

Global Energy Outlook

September 2018



Alberta 

Agenda



Growing energy demand



Shifting energy demand to Asia



Fossil fuels in the future energy mix

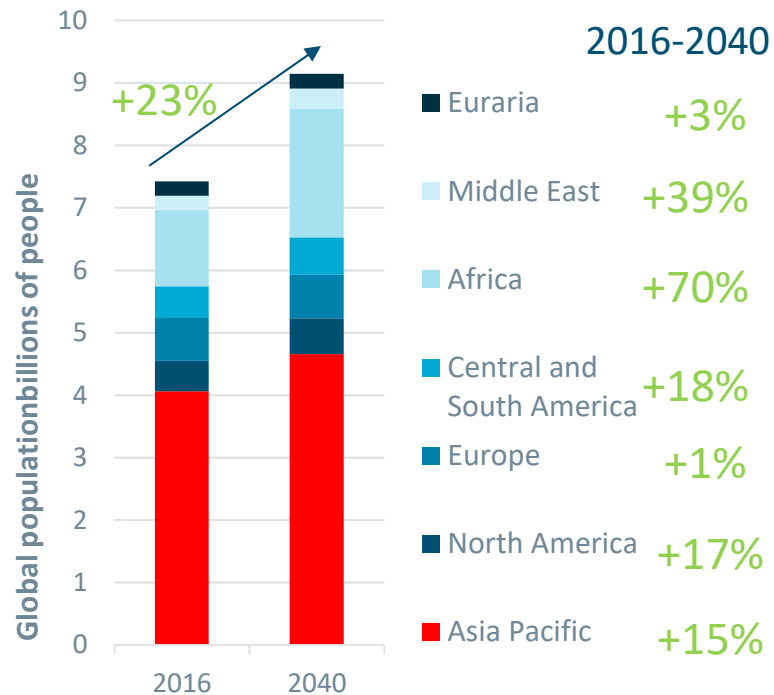


Future oil demand by sector

Growing Energy Demand

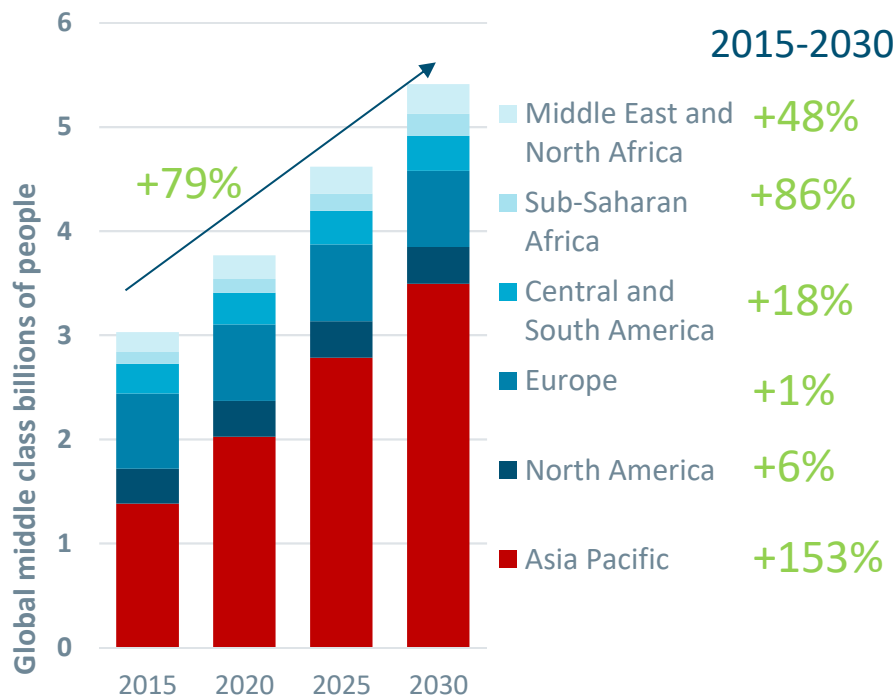
Population growth, urbanization
and GDP growth

Drivers for global energy demand



- By 2040, the global population will increase from 7.6 billion in 2018 to 9.2 billion

