Upgraders and Refineries
Facts and Stats

Production

- In 2015, Alberta produced about 2.5 million barrels per day (bbl/d) of crude bitumen from three oil sands regions - Athabasca, Cold Lake and Peace River, with surface mining accounting for 46% and in-situ for 54% of the production.
- In 2015, about 45%, or 1.1 million bbl/d of crude bitumen production, was sent for upgrading in Alberta.

Upgrading

Project Name	Location	Capacity (bbl/d) Bitumen
Athabasca Oil Sands Project - Shell Scotford	Fort Saskatchewan	269,000
Suncor Base and Millennium	Fort McMurray	440,000
Syncrude Mildred Lake	Fort McMurray	407,000
Canadian Natural Resources Ltd Horizon	Fort McMurray	211,000
	Total	**1,327,000**

NOTE: total capacity does not equal total production

- Most upgraders produce synthetic crude oil, but some also produce products such as diesel.
- Upgraders (and refineries) also produce off-gases, gaseous mixtures rich in alkanes and alkenes, which are potential feedstock for Alberta's petrochemical industry.

Refining

- There are four operating refineries in Alberta with a combined crude processing capacity of over 458,200 bbl/d.

Company	Location	Capacity (bbl/d)
Suncor	Edmonton	142,000
*Imperial Oil	Edmonton	187,200
Shell Canada	Scotford	100,000
**Husky Asphalt Refinery	Lloydminster	29,000
	Total	**458,200**

*Refining feedstock is conventional oil. The Suncor and Shell refineries are configured to handle feedstock from oil sands.

**The Husky Asphalt Refinery in Lloydminster, AB is integrated with the Husky Upgrader in Lloydminster, Sask. which produces synthetic crude oil from heavy oil in the two provinces. The refinery produces asphalt products which are then transported to market.

New Projects

Project Name	Scheduled Start-up	Capacity (bbl/d) Products
CNRL Horizon (Expansion)		
Phase 3	2017	80,000
North West Sturgeon Refinery		
Phase 1	2017	50,000
Phase 2	Regulatory Approval	50,000
Phase 3	Regulatory Approval	50,000
		Total: 150,000
BP plc		
Terre de Grace Pilot	Approved	8,400
Total		**238,400**

- Alberta also has additional new projects which are either announced or have submitted applications for development.

Alberta Government