



**Stephen M. Kretzmann
Executive Director
Oil Change International**

**Testimony on “The Crude Oil Export Ban: Helpful or Hurtful”
Subcommittee on Terrorism, Nonproliferation, and Trade
of the House Committee on Foreign Affairs
2172 Rayburn House Office Building
April 14, 2015**

Chairman Poe, Ranking Member Keating, and members of the Subcommittee, thank you very much for the opportunity to testify today.

I am Stephen M. Kretzmann, the Founder and Executive Director of Oil Change International, a non-profit charitable organization supported by over 100,000 individuals and dedicated to conducting ongoing public education regarding the environmental, social, and economic impacts associated with the production and consumption of fossil fuels.

Oil Change International believes the crude oil export ban should not be lifted and that maintaining the ban would be ‘helpful’ from the perspectives of community safety and climate protection. Our analysis and that of others predicts that lifting the ban will lead to a hazardous increase in U.S. oil production. This production would in turn likely lead to greater greenhouse gas emissions and threats to public safety.

Lifting the crude oil export ban would also likely lead to an increase in crude-by-rail traffic, putting hundreds of communities and the lives of 25 million Americans at increased risk of an oil train disaster, such as the one in Lac Megantic, Canada last year where 47 people perished because an oil train derailed and exploded.

The crude oil export ban was certainly not designed to play a role in climate change mitigation or to reduce the likelihood of a mile long freight train full of crude oil destroying a community in America’s heartland. However it plays an important role in regulating an industry that currently has few limits placed upon it. Lifting the ban without the implementation of urgently required actions to protect the climate and communities in the path of crude oil trains or otherwise endangered by this hazardous industry, would only exacerbate these serious risks.

More broadly, this issue points to the urgent need to harmonize energy policy with climate policy. We cannot drill our way out of the climate crisis, and arguments to that effect are nothing short of climate denial.

Lifting the Crude Oil Export Ban will increase U.S. oil production

The key reason that U.S. oil producers want an end to the export ban is to gain access to international markets, thus raising the price they receive for their crude. In recent years, a glut of U.S. light crude has caused a structural price differential between North American crude oil and international crude oil. This is primarily manifested in the spread between the crude oil benchmarks: WTI and Brent. Exporting U.S. crude oil would essentially end the glut of U.S. crude within in the North American market and raise the price of WTI, even while the entry of U.S. crude into the international market may lower the price of Brent.

Raising the price producers receive for their crude facilitates greater production by raising capital available to reinvest in new production and by bringing into play oil fields that may not have been economic with lower crude oil prices. Allowing exports will also simply create a larger market for U.S. crude than would otherwise be available. The end result of all these factors is a hazardous increase in U.S. oil production.

In March 2014, Oil Change International conducted an analysis using Rystad Energy's UCube database to estimate the potential production increase caused by a \$10 per barrel increase in the price received by U.S. oil producers.¹ We found that a \$10 per barrel increase in U.S. crude oil prices could stimulate an additional 9.9 billion barrels of crude to be produced between 2015 and 2050.

At almost the same time, the American Petroleum Institute (API) estimated that U.S. production could increase by 500,000 barrels per day (bpd) by 2020 if the export ban is lifted.²

Oil Change International's analysis estimated an average projected U.S. oil production increase of more than 476,000 bpd by 2020, which is very similar to the API estimate of 500,000 bpd by that time.

A more recent report by the Center on Global Energy Policy (CGEP)³ gives a wider range but certainly demonstrates that lifting the U.S. crude oil export ban could indeed increase U.S. production and place additional crude oil supply onto the world market.

The critical question to consider is: What will other oil producers do when confronted by this additional U.S. supply? The conventional wisdom had been that the Organization of the Petroleum Exporting Countries (OPEC) would counter new supply by reducing production to support higher oil prices. This conventional wisdom has been proven spectacularly wrong over

¹ Oil Change International. "Lifting the Bank, Cooking the Climate: The Climate Impact of Ending the U.S. Crude Oil Export Ban." March 2014. <http://priceofoil.org/content/uploads/2014/03/LiftingTheBanFinal.pdf> Although this was before the oil price crash that ensued later in the year it was only designed to be indicative of the impact of lifting the export ban on production and thus remains valid today.