Drivers for global energy demand



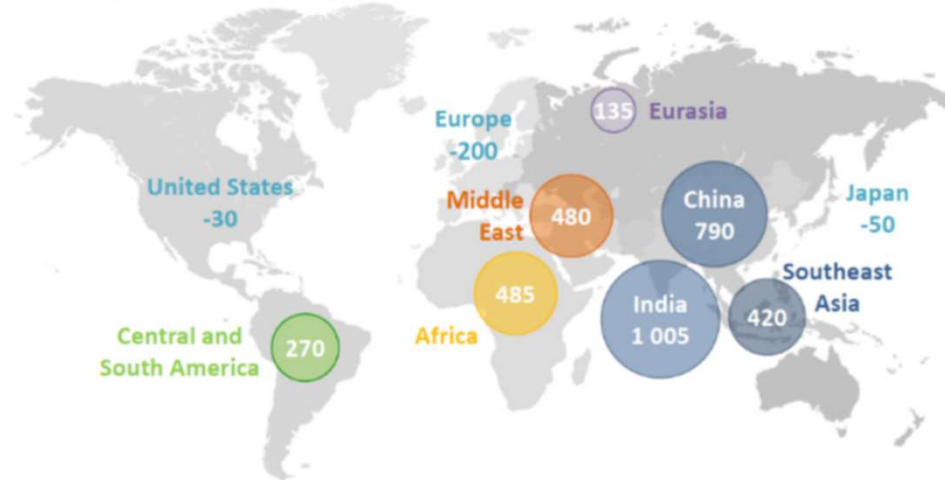
- The middle class will expand by 79 per cent by 2030

Shifting energy demand growth

Economic and energy demand growth
in Asia

Shifting energy demand growth

Change in Energy Demand, 2016–40 (Mtoe)



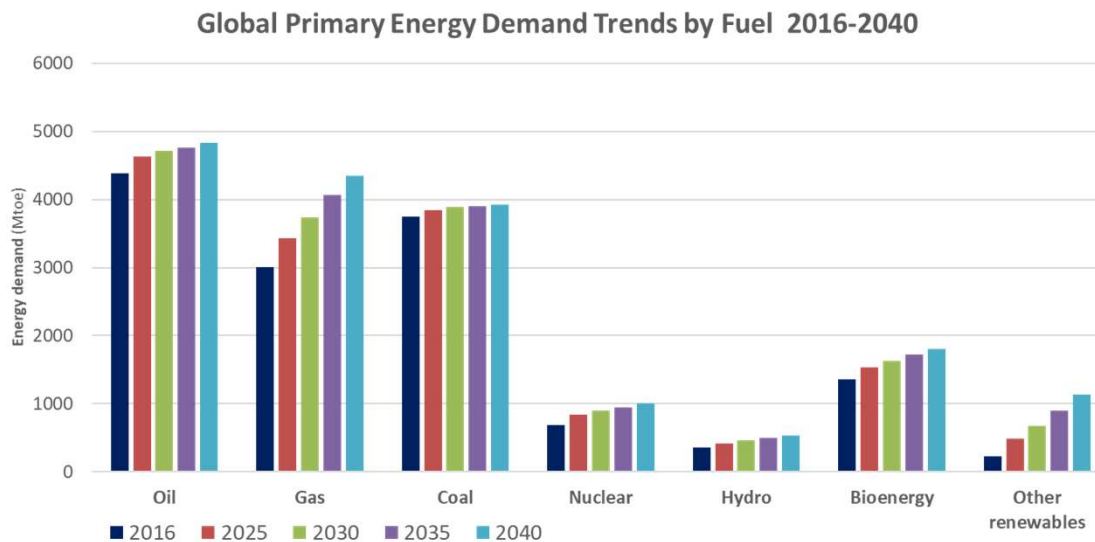
- Energy demand shifts to Asia and India
- Fossil fuels are reliable, cost-effective and transportable

