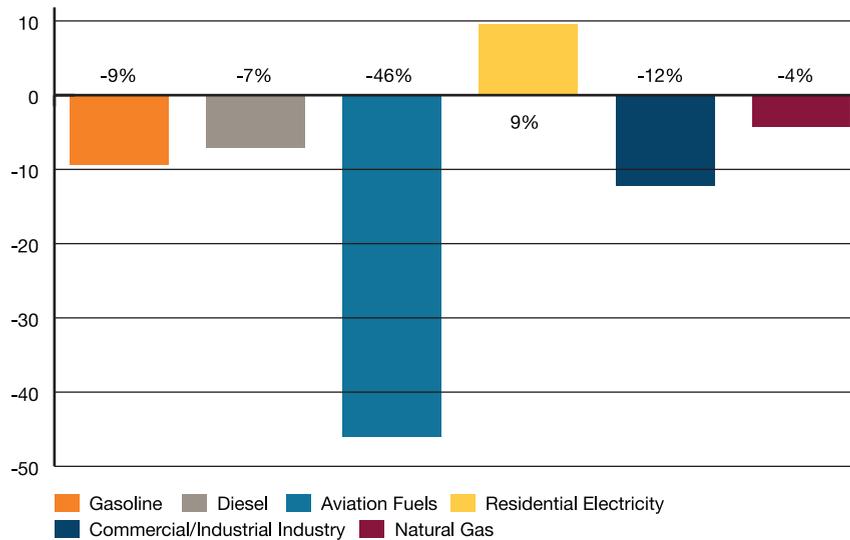


Overview

CANADA'S ENERGY FUTURE 2020

COVID-19 Impacts on Energy Demand and Production in 2020

Projected % Change in End-Use Demand from 2019 to 2020



Demand for oil products declined with less road and air travel, and daytime electricity use was spread more evenly throughout the day as residential electrical demand went up overall.

Production Impacts

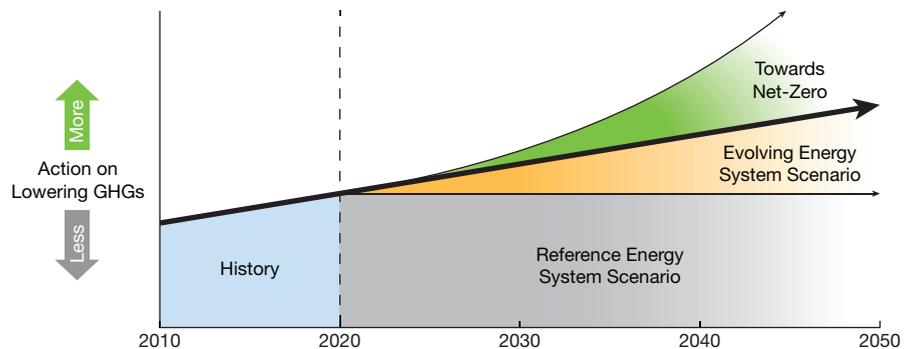
 Although energy demand trends changed significantly in response to the pandemic, electricity generation remained relatively stable.

 In western Canada almost 1 MMB/d of oil production was shut-in by mid-May due to low prices. Production increased in the latter half of 2020 with rising prices.

 Natural gas prices in western Canada were rising before the pandemic, keeping natural gas production in 2020 similar to 2019.

Scenario Overview

In the long-term, global and Canadian action to reduce greenhouse gas (GHG) emissions will be a critical factor in how energy systems evolve. This report includes two scenarios: Evolving and Reference. Also included is a discussion of the implications of moving the energy system towards net-zero emissions.



Towards Net Zero

The pace of action on addressing climate change increases from current levels.

Evolving Energy System Scenario

Continues the historical trend of increasing action on climate change throughout the projection. Policies and agreements are strengthened after they sunset. Low carbon technologies continue to be developed.

Reference Energy System Scenario

Climate change actions limited to only the measures that are currently in place. Technological development is modest, generally limited to those with existing momentum and/or market share.

History

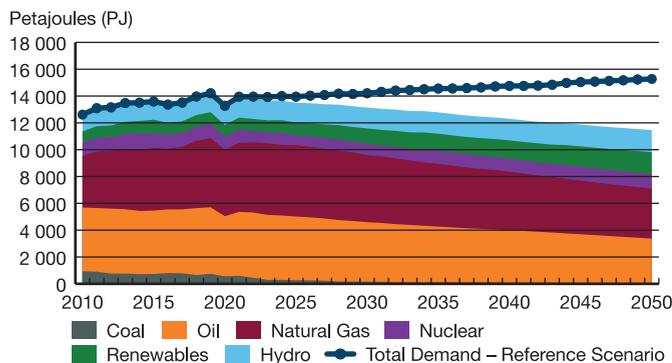
Gradually increasing action on climate change, including policies, regulations, and development of low carbon resources and technologies.

