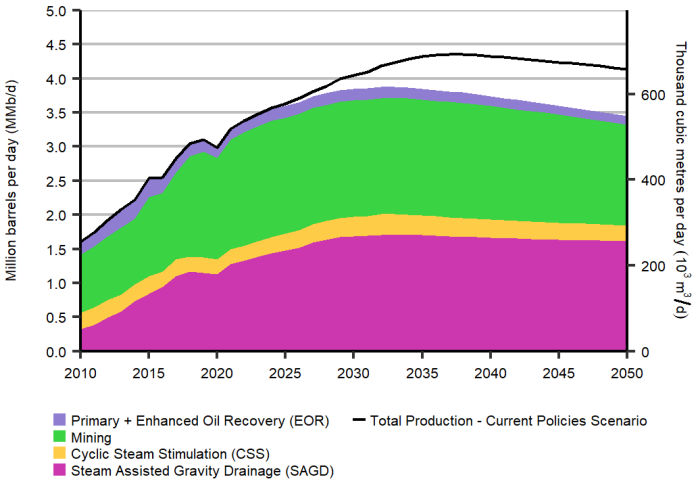
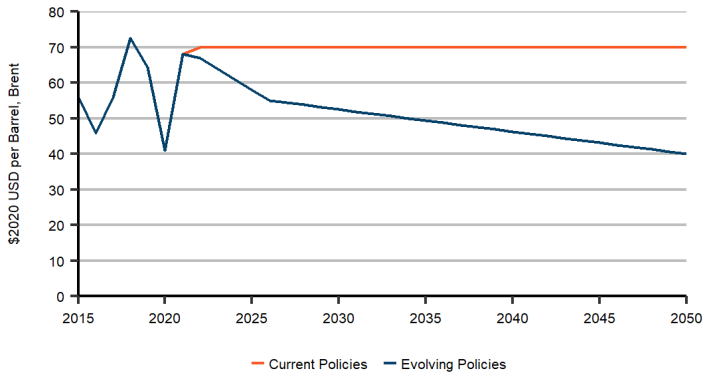
Raw Bitumen Production by Type - Evolving Policies Scenario





The Evolving Policies Scenario assumes lower oil prices and higher carbon costs than the Current Policies Scenario. In the Evolving Policies Scenario raw bitumen production from the oil sands peaks in 2032 at 3.9 MMb/d, then declines to 3.5 MMb/d by 2050. Steam-assisted gravity drainage (SAGD) production rises to 2034 then flattens, and mining production rises near-term and declines long term. All raw bitumen production is in Alberta.

SAGD grows 42% over the projection in the Evolving Policies Scenario

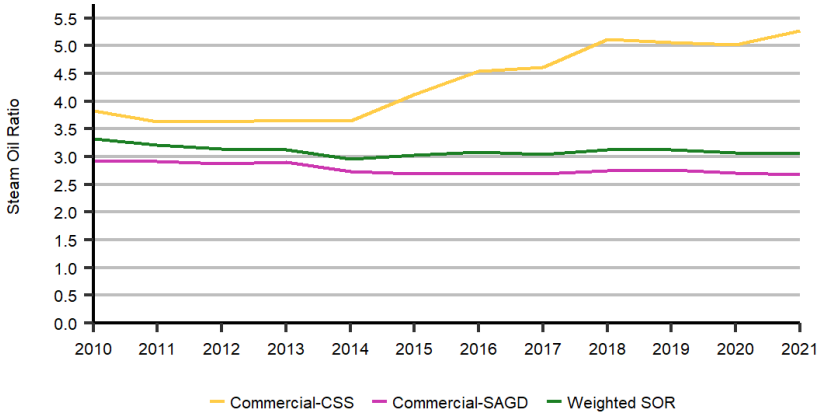
Mining is 1% lower in 2050 than in 2020 in the Evolving Policies Scenario

Current Policies Scenario in 2050: 4.1 MMb/d production 2020 US$70/b WTI Price

Evolving Policies Scenario	2010	2020	2030	2040	2050
Raw Bitumen Production by Type, thousand b/d	**1 609**	**2 981**	**3 851**	**3 744**	**3 454**
SAGD	323	1 133	1 689	1 662	1 612
CSS	239	215	284	271	234
Mining	857	1 487	1 703	1 665	1 479
Primary + EOR	191	147	174	146	128
West Texas Intermediate (WTI) Price, 2020 US$ per barrel	**93.83**	**41.00**	**52.50**	**46.25**	**40.00**

