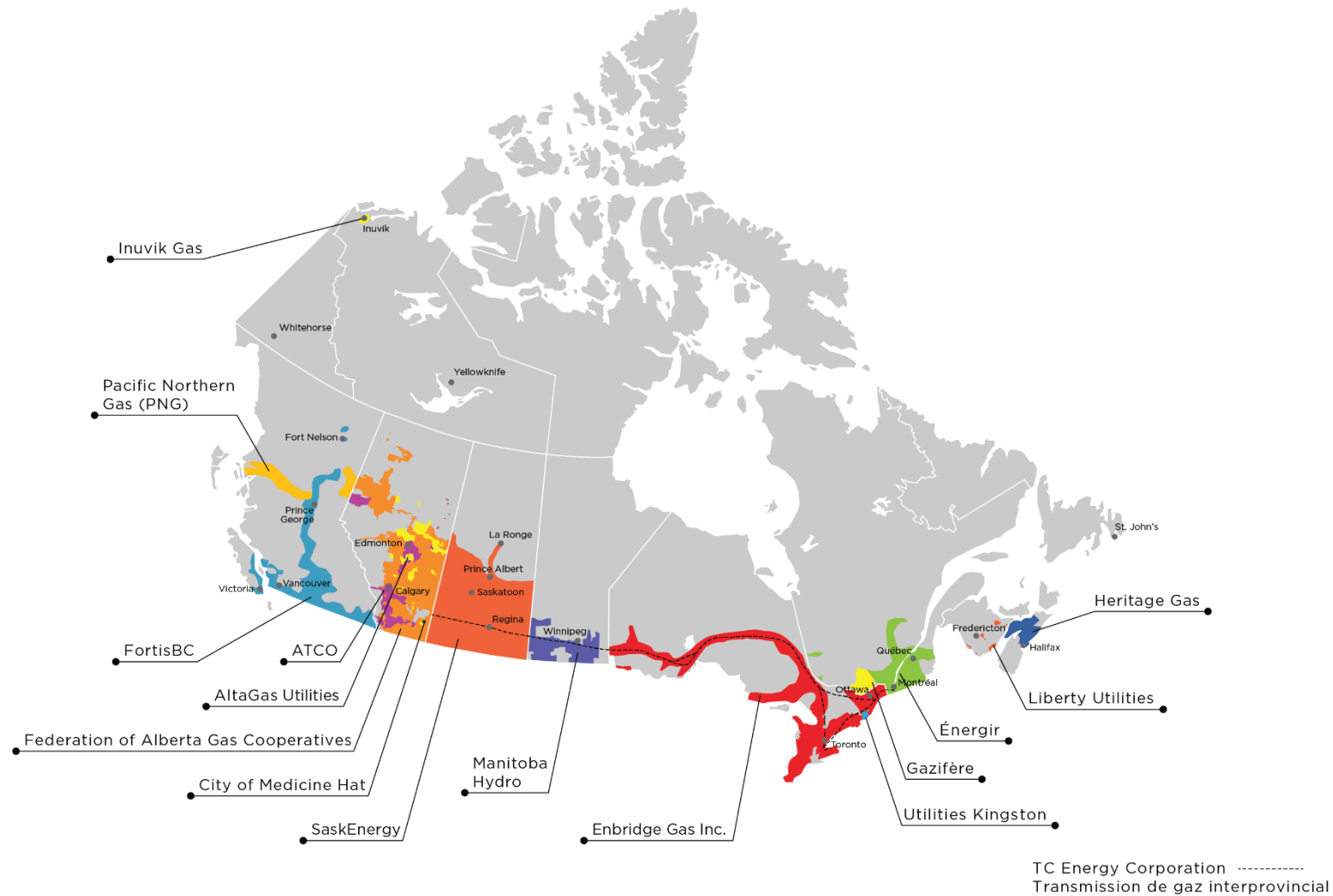


NATURAL GAS IN CANADA

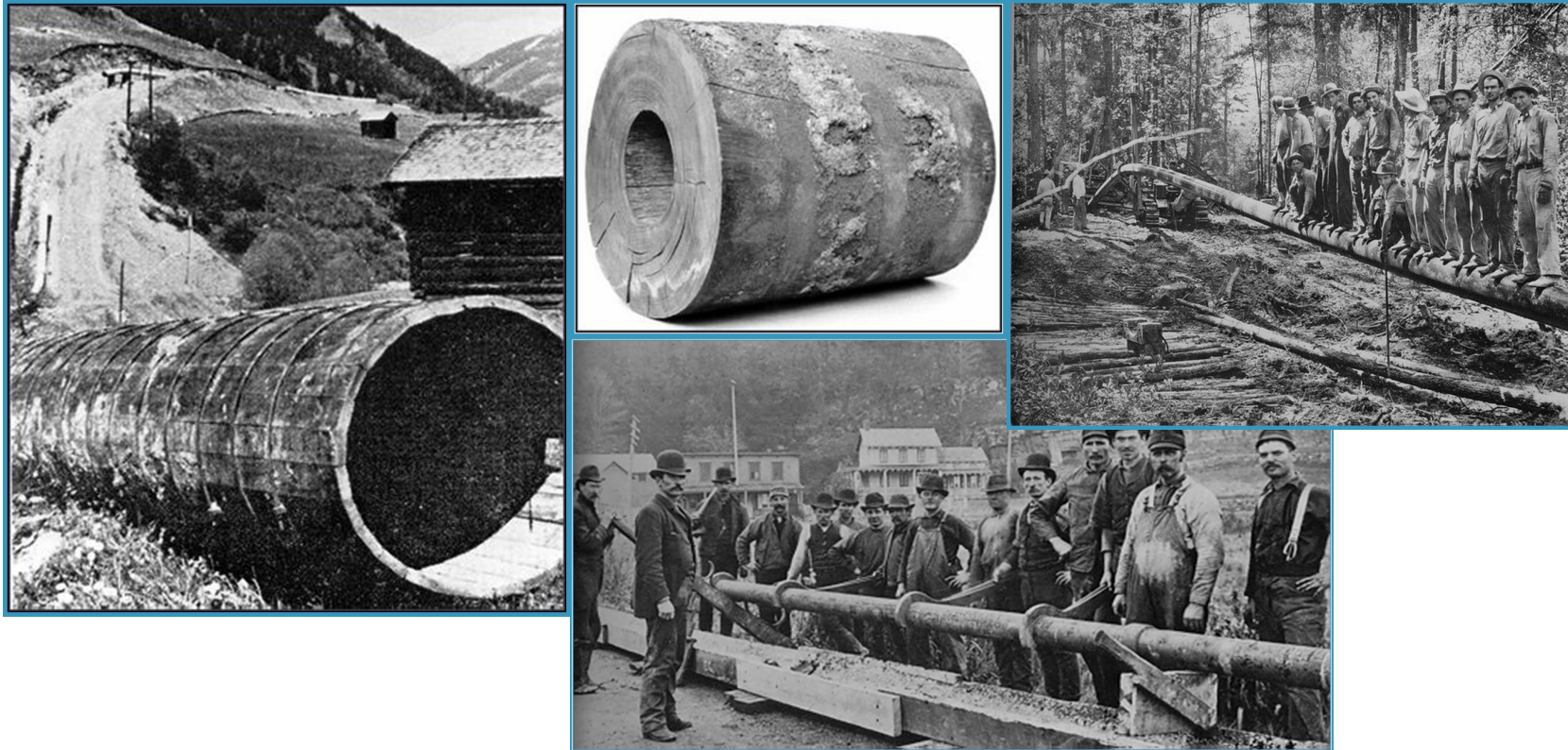


Monday, March 2nd – Wednesday, March 4th, 2020 | Delta City Centre | Ottawa, ON

CANADIAN GAS ASSOCIATION MEMBERSHIP

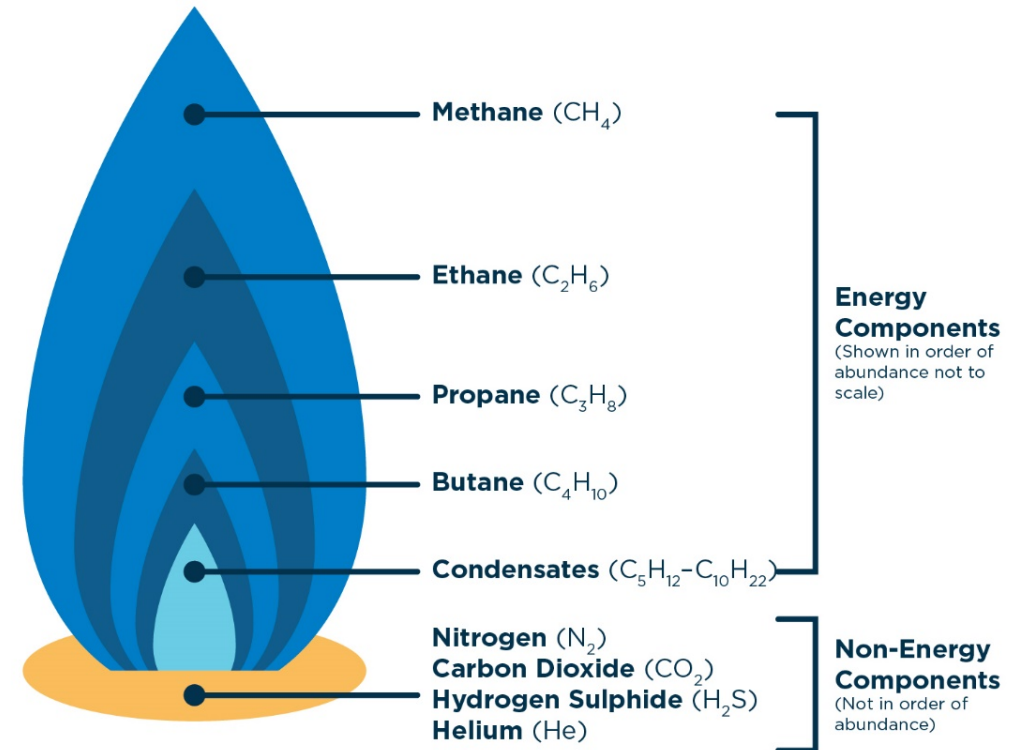


NATURAL GAS – OVER A 100 YEAR HISTORY IN CANADA

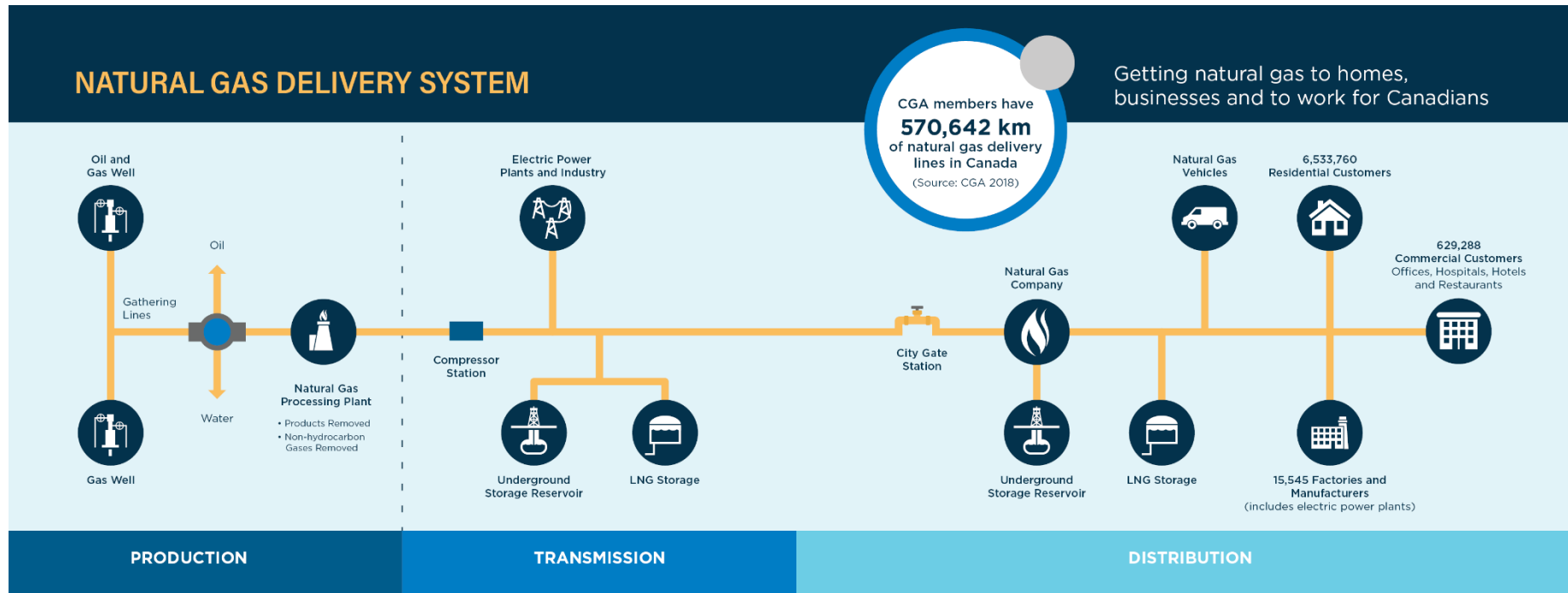


NATURAL GAS – WHAT IS IT COMPOSED OF?

- Home delivery of natural gas is more than 95% methane (CH_4).
- It is located deep under ground in porous rock formations trapped in various formations.
- Biomethane/ renewable natural gas and hydrogen are low emissions gases also being delivered to Canadians in increasing quantities.

