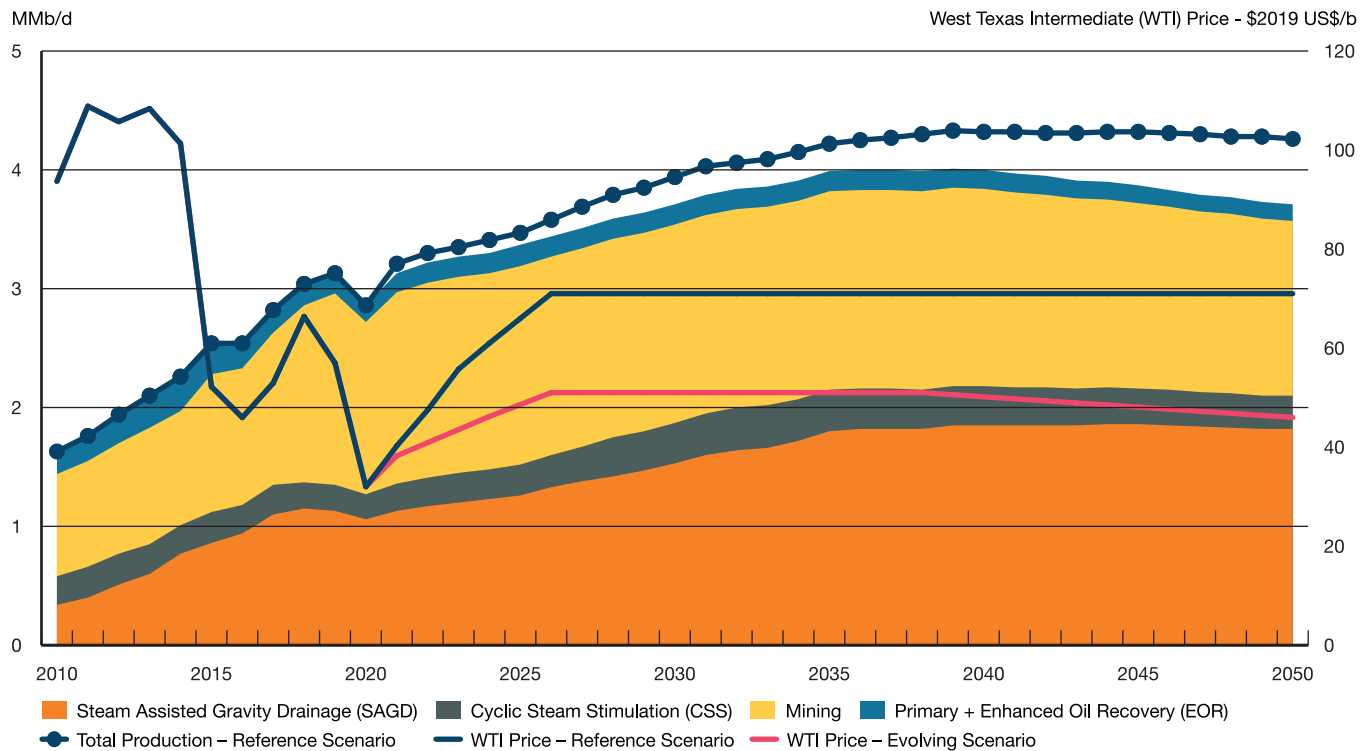


Oil Sands

CANADA'S ENERGY FUTURE 2020

Raw Bitumen Production by Type – Evolving Scenario



The Evolving Scenario assumes lower oil prices and higher carbon costs than the Reference Scenario. In the Evolving Scenario raw bitumen production from the oil sands peaks in 2039 at 4.1 MMb/d, then declines to 3.7 MMb/d by 2050. SAGD rises then flattens, and mining rises near-term then declines longer-term. All raw bitumen production is in Alberta.

↑ SAGD grows 71% over the projection in the Evolving Scenario

→ Mining is 1% higher in 2050 than in 2020 in the Evolving Scenario

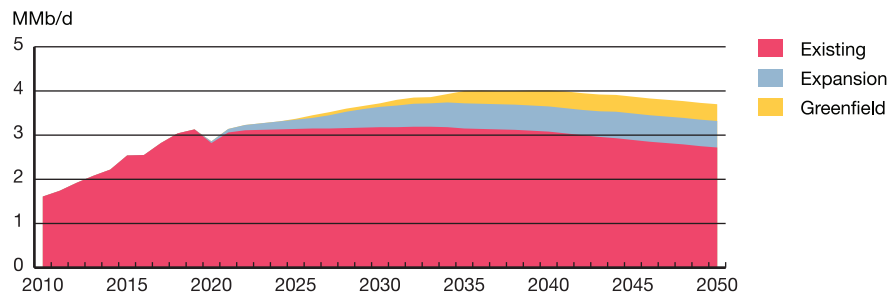
Reference Scenario in 2050:
4.3 MMb/d production
2019 US\$71/b WTI Price

