



Key Companies Active in Alberta Oil Sands

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Alberta Oil Sands Overview

The oil sands comprise more than 98% of Canada's 173 billion barrels of proven oil reserves. According to Natural Resources Canada, oil sands reserves are spread in 3 distinct areas of northern Alberta that cover a total area of 140,200 km². The 3 areas are:

- Athabasca deposits (largest reserves)
- Cold Lake deposit
- Peace River deposit

Alberta's heavy oil resources contain 1.7 trillion barrels of oil in place. Some 170 billion barrels of this heavy oil, or bitumen, are rated economically recoverable – making them the world's 3rd largest crude reserve. Only about 20% of bitumen reserves that lie within 70 m of earth's surface are economically accessible by open-pit mining, while the remaining 80% are buried too deep to be mined and must be recovered in situ (Latin for in place) by drilling wells. This involves much less surface disturbance than mining operations.

In 2013, oil sands were recorded to produce 1.95 million barrels per day. According to Canadian Association of Petroleum Producers (CAPP) it is estimated that the oil sands will produce 4.8 barrels per day by 2030.

The Canadian oil sands have attracted an estimated \$217 billion of capital investment to date, including almost \$33 billion in 2013.

Currently there are 58 oil sands projects in Alberta that are valued at \$5 million or greater, which account for an approximate total value of \$109.3 billion.

The 10 largest companies are responsible for more than half of oil and gas production in Canada.

Top 10 Canadian Oil Sands Companies

Suncor Energy Inc.

Suncor Energy Inc. is an integrated energy company strategically focused on developing one of the world's largest petroleum resource basins in the Athabasca's oil sands. In addition, the company explores, acquires, develops, produces, and markets crude oil in Canada and internationally. Suncor's oil sands assets are located in the Wood Buffalo region, where it recovers bitumen from mining and in situ operations.

The company's mining operations in Alberta include:

- Millennium Site – estimated total cost of \$1.6 billion.
- North Steepbank Site – estimated total cost of \$1.6 billion.

- Fort Hills Project – approximate cost of \$13.5 billion, to be completed in 2017.
- Voyager South Project – approximate cost of \$11.6 billion, to be completed in 2016.
- Joslyn Mine Project – Suncor has 36.75% interest in the Total-operated project.

The company's in situ operations in Alberta include:

- MacKay River Project – approximate cost of \$1.3 billion, completed in 2014.
- Firebag Project – approximate total cost of \$3.6 billion, completed in 2012.

In 2013, Suncor's oil sands was the most profitable sector, contributing \$2.1 billion in operational earnings, \$4.6 billion in cash flow from operations, and boasting production volumes of 392,500 bpd from all operating oil sands projects.

Imperial Oil Ltd.

Imperial Oil Limited is an integrated oil company. On the global scale, the company is engaged in 3 business sectors – Upstream (exploration & development), Downstream (refining & marketing) and Chemical production. In Alberta's oil sands, the company is engaged in the exploration, production, and sale of conventional crude oil, synthetic oil and bitumen. Imperial Oil has operations in all three major Albertan oil sand areas - Peace River, Athabasca and Cold Lake.

The company's operations in Alberta include:

- Kearl Lake Oil Sands Project – estimated cost of \$8.9 billion, completed in 2014.
- Aspen Oil Sands Project – estimated cost of \$7 billion, proposed (2020).
- Nabiye Oil Sands Project – estimated cost of \$2 billion.

In 2013, Imperial Oil's net earnings were \$2.8 billion, with gross volume production increased to 295,000 bpd. In terms of expenditures a total of \$8 billion was spent on capital and exploration for major upstream growth projects, including Kearl Lake expansion and Cold Lake's Nabiye Project.

Husky Energy Inc.

Husky Energy is an international integrated energy company that is headquartered in Calgary, Alberta. The company operates in two segments: Upstream and Downstream. Upstream includes exploration, development and production of crude oil, bitumen, natural gas and natural gas liquids. Downstream includes upgrading of heavy oil feedstock into synthetic crude oil and refining it, and marketing petroleum products across Canada and the United States.

Husky is currently rejuvenating its heavy oil business with an increased focus on thermal technologies and horizontal wells to tap into the significant resource in place. In Alberta, the company is pursuing oil and liquid-rich gas resource plays to extract value from its extensive land position of more than 2 million acres.

The company's operations in Alberta include:

- Sunrise Energy Project – approximate cost of \$3.2 billion, completed in 2014.
- Tucker Oil Sands Project – approximate cost of \$500 million, completed in 2006.

As well as proposed and emerging projects in Athabasca and Cold Lake regions:

- Saleski Project
- McMullen Project
- Caribou Project

Husky's total revenues before royalties were \$6.43 billion in 2013, while its daily production averaged at 341,000 bpd of oil.

Cenovus Energy Inc.

Cenovus Energy, Inc. is an integrated oil company. The company's operations include oil sands projects in northern Alberta, which use specialized methods to drill and pump the oil to the surface. It also has natural gas and oil production in Alberta and Saskatchewan. Cenovus has 2 producing SAGD projects in the oil sands: Foster Creek & Christina Lake. In addition, there are several emerging projects utilizing SAGD which are in various stages of development.

