Construction Labour Market Trends
Total Employment (Res + Non-Res), Canada

1996-2015:
Employment increased by 90%; brief downturn in 2009

2017-2026:
Marginal decline, first sustained period of weaker growth in over 20 years.
Res = -7%
Non-res = +3%

Source: Statistics Canada; BuildForce Canada
Non-Residential construction employment
Newfoundland and Labrador
(34 direct trades and occupations)

Major resource development projects (offshore platforms, nickel smelter, hydroelectric and transmission) **winding down.** Next investment (offshore and mining) wave **pushed out** later in the period as some projects are delayed or cancelled.

Source: Statistics Canada; BuildForce Canada (2016-2026)
Non-Residential construction employment
Nova Scotia
(34 direct trades and occupations)

Modest rise in ICI construction across the outlook period, shipbuilding spin-off. Tracking LNGs but not included in scenario.

Source: Statistics Canada; BuildForce Canada (2016-2026)
Non-Residential construction employment
New Brunswick
(34 direct trades and occupations)

Forecast

Proposed pipeline, marine terminal, and mine development project delays. Later in the period major dam refurbishment adds to activity.

Market Conditions:

WEAK

TIGHT

Source: Statistics Canada; BuildForce Canada (2016-2026)
Non-Residential construction employment
Prince Edward Island
(34 direct trades and occupations)

Source: Statistics Canada; BuildForce Canada (2016-2026)

Steady but moderate investment gains lead by commercial construction, no significant major projects.
Non-Residential construction employment
Quebec
(34 direct trades and occupations)

Source: Statistics Canada; BuildForce Canada (2016-2026)
Non-Residential construction employment
Ontario
(34 direct trades and occupations)

Employment

Market Conditions:
WEAK ← 1 2 3 4 5 → TIGHT

Moderate expansion driven by proposed nuclear refurbishments, transportation and other infrastructure projects.

Source: Statistics Canada; BuildForce Canada (2016-2026)
Non-Residential construction employment
Manitoba
(34 direct trades and occupations)

Near term growth driven by major power generation and transmission projects; investment declines as major projects end. Moderate growth over the long term.

Source: Statistics Canada, BuildForce Canada (2016-2026)
Non-Residential construction employment
Saskatchewan
(34 direct trades and occupations)

Ongoing and proposed resource development and pipeline projects sustain activity over the medium term but requirements depend on proposed project schedules.

Market Conditions:

Source: Statistics Canada, BuildForce Canada (2016-2026)
Non-Residential construction employment
British Columbia
(34 direct trades and occupations)

Source: Statistics Canada; BuildForce Canada (2016-2026)

Forecast

Major LNG, pipelines, utilities, mining, transportation and other infrastructure projects; project schedules impact medium term requirements.
Non-Residential construction employment
Alberta
(34 direct trades and occupations)

Weaker markets prevail across the medium term as current projects wind down.

Oil sands – continuing decline in new capital over the medium term; more moderate long term growth. Sustaining capital and maintenance work partially offsets ‘new’ declines but lower growth expected.

Source: Statistics Canada; BuildForce Canada (2016-2026)
Alberta Oil Sands Investment -- New*

Significant decline in new capital; more moderate long term growth

Source: Statistics Canada; BuildForce Canada (2016-2026)

*Includes construction and M&E
Alberta Oil Sands Investment -- New + Sustaining + Maint.*

$2007 Millions (adjusted for inflation)

Forecast

Seasonal peaks / challenges

Source: Statistics Canada; BuildForce Canada (2016-2026)

*Includes construction and M&E
Demographic trends / market risks, Alberta

Workforce squeeze -- buffer of young workers could disappear, just as retirements mount over the long term.

Source: Statistics Canada; BuildForce Canada
Inflation Adjusted Oil Prices: 1947-2016

Average Price = $44.26/Bbl

- 27 Mos. 9/79-11/81
- Iranian Revolution
- Arab Oil Embargo
- 18 Years Sub $45/Bbl
- 1st Gulf War
- 9/11
- 13 Mos. 9/07-9/08
- 46 Mos. 11/10-9/14
World liquid fuels production and consumption

**balance**

<table>
<thead>
<tr>
<th>million barrels per day</th>
<th>million barrels per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 2011: 88</td>
<td>Q1 2011: 6</td>
</tr>
<tr>
<td>Q1 2012: 88</td>
<td>Q1 2012: 4</td>
</tr>
<tr>
<td>Q1 2013: 88</td>
<td>Q1 2013: 3</td>
</tr>
<tr>
<td>Q1 2014: 88</td>
<td>Q1 2014: 3</td>
</tr>
<tr>
<td>Q1 2015: 88</td>
<td>Q1 2015: 2</td>
</tr>
<tr>
<td>Q1 2016: 88</td>
<td>Q1 2016: 1</td>
</tr>
<tr>
<td>Q1 2017: 88</td>
<td>Q1 2017: 0</td>
</tr>
</tbody>
</table>

