

# CANADIAN ENERGY: RESPONSIBLE AND SUSTAINABLE

The world needs more reliable, clean, and environmentally sustainable Canadian oil

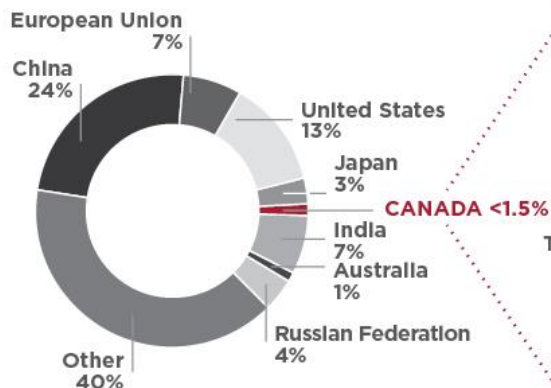
- The global economy has been reliant on oil for over 125 years<sup>(1)</sup> – access to oil drives advanced industrialized societies. Global demand for oil is estimated to reach over 100 million barrels per day in the next year<sup>(2)</sup>, and demand is growing at an increasing rate as China, India and Asia (over 4 Billion people)<sup>(3)</sup> continue to industrialize.
- Canada has the world's 3<sup>rd</sup> largest oil reserves<sup>(4)</sup>, behind only Saudi Arabia and Venezuela, and is the world's 4<sup>th</sup> largest oil producer<sup>(5)</sup> - all while adhering to world leading regulation and environmental standards.
- Canada's oil is extracted and produced under the watchful eye of both Federal (National Energy Board or NEB) and Provincial jurisdictions (AER, SER, BC-OGC), ensuring that Canadian oil is one of the cleanest, most sustainable energy resources in the world<sup>(6)</sup>.
- Canadian oil companies have an exceptional track record of corporate transparency<sup>(7)</sup> :
  - In Canada's capitalist free market, companies are required to report financial information, reserves<sup>(8)</sup>, and liabilities.
  - Provincial regulators continually monitor company operations through site specific audits and inspections - which result in Satisfactory, Low Risk or High Risk compliance outcomes.
  - Strict guidelines must be followed to receive approvals for nearly all industry processes, including drilling license approvals, enhanced recovery approvals, and pipeline approvals. Ultimately, it is the industry's responsibility (not the tax-payer!!) to clean-up and restore the land to its natural state at the end of the project life or in the case of an incident.

# CANADIAN OIL – A SOLUTION, NOT THE PROBLEM

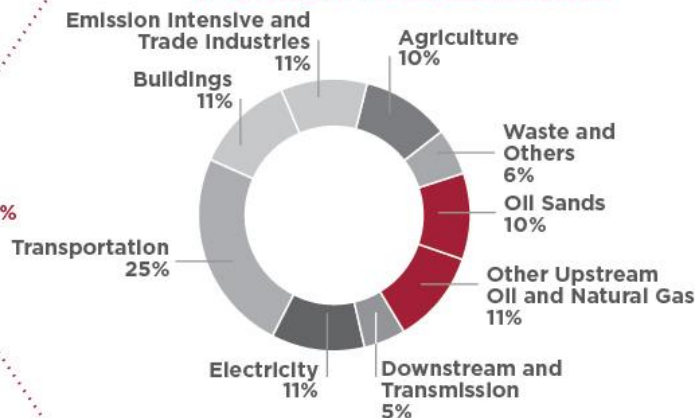
Canada is a global leader in developing its oil resources responsibly

- Canadian oil companies reinvest a large portion of the cash flow they generate back into the economy<sup>(1)</sup> – creating jobs, increasing the private sector tax base, and increasing Canada's GDP – all of which benefit Canadians from coast to coast; helping to fund many of Canada's social programs and government services.
- The Canadian upstream oil and gas sector emits **less than 0.3%** of global greenhouse gas emissions despite being the world's 4<sup>th</sup> largest oil producer – Canada as a whole contributes less than 1.5% to global emissions<sup>(2)</sup>.

