

NWT Natural Gas: A local and global energy solution



Government of
Northwest Territories

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Arctic Energy and Emerging Technologies
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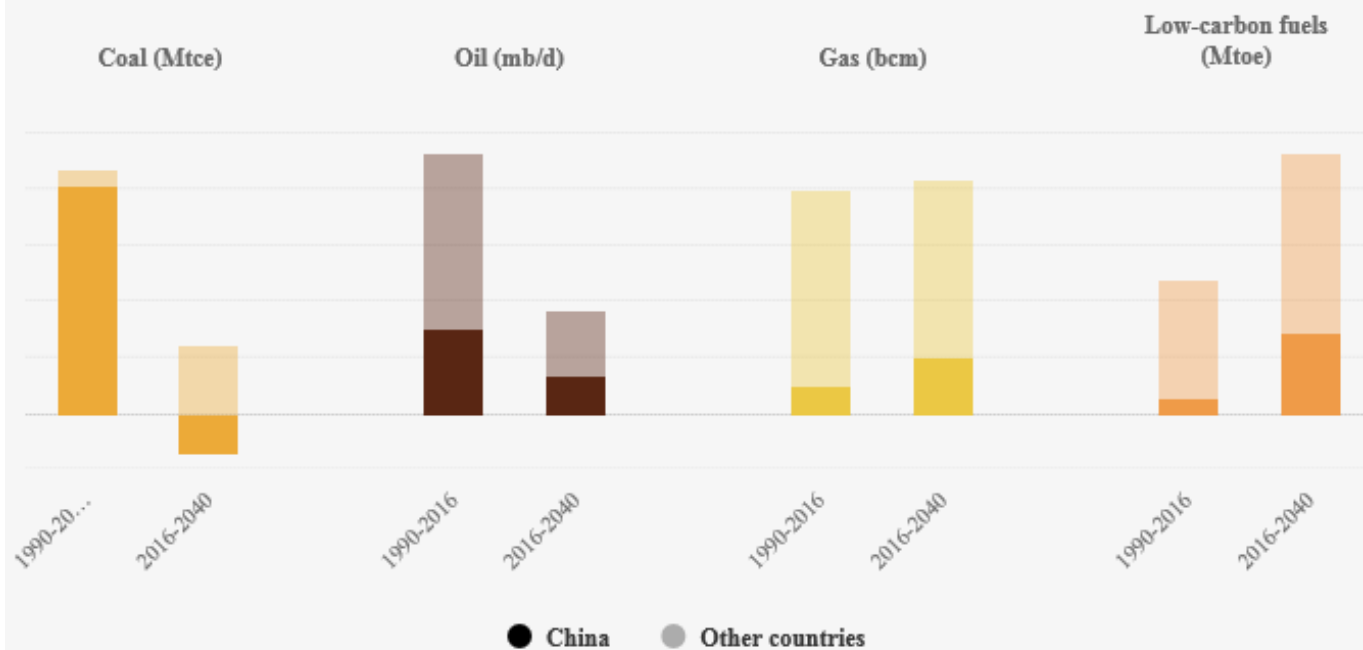


What is Natural Gas?

- What is it?
- How does it form?
- Where is it?
- How is it used?
- How do its emissions compare with coal and diesel?