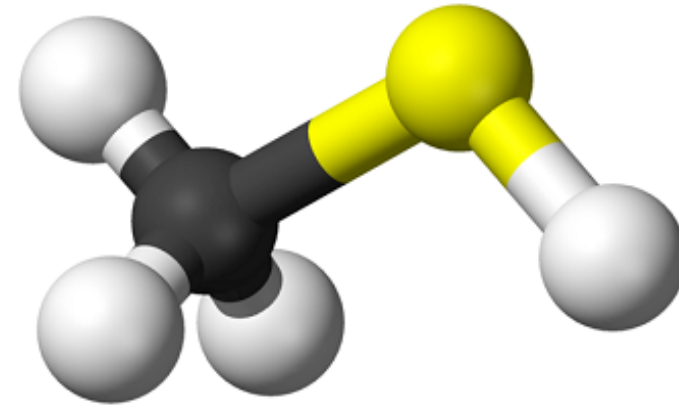


ELEMENTS OF THE NATURAL GAS SYSTEM



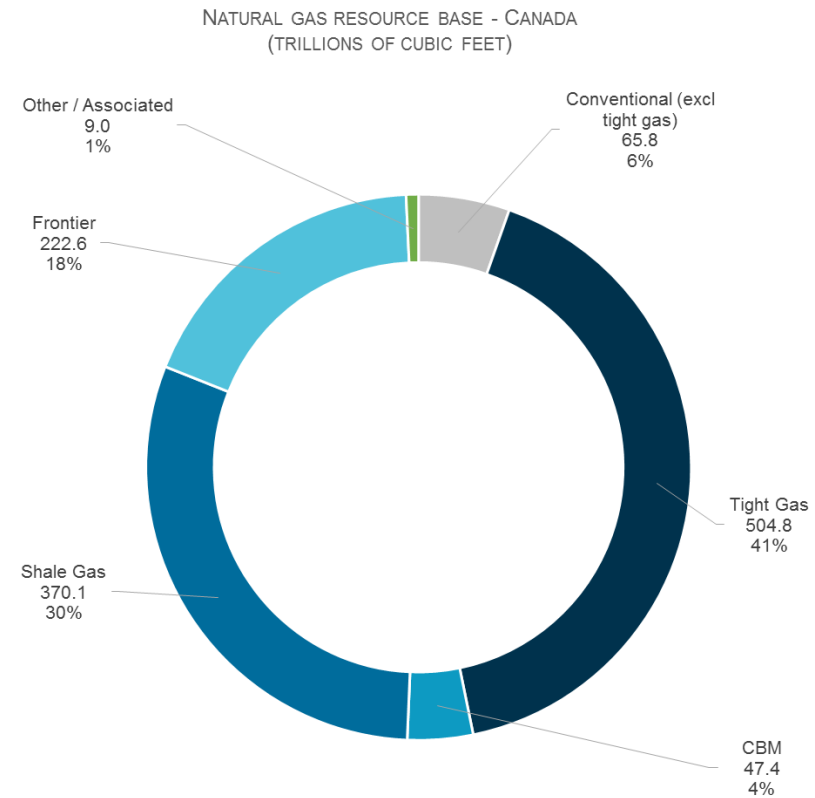
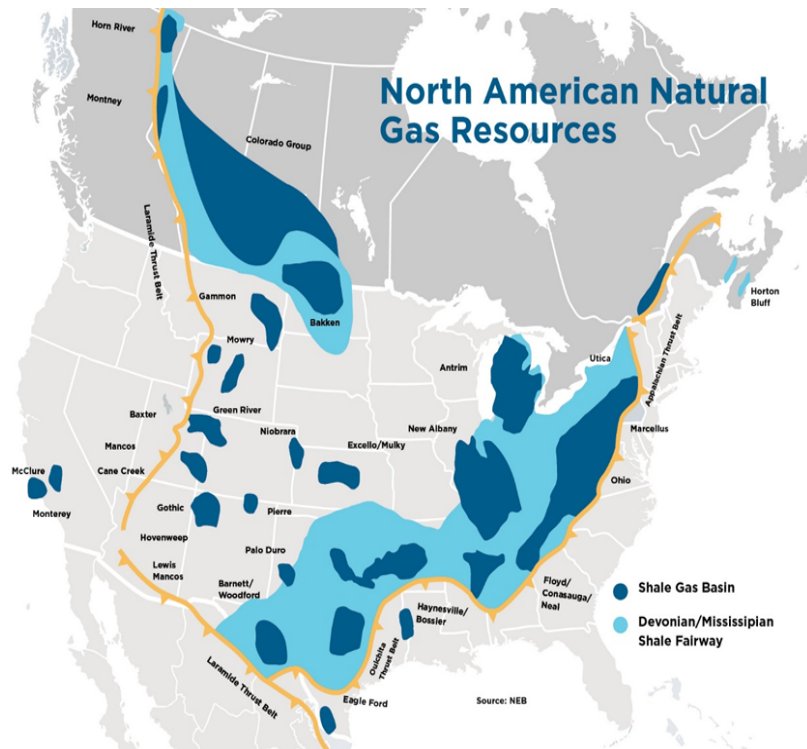
- Once extracted from the ground, gas gathering lines bring the raw gas to processing plants where it is cleaned up and made suitable for end use.
- After clean up high pressure, large diameter pipelines deliver gas from production basins to industry or the distribution utility's system at a "City gate" station.
- Natural gas delivery systems consist of smaller, lower pressure pipelines, pressure controls, odorization, storage facilities and equipment and gas measurement equipment.

MERCAPTAN: GIVING NATURAL GAS 'THAT SMELL'



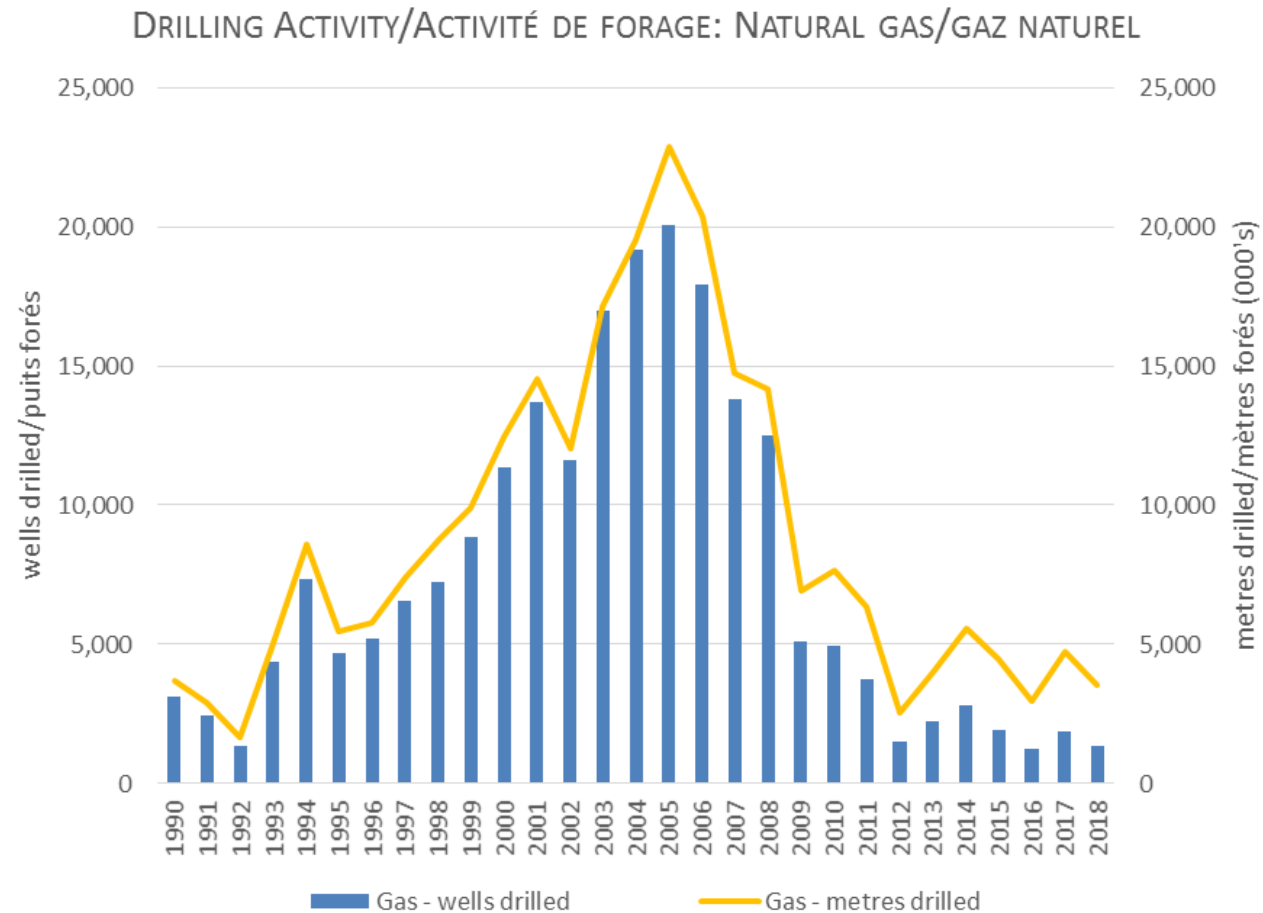
Here the yellow represents sulfur, the black represents carbon, and the white represents hydrogen

