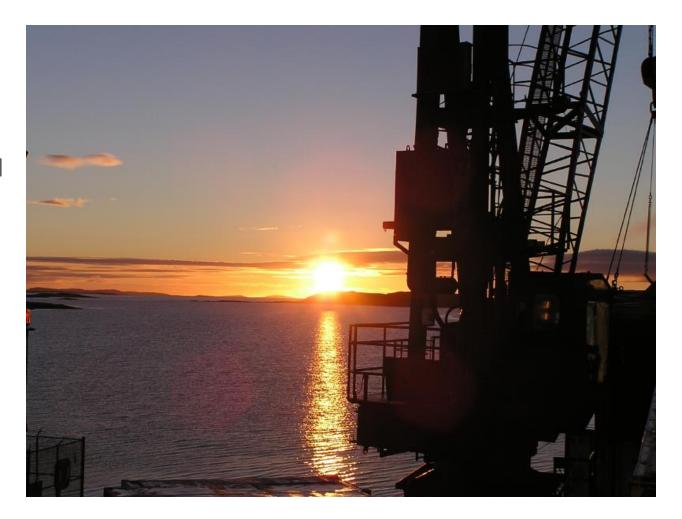


Overview

- CAPP Overview
- The Global Need for Energy
- Benefits of a Strong Canadian Oil and Natural Gas Industry
- Canada's Role as a Climate Change Leader
- Where does Canada's Arctic fit?
- Summary Canada's Role in Global Energy Security



Canadian Association of Petroleum Producers (CAPP)

- CAPP is the trusted voice for companies, large and small, that explore for, develop and produce natural gas and oil throughout Canada.
- CAPP's member companies produce about 80 per cent of Canada's natural gas and oil.
- Together CAPP's members and associate members are a solutionoriented partner to Canada and the world's needs for safe, secure, reliable, affordable and responsibly produced energy.
- Continues to engage on Canadian Arctic matters

Global Demand for Energy in 2050: Oil and Gas in the Mix

- A larger population and growing middle class, combined with more disposable income and aspirations for a better quality of life, will drive the ongoing need for energy
- U.S. Energy Information Administration projects a 50% increase in global energy demand by 2050
- Oil and natural gas will continue to be part of the global energy mix in 2050



By 2050, the UN estimates
Earth's population will hit 9.8B

2B more than today

Canada's Opportunity





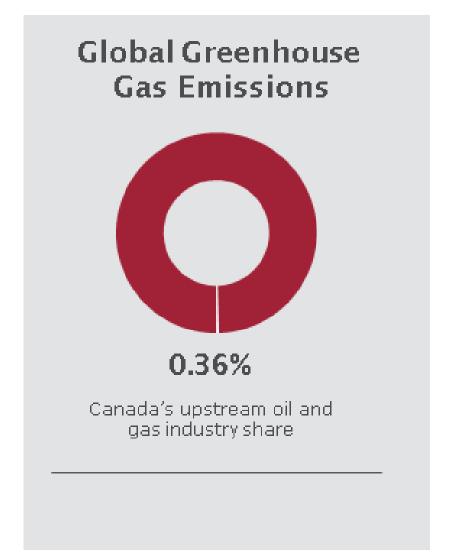
- Canada produces 5 million barrels of oil/day and
 18 billion cubic feet/day of natural gas
 - More than two thirds of Canadian oil production is exported
- With significant reserves and resource potential,
 Canadian energy can help displace natural gas and oil from regimes like Russia and Saudi Arabia
- Necessary to balance emission reduction goals with energy security and affordability/economic prosperity
- Canada's has an opportunity to grow production to provide reliable, safe, and responsibly produced energy to our NATO allies and trading partners

Benefits of a Strong Canadian Oil and Natural Gas Industry

- Oil and natural gas is Canada's top export, accounting for about 20% of national trade value
- \$36 billion in total government revenues from the oil and gas industry between 2019 and
 2021
- \$40 billion in forecasted capital investment in 2023
- Employs 450,000 people from coast to coast

Responsible Canadian Energy

- Canada's oil and natural gas producers recognize that producing lower emission resources will provide us with a global competitive advantage
- Canada's environmental standards are among the highest in the world
- The industry continues to invest in technologies and processes that drive down GHG emissions
- Industry is committed to collaborating with governments,
 Indigenous people and other stakeholders to accelerate the adoption and deployment of technology that reduces emissions while delivering responsibly produced energy to meet growing energy demand



Canada: Global Leader in Low Emissions Innovations and Technologies

Environmental Protection Activities

Capital expenditures on environmental activities by industry (Statistics Canada)

