

Carbon pricing and the Canadian oil sands

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Pricing Carbon: Lessons from
Canada
Kleinman Center for Energy
Policy

Philadelphia| Jan. 24, 2017



About Cenovus



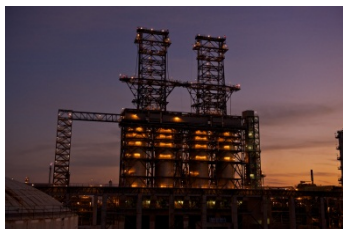
Oil sands

Oil sands drilling projects in northern Alberta



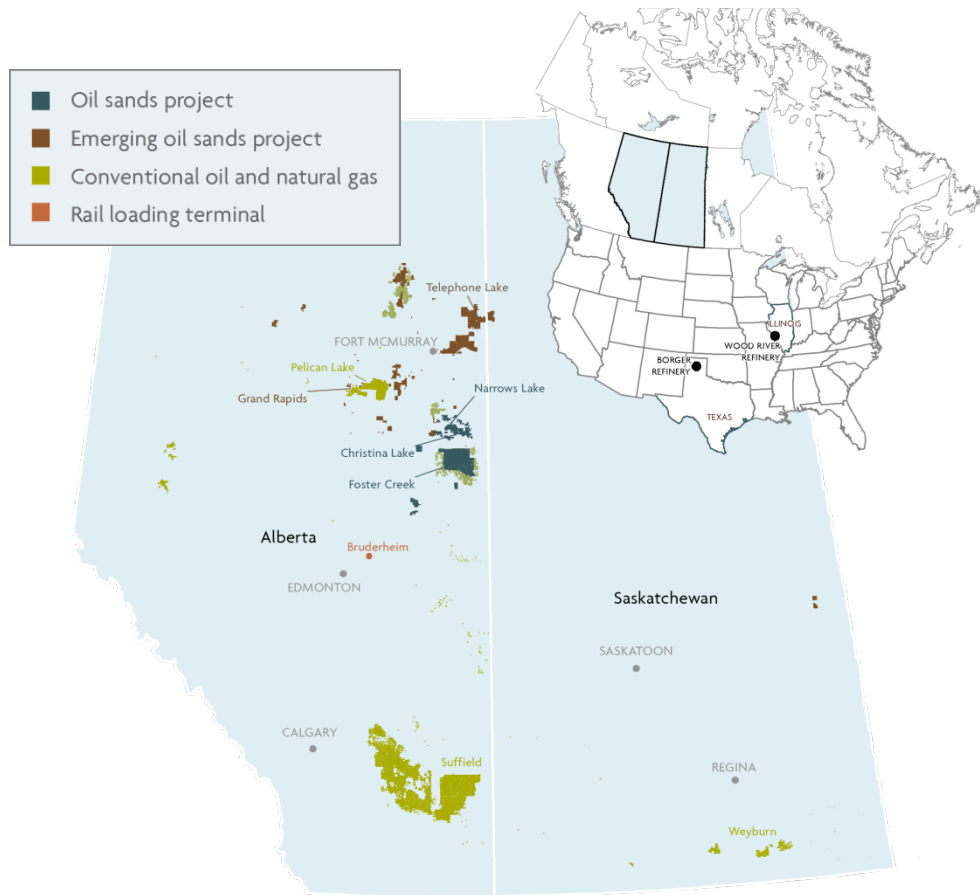
Conventional assets

Established conventional oil and natural gas assets in southern Alberta and Saskatchewan



Refineries

50 percent ownership in two U.S. refineries



About the oil sands

Canada has the third largest oil reserves in the world

- 97 percent is located in the oil sands in northern Alberta (167 billion barrels)

There are two ways
oil can be accessed
in the oil sands

20%
mining

because the oil
is close to
the surface

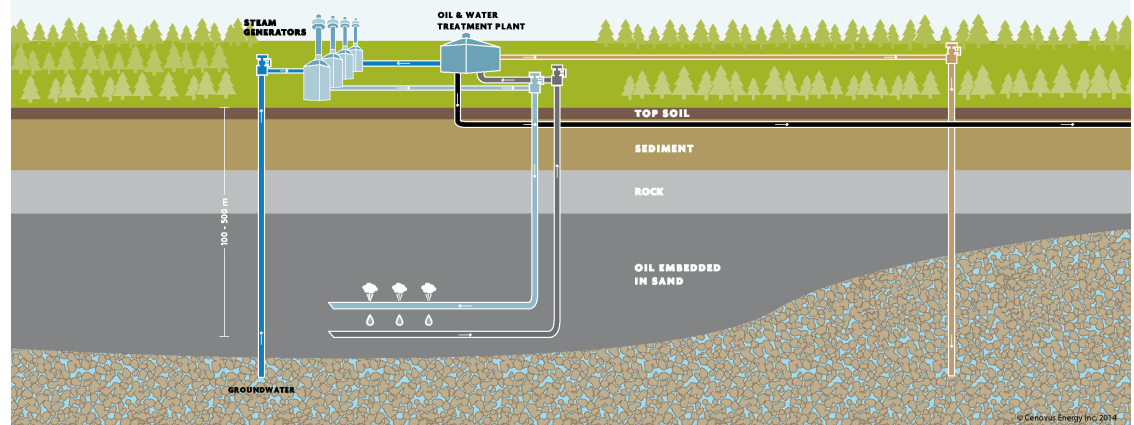
80%
drilling

because the oil
is deep under
the ground

Source: Oil Sands Today, Canadian Association of Petroleum Producers.