NATURAL GAS RESOURCES – A 200 YEAR SUPPLY



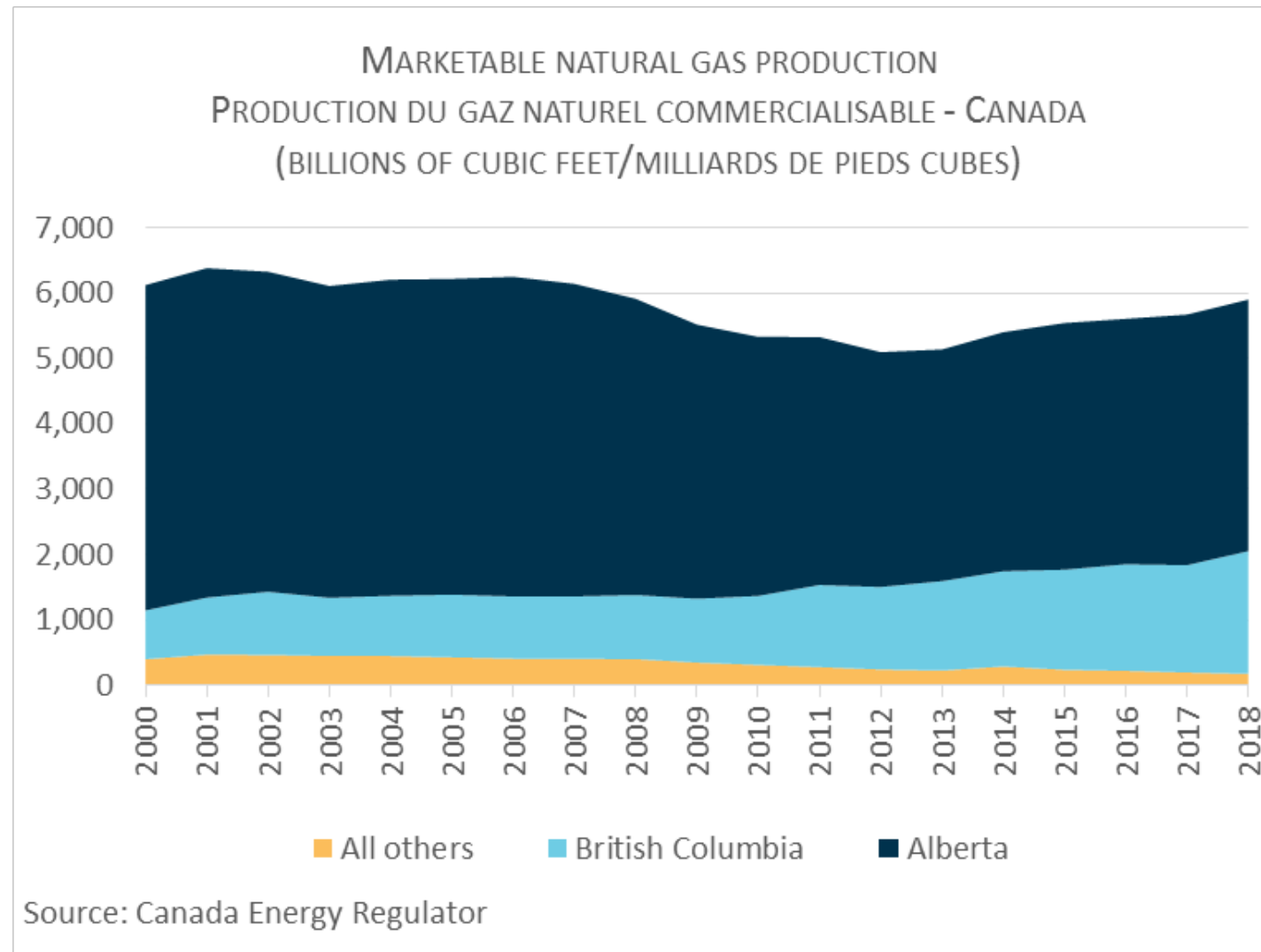
Source: Canada Energy Regulator - Energy Futures Outlook 2018 reference case, CGA