² ICF International and EnSys Energy. "The Impacts of U.S. Crude Oil Exports on Domestic Crude Production, GDP, Employment, Trade, and Consumer Costs The Impacts of U.S. Crude Oil Exports on Domestic Crude Production, GDP, Employment, Trade, and Consumer Costs." American Petroleum Institute, March 31, 2014. <http://www.api.org/rss/~media/Files/Policy/LNG-Exports/LNG-primer/API-Crude-Exports-Study-by-ICF-3-31-2014.pdf>

³ Jason Bordoff and Trevor Houser. "Navigating the U.S. Oil Export Debate." Columbia University School for International and Public Affairs Center on Global Energy Policy, January 2015. <http://energypolicy.columbia.edu/sites/default/files/energy/Navigating%20the%20US%20Oil%20Export%20Debate%20January%202015.pdf>

the last year. In the past nine months it has become increasingly clear that OPEC's most important member, Saudi Arabia, is determined to maintain market share rather than cut production to support high prices. This makes the conclusion that increased U.S. production will lead to increased global production clearer than ever.

Lifting the Crude Oil Export Ban will likely increase crude-by-rail traffic - putting 25 million Americans at greater risk of disaster

The U.S. oil boom has precipitated a parallel boom in the transportation of crude by rail. Since 2005, the amount of tank cars on the U.S. railways has increased over 4000%.⁴ Around 1 million barrels of crude oil is currently loaded and unloaded onto and off of the rail network every day in the United States.⁵ With the number of days from source to destination averaging 9 days, this means that at any given time there are about 135 one-hundred-car trains carrying a total of 9 million barrels (378 million gallons) of crude oil through American communities at any given time.⁶

However, the capacity of loading and unloading terminals in the U.S. and Canada is nearly five-times greater.⁷ In addition, planned new terminals and capacity expansions at existing terminals may add a further 1 million bpd in the next two years.⁸

Lifting the crude oil export ban would raise U.S. production further and likely send more crude oil trains to terminals on the East, West, and Gulf Coasts for export. If all of the projected increase in U.S. production (500,000 bpd) were to go by rail to export terminals crude-by-rail traffic would see a 50% increase. If increased production were to reach the top end of the CGEP analysis – some 1.2 million bpd – this could more than double crude-by-rail traffic from today's levels.

Dozens of terminals on the Gulf Coast, at least four on the East Coast and at least six planned terminals on the West Coast have facilities, or will be designed with facilities, for unloading crude oil from trains and loading it onto tankers for export. This already occurs in Albany, New York, where trains are unloaded to barges that send crude oil down the Hudson River for export to Canada. This has generated concern in Albany and right through the Hudson Valley resulting in a moratorium on the expansion of crude-by-rail in Albany.⁹

American citizens are rightly concerned about current crude-by-rail activity and even more concerned about the potential for it to grow further. According to a review of federal accident records conducted by Associated Press, at least 21 oil-train accidents and 33 ethanol train accidents involving a fire, derailment, or significant amount of fuel spilled have occurred in the

⁴ Association of American Railroads. "Crude Oil By Rail." Accessed on April 13, 2015. <https://www.aar.org/todays-railroads/what-we-haul/crude-oil-by-rail>

⁵ U.S. Energy Information Administration. "U.S. Movements of Crude Oil By Rail." March 30, 2015. <http://www.eia.gov/petroleum/transportation/>

⁶ Oil Change International. "Runaway Train: The Reckless Expansion of Crude-by-Rail in North America." May 2014. http://priceofoil.org/content/uploads/2014/05/OCI_Runaway_Train_Single_reduce.pdf

⁷ Oil Change International. "Runaway Train: The Reckless Expansion of Crude-by-Rail in North America." May 2014. http://priceofoil.org/content/uploads/2014/05/OCI_Runaway_Train_Single_reduce.pdf

⁸ Oil Change International. "Runaway Train: The Reckless Expansion of Crude-by-Rail in North America." May 2014. http://priceofoil.org/content/uploads/2014/05/OCI_Runaway_Train_Single_reduce.pdf

⁹ Earthjustice. Albany County Halts Expansion of Dangerous Crude by Rail Project. March 12, 2014. <http://earthjustice.org/news/press/2014/albany-county-halts-expansion-of-dangerous-crude-by-rail-project>

U.S. and Canada since 2006.¹⁰ This does not include the five incidents that recently occurred in February and March 2015.¹¹

In July 2013, 47 people were killed in the small town of Lac Megantic, Quebec when a train carrying crude oil from North Dakota derailed and exploded in the middle of the town. Since then, at least ten major incidents have occurred in the U.S. and Canada involving derailed crude oil tank cars and serious explosions and fires.