Other Industries

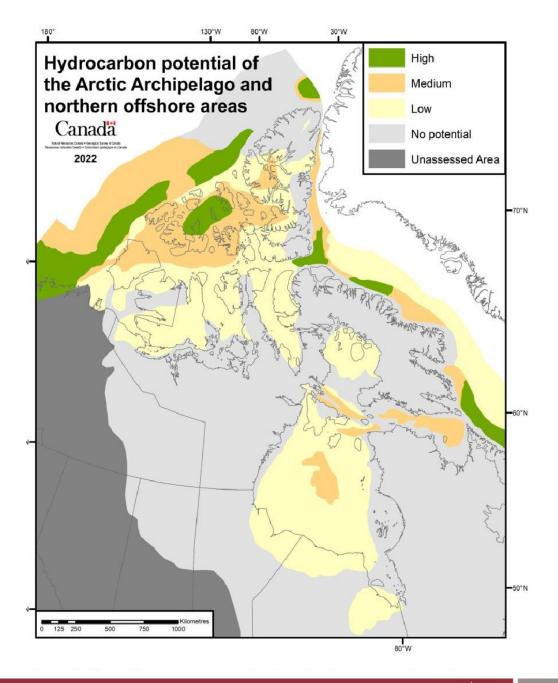
34.3%

3.05 BillionOil and Gas spend

*Based on 2019 Statistics Canada data

Canadian oil and natural gas producers have invested an average of \$1.2 billion annually since 2012 into research and development, much of that focused on reducing emissions.

Canada's Arctic has Significant Hydrocarbon Potential



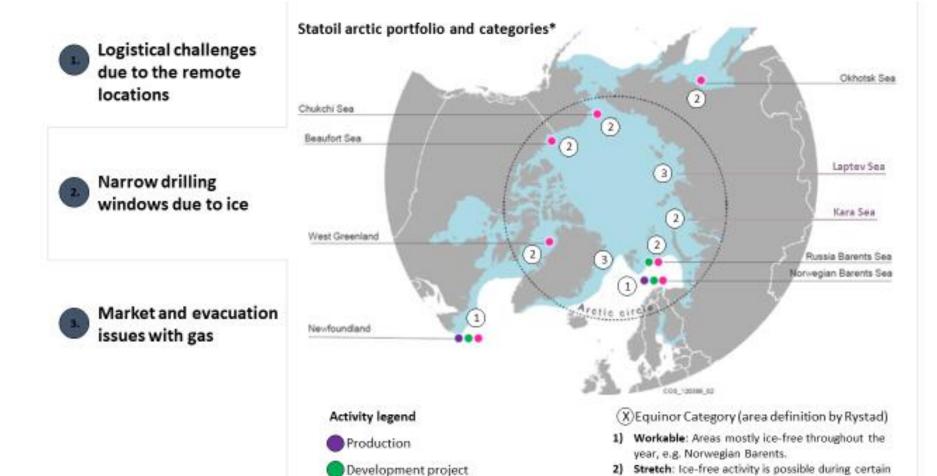
Where does the Canadian Arctic fit?

Challenges related arctic development result in higher costs

- Presence of Ice
 - requires heavy facilities, location of rigs & support
- Remoteness and Logistics
 - long distance to market/long equipment lead times
- Climate
 - storms, low temperatures, darkness
- Health Safety & Environment
 - waste disposal and treatment, spill containment
- High volumes of oil/gas needed to justify constructing needed infrastructure



Several regions limited ice-free windows – Beaufort is a stretch workable area



Source: RystadEnergy

*Communication from 2014, now Equinor Source: Rystad Energy research and analysis; Statoil 2014

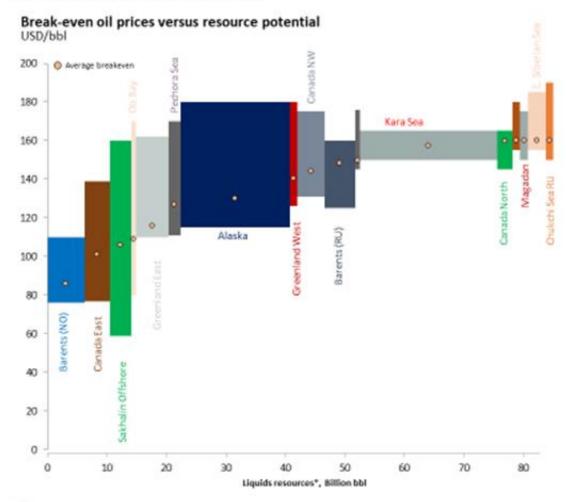
Exploration

weather windows, e.g. Sea of Okhotsk.

Greenland

3) Extreme: radical innovation is required, e.g. East

Regional analysis from 2014 suggest only Norway Barents, East Canada and Sakhalin can be cost competitive offshore areas



Source: RystadEnergy

Source: Rystad Energy research and analysis

Global Energy Trends

- Investor funding
- Political headwinds
- Increased transition uncertainty
- Technology improving deepwater costs half of what they were 5 years ago
- Industry fast tracking projects selecting basins they know best

Summary



- Necessary concurrent balance of climate change, energy security and affordability/economic prosperity
- Canada's has an opportunity to grow production to provide reliable, safe, and responsibly produced energy to our NATO allies and trading partners
- Potential for oil and natural gas development in Canada's Arctic though challenges remain and must be addressed in order to realize the potential