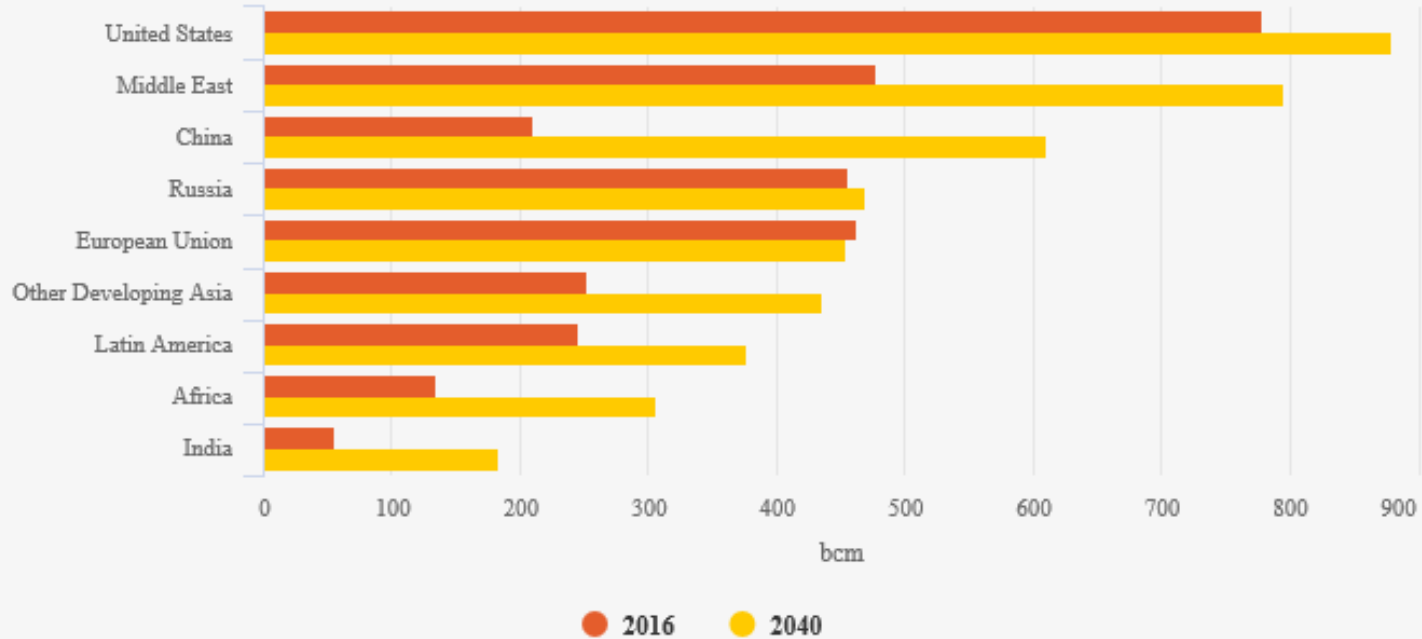
Change in world primary energy demand by fuel



World Energy Outlook 2017, IEA



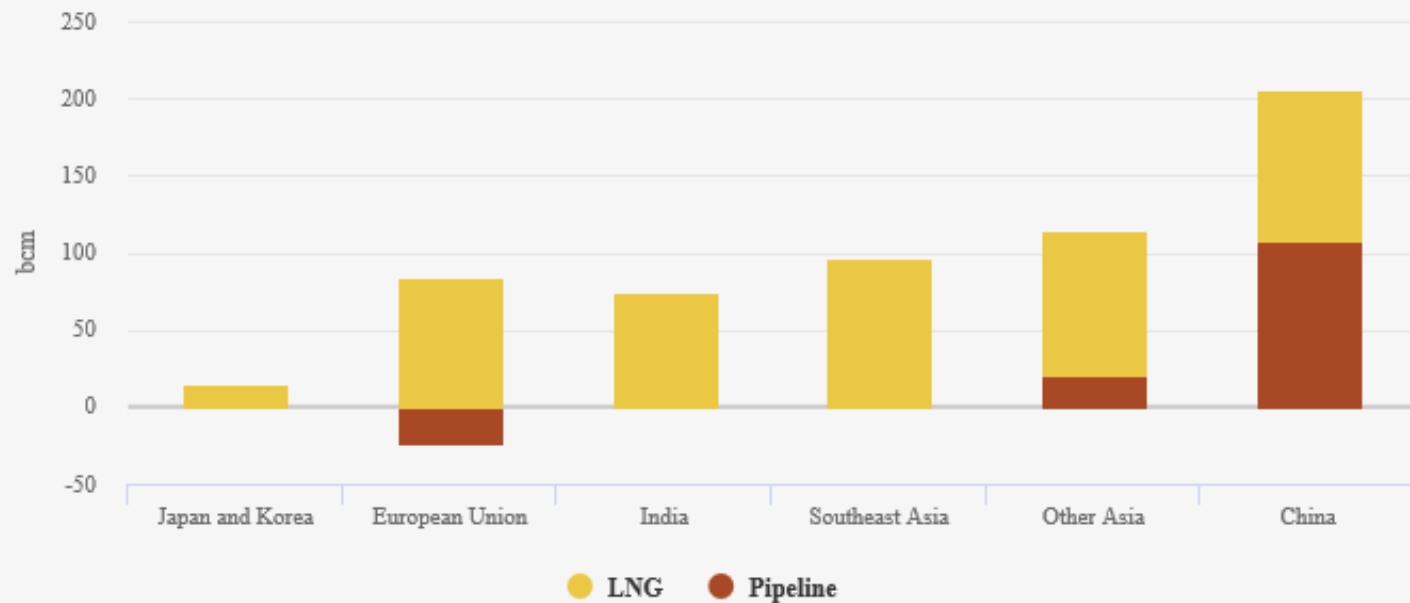
Gas demand in selected regions in the New Policies Scenario