| Evolving Scenario | 2010 | 2020 | 2030 | 2040 | 2050 |
|---|-------------|-------------|-------------|-------------|-------------|
| Raw Bitumen Production by Type, thousand b/d | 1627 | 2860 | 3712 | 3998 | 3705 |
| SAGD | 340 | 1064 | 1527 | 1852 | 1816 |
| CSS | 239 | 205 | 340 | 326 | 281 |
| Mining | 857 | 1451 | 1670 | 1658 | 1473 |
| Primary + EOR | 191 | 140 | 174 | 162 | 136 |
| West Texas Intermediate (WTI) Price, 2019 US\$ per barrel | 93.68 | 32.00 | 51.00 | 50.17 | 46.00 |

New vs. Existing Production — Evolving Scenario

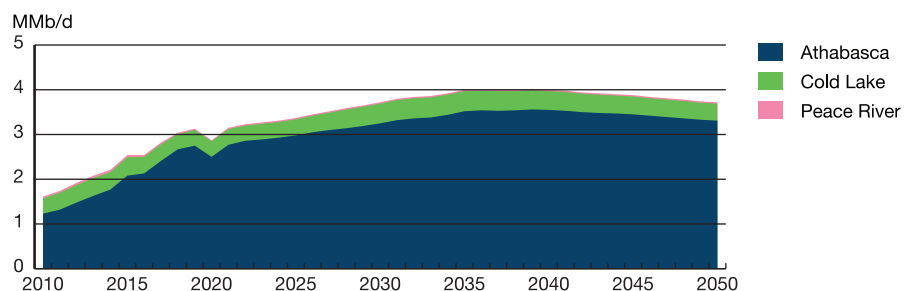
Oil sands projects have very low decline rates and can continue producing bitumen at or near their initial production rates for 25-40 years.

Even in 2050, the majority of bitumen production, over 73%, will come from projects that are actively producing bitumen today.

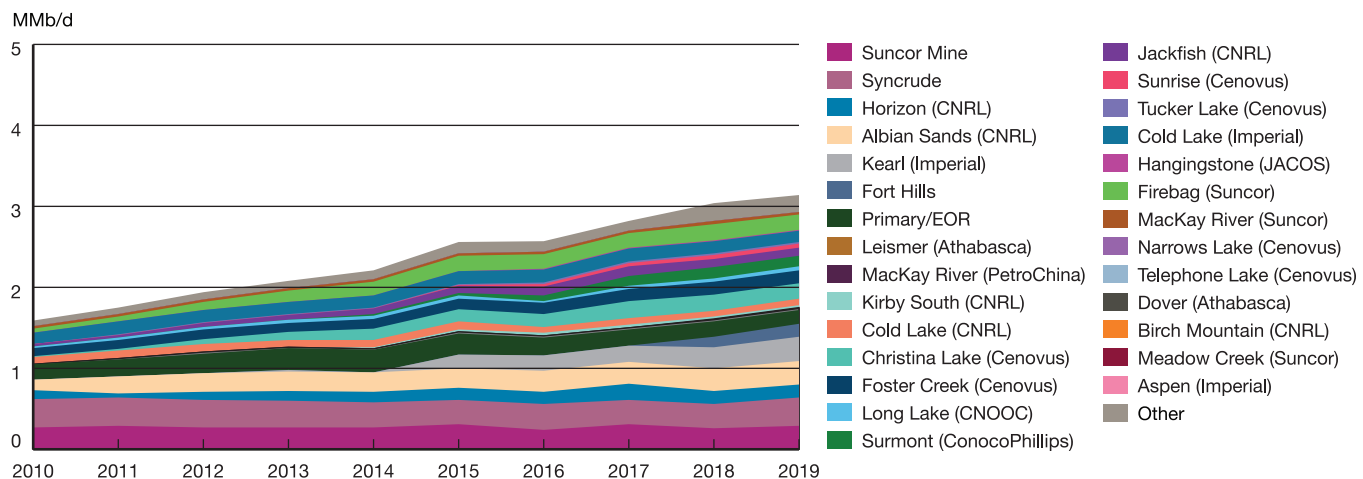


Production by Region — Evolving Scenario

The Athabasca region contains all of the currently operating mining oil sands projects and most of the in situ projects. This region will also contain the majority of the new projects and facility expansions in the projection. Athabasca's share of oil sands production stays relatively steady, from 88% in 2019 to 89% in 2050.



Raw Bitumen Production by Project



This chart shows the amount of production attributable to each major oil sands project from 2010 to 2019, at the time of analysis. This includes all projects in all three areas, and hundreds of primary projects, all in Alberta.

Find these figures, and additional data and figures, in the downloadable Excel file at <https://www.cer-rec.gc.ca/en/data-analysis/canada-energy-future/2020oilsands/index.html>