GLOBAL EMISSIONS - 2014



CANADIAN EMISSIONS - 2016  
(Percentage of Global Emissions)

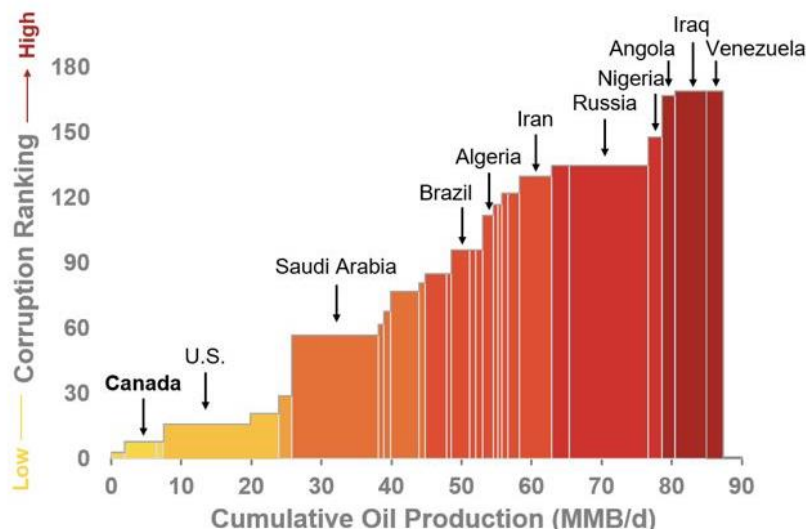


Source: [www.capp.ca/responsible-development/air-and-climate/greenhouse-gas-emissions](http://www.capp.ca/responsible-development/air-and-climate/greenhouse-gas-emissions)

# RESOURCE DEVELOPMENT - PROSPERITY FOR ALL CANADIANS

- For well over a century, Canada has developed its resources in a responsible and sustainable manner. As a result, Canadians enjoy a stable, industrialized economy, with the advanced social programs and high standard of living that is in place today.
- Canada currently sells its oil to the U.S. at a significant discount (differential) to world benchmark pricing. The U.S. and Canada currently have 70 operating oil and gas pipelines crossing the border<sup>(1)</sup>. It is estimated that **\$15.6 Billion per year** in additional funds would be generated by receiving world pricing for Canadian oil<sup>(2)</sup>; which in turn would significantly increase Canada's economic and social prosperity.
- Canada is a global leader in the responsible development of its oil resources, doing so with one of the lowest rates of corruption in the entire world<sup>(3)</sup>:

## World Oil Producers Ranked by Corruption and Volume



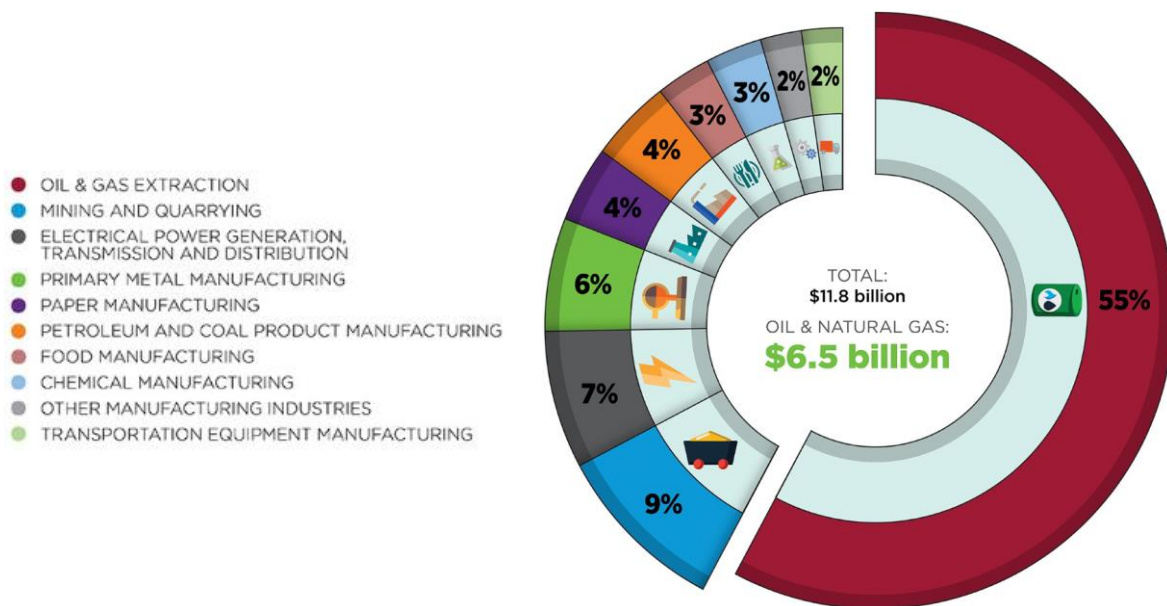
Source: Peter Tertzakian's column dated June 11th, 2018 - <https://www.arcenergyinstitute.com/thumbs-up-for-canada/>

