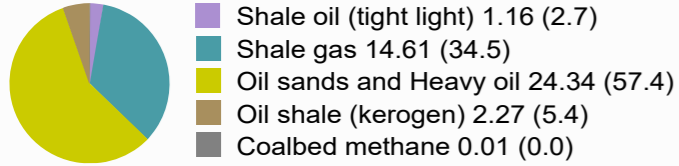


# Canada • Fossil fuels • Unconventional

## Unconventional proved reserves by fuels, Billion tonnes of oil equivalent (%):



**Total: 42.39 (100)**

Sources: Based on the U.S. EIA 2015 data (Sep 2023); Used by permission of the WEC 2010 (Sep 2023); U.S. Geological Survey SIR 2005-5294 (Sep 2023); U.S. EPA 2017 (Sep 2023) et al.

### Major coalbed methane extraction fields:

- 1 Horseshoe Canyon, Alberta
- 2 Mannville, Alberta
- 3 Hudson's Hope, British Columbia

### Gas hydrates occurrence:

- 1 Mallik
- 2 IODP Exp 311, Vancouver Margin (Cascadia)
- 3 Winona Basin
- 4 Canada's Atlantic Margin
- 5 Nova Scotian Slope Eastern Canada



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### Major shale gas extraction fields:

- 1 Liard (Lower Besa River), BC/NT
- 2 Horn River Shale Play, BC
- 3 Duvernay, AB
- 4 Colorado Group, AB (inactive)
- 5 Utica, QC (inactive)

### Major heavy oil extraction fields, bbl/d:

- 1 Pikes Peak (Waseca), SK, 4200
- 2 Foster Creek (McMurray), AB, 130 000
- 3 Pelican Lake, AB, 60 000

As of 2021, Canada has about 8.8 billion barrels of shale oil (tight light), 15.2 billion barrels of oil shale (kerogen), 163.4 billion barrels of oil sands and 572.9 trillion cubic feet of shale gas in place.

Sources: U.S. Energy Information Administration (Dec 2021); Used by permission of the World Energy Council 2010 (Dec 2021); Natural Resources Canada.

### Surface oil sands extraction fields:

- 1 Athabasca, Alberta

### Largest In-situ oil sands extraction fields:

- 1 Athabasca, Alberta
- 2 Cold Lake, Alberta
- 3 Peace River, Alberta

### Oil sands upgrader plants, bpd:

- 1 Fort McMurray, AB, Syncrude, 465 000
- 2 Fort McMurray, AB, Suncor Base U1/U2/Millennium, 438 000
- 3 Fort Saskatchewan, AB, Shell Scotford, 240 000
- 4 Fort McKay, AB, CNRL Horizon, 135 000
- 5 Wood Buffalo, AB, Nexen-CNOOC, 72 000
- 6 Lloydminster, SK, Husky Energy, 78 000

### Underground coal gasification project:

- 1 Swan Hills Synfuels, Alberta Project

### Vertical oil shale retorting plant:

- 1 Devon, AB, Chattanooga Corp.

### Horizontal oil shale retorting plant:

- 1 Calgary, AB, UMATAC Industrial

Largest oil shale (kerogen) fields