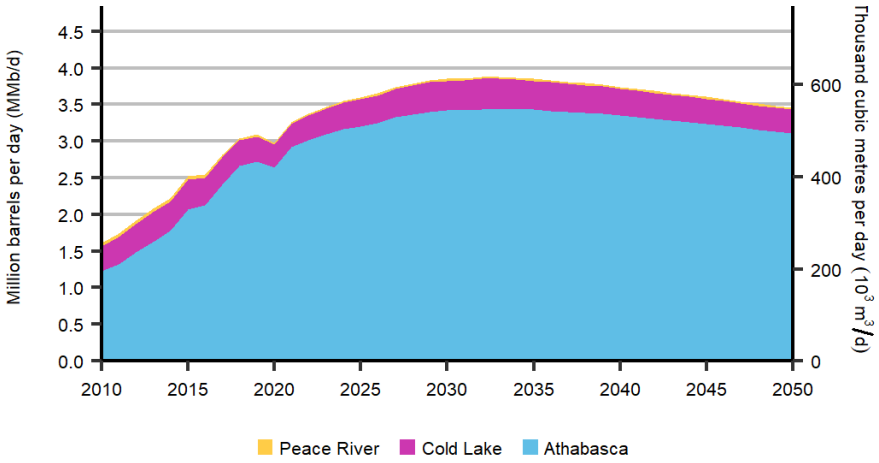
Historical Steam to Oil Ratio (SOR) of Cyclic Steam Stimulation (CSS) and Steam Assisted Gravity Drainage (SAGD)

In-situ bitumen can be produced through either SAGD or cyclic steam stimulaton (CSS), both of which use steam to heat up underground bitumen to help it flow. Of the two, SAGD is used more often. Steam-oil ratio (SOR) is a measure of the energy intensity of in-situ bitumen production. Since 2010 the average SOR of CSS has been steadily increasing while the SOR of SAGD has declined. On average the SOR of all in-situ projects has declined since 2010 as SAGD's production share increased.

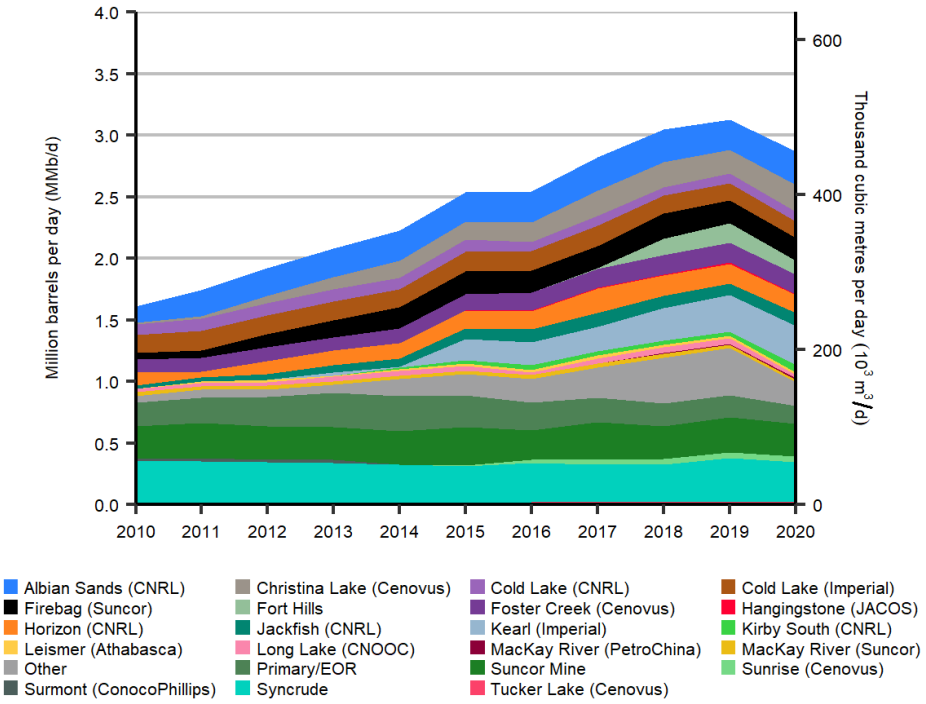


Production by Region - Evolving Policies Scenario

The Athabasca region contains all the currently operating mining oil sands projects and most of the in situ projects. This region will also contain most of the new projects and facility expansions in the projection. Athabasca's share of oil sands production stays steady, from 89% in 2020 to 90% in 2050.



Historical Raw Bitumen Production by Project



This chart shows the amount of production from selected major oil sands projects from 2010 to 2020. This includes all projects in the three production regions. The Other category includes projects not shown in the legend.