NATURAL GAS EXPLORATION

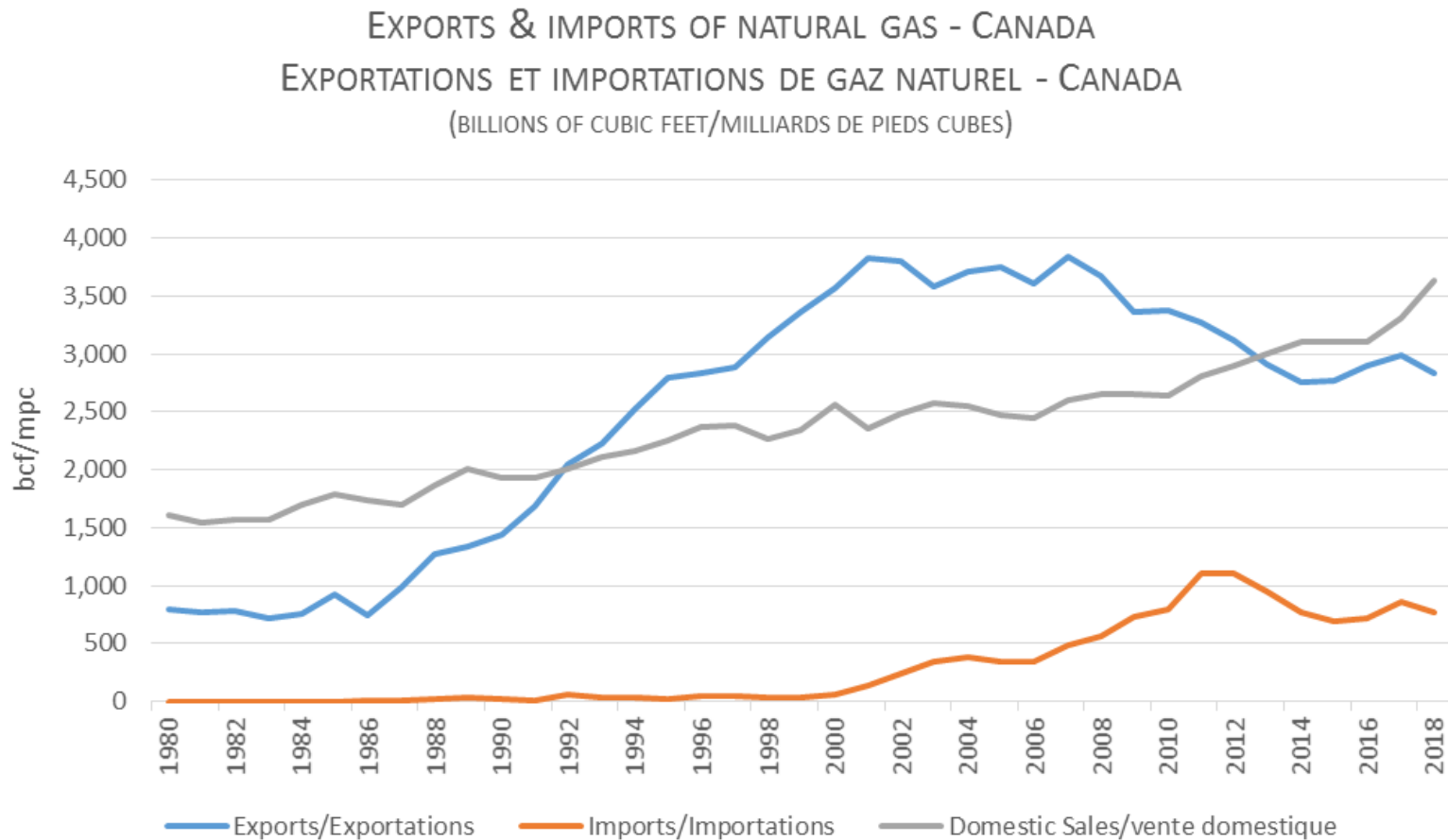


Source: Canadian Association of Petroleum Producers, CGA

NATURAL GAS PRODUCTION

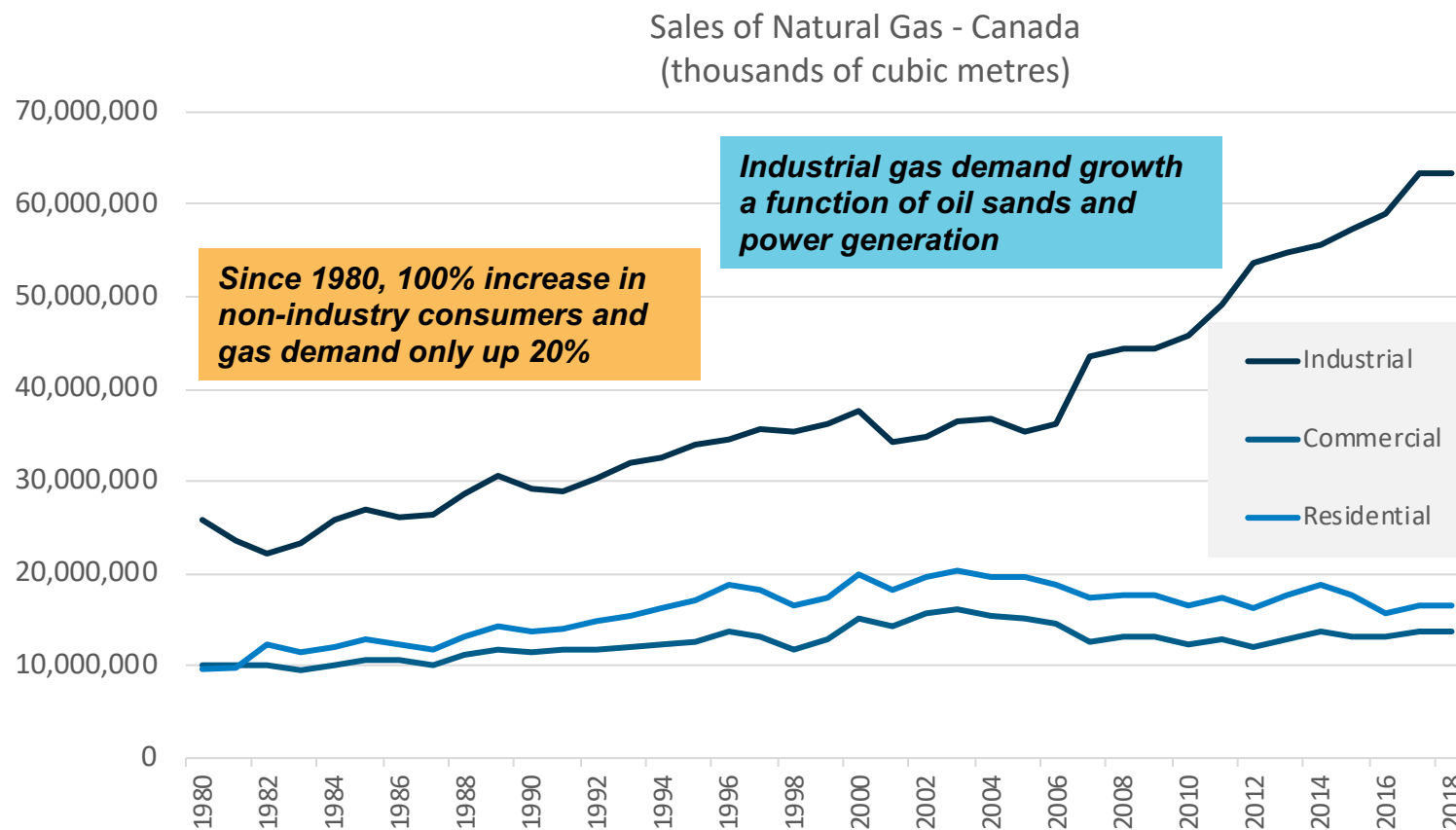


NATURAL GAS TRADE



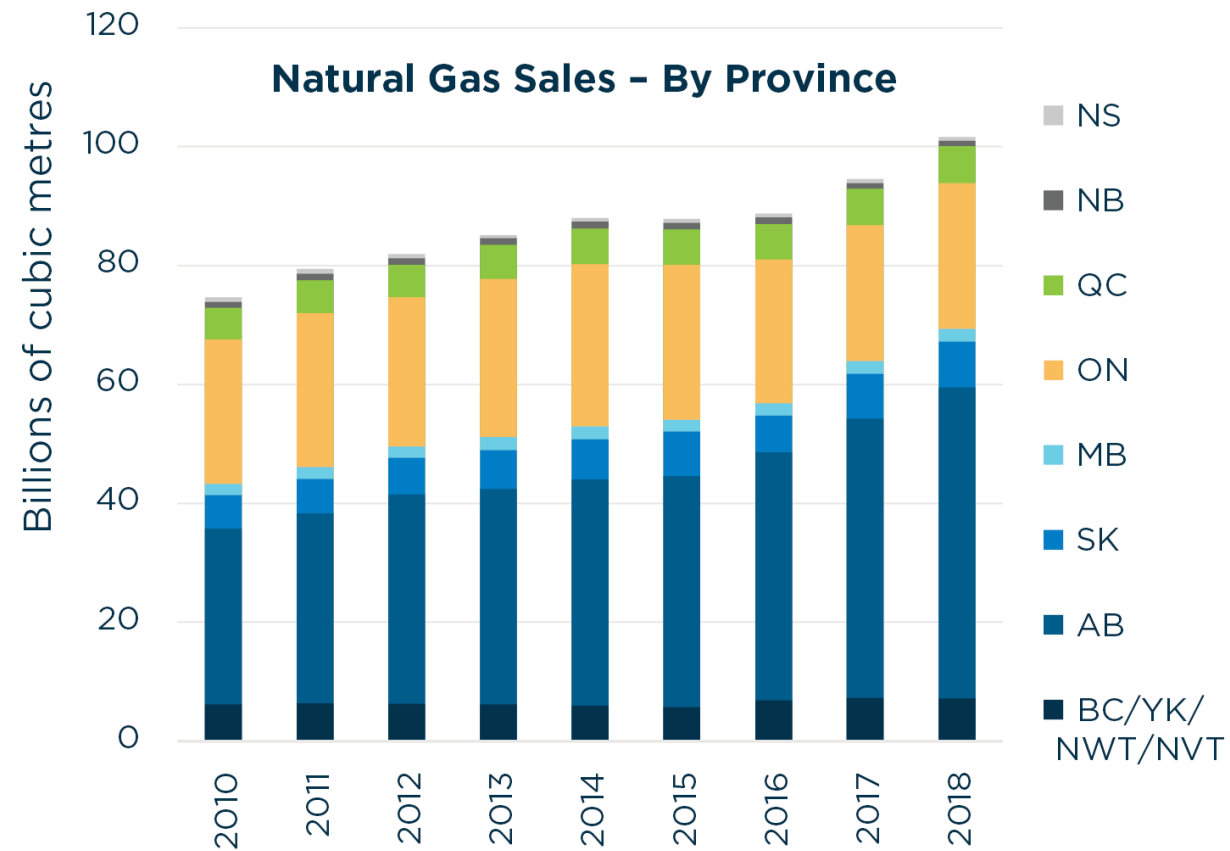