World Energy Outlook 2017, IEA



Change in gas imports by selected region and mode in the New Policies Scenario, 2016-2040



World Energy Outlook 2017, IEA



U.S. liquefied natural gas export capacity (2016-2019)

billion cubic feet per day





Petroleum Resources Strategy

- Released May 1, 2018 along with NWT Energy Strategy 2030 and the Climate Change Strategic Framework
- A 15-year roadmap to a developed petroleum resources sector
- Includes Implementation Plan and Evaluation Framework





Petroleum Resources Strategy

- **Strategy includes 10 goals housed under three pillars**
 - **Improving our Competitive Edge**
 - **Ensuring Benefits for all NWT residents**
 - **Creating a Sustainable and Innovative Sector**





Regional energy supply initiatives

- Looking into the possibility of increasing energy security by tapping into NWT reserves
- Reduce energy costs for NWT residents
- Reduce carbon and particulate emissions
- Move away from continued dependence on imported diesel and other fuels
- Beaufort Delta gas supply study almost complete





LNG export opportunities

- Technically feasible to safely export natural gas by ship from the Mackenzie Delta region
 - Seasonal and year-round
- Development of this capacity would result in significant socio-economic benefits for Beaufort Delta and NWT
- Asia-Pacific would be the primary target market





Beyond initial project design

- Strengthen and expand NWT Knowledge Economy
- NWT could position itself as a key Arctic LNG jurisdiction
- Phased scale up easier to implement
- As technology and understanding improve with each phase, so would efficiency and economics

