

## Canadian Oil: the Export Picture

### Oil in Canada

- Canada has the third largest volume of oil reserves in the world after Saudi Arabia and Venezuela. Of these reserves, approximately 97% are found in unconventional sources such as the oil sands.
- Oil production in Canada occurs predominantly at three sources: the Western Canada Sedimentary Basin, Alberta's oil sands, off-shore oil fields in the Atlantic Ocean. Additional reserves are located under the Beaufort Sea (Arctic), along the Pacific coast, and in the Gulf of St. Lawrence. Alberta's oil sands provide the majority of Canada's oil production.

### Oil Exports

- Approximately 99% of Canadian oil exports go to the US, totaling almost 2000 barrels a day. This is nearly double the next biggest importer which is Mexico. Despite the importance of Canadian oil exports to the US, Canada accounts for just 22% of total US oil imports.
- Canadian oil exports are mostly transported via a network of pipelines to the United States. Pipelines are not the only means for transporting oil but are seen to be the most economical solution for transporting oil long distances over land.
- In order to export oil to Asia, oil products would need to be transported from oil fields via pipelines to the BC coast before being shipped to Asia on oil tankers.
- There are currently some proposals to build the pipeline and shipping infrastructure to make oil exports to Asia possible.

### Proposed pipeline infrastructure

- Several oil pipelines are in operation and owned by three Canadian companies, Kinder Morgan, Enbridge, and TransCanada.
- There are two key oil pipeline proposals that could support exports to Asia:
  1. The first is the potential expansion of the **Trans-Mountain pipeline** owned by Kinder Morgan. This existing pipeline runs from Edmonton, AB to the BC Lower Mainland.
  2. The second is the **"Northern Gateway Pipeline"** project proposed by Enbridge which aims to build a new pipeline from Edmonton, AB to a terminal in Kitimat, BC.
    - Environmental NGOs and First Nations groups have expressed concerns on the safety record of an Enbridge-operated oil pipeline and on the environmental impact of tanker traffic through Northern BC.
    - Some of the First Nations that oppose the proposal have mobilized into the Yinka Dene Alliance, which includes Nadleh Whut'en, Nak'azdli, Takla Lake, Saik'uz, and Wet'suwet'en First Nations in Northern BC.
    - The proposal is under review by the National Energy Board. Hearings will begin next year and a decision is expected at the end of 2012. If the decision is in favour of the pipeline, it should be up and running sometime in 2017.

#### Sources:

[Canadian Centre for Energy Information](#)  
[US Energy Information Administration](#)  
[Natural Resource Canada](#)

International Energy Agency. [2010 World Energy Statistics](#).

#### Crude Oil Producers

By Country (2009)	% of world
1. Russia 	12.9
2. Saudi Arabia 	11.8
3. USA 	8.3
4. Iran 	5.4
5. China 	5.0
6. Canada 	4.0

#### Largest Oil Reserves

##### By Country (2011)

1. Saudi Arabia 
2. Venezuela 
3. Canada 
4. Iran 
5. Iraq 

#### Conventional Crude v. Oil Sands and Heavy Oil

- Conventional crude is oil that flows naturally or that can be pumped without being heated or diluted.
- Oil sands and heavy oil are "unconventional" as they cannot be pumped to the surface through ordinary production techniques.
- Oil sands are made up of sand, water, clay and crude bitumen.