and ongoing peaceful public protests along the pipeline route have led to over one hundred arrests including prominent academics and citizens and forced the company to halt development in the Burnaby Mountain region in recent weeks.<sup>41</sup>

## Climate Science, and the Need to Keep Fossil Fuels in the Ground

*"Science is science. And there is no doubt that if we burned all the fossil fuel that's in the ground right now that the planet's going to get too hot and the consequences could be dire."*  
 – President Barack Obama, June 2014<sup>42</sup>

Increasingly, scientists and public officials recognize the need to leave currently proven fossil reserves in the ground. In order to keep global warming below the agreed-upon definition for the threshold of dangerous climate change, 2°C above pre-industrial levels, cumulative human CO<sub>2</sub> emissions since 1870 must remain below about 2900 GtCO<sub>2</sub>. About two-thirds of that budget--1900 GtCO<sub>2</sub>--had already been emitted by 2011, according to the latest IPCC Synthesis Report.

The Fifth Assessment Synthesis Report, released on Nov 2, 2014, noted that *"Estimated total fossil carbon reserves exceed this remaining amount by a factor of 4 to 7, with resources much larger still."* That means that 75-86% of current proven fossil fuel reserves are unburnable in a safe climate world. As Todd Stern said recently, it is

---

<sup>38</sup> Reuters. "Kinder Morgan files application to expand Trans Mountain pipeline." December 16, 2013. <http://www.reuters.com/article/2013/12/16/kindermorgan-transmountain-expansion-idUSL2N0JV1GL20131216>.

<sup>39</sup> Jackson, E. "Vancouver mayor Gregor Robertson wins third term." *Metronews*. November 16, 2014. <http://metronews.ca/news/vancouver/1213731/vancouver-mayor-gregor-robertson-wins-third-term/>

<sup>40</sup> Lee, J. and and Morton, B. "Vancouver and Burnaby mayors decry Kinder Morgan pipeline expansion." *Vancouver Sun*. April 14, 2012. <http://www.vancouversun.com/business/Vancouver+Burnaby+mayors+decry+Kinder+Morgan+pipeline+expansion/6457014/story.html>.

<sup>41</sup> Crawford, T. "Kinder Morgan halts drilling and readies to leave Burnaby Mountain." *National Post*. November 28, 2014. <http://news.nationalpost.com/2014/11/28/kinder-morgan-halts-drilling-and-readies-to-leave-burnaby-mountain/>

<sup>42</sup> Friedman, T. "Obama on Obama on climate." *The New York Times*. June 7, 2014. <http://www.nytimes.com/2014/06/08/opinion/sunday/friedman-obama-on-obama-on-climate.html? r=0>

“pretty obvious” that the world will have to leave “a lot of fossil fuel assets in the ground”.<sup>43</sup>

This is particularly true for the tar sands, which are significantly more carbon intensive than other crudes and are responsible for massive land use changes that cause further increases in global GHG emissions.<sup>44</sup> Given the need for rapid action on GHG emissions worldwide, any project that facilitates expanded development of tar sands – which have a “lock-in” problem due to their high startup costs, high production costs, and long period of capital recovery – could seriously undermine global efforts to combat climate change.

The current economics of tar sands production limits growth. Constructing Keystone XL would change those economics and trigger additional production and emissions. There is simply no need for the Administration to enable and incentivize another country to profitably produce reserves that would otherwise be left in the ground.

Over the longer term, the International Energy Agency has forecast that oil prices in the range of \$100/barrel are consistent with global efforts to curb carbon emissions and attain the universal goal of limiting warming to no more than 2 Degrees Celsius warming.<sup>45</sup> This is significantly lower than the oil price projections in the State Department’s FSEIS. The construction of Keystone XL would lower transport costs and enable additional production by profitably unlocking even more carbon.

## **Conclusion**

The central FSEIS finding was that the Keystone XL pipeline was unlikely to have a significant impact on tar sands production. That finding was made over 11 months ago and likely based on analysis over a year old. That finding was made based on key assumptions of major factors such as global oil prices, production costs, and the emergence of a crude-by-rail industry that was only just beginning. Each one of these assumptions has now been rebutted by real world data and experience.

In this past year, there have been seismic shifts in the oil market, significant developments in the tar sands industry in terms of rising costs, and much more is known about the viability of moving tar sands by rail. Even the State Department

---

<sup>43</sup> Goldenberg, S. “Obama’s climate change envoy: fossil fuels will have to stay in the ground.” *The Guardian*. November 25, 2014.

<http://www.theguardian.com/environment/2014/nov/25/todd-stern-fossil-fuels-ground-climate-change-obama>

<sup>44</sup>Tar sands crude generates up to 17% more carbon dioxide per barrel than the conventional crude. The FSEIS acknowledged that tar sands crude is significantly more carbon-intensive than the conventional oil it would displace. See: U.S. Department of State. “Final Supplemental Environmental Impact Statement for the Keystone XL Project.” January 2014. 4.14-31.

<http://keystonepipeline-xl.state.gov/finalseis/>

<sup>45</sup> International Energy Agency. “World Energy Outlook 2014.” November, 2014. P. 97. <http://www.worldenergyoutlook.org/>

recognized the possibility of low oil prices and included a scenario that it concluded would result in a substantial impact to tar sands production. It turns out that this scenario most closely matches current and currently projected market conditions.

Meanwhile, oil market analysts, the Canadian government, and the tar sands industry have continued to acknowledge how critical Keystone XL is to their plans to expand production. It is therefore no secret the pipeline is widely viewed as a linchpin to more expanded carbon-intensive tar sands production.

The completion of Keystone XL would be a hedge against future price volatility for tar sands producers. That is why they need it. It would enable them to open more acreage, to prove more reserves, to produce more carbon and to generate more profit because it would improve the risk profiles of their companies by lowering the cost of transport for their product.

Together, all of this information – much of it recent– compels the Obama Administration to a finding that the pipeline would, in fact, substantially impact and increase tar sands production. Leading climate scientists have called on decision-makers to recognize how massive pipeline infrastructure enables growth of tar sands development. The evidence is clearer today than ever before to reject Keystone XL.

The proposed Keystone XL tar sands pipeline should be the first fossil fuel project rejected explicitly on climate grounds. It will not be the last.