

Energy Resources

Facts and Stats

Oil (2015)

Remaining established reserves:

- conventional = 1.8 billion barrels
- oil sands* = 165.4 billion barrels

Canada has the 3rd largest oil reserves in the world. 97% of these reserves are in the oil sands.

Oil Production (2015)

conventional oil = 530 thousand bpd**

crude bitumen = 2.5 million bpd

- surface mining 46%
- in-situ for 54%

Alberta exports 2.5 million bpd of crude oil and equivalent to the U.S.

The Alberta Energy Regulator forecasts that annual crude bitumen production will total 4 million bpd by 2025.

Oil Sands Production Methods

There are two methods of producing oil from oil sands: open-pit mining and in-situ (latin, meaning “in place”) technology. Bitumen close to the surface is mined. Bitumen deep within the ground is produced in-situ using specialized extraction techniques like steam assisted gravity drainage.

*oil sands are a mixture of sand, water, clay and bitumen (a heavy oil).

**bpd = barrels per day

Natural Gas (2015)

Remaining conventional established reserves:

- 9.3 trillion cubic feet

Natural Gas Production (2015)

- 10.1 billion cubic feet per day

Oil and Gas Drilling (2015)

- 2,576 oil and gas wells completed

Pipelines (2015)

- 431,000 kilometres (oil and natural gas)

Electricity (2015)

Installed generating capacity is 16,133 megawatts.

- 39% coal
- 43% natural gas
- 15% hydro and wind

1 megawatt of electricity will power about 1,000 homes.

Under Alberta’s Climate Change Leadership Plan coal powered electricity is being phased-out and replaced with energy from renewable sources by 2030. The plan also sets a target, in which 30% of electricity used by Albertans will come from renewable sources like solar, wind and hydro by 2030.

Coal (2015)

Remaining established reserves:

- 33.2 billion tonnes

Production:

- 27.3 million tonnes per year