# CANADIAN PIPELINE PROJECTS - INCREASE THE AMOUNT OF CLEAN OIL THE WORLD CONSUMES

- Pipeline projects such as:
  1. **Trans Mountain** - the simple addition of a twin pipeline in an existing right of way, allowing access to world markets and pricing;
  2. **Energy East** – the simple reversal of an existing pipeline which would give Eastern Canada access to clean, sustainable Canadian oil vs. imports from nations like Iraq, Angola, Algeria, and Nigeria<sup>(1)</sup>;
  3. **Northern Gateway** – a pipeline project which was approved by the NEB to take oil to the west coast; and
  4. **Northern Spirit** – a First Nations’ inspired and backed pipeline project to take oil to the west coast; would put more clean Canadian oil into jurisdictions that are currently sourcing their energy from places with high levels of corruption, and little or no environmental standards – countries such as Venezuela, Iraq, Angola, Nigeria, Russia, and Iran<sup>(2)</sup>.
  
- Countries likely to benefit from using locally-sourced, Canadian oil by way of safe, strategic pipeline projects similar to those listed above, include:
  1. **Canada** – Canada imports 759,000 barrels per day of oil by pipeline and tanker, and is spending on average more than \$15 billion every year to do so; often sourcing the oil from the corrupt countries mentioned above<sup>(3)</sup>; Canada will also see economic benefits as Canadian crude gets world standard pricing vs. the discount we currently give to the U.S.
  2. **China** – The world’s top importer of crude oil<sup>(4)</sup>.
  3. **India** – Highest rate of industrialization/growth; which coincides with increasing oil consumption<sup>(5)</sup>.
  4. **Asia** – Large population base which is following the energy consumption lead of China and India.
  5. **Europe** – With a pipeline to Eastern Canada, Europe could benefit through the use of Canada’s oil and refined oil products.

# CANADIAN UPSTREAM OIL AND GAS SECTOR – LEADING THE WAY IN ENVIRONMENTAL PROTECTION

- In 2014 Canadian businesses spent \$11.8 billion on environmental protection, of these expenditures the upstream oil and gas sector accounted for \$6.5 billion or 55% of the total expenditures<sup>(1)</sup>.



Source: Canada's Oil and Natural Gas Producers (CAPP) - <https://context.capp.ca/infographics/2016/environmental-protection-spending-by-industry>

- To further mitigate environmental impacts, Transport Canada and the oil and gas industry have built a unique partnership, putting in place a comprehensive set of guidelines, structures, and plans to respond quickly and appropriately in case of an oil spill in marine waters under Canadian jurisdiction<sup>(2)</sup>.

# CANADIAN PIPELINES AND TANKERS ARE SAFE

## A safe and environmentally sound way to transport clean Canadian oil

- Canadian pipeline and tanker transportation have proven to be efficient and environmentally safe modes of transporting clean Canadian oil.
- Crude oil tankers have operated safely along Canadian coastlines for over 100 years.
- Eastern Canada has approximately 4,000 inbound tanker trips per year<sup>(1)</sup>.
- Oil tankers along Canada's west coast have been in operation since 1930 without a major incident<sup>(1)</sup>. Since 1995 oil tankers travelling in Canadian and U.S waters have been required to be double hulled – reducing the risk of spills dramatically. Internationally, single hulled tankers were completely phased out in 2014. <sup>(2,3,4)</sup>
- The largest oil spill on the west coast of Canada can be attributed not to an oil tanker, but to B.C. Ferries passenger ferry “The Queen of the North” in 2006. The sinking of the Ferry caused just 1,765 barrels of oil to be released off the west coast of Vancouver Island<sup>(1)</sup>.
- According to Natural Resources Canada, over 1.3 billion barrels of oil are transported safely via pipeline in Canada every year. **On average just 1,084 barrels or 0.00000083% of what is transported is spilled in any given year<sup>(5)</sup>.**