Overview CANADA'S ENERGY FUTURE 2020

Price History and Assumptions

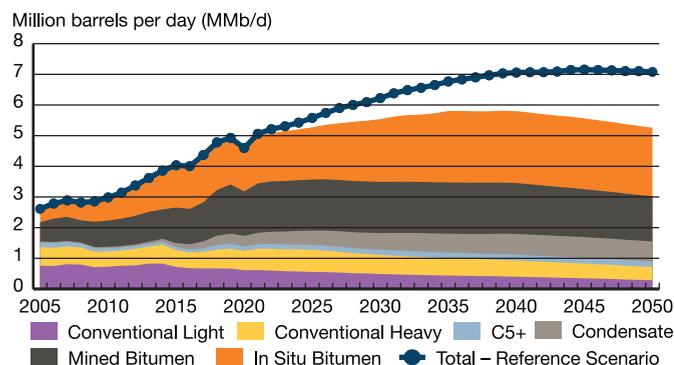
Price Assumptions	2010	2015	2020	2025	2030	2035	2040	2045	2050
Crude Oil Price - Brent, 2019 US\$ per barrel									
Evolving	94	56	37	53	55	55	54	52	50
Reference	94	56	37	70	75	75	75	75	75
Natural Gas Price - Henry Hub, 2019 US\$ per MMBtu									
Evolving	5.45	2.81	2.05	2.74	3.35	3.55	3.75	3.75	3.75
Reference	5.45	2.81	2.05	2.81	3.50	3.75	4.00	4.13	4.25
Carbon Price, 2019 CDN\$ per Tonne									
Evolving	-	-	30	52	60	68	75	100	125
Reference	-	-	30	45	40	36	32	29	25

Total Primary Energy Use



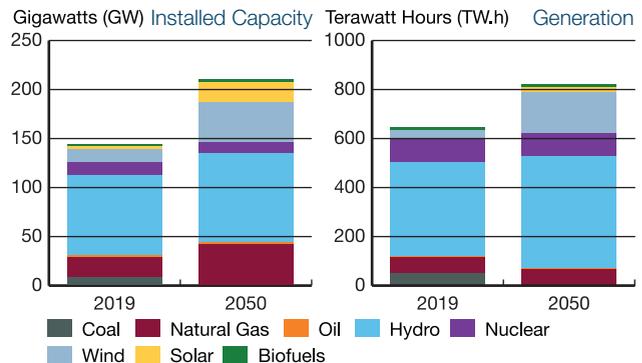
Canada's domestic fossil fuel consumption peaked in 2019 in the Evolving Scenario. However, fossil fuels still make up over 60% of Canada's fuel mix in 2050. Achieving net-zero GHG emissions by 2050 will require an accelerated pace of transition away from fossil fuels.

Crude Oil Production



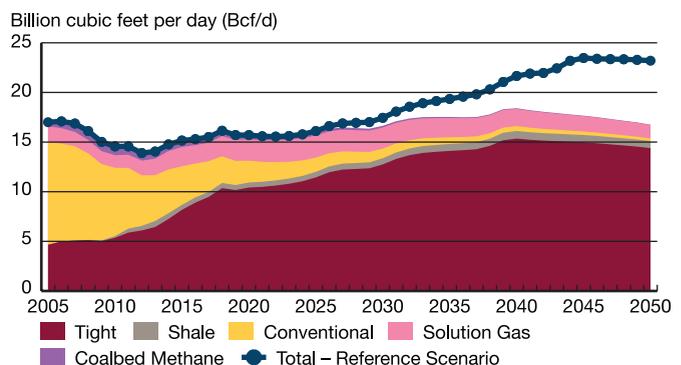
Canadian crude oil production increases steadily until peaking in 2039 in the Evolving Scenario, and in situ production accounts for 43% of production in 2050. In both scenarios, under-construction pipelines will be able to accommodate all future production growth.

Electricity



Electricity's share of end-use demand increases in the Evolving Scenario, as half of all passenger vehicle sales are projected to be electric in 2050. The share of renewable sources grows.

Natural Gas Production



Driven by growing assumed exports of liquefied natural gas, Canadian natural gas production increases and peaks in 2040 in the Evolving Scenario. In this scenario, tight gas accounts for 86% of total natural gas production in 2050.

Find the Report Appendix data at <https://apps.cer-rec.gc.ca/ftppndc/dffit.aspx?GoCTemplateCulture=en-CA>