Over 25 million Americans live within the 'blast zone' of crude oil trains. This is an area of within 1 mile from the tracks.¹² It seems only a matter of luck that the incidents to date have not caused further loss of life.

Crude oil trains pass through more than 400 counties, including major metropolitan areas such as Philadelphia, Seattle, Chicago, Newark, Richmond, and dozens of other cities.¹³

A recent Department of Transportation report estimated that an average of ten derailments will occur annually for the next two decades.¹⁴ This is an already untenable situation that we cannot afford to exacerbate by stimulating further traffic for exports.

The Crude Oil Export Ban is not a climate policy, but lifting it would hinder, not help, progress toward the goal of climate protection

In the current market, additional U.S. oil production will likely lead to an increase in greenhouse gas emissions. Every additional barrel of oil produced and consumed emits from 550 kg to 850 kg of carbon dioxide equivalent, depending on the type of oil that is being produced and consumed.¹⁵

There are two primary ways in which an increase in U.S. oil production harms the climate:

- Failure to keep oil in the ground,
- Increased demand brought about by greater supply.

The stark reality laid out in the Intergovernmental Panel on Climate Change's (IPCC) Fifth Assessment report of November 2014 is that more than three quarters of existing, proven fossil

¹⁰ Matthew Brown and Josh Funk. "Fuel Trains Could Derail Up To 10 Times A Year Over Next Two Decades, Feds Predict." Huffington Post, February 22, 2015. http://www.huffingtonpost.com/2015/02/23/ap-exclusive-fuel-haulin_n_6730476.html

¹¹ Matthew Maiorana, "How many explosions before we stop crude-by-rail?" Oil Change International Price of Oil Blog, March 13, 2015. <http://priceofoil.org/2015/03/13/many-explosions-will-take-stop-crude-rail/>

¹² Forest Ethics, "Oil Train Blast Zone Website." Accessed on April 13, 2015. <http://explosive-crude-by-rail.org/>

¹³ Matthew Brown and Josh Funk. "Fuel Trains Could Derail Up To 10 Times A Year Over Next Two Decades, Feds Predict." Huffington Post, February 22, 2015. http://www.huffingtonpost.com/2015/02/23/ap-exclusive-fuel-haulin_n_6730476.html

¹⁴ Matthew Brown and Josh Funk. "Fuel Trains Could Derail Up To 10 Times A Year Over Next Two Decades, Feds Predict." Huffington Post, February 22, 2015. http://www.huffingtonpost.com/2015/02/23/ap-exclusive-fuel-haulin_n_6730476.html

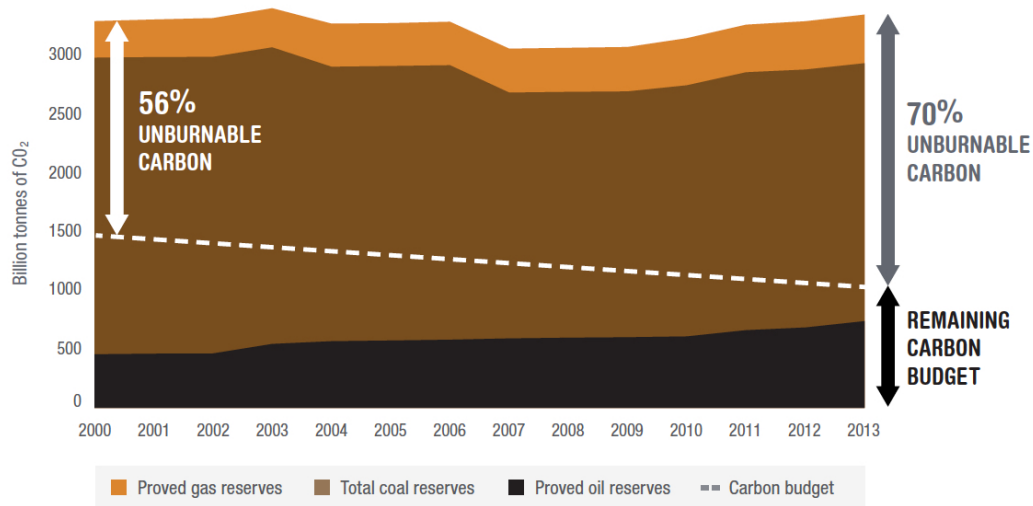
¹⁵ Deborah Gordon, Adam Brant, Joule Bergerson, and Jonathan Koomey. "Know Your Oil: Creating a Global Oil-Climate Index." Carnegie Endowment for Peace, March 11, 2015. <http://carnegieendowment.org/2015/03/11/know-your-oil-creating-global-oil-climate-index/i3v1>

fuel reserves need to stay in the ground if the world is to maintain a 2 in 3 chance of limiting global warming to two degrees Celsius.¹⁶