Steam-assisted gravity drainage (SAGD)

Our Christina Lake facility



Oil industry challenges

Key environmental challenges include:

- generation of significant greenhouse gas emissions
- consumption and disposal of large amounts of water
- disturbance of marine and terrestrial ecosystems
- lower environmental impact products at a lower cost

“No single company, industry or even country can solve the related challenges of growing energy demand and climate change on its own.

It has to be a collaborative effort.”

Brian Ferguson
President & Chief Executive Officer
Cenovus Energy

Cenovus supports climate leadership

Collaborating with government and environmental groups to find solutions.

- Alberta's climate policy:
 - economy-wide carbon pricing
 - methane reduction target
 - oil sands emissions limit
 - phase-out of emissions from coal power generation
- Canada's climate policy:
 - carbon-pricing benchmark
 - adaptation and climate resilience
 - clean technology
 - complementary actions to reduce emissions

How carbon pricing works for Cenovus

Leadership

- Incentivizes carbon reduction
- Internalizes the cost of emissions

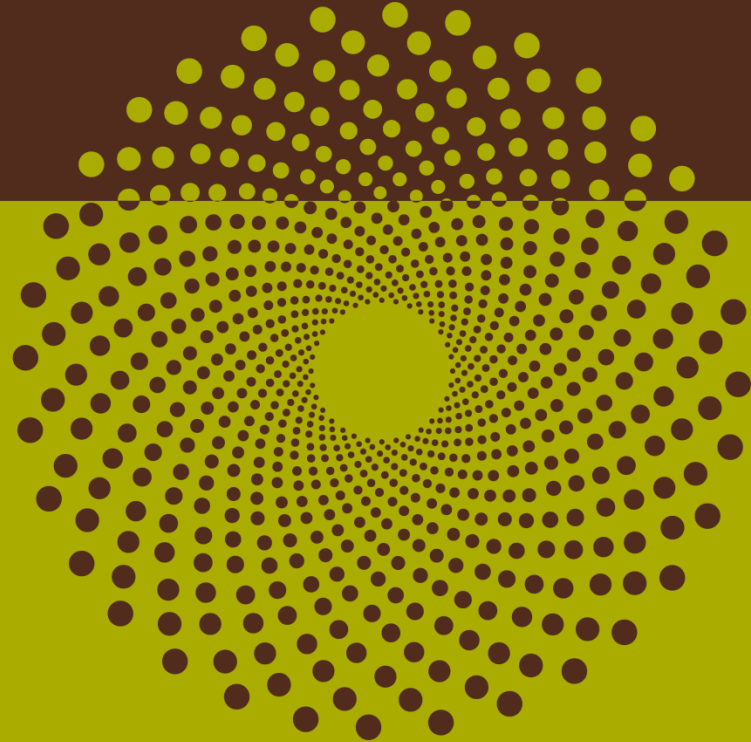
Technology

- Revenue used to develop technology
- Persistent price signal drives greatest deployment impact

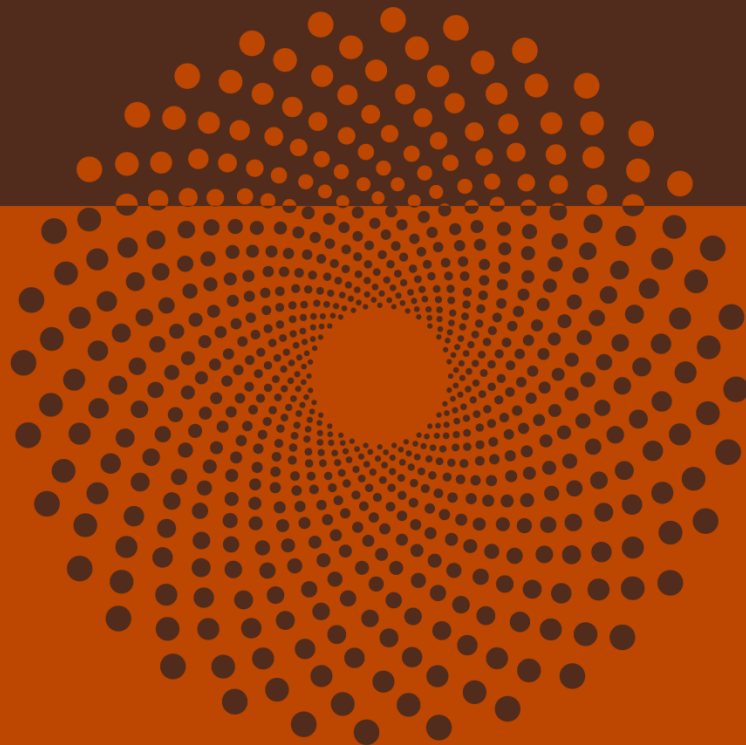
Competitiveness

- Minimize adverse impacts on energy-intensive firms
- Prevent “leakage” to other jurisdictions

Questions?



Back up slides



Aboriginal role in energy projects



First Nations businesses



Aboriginal project engagement

Collaborating to be a low-cost, low-carbon producer