- Implied stock change and balance (right axis)
- World production (left axis)
- World consumption (left axis)

Source: Short-Term Energy Outlook, September 2016
OPEC and world oil supply

mb/d

Source: OPEC Secretariat.
OPEC-NOPEC Have Cut 1.8 mmb/d Liquids Since November 2016
35% Saudi Arabia, 65% GCC States, 12% Iraq, 10% Russia, 9% Mexico

Source: EIA April STEO, EIA International Data & Labyrinth Consulting Services, Inc.
Rig orders by year

Source: IHS Petrodata  Notes: *YTD May 2016.
Orders for Floating Oil/Gas Production Facilities Predicted to Rise This Year

![Phased FPS Installation Capex by Region 2012-2021](image)

*Courtesy/Source: Douglas-Westwood, World Floating Production Market Forecast 2017-2021*
Terminal Decline
North Sea oil output, million barrels per day

Source: U.S. Energy Information Administration
Critical Supply & Demand Are In Approximate Balance

Brent Price (RHS)

2010-2014 Production Bubble

Price Collapse

Increasing Surplus

Decreasing Surplus

Critical Supply-Demand Balance (LHS)

$30/barrel Price Floor

Source: EIA STEO, IEA OMR, OPEC MOMR & Labyrinth Consulting Services, Inc.
OECD Inventories Have Fallen More Than 100 mmb Since July 2016
~260 mmb More Than the 5-Year Average

Brent Price (RHS)

~260 mmb to the 5-Yr Average

July 2016

U.S. Inventories (LHS)

~435 mmb Incremental Inventory Since December 2013

Jan 2017 Increase

$70 Brent

OECD Minus U.S. Inventories (LHS)

Source: EIA April 2017 STEO & Labyrinth Consulting Services, Inc.
U.S. Crude Oil + Refined Product Inventories Must Fall 143 Million Barrels To Reach The 5-Year Average & Higher Oil Prices

Source: EIA & Labyrinth Consulting Services, Inc.
2017 Demand Growth Has Fallen To 1.25 mmb/d

Brent Price (RHS)

Annual Demand Growth

Demand Growth (LHS)

Source: EIA STEO, IEA OMR, OPEC MOMR & Labyrinth Consulting Services, Inc.
U.S. Crude Oil Inventory 5 Year Comparison

+8.2 mmb Addition Fairly Normal For Re-Stocking Season: + 10.4 mmb in 2016, +5.3 mmb 5-Yr Avg.

2017 Inventory

+42 mmbo above 2016 level;
+144 mmbo above the 5-year average

Source: EIA & Labyrinth Consulting Services, Inc.
2011 drilled 7638 wells - added 850,000 bpd

2014 drilled 14261 wells - added 2,600,680 bpd but by Nov. the price of oil collapsed

2015 drilled less than 10,000 wells - added 2 million bpd but by the end of the year total production was down

2016 drilled less than 6,000 wells - added 1.4 million bpd – total production down over 600K bpd

Had the price not collapsed in 2014 they would be at 6.8 million bpd by now!

2014 drilled 14261 wells - added 2,600,680 bpd but by Nov. the price of oil collapsed

2011 drilled 7638 wells - added 850,000 bpd
Steady Rise
U.S. Crude Imports From Canada

Source: U.S. Department of Energy

DOE Crude Oil US Import Data/Canada

Thousands of Barrels a Day

Bloomberg

2016 only 736 wells drilled (down 68% from 2014) producing 245,000 Bpd – total production at the end of 2016 was down 23% from the peak in 2014.

This graph includes production to February of 2017 which appears to be increasing.
Monthly oil production from U.S. Federal Gulf of Mexico

million barrels per day

production from fields projected to start in 2017 and 2018

adjustments for hurricane-related shut-ins

production from existing fields

Source: U.S. Energy Information Administration, Short-Term Energy Outlook April 2017
Natural gas demand prospects

Unit: Bcm

2014
- Asia-Oceania: 20%
- North America: 14%
- Middle East: 13%
- CIS: 17%
- Europe: 14%
- Africa: 4%
- Asia-Oceania: 20%

2035
- Asia-Oceania: 25%
- North America: 23%
- Middle East: 17%
- CIS: 14%
- Europe: 11%
- Latin America: 5%
- Africa: 5%