Source: StatsCan 25-10-0055-01

NATURAL GAS SALES IN CANADA



Source: StatsCan 25-10-0055-01

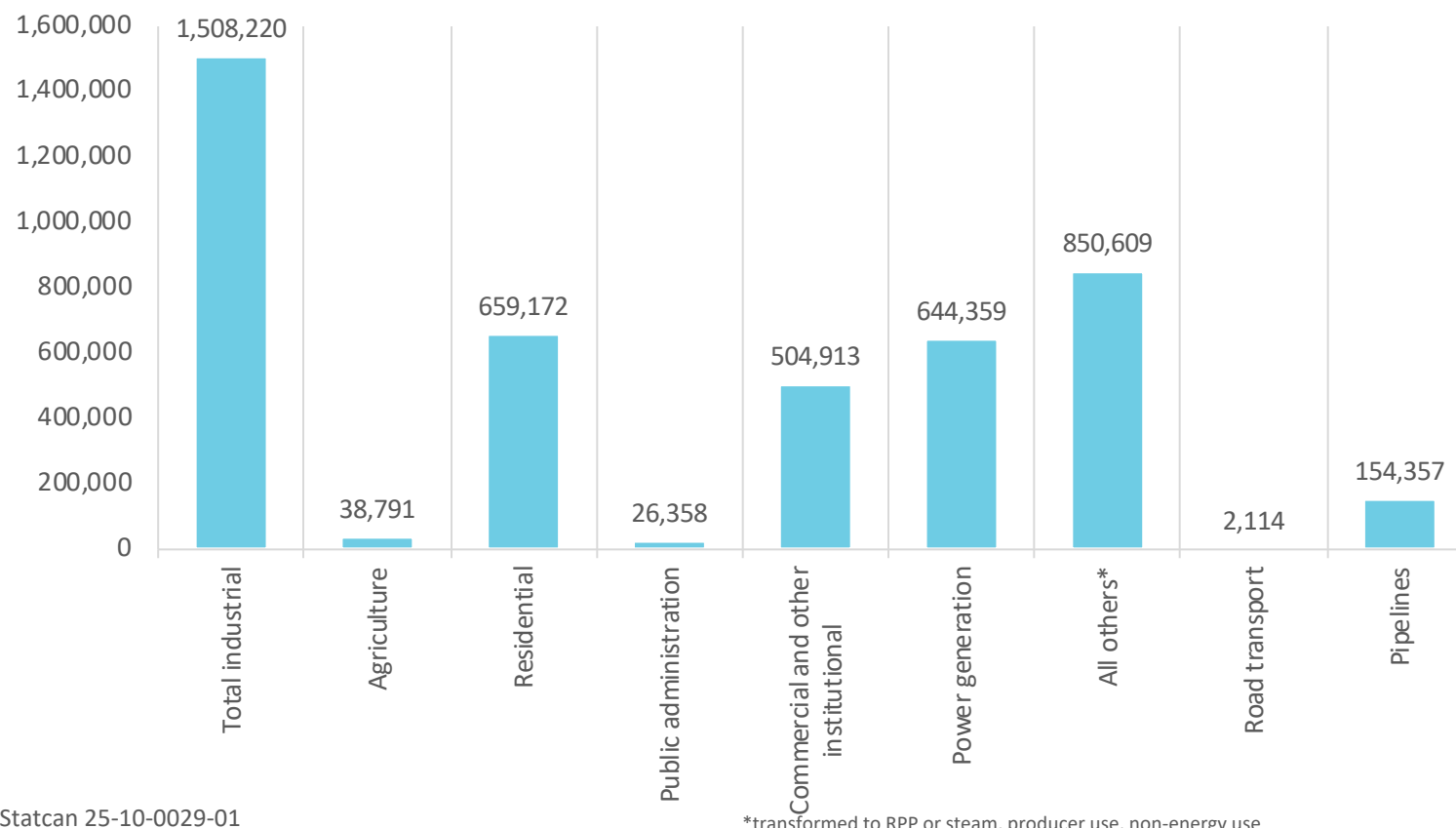
NATURAL GAS SALES – BY PROVINCE



Source: Statistics Canada 25-10-0059, 25-10-0058-01, CGA

HOW DO CANADIANS USE NATURAL GAS?

