

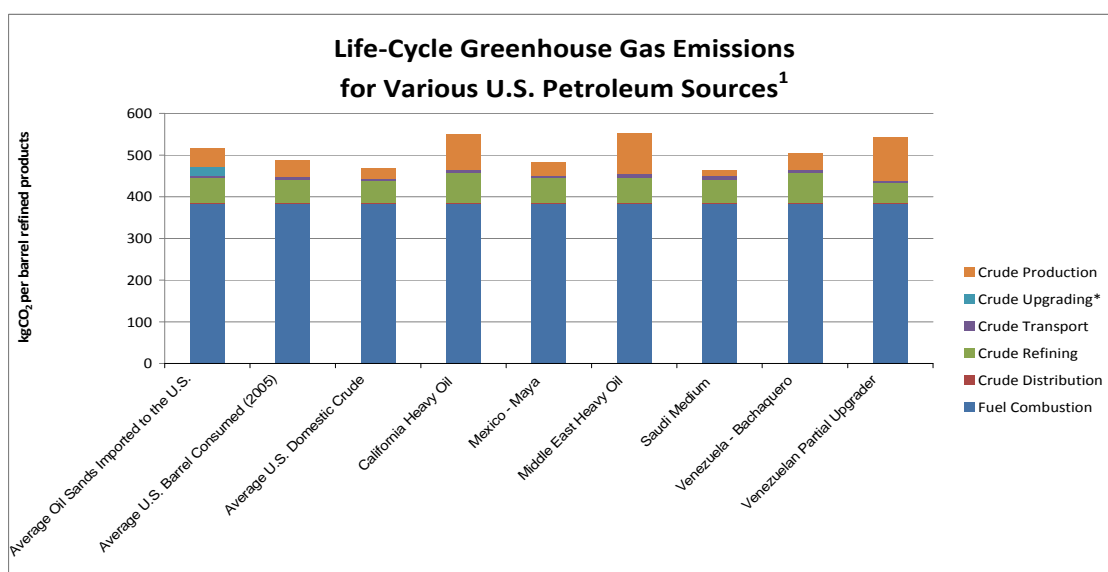
ISSUE: Canadian Oil Sands

PROBLEM: Certain environmental groups are opposed to the United States' continued import of oil derived from the Canadian oil sands. This paper discusses the environmental, economic and energy security implications surrounding the U.S. imports of Canadian oil sands.

BACKGROUND and DISCUSSION: The United States consumes approximately 19 million barrels of oil each day. Approximately half of the oil consumed by the U.S. is produced in the U.S. and half is imported. Two and a half million barrels of oil (12-13% of U.S. consumption) are imported from Canada and about half of that (5%) is derived from Canadian Oil Sands. Canada sends 99% of the oil it exports to the United States – mostly to Midwestern refineries. The amount of oil Canada produces from oil sands is expected to rise from 1.2 million barrels per day to 3.3 million barrels per day by 2030.

Energy Security: Notwithstanding efforts to enhance conservation and identify alternative energy sources, the U.S. trucking industry will continue to depend upon petroleum-derived diesel fuel for the foreseeable future. Oil shipped to the U.S. from Canada is less subject to geopolitical instability than oil imported from the Middle East, Russia or Africa and less vulnerable to disruptions from severe weather in the Gulf of Mexico. Canadian oil sands are an important component of a stable North American petroleum supply.¹ If the U.S. refuses to import oil derived from Canadian oil sands, Canada simply will export that oil to other nations and the U.S. will be forced to import an equivalent amount of oil from somewhere else.

Carbon Footprint: In considering the lifecycle (well-to-wheels) carbon emissions of various crude oil sources, it is important to remember that almost 80% of the total carbon emitted stems from the combustion of refined product (e.g., diesel or gasoline) and does not vary by crude oil source. The remaining carbon emissions are attributable to the extraction, refining and transportation of the fuel.



¹ Recent estimates place the amount of economically recoverable oil at 170 billion barrels, which is second only to Saudi Arabia's reserves. At 3.1 million barrels per day, there would be 153 years of crude oil available.



Oil from the Canadian oil sands requires additional energy to extract and this additional energy increases the carbon footprint compared to light, sweet (low sulfur) crude oil. The lifecycle carbon emissions from refined products wholly derived from oil sands are 5 to 15 percent higher than the average crude consumed in the United States, and are comparable to the greenhouse gas (GHG) footprint of the heavy sour crudes produced in the U.S.

Carbon Paradox: If the United States turns its back on Canadian oil sands, global carbon emissions likely would increase, as the Canadian oil is transported to China or elsewhere for

consumption. The amount of carbon produced from the *combustion* of Canadian oil sands will be identical regardless of whether the fuel is consumed in the U.S. or in China. Similarly, the amount of carbon released during the *extraction* process will not change. The only difference in lifecycle carbon emissions that result from the U.S. refusing to import Canadian oil sands stems from the increase in carbon emitted from the transportation of the oil to other countries. The carbon emissions associated with transporting the Canadian oil to China by supertanker exceed the carbon emissions associated with transporting it by pipeline to Houston. The map shows the proposed route of the Keystone XL pipeline, which could bring an extra 500,000 barrels of Canadian oil to the U.S. while reducing the GHG emissions associated with transporting that oil elsewhere.



Economics: In addition to the temporary jobs that would be created from the construction of the Keystone XL pipeline and refinery expansions, an additional 500 permanent refinery jobs would be created in the United States.

Other Environmental Issues: Environmentalists also have raised concerns over water usage during the oil sands extraction process and the destruction of the Boreal Forest. Canadian law requires all land on which oil sands are developed to be returned to its natural state. Only 2.5% of the 140,000 sq. kilometers can be mined – the remainder must be extracted *in situ* – a process which has a surface impact similar to conventional oil drilling. There are strict regulations governing the amount of water that can be allocated to oil and gas development, requirements to recycle the water, and limitations on the amount of Boreal Forest land that can be used.

ATA POSITION: The trucking industry is interested in the development of alternative fuels, but recognizes that it will be dependent upon petroleum-based diesel fuel for the foreseeable future. As a result, we must continue to support increased secure supplies of petroleum, such as the Canadian oil sands. Policies such as a low carbon fuel standard or refusal to permit the Keystone XL pipeline will prevent the U.S. from importing Canadian oil, will erode energy security, and will result in higher diesel prices.

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