Fossil fuels in the future energy mix



Still the largest contributor

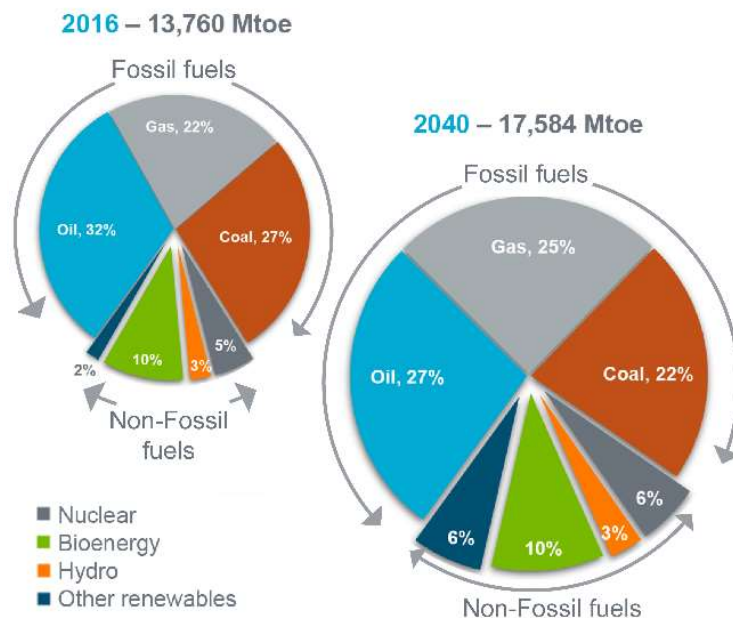
Fossil fuels in the future energy mix



- Global demand for all forms of energy will grow – including fossil fuels

Fossil fuels in the future energy mix

Global Energy Demand



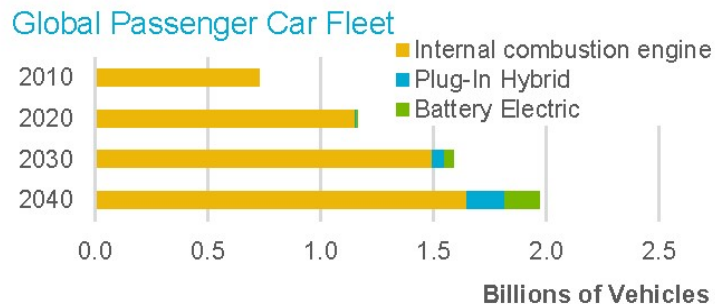
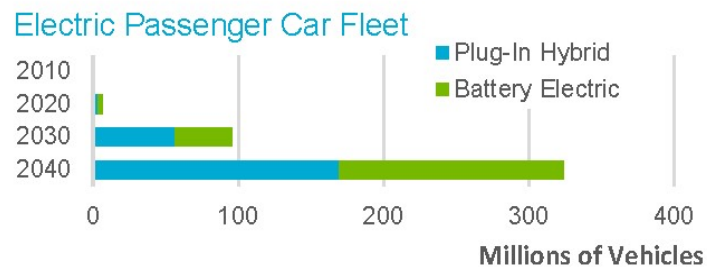
- Fossil fuels will remain the largest part of the energy mix
- By 2040, fossil fuels will provide 75 per cent of the global energy demand

Future oil demand by sector



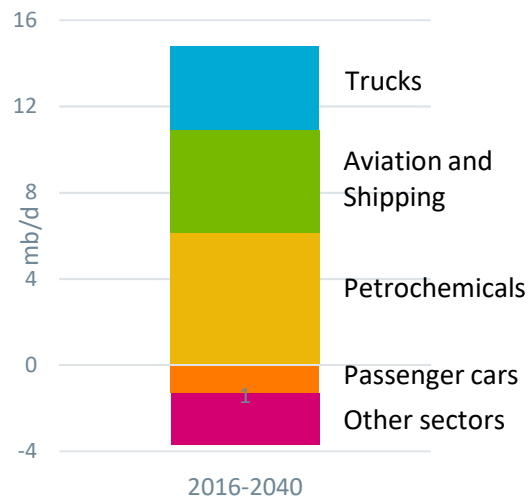
Commercial transportation and
chemicals sector

Future oil demand by sector



- By 2040, around 15 per cent of the global car fleet will be electric cars
- Oil will still be required for passenger cars

Future oil demand by sector



- By 2040, oil demand for commercial transportation, industrial and petrochemical uses is forecasted to be about 14 million barrels per day

Alberta can be the world's
energy supplier of choice.

