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California Standards Could Crimp Canadian Oil Boom

By Robert Collier

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Schwarzenegger's deals might affect Alberta's tar sands.

Gov. Arnold Schwarzenegger has signed environmental agreements with two Canadian provinces that could slow down the biggest oil boom in North American history - the tar sands of Alberta.

Last week's agreements commit Ontario and British Columbia to adhere to California's low-carbon fuel standard, which will cut the use of petroleum sources such as Alberta's that cause high levels of global-warming emissions. Other provinces and U.S. states are expected to join the standard, thus shrinking the market for the fast-growing Alberta oil industry, which U.S. officials hope will overtake the Middle East as America's main source of imported petroleum.

The agreements, signed in Toronto with Ontario Premier Dalton McGuinty and in Vancouver with British Columbia Premier Gordon Campbell, require the provinces to reduce the greenhouse gas output of gasoline and diesel fuels by at least 10 percent by 2020, in accordance with the new California standard. This includes all emissions resulting from production and use of the fuels, from exploration to refining to combustion.

Later this month, the California Air Resources Board is expected to announce detailed regulations to implement the standard.

The California measure is designed to address the often-overlooked, emissions-spewing ways in which fuels are created, thus complementing the state's other global warming policies such as cuts in vehicle tailpipe emissions.

Nine Northeast states are expected to eventually join California's fuel standard, along with Illinois, Quebec and Manitoba. Together, these steps will advance Schwarzenegger's stated goal of forcing oil companies to reduce emissions - such as oil production processes that capture and store greenhouse gases underground, or cellulosic ethanol, or even electricity.

Experts say the fuel standard will make the vast amounts of tar-like petroleum underneath Alberta's boreal forests seem less attractive to oil companies.

"It's difficult to overstate the impact of the low-carbon fuel standard on tar sands production," said Drew Kodjak, executive director of the International Council on Clean Transportation, an alliance of air-quality scientists and regulators with offices in Washington and San Francisco.

While the lack of pipelines from Alberta to California means the state receives little oil sands output, Ontario and British Columbia consume about 15 percent of total oil sands production and Illinois takes about 20 percent, according to Canadian and U.S. government data.

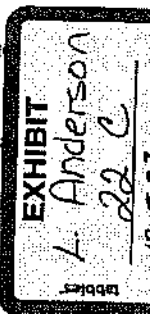
"This sends a wake-up call to the tar sands industry, and they're going to have to clean up their emissions if they want to sell to British Columbia, Ontario, California, and pretty soon the rest of the United States and Canada," said Ian Bruce, a climate change specialist at the David Suzuki Foundation, an environmental group in Vancouver.

Oil industry officials dismiss the challenge, however, saying that governments and consumers alike will have no alternative to Alberta's tar sands.

Pierre Alvarez, president of the Canadian Association of Petroleum Producers, noted that the world's remaining oil reserves are largely in remote regions like the Arctic or in the tar sands and oil shale of Alberta, Venezuela and Colorado - all of which produce high levels of greenhouse gas emissions in the extraction and refining processes.

"The world is running out of light, sweet crudes," he said, referring to the easily refined, low-emissions oil from sources such as the Persian Gulf, Alaska and Mexico, where production of those grades is declining.

"We have a long-term, secure supply of production here in Alberta. It will be interesting, if California does go down that road (of enforcing the fuel standard), where will they find the light, sweet crudes that they are losing elsewhere," Alvarez said.



The authors of California's new standard reply that the oil companies must adapt or lose.

"The whole purpose of this standard is to create alternatives beyond just oil," said Daniel Sperling, director of the Institute of Transportation Studies at UC Davis and a member of the state Air Resources Board.

"We know there are lots of sources of transportation energy a lot cleaner than the tar sands," Sperling said, citing examples such as cellulosic ethanols from switchgrass and elephant grass, which produce very low greenhouse gas emissions. "Already, this is generating lots of investment in the alternatives," he said, adding that any company that chooses not to invest in clean energy technology "is taking a big chance."

All sides agree that Alberta's tar sands are enormous - an estimated 174 billion barrels of proven reserves, second only to Saudi Arabia's 264 billion barrels. In recent years, as the tar sands production has soared, Canada has overtaken Saudi Arabia as the leading source of U.S. oil imports, and that lead is expected to widen.

The Canadian government forecasts that tar sands production, which has quintupled in the past decade to 1.2 million barrels per day, will reach 3.5 million barrels by 2015 and 4 million barrels by 2020, accounting for more than 80 percent of Canadian oil production. This rate of growth constitutes the biggest oil boom in North American history, and one of the biggest ever worldwide.

In the tar sands region, hundreds of square miles of boreal forest have been scalped and turned into the world's largest strip mines, where the scooped-out sands require the burning of huge amounts of natural gas to separate the oil and refine it.

As a result, the tar sands industry now emits almost three times more greenhouse gas per barrel than conventional oil - a major reason why Canada's emissions have been rising faster than any other developed nation. Since 1990, Canada's total emissions have risen 25.3 percent, a pace of growth far exceeding the 16.3 percent increase in the United States, the second fastest-rising nation, according to U.N. data.

Surprisingly, Schwarzenegger and his Canadian hosts made little mention of the tar sands during his three-day trip to Canada.

In British Columbia, the governor touted the low-carbon fuel standard as an economic boon, saying it would cause a "gold rush" in spurring the development of energy-saving technology.

In Ottawa, the governor even made a courtesy visit to Canadian Prime Minister Stephen Harper, a conservative from Alberta who is a strong backer of the tar sands.

Harper, like President Bush, takes a go-slow approach to global warming. In April, Harper's government announced a multiyear plan for global warming that was panned by environmentalists for setting targets that would not limit the tar sands emissions. Former Vice President Al Gore called the plan "a complete and total fraud."

Some experts note the tar sands industry has long promised to reduce its emissions through high-tech methods of carbon capture and storage, yet has made little progress.

"In the past several years, the industry has focused its attention on fighting against stringent federal legislation instead of focusing its resources on reducing emissions," said Dan Woynilowicz, a senior policy analyst at the Pembina Institute, a think tank in Calgary, Alberta's largest city.

"At this point, its promises to reduce emissions are a lot of talk and no action. They've been largely successful in lobbying the federal government to allow business as usual, not creating incentives to reduce emissions or compelling it through firm limits."