Energy Infrastructure Projects
North American Energy Trade

NORTH AMERICA ENERGY FLOWS BY COMMODITY, 2015
Canada’s Oil and Natural Gas Industry Creates Jobs

528,000 TOTAL JOBS

Source: CAPP, 2018
Number of Suppliers to Canada’s Oil Sands by Province in 2016-2017

Source: CAPP member data aggregated by CAPP, 2019
Almost 1,580 U.S. based companies provided goods and services to Canada’s oil sands sector.
Canadian Oil Sands and Conventional Production

- **Eastern Canada**
- **Oil Sands**
- **Pentanes and Condensate**
- **Conventional Heavy**
- **Conventional Light**

**MILLION BARRELS PER DAY**

**2010** | **2015** | **2018** | **2020** | **2025** | **2030** | **2035**
--- | --- | --- | --- | --- | --- | ---
**Actual** | **Forecast** | **2014 Forecast** | **2018 Forecast**
Existing Takeaway Capacity from Western Canada vs. Supply

2019 Supply Forecast

MILLIONS BARRELS PER DAY

2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035

Western Canadian Refineries
Keystone
Rangeland Milk River
Trans Mountain
Enbridge Mainline
Express
Pipeline Proposal Projects

**TRANS MOUNTAIN EXPANSION PROJECT**
- **ADDITIONAL CAPACITY:** 590,000 b/d
- **POTENTIAL MARKETS:** Asia and California
- **STATUS:** Approved November 29, 2016 with 157 conditions by the federal government.

**ENBRIDGE LINE 3 REPLACEMENT**
- **ADDITIONAL CAPACITY:** 370,000 b/d
- **POTENTIAL MARKETS:** Central and Eastern Canada, U.S. Midwest and Gulf Coast
- **STATUS:** Approved November 29, 2016 with 89 conditions by the federal government.

**TRANS CANADA KEYSTONE XL**
- **ADDITIONAL CAPACITY:** 830,000 b/d
- **POTENTIAL MARKETS:** Heavy oil refineries along Gulf Coast
- **STATUS:** U.S. Presidential permit received on March 24, 2017.
Enbridge Line 3 Timeline

Successful completion of L3RP will put an additional 370,000 b/d of Canadian oil on the global market.

ENBRIDGE LINE 3 REPLACEMENT (L3RP)

- **COST:**
  - C$5.3 billion (Canadian component)
  - US$2.9 billion (American component)

- **INITIAL CAPACITY:** 760,000 b/d (replaces existing 390,000 b/d + 370,000 b/d new)

- **LENGTH:** 1,659 kilometres

- **DIAMETER:** 36 inch replacing 34 inch
TC Energy Keystone XL Timeline

Successful completion of KXL will put an additional 830,000 b/d of Canadian oil on the global market.

TC ENERGY KEYSTONE XL

- COST: C$10.85 billion (2014 estimate)
- CAPACITY: 880,000 b/d (700,000 b/d initial + 830,000 b/d additional)
- LENGTH: 526 kilometres (987 new + 193 reactivated + 2 x 3.6 km)
- DIAMETER: 36 inches
- CONTRACTS: 500,000 b/d*

* TC Energy announced in January 2018 that 500,000 b/d of firm 20-year commitments have been secured, including 50,000 b/d from the Govt. of Alberta. TC will continue to secure long-term contracts.

KEYSTONE PIPELINE: Hardisty to Steele City, Wood River & Palska

Gulf Coast Project: Cushing to Nederland/Museum

Proposed Keystone XL: Hardisty to Steele City
Trans Mountain Timeline

Successful completion of TMESP will put an additional 590,000 b/d of Canadian oil on the global market.

TRANS MOUNTAIN EXPANSION

**COST:** C$7.4 billion (March 2017 estimate)

**CAPACITY:** 890,000 b/d
- (500,000 b/d existing + 590,000 b/d additional)

**LENGTH:** 1,183 kilometres
- (987 new + 193 reactivated + 2 x 3.6 km)

**DIAMETER:** 36 inches

**CONTRACTS:** 707,500 b/d
- (13 shippers: 15 and 20 year terms)
Existing Takeaway Capacity from Western Canada vs. Supply

2019 Supply Forecast

MILLIONS BARRELS PER DAY

2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035

Western Canadian Refineries

Rangeland Milk River

Trans Mountain

Express

Keystone

Enbridge Mainline
Indigenous Opportunity

Industry Growth Drives Opportunity

JOBS 2016
- 11,900 individuals working in Canada’s oil and natural gas industry identified as Indigenous.

PAYMENTS TO INDIGENOUS GOVERNMENTS Jun. 1-Dec. 31, 2017
- $55 million in payments (from conventional oil and natural gas activity) made to Indigenous governments in Canada.

PROCUREMENT 2015-2016
- $3.3 billion spent by oil sands companies on procurement from Indigenous-owned companies.

COMMUNITY INVESTMENT 2015-2016
- $48.6 million in Indigenous community investment provided by oil sands producers.

APPRENTICES 2015
- 6% of apprentices in Canada were Indigenous people working in industry-related trades.