

The
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Canada's energy industry

Tarded with the same brush

The Gulf spill has focused American minds on pollution from Canadian oil producers. But cleaning up the tar sands will not be easy

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"A GOOD neighbour lends you a cup of sugar," read an ad in the *Washington Post* last month. "A great neighbour supplies you with 1.4 million barrels of oil a day." Ed Stelmach, the premier of the energy-rich province of Alberta, certainly knows how to make the case for Canadian petroleum. Buying from Canada neither props up an authoritarian regime nor exposes the United States to political manipulation of its energy supply. Little wonder, then, that Canada is the biggest exporter of oil to America, with 22% of the total. The runners-up, Mexico, Saudi Arabia and Venezuela, have just 11-12% each. And the country's potential seems limitless: Canada's 179 billion barrels of oil and gas reserves rank second in the world.

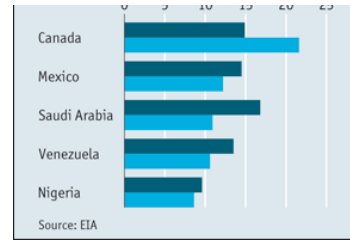
There is, however, a catch: Canadian crude is dirty. Just over half the country's oil comes from tar sands, a mixture of water, sand, clay and bitumen—an extremely dense and thick form of petroleum, which usually must be melted before it can be extracted and refined. It takes up to four barrels of water to generate one barrel of tar-sands crude, and 20% of Canada's natural gas (a clean fuel) is used to produce oil (a dirty one). Mining the sands also strips forest and creates vast ponds of toxic byproducts. According to America's Environmental Protection Agency (EPA), producing Canadian tar-sands oil generates 82% more greenhouse-gas emissions than does the average barrel refined in the United States.

In the wake of the Deepwater Horizon spill, and of a pipeline rupture that shed 19,500 barrels of Canadian oil into Michigan's Kalamazoo river last month, concern in America is growing over the environmental consequences of oil exploration. Federal government agencies were banned from buying tar-sands oil in 2007. Henry Waxman, chairman of the House Committee on Energy and Commerce, calls it "the dirtiest source of transportation fuel currently available". This year he was one of 50 lawmakers who complained to Hillary Clinton, the secretary of state, that her department had not analysed the environmental impact of a proposed pipeline extension that would more than double imports from the sands. The EPA then recommended that the department, which must approve international pipelines, consider alternatives to Canadian crude. On July 26th the department extended its review of the project by 90 days.

Changing the status quo, however, will be hard. The oil industry's economic importance to Canada has consistently trumped green concerns. Energy, including natural gas, conventional oil and coal,



makes up a quarter of Alberta's \$211 billion economy. The rest of the country benefits from service and supply contracts with energy companies, and from the government's redistribution of Alberta's wealth to poorer provinces. At the peak of the commodity boom in 2008, energy was Canada's largest export. As a result, the sands have only been lightly regulated. Instead of being 6% below 1990 levels of greenhouse-gas emissions by 2012, its commitment under the Kyoto protocol, Canada will be 30% above.



Stephen Harper, the prime minister, built his political career in Alberta and shares its energy-friendly attitudes. He has refused to implement a new emissions policy until America does. Given the Democrats' recent decision to drop a cap-and-trade bill in the Senate, that seems a long way off. It also means the environmental costs of the sands' oil are not about to be reflected in their price. In fact, the political fallout from the Gulf spill might actually increase America's dependence on Canadian supplies, if demands for new limits on offshore drilling are met.

Moreover, efforts to press Canada into cleaning up the business would face stiff resistance from America's energy lobby, since many operators in the sands are based in the United States. One of the draft energy bills floating around the Senate this year even proposed removing the ban on government purchases of tar-sands oil. And even if America does try to reduce its imports, China will be more than happy to take them. Chinese firms have already begun investing heavily in the sands.

The best hope to reduce pollution from the sands is probably finding alternative energy sources or cutting consumption. Transforming tar sands into crude is costly as well as dirty: the process only becomes profitable with oil prices in the \$60-85 range or higher. Indeed, the recession put 70% of proposed investment there on hold, although half of that has since restarted, according to Jackie Forrest of IHS CERA, an energy-forecasting firm. With just a modest fall in oil prices, the sands' production would start to go.

The Americas

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