



Leveraging Technology &
Canadian Ingenuity
A Canadian Success Story

Canadian Natural Technology, Innovation & Continuous Improvement

- Leading R&D investor
 - ~\$3.4 billion invested since 2009*
- Benefits
 - Unlocking reserves
 - Becoming more effective and efficient
 - Increasing production
 - Reducing environmental footprint → GHG emission reductions are a priority
- Canadian Natural's culture of leveraging technology, innovation and continuous improvement is everyone's accountability and is key to driving sustainable operations and long-term value

*Based upon SRED capital invested from 2009-2018.

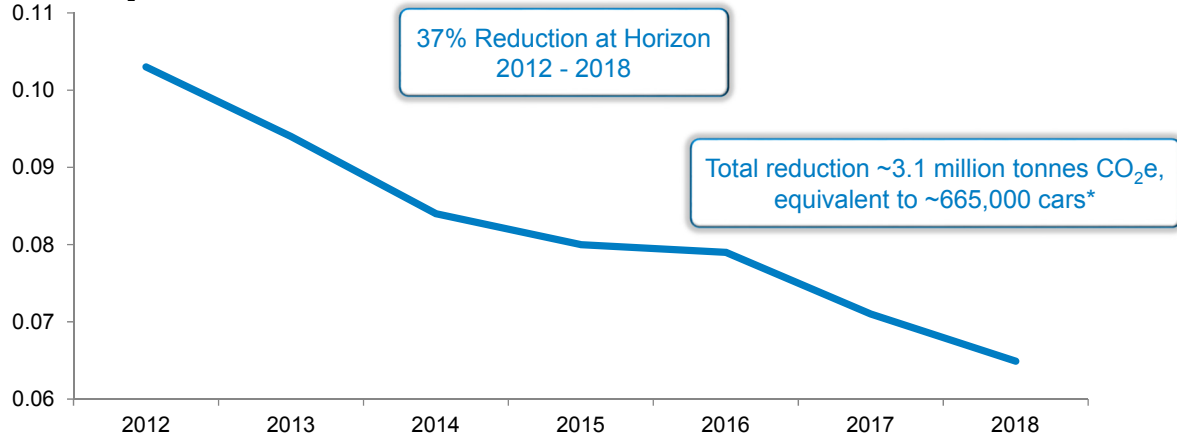


TECHNOLOGY, INNOVATION & CONTINUOUS IMPROVEMENT = SUSTAINABILITY

2

Canadian Natural Delivering Climate Leadership at Horizon Oil Sands

GHG Emissions Intensity
(tonnes CO₂e/BOE)



**Relative to 2012 performance.
Note: Represents GHG emissions intensity at Horizon oil sands and upgrading.*

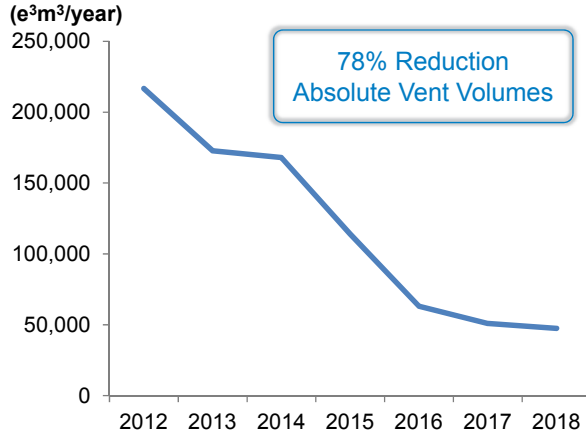


3

Heavy Crude Oil Continuous Improvement in GHG Emissions

Primary Heavy Oil

Vent (Methane)
(e³m³/year)



- Continuous improvement initiatives have reduced environmental emissions
- Heavy Oil Casing Gas vent reduction
 - Solution Gas Conservation has reduced GHG emissions

Total reduction of ~4.4 million tonnes CO₂e,
equivalent to ~930,000 cars*

**Relative to 2012 performance; includes reductions in Primary Heavy crude oil venting and Primrose CSS flaring.
Note: 2012 is the reference point for the Government of Canada's methane reduction target.*



STRENGTHENING ENVIRONMENTAL INITIATIVES

4

Canadian Natural Carbon Capture & Sequestration / Storage Technology

- Top tier CO₂ capturer and sequesterer in the world⁽¹⁾
- Reduced CO₂ footprint
- Reduced CO₂ charges

	Tonnes per Year
Horizon	0.4 million
Quest ⁽²⁾	1.1 million
NWR ⁽³⁾	1.2 million
	2.7 million