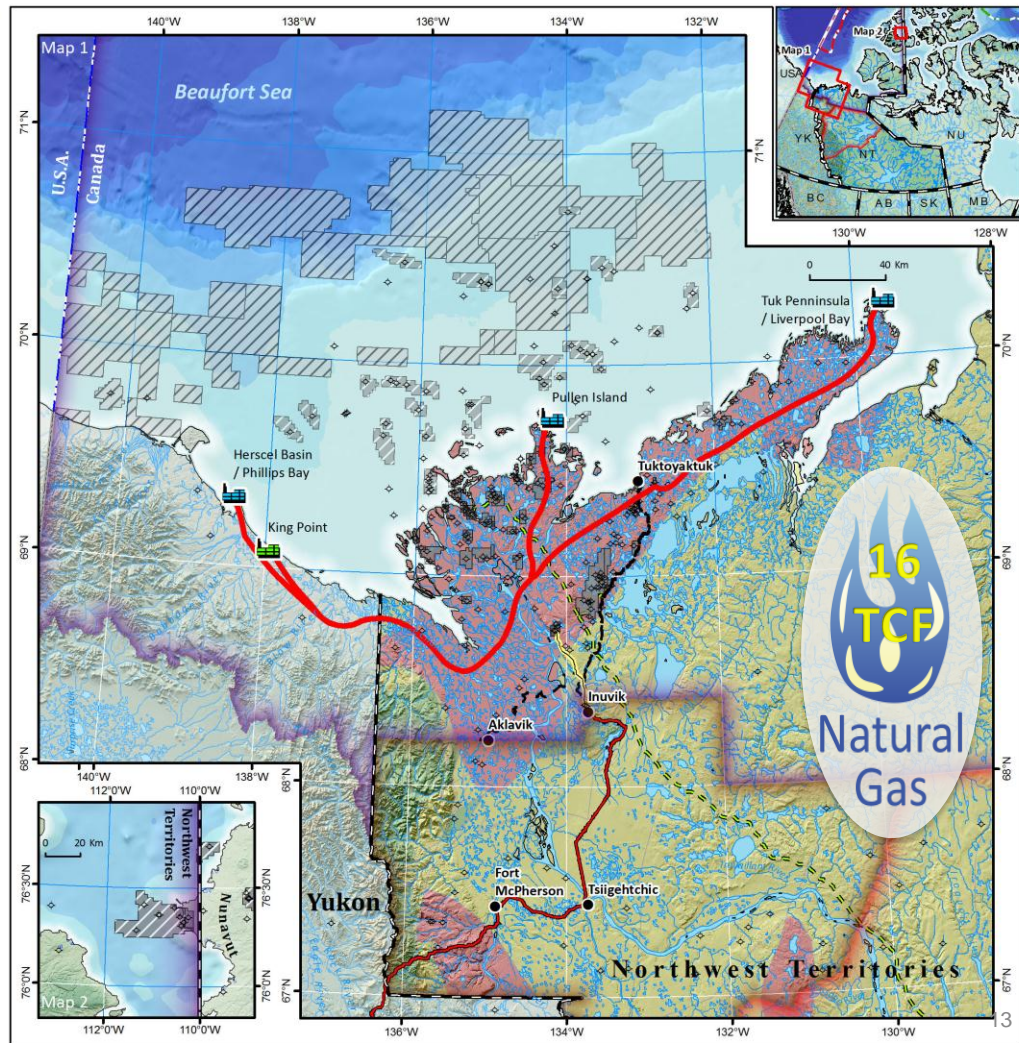


Mackenzie Delta / Arctic Islands

Oil and Gas Rights, Pipeline Infrastructure and Hydrocarbon Potential

- ◇ Wells
- NWT Communities
- Possible Floating LNG Terminal Area
- Possible Land Based LNG Terminal Area
- Hypothetical LNG Pipeline Connector Routes
- Pipelines
- Proposed MGP route
- Inuvik to Tuktoyaktuk Highway
- Major Road
- Winter Road
- Limit of Exclusive Economic Zone Pursuant to Bilateral Boundary Agreement
- International Boundary
- Provincial or Territorial Boundary
- Offshore Oil and Gas Rights - INAC**
- Exploration Licence
- Significant Discovery Licence
- Oil and Gas Rights - GNWT**
- Exploration Licence
- Production Licence
- Significant Discovery Licence
- NWT Hydrocarbon Potential**
NWT: NTGO - Open File 2005 - 04
- High - Very High
- High / Moderate - Moderate - Moderate / Low
- Low - Very Low
- Inuvialuit Settlement Area
- Gwich'in Settlement Area
- Sahtu, Dene and Metis Settlement Area

Document: Mackenzie_Delta_Arctic_Islands_Can_Gas_LNG_Conf_v6_May2_2018.mxd
 Document Security: PUBLIC
 Source: Petroleum Resources Division,
 Industry Tourism and Investment
 Projection: Modified Lambert Conformal Conic
 Central Meridian: 134°W
 Standard Parallels: 62°N
 70°N
 Datum: NAD83



*MV GULF
BEAUFORT
hailed the
only load of
oil from the
Canadian
Beaufort to
Asia*





Gulf Canada Resources; Beaudril Ice breaker fleet

Questions?



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