NATURAL GAS USE - BY SECTOR

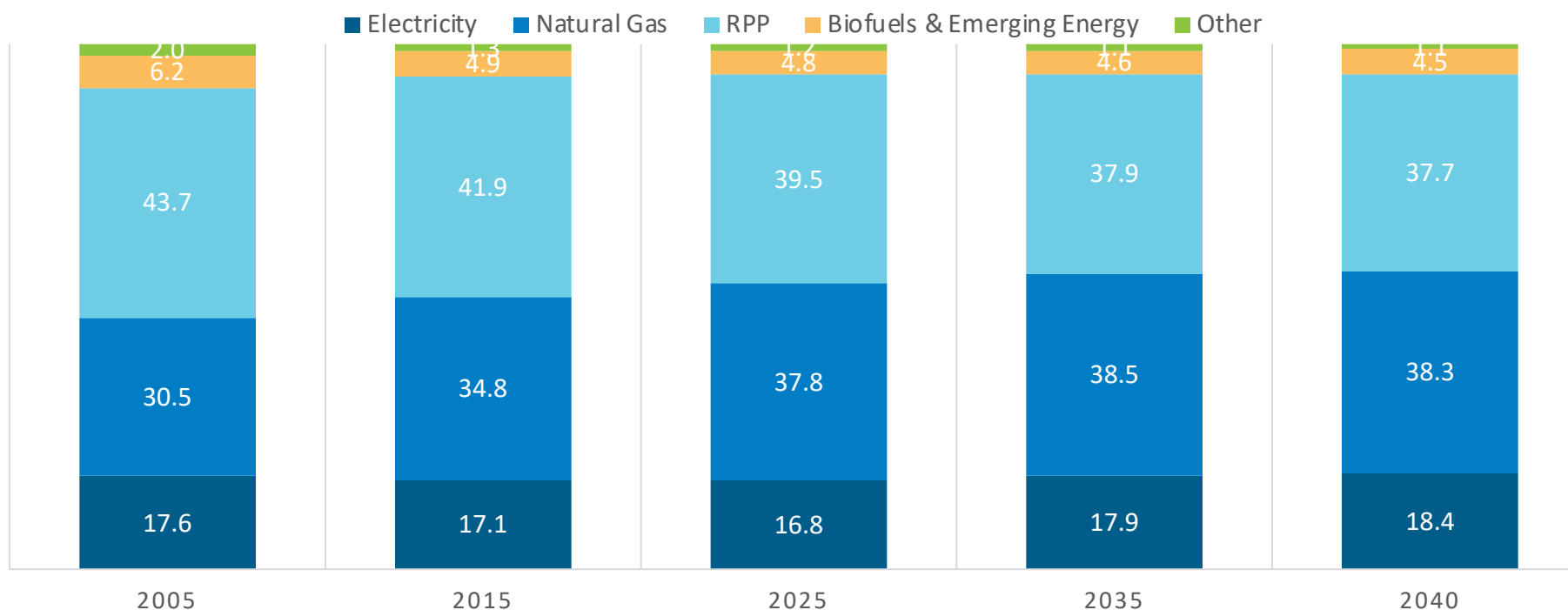


Source: Statcan 25-10-0029-01

*transformed to RPP or steam, producer use, non-energy use

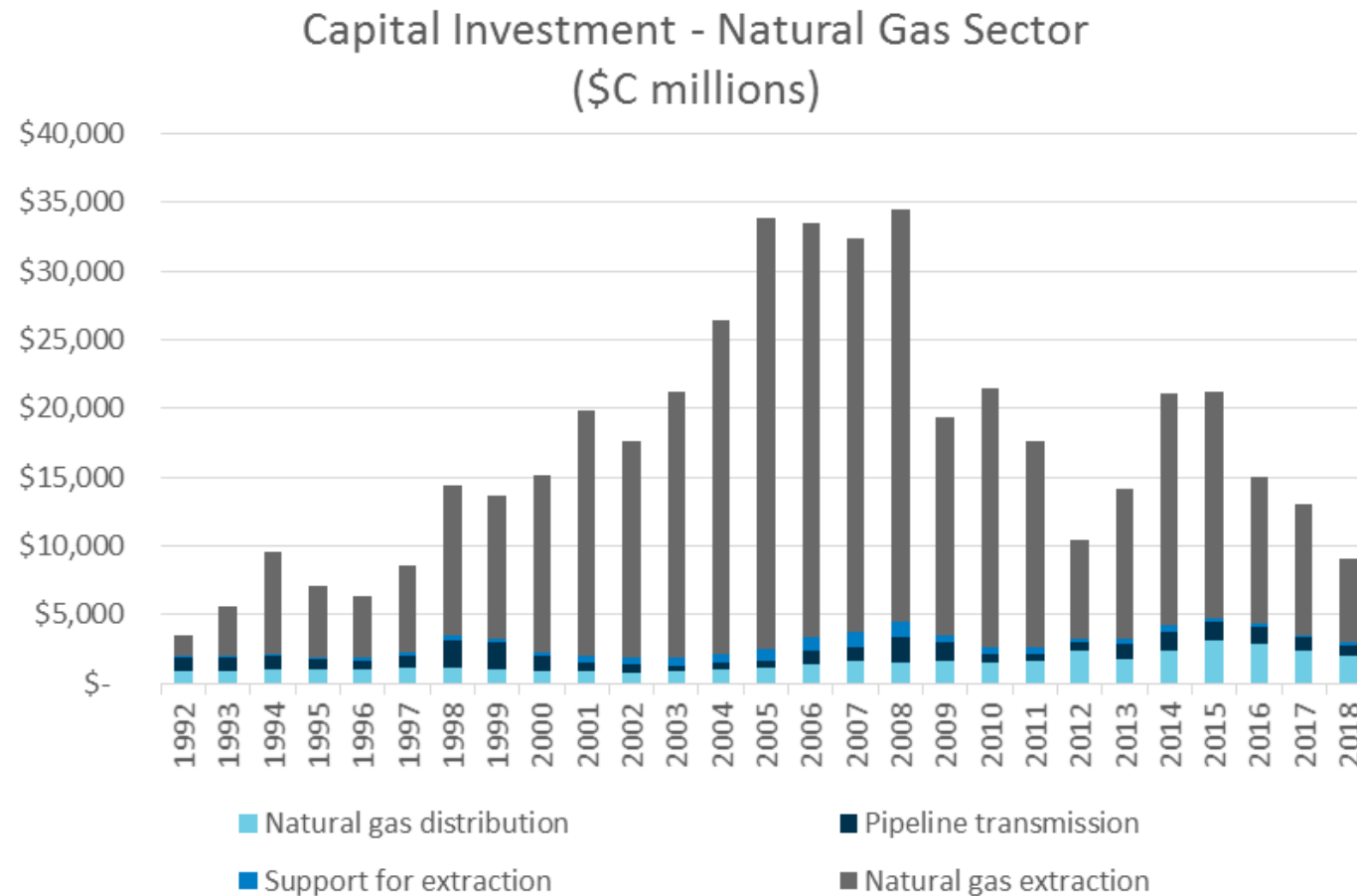
THE FUTURE OF NATURAL GAS IN CANADA

NATIONAL ENERGY BOARD: CANADA END USE DEMAND TO 2040 (REFERENCE CASE)