Equivalent to ~576,000 cars off the road annually

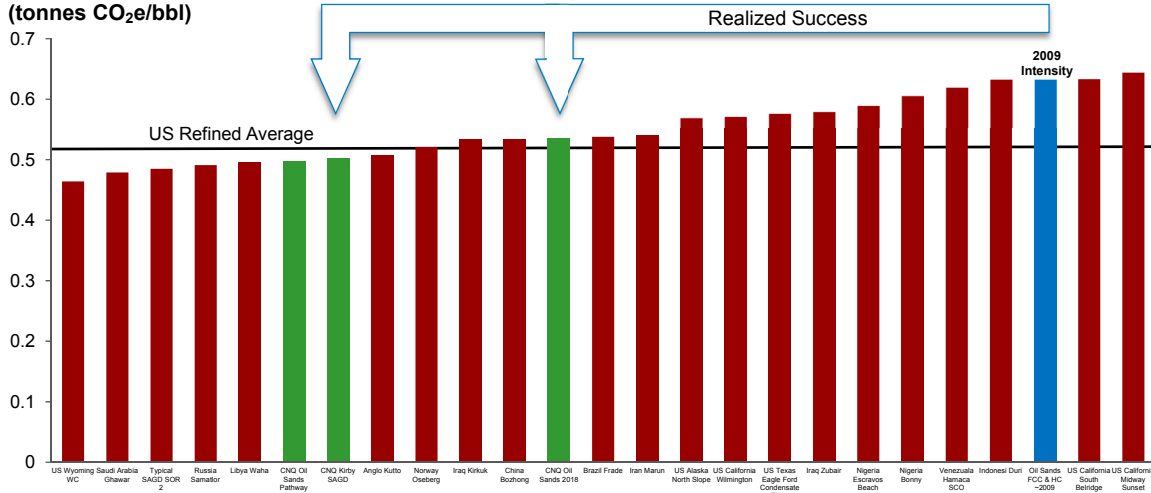
(1) Per the Global CCS Institute.
(2) Canadian Natural is a 70% working interest owner in Quest.
(3) On stream in 2019, Canadian Natural is a 50% owner in NWR.



LEADING CANADA IN CARBON CAPTURE & STORAGE

Oil Sands Well-to-Combustion

GHG Emissions Intensity
(tonnes CO₂e/bbl)

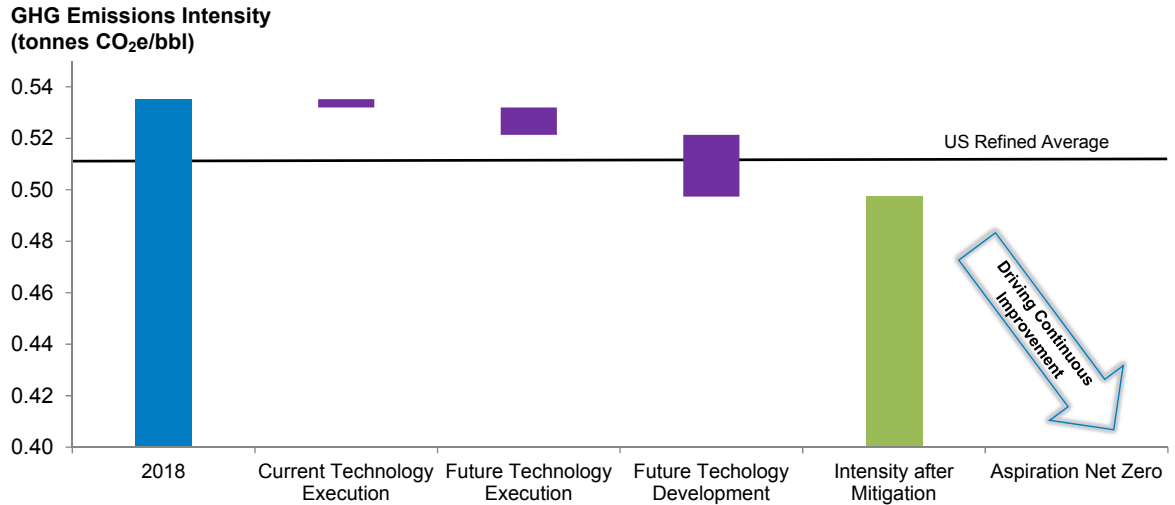


Note: Total emissions intensity includes: production and upgrading, transportation, refining, transportation of refined product and combustion. CNQ Oil Sands includes: Oil Sands Mining and Upgrading and Thermal Crude Oil.
Source: Internal company reports and ARC Energy Research Institute 2017 Report.