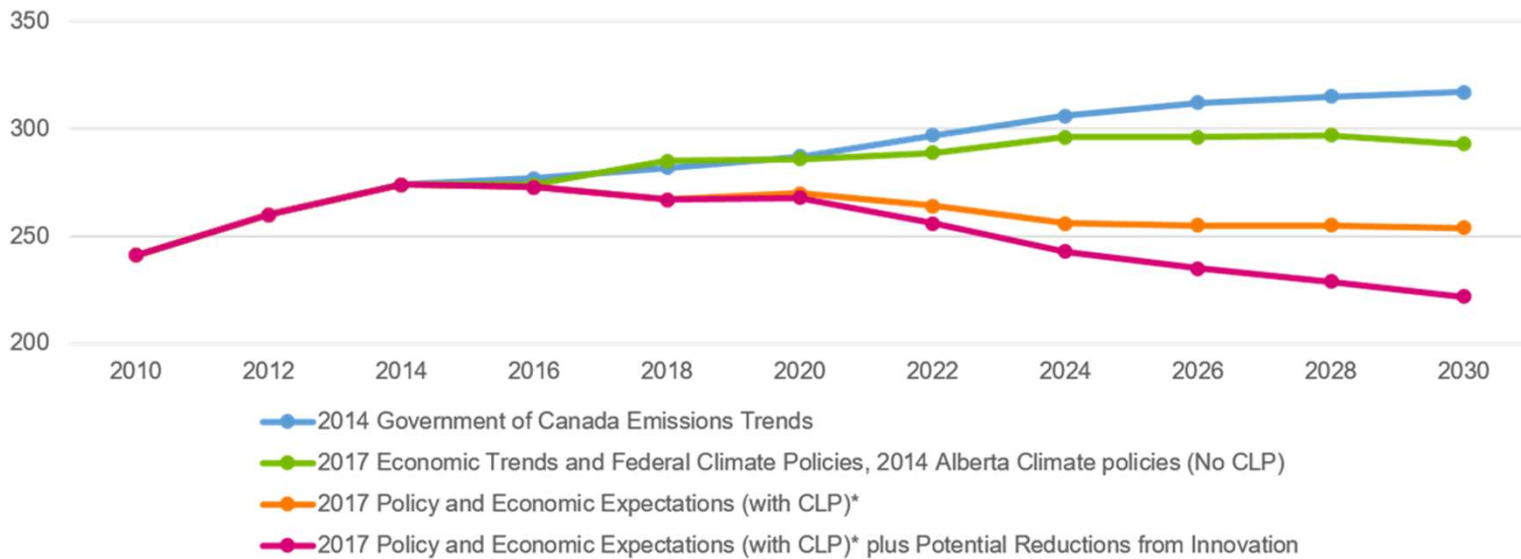
2017 world energy market

Rank	Producer of oil	Reserves of crude oil
1	Russia	Venezuela
2	Saudi Arabia	Saudi Arabia
3	USA	Alberta
4	Iraq	Iran
5	Iran	Iraq
6	China	Kuwait
7	Alberta	AE
8	UAE	Russia
9	Kuwait	Libya
10	Brazil	Nigeria

Source:
U.S. Energy Information
Administration, the National
Energy Board, BP, Oil &
Gas Journal

Sustainable development commitment

Emissions pre and post climate plan implementation



Sustainable development commitment

Canada's Oil Sands Innovation Alliance (COSIA) members are accelerating the pace of environmental performance

33 GREENHOUSE GAS PROJECTS
exploring emissions reductions

78 TAILINGS PROJECTS
exploring reclamation and treating fluid tailings

Between 2012 and 2016:

11% REDUCTION in
situ GHG emission
intensities

9% REDUCTION
mining GHG
emission intensities

42% REDUCTION
in situ water usage

18% REDUCTION
mining water
usage

Renewable future commitment

- Phasing out coal
- Renewable electricity program
 - 30 per cent target of renewable energy by 2030
 - Developing 5,000 megawatts of renewable electricity capacity
 - First round of competition will provide 600 megawatts of electricity
 - Future rounds expected to provide 700 megawatts of electricity
 - Includes a minimum Indigenous equity ownership component

Invest in the best barrel.
Invest in Alberta.

Thank you



Alberta 