The company's operations in Western Canada include:

- Christina Lake Project – approximate cost of \$2.7 billion, expansion to be completed in 2017.
- Foster Creek Project – approximate cost of \$2 billion, expansion to be completed in 2017.
- Pelican Lake Project – approximate cost of \$2 billion, expansion to be completed in 2017.
- Narrows Lake Project – approximate cost of \$1.6 billion, to be completed in 2017.

The company's emerging projects in Alberta include:

- Telephone Lake Project – approximate cost of \$1 billion,
- Grand Rapids Project – approximate cost of \$2 billion.

In 2013, Cenovus' gross revenues from its oil sands operations totaled \$3.7 billion with an average oil sands production of 125,000 bpd.

Canadian Natural Resources Ltd.

Canadian Natural Resources Limited (CNRL) is a Canadian independent energy company engaged in acquisition, exploration, development, production and sale of crude oil, natural gas liquids (NGLs), and natural gas production. The company is actively involved in the Horizon Oil Sands Mining and Upgrading segment of northern Alberta where it produces synthetic crude oil through bitumen mining and upgrading operations.

The company's major operations in Alberta include:

- Horizon Oil Sands – approximate cost of \$9.7 billion, completed in 2008, ongoing upgrades.
- North West Bitumen Upgrader Phase 1 – approximate cost of \$8.5 billion, CNRL is a partner in the project along with North West Upgrading Inc. To be completed in 2017.
- Grouse In Situ Oil Sands Project – approximate cost of \$1.5 billion, to be completed in 2017.
- Kirby In Situ Oil Sands Project – approximate cost of \$1.2 billion, to be completed in 2016.

In 2013, CNRL's net earnings totaled \$2.3 billion with oil sands production of approximately 133,000 bpd.

Encana Corporation

Encana Corporation (Encana) is a North American energy producer. The company operates in two divisions: Canadian Division and USA Division. The Canadian Division includes the exploration, development, and production of natural gas, oil, NGLs and other related activities within Canada. In Alberta, Encana is engaged in production of oil from Bighorn resource play and Peace River Arch resource play.

The company's operations in Alberta include:

- Bighorn – Encana controls approximately 307,000 acres and produces approximately 242,000 bpd of natural gas and approximately 5,800 bpd of oil and NGLs.
- Peace River Arch – Encana controls approximately 254,000 acres and produces approximately 108,000 bpd of natural gas and approximately 2,900 bpd of oil and NGLs.

In 2013, Encana reported cash flow of approximately \$2.6 billion from its operations with an average production of 53,900 bpd of oil and NGLs.

Talisman Energy Inc.

Talisman Energy Inc. is an incorporated company engaged in producing oil and gas through a combination of exploration, development and acquisition. The company has a number of assets in Alberta, including shale plays and conventional assets.

The company's operations in Alberta include:

- Duvernay shale play – the company is currently engaged in exploration in 352,000 acres of land.
- Greater Edson – the company has invested approximately \$178 million in exploration and development and produces approximately 5,000 bpd of NGLs.

Talisman has reported to generate revenues of approximately \$26 million from its Canadian operations in 2014, with investments of approximately \$353 on further exploration and development of its assets.

Nexen-CNOOC Ltd.

Nexen is a wholly-owned subsidiary of a Chinese CNOOC Limited. It discovers and develops the oil sands in the Athabasca where it has an interest in more than 300,000 acres. Nexen uses an integrated SAGD and upgrading operations as well as hydrocracking and gasification to produce premium synthetic crude oil. Nexen has a 7.23% interest in Syncrude's oil sands operations in Athabasca, as well as managing CNOOC Ltd.'s 12.39% interest in MEG Energy.

The company's operations in Alberta include:

- Long Lake Project – approximate cost of \$6.1 billion, completed in 2008.
- Kinosis Project Phase 1 – approximate cost of \$1 billion, completed in 2014.
- Hangingstone – approximate cost of \$774 million, Nexen has a 25% non-operating working interest.

CNOOC has announced that its 2013 revenues totaled \$9.2 billion upon acquisition of Nexen. In early 2013, Nexen received \$2.6 billion from its oil sands operations and produced 198,000 bpd of oil.

Harvest Operations Corp.

Harvest Operations Corp. is a wholly-owned subsidiary of Korea National Oil Corporation (KNOC). The company is a significant operator in Canada's energy industry offering exposure to exploration, development and production of crude oil and natural gas. Harvest's crude oil and natural gas production business is weighted approximately 65% to crude oil liquids and 35% to natural gas.

The company has one major oil sands project in Alberta:

- BlackGold Oil Sands Project – approximate cost of \$900 million, to be completed in 2015-2016.

In 2013, Harvest's cash flow from operations totaled approximately \$140 million, and its oil sands operation produced on average 50,000 bpd.

Canadian Oil Sands Ltd.

Canadian Oil Sands Limited is a Canadian company with headquarters in Calgary, Alberta. The company holds a 36.74% interest in Syncrude and generates income from investment in Syncrude facility operations and mining of oil sands in the Athabasca region. The company

The company has one major oil sands project in Alberta:

- Mildred Lake Mine Replacement – approximate cost of \$1.4 billion, completed in 2014.
- Aurora North Mine Relocation – approximate cost of \$400 million, completed in 2013.

In 2013, Canadian Oil Sands Ltd. reported total revenues to be \$966 million.

For More Information

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