CLEAR DEFINED GOAL TO REDUCE GHG EMISSIONS

Capturing Technological Improvements in Oil Sands Operations Pathway to the Future



*Note: Total emissions intensity includes: production and upgrading, transportation, refining, transportation of refined product and combustion. CNQ Oil Sands operations includes: Oil Sands Mining and Upgrading and Thermal Crude Oil.
Source: Internal company reports and ARC Energy Research Institute 2017 Report.*



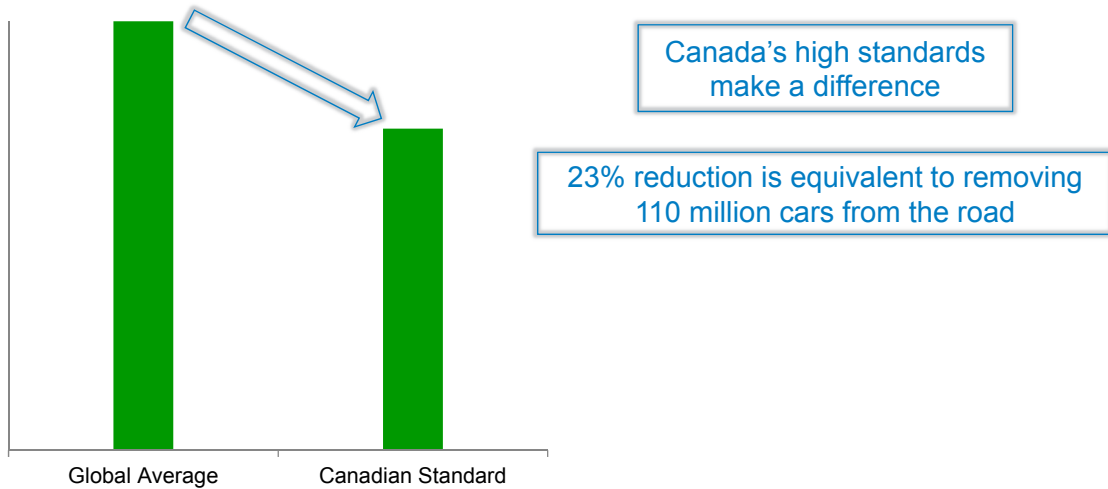
PATHWAY TO CONTINUE TO REDUCE GHG EMISSIONS

7



Canada Can Make a Significant
Positive Impact on
Global GHG Emissions

Canadian Oil Reduces GHG Emissions

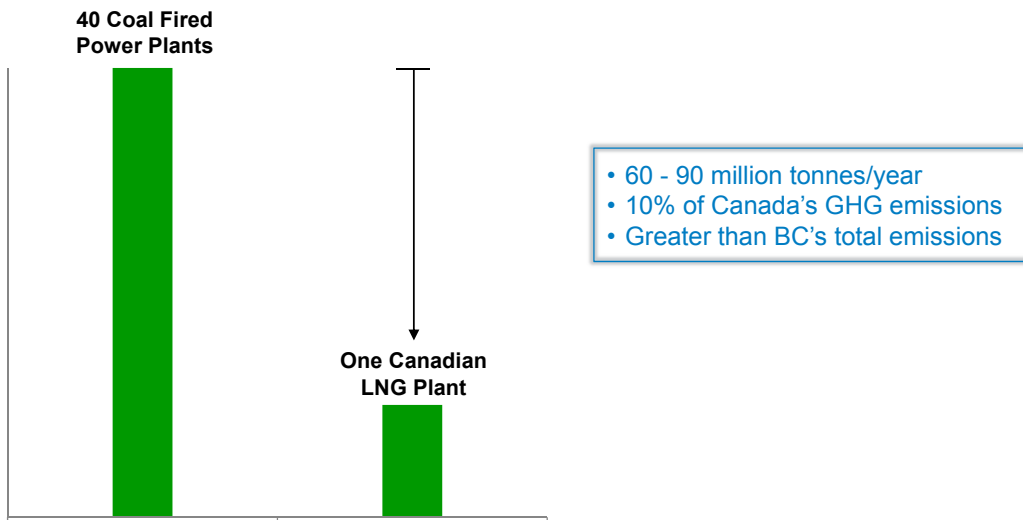


Note: Recognition and application of Canadian flaring standards to the world.



110 MILLION CARS (MORE THAN 3X CARS IN CANADA)

Canadian Natural Gas Reduces GHG Emissions



Note: Based on LNG Canada. EIA.



BUILDING 5 LNG PLANTS EQUIVALENT TO REDUCING CANADA'S GHG EMISSIONS BY 50%

Canada's Opportunity to Lead

Delivering Canada's Crude Oil & Natural Gas to
Global Markets Should be a
**Climate Change & Economic
Priority for Canada**