# ENDNOTES

- Slide 2:
- (1) Source: Yergin, Daniel. The Prize – The Epic Quest for Oil, Money and Power. Free Press, 1991. 2008 Edition.
  - (2) Source: Peter Tertzakian’s column dated May 15<sup>th</sup>, 2018 - <https://www.arcenergyinstitute.com/100-million-barrels-per-day/>
  - (3) Source: World Population Review - <http://worldpopulationreview.com/countries/countries-in-asia/>
  - (4) Source: Central Intelligence Agency’s World Factbook – <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2244rank.html>
  - (5) Source: U.S. Energy Information Administration - <https://www.eia.gov/tools/faqs/faq.php?id=709&t=6>
  - (6) Source: Natural Resources Canada - <https://www.nrcan.gc.ca/energy/oil-sands/18078>
  - (7) Source: Peter Tertzakian’s column dated June 11<sup>th</sup>, 2018 - <https://www.arcenergyinstitute.com/thumbs-up-for-canada/>
  - (8) National Instrument – Standards of Disclosure for Oil and Gas Activities – Alberta Securities Commission. [www.albertasecurities.com](http://www.albertasecurities.com)
- Slide 3:
- (1) Source: ARC Financial “The Fiscal Pulse of Canada’s Oil and Gas Industry”, May 2016; [http://www.arcfinancial.com/assets/699/ARC\\_Financial\\_Corp.\\_Fiscal\\_Pulse\\_Q1\\_2016.pdf](http://www.arcfinancial.com/assets/699/ARC_Financial_Corp._Fiscal_Pulse_Q1_2016.pdf)
  - (2) Source: [www.capp.ca/responsible-development/air-and-climate/greenhouse-gas-emissions](http://www.capp.ca/responsible-development/air-and-climate/greenhouse-gas-emissions)
- Slide 4:
- (1) Source: Natural Resources Canada - <http://www.nrcan.gc.ca/energy/infrastructure/5893#h-1-4>
  - (2) Source: National Post: <http://business.financialpost.com/commodities/energy/a-self-inflicted-wound-pipeline-delays-to-cost-canadian-economy-15-6b-in-2018-says-scotiabank>
  - (3) Source: Peter Tertzakian’s column dated June 11<sup>th</sup>, 2018 - <https://www.arcenergyinstitute.com/thumbs-up-for-canada/>
- Slide 5:
- (1) Source: Government of Canada National Energy Board - <https://www.neb-one.gc.ca/nrg/ntgrtd/mrkt/snpsht/2017/02-04cndncrlmprtsdcln-eng.html>
  - (2) Source: Peter Tertzakian’s column dated June 11<sup>th</sup>, 2018 - <https://www.arcenergyinstitute.com/thumbs-up-for-canada/>
  - (3) Source: Natural Resources Canada - <https://www.neb-one.gc.ca/nrg/ntgrtd/mrkt/snpsht/2017/02-04cndncrlmprtsdcln-eng.html>
  - (4) Source: OilPrice.com - <https://oilprice.com/Energy/Crude-Oil/Chinas-Becomes-Worlds-Next-Top-Oil-Importer.html>
  - (5) Source: Fitch Ratings - <https://www.fitchratings.com/site/pr/1034704>
- Slide 6:
- (1) Source: Statistics Canada - <https://www150.statcan.gc.ca/n1/daily-quotidien/171024/dq171024a-eng.htm>
  - (2) Source: Transport Canada - <https://www.tc.gc.ca/eng/marinesafety/oep-ers-regime-menu-1780.htm>
- Slide 7:
- (1) Source: Transport Canada - <https://www.tc.gc.ca/eng/marinesafety/facts-oil-tanker-safety-canada-4513.html>
  - (2) Source: Transport Canada - <https://www.tc.gc.ca/eng/marinesafety/oep-environment-tankers-background-539.htm>
  - (3) Source: ClearSeas - <https://clearseas.org/tankers/>
  - (4) Source: National and Atmospheric Administration (NOAA) - <https://response.restoration.noaa.gov/about/media/final-farewell-oil-tankers-single-hulls.html>
  - (5) Source: Natural Resources Canada - <http://www.nrcan.gc.ca/energy/infrastructure/5893#h-3-2>