While it is not clear how much of U.S. oil reserves in particular need to be left in the ground, it is clear that lifting the ban would increase the incentives for production, which is precisely the wrong signal to be sending. In fact, a gradual slow-down in U.S. – and global - oil production over time is exactly what we need in order to avoid catastrophic climate change. The International Energy Agency has also warned that “no more than one-third of proven reserves of fossil fuels can be consumed prior to 2050 if the world is to achieve the 2°C goal,”¹⁷ which is the conservative, globally accepted threshold of average global temperature increase for avoiding catastrophic climate change.

As fossil fuel production is increasing in the U.S. and globally, our window to meet this target is closing fast (See Figure 1).

Figure 1. The carbon content of fossil fuel reserves in comparison to the carbon budget¹⁸



The percentage of total fossil fuel reserves that are unburnable has grown rapidly over the past decade: proven global oil, gas and coal reserves have risen while the carbon budget (the amount left to burn) has shrunk as the result of rising greenhouse-gas (GHG) emissions. Source: All data from U.S. EIA, IPCC, and Global Carbon Project - calculations by Oil Change International.

In the same Fifth Assessment report, the IPCC notes that not only will it be necessary to keep carbon in the ground, but that in fact global emissions must fall dramatically between now and

¹⁶ Intergovernmental Panel on Climate Change. “Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.” Geneva, Switzerland, 151 pp. <https://www.ipcc.ch/report/ar5/syr/>

¹⁷ International Energy Agency (IEA). “World Energy Outlook 2012.” <http://www.iea.org/publications/freepublications/publication/English.pdf>

¹⁸ Source: Elizabeth Bast, Shakuntala Makhijani, Sam Pickard and Shelagh Whitley, “The fossil fuel bailout: G20 subsidies for oil, gas and coal exploration.” Oil Change International and Overseas Development Institute, November 2014.

2050. Lifting the export ban, which is likely to increase global oil demand, clearly pushes this in the wrong direction.

How much additional global oil demand may be stimulated by liberalized U.S. oil exports is subject to many factors. The CGEP report suggests a range of between 0 and 1 million bpd – a wide range derived from the multiple uncertainties considered in the analysis. However, if we assume that a likely impact that is in the middle of that range, then an additional 500,000 bpd of additional oil demand would lead to emissions of up to 110 million metric tons of carbon dioxide equivalent (CO₂e) per year. This is equivalent to the emissions from 29 average US coal-fired power plants or over 23 million average passenger vehicles.¹⁹

A net increase in global greenhouse emissions is very likely to be the result of lifting the crude oil export ban. The United States and the world have agreed in multiple international forums to limit average global temperature rise to below 2 degrees Celsius. At this point, the world is dangerously close to passing the point at which that goal can be achieved and therefore condemning future generations to climatic changes that will drastically challenge their chances of living prosperous and secure lives.

Given this context, any policy change that could result in a net increase in global greenhouse emissions needs to be evaluated in terms of its climate impact. As President Barack Obama noted in June of 2013 in regards to the Keystone XL pipeline:

[O]ur national interest will be served only if this project does not significantly exacerbate the problem of carbon pollution.”²⁰

This ‘climate test’ should be applied to all policy decisions as well as the permitting of infrastructure to extract, transport, or process fossil fuels. The lifting of the crude oil export ban almost certainly fails this test.

Conclusion

The crude oil export ban was not designed to mitigate climate change or to reduce the likelihood of a freight train full of crude oil destroying a community in America’s heartland. However, in the absence of adequate regulation to mitigate either of these crucial issues it plays an important role in regulating an industry that has few limits placed upon it. Lifting the ban prior to implementing the urgently required action to protect the climate and protect communities in the path of crude oil trains, can only exacerbate these serious risks.

¹⁹ EPA Greenhouse Gas Calculator: <http://www.epa.gov/cleanenergy/energy-resources/calculator.html>

²⁰ The White House Office of the Press Secretary. “Remarks by the President on Climate Change.” Georgetown University, Washington, D.C., June 25, 2013. <https://www.whitehouse.gov/the-press-office/2013/06/25/remarks-president-climate-change>