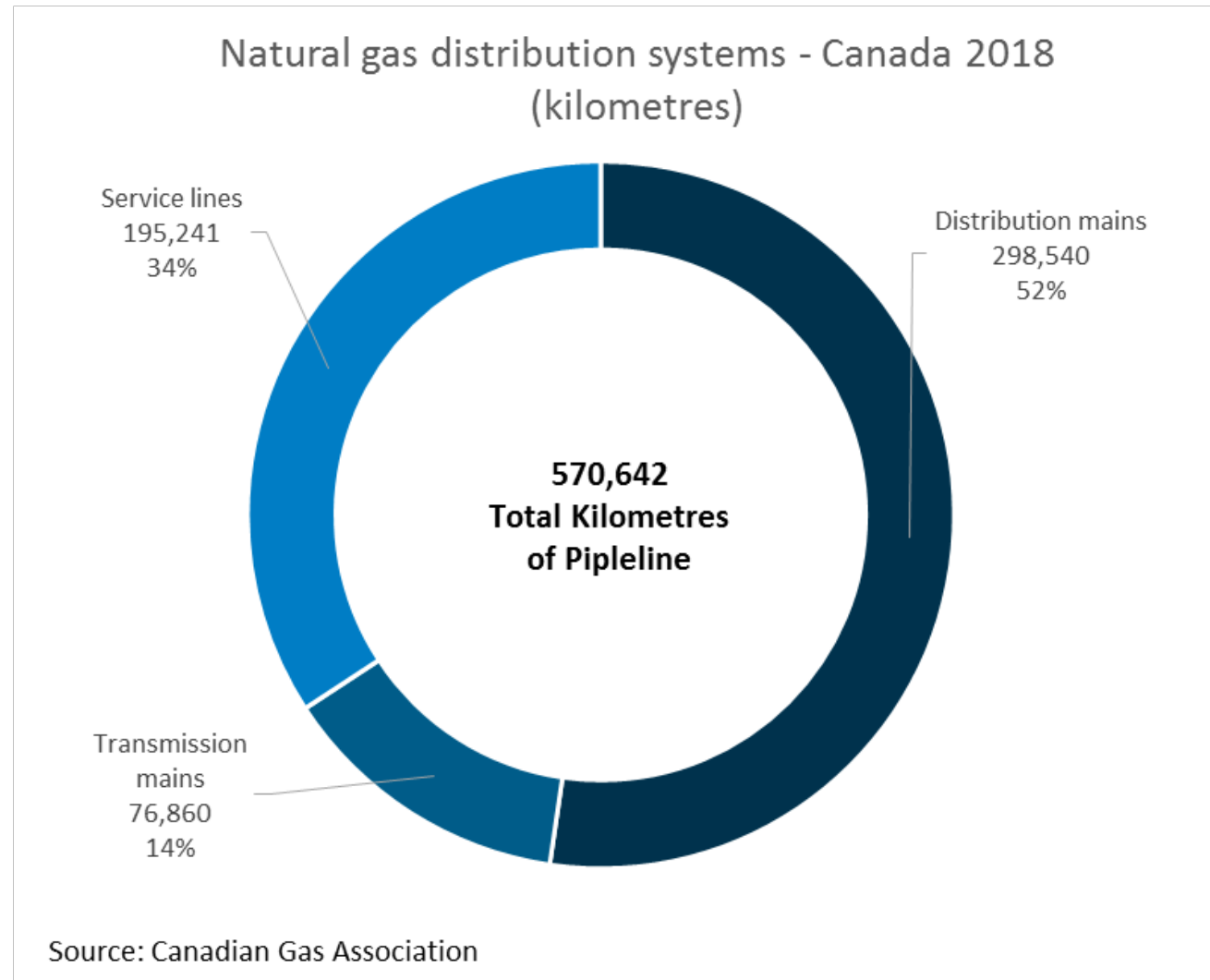
SOURCE: NEB ENERGY FUTURES OUTLOOK 2018

NATURAL GAS INVESTMENT



Source: StatCan 031-0002, CGA

NATURAL GAS DELIVERY SYSTEM



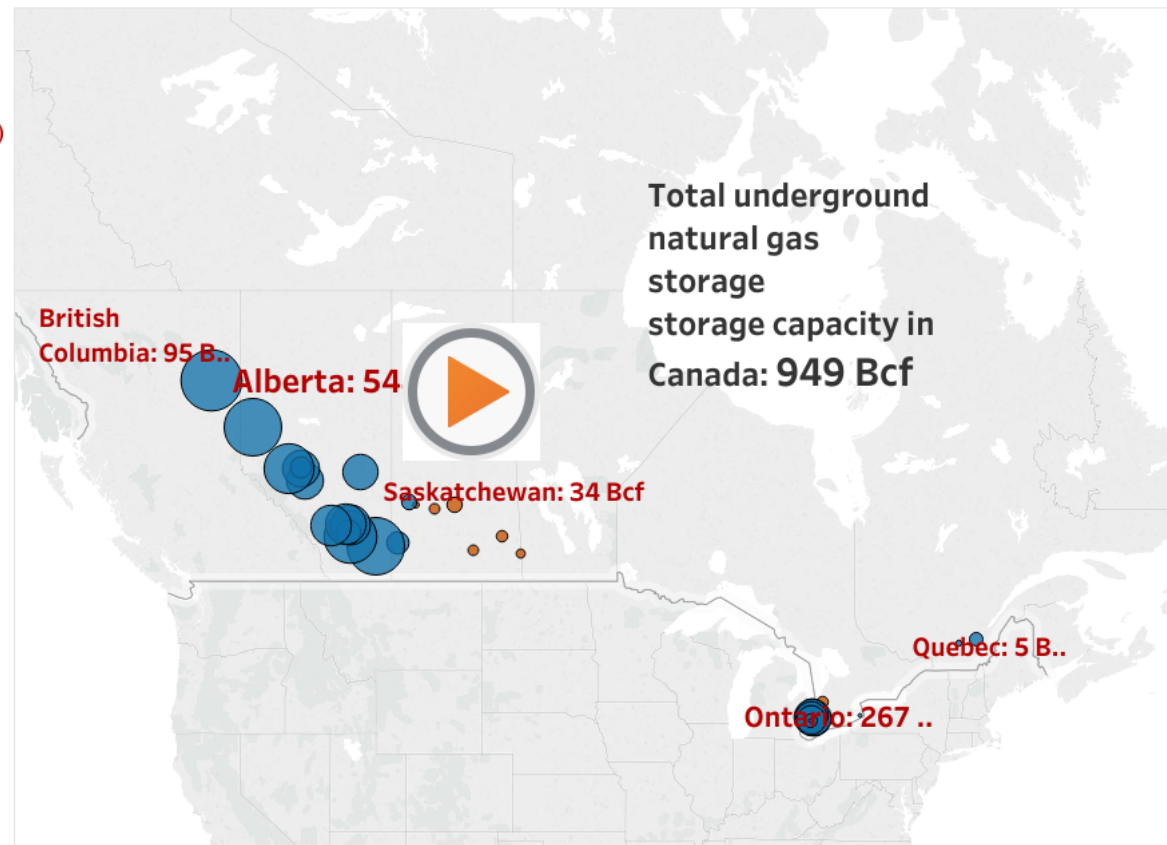
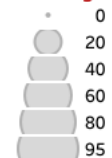
NATURAL GAS STORAGE

Natural gas underground storage facilities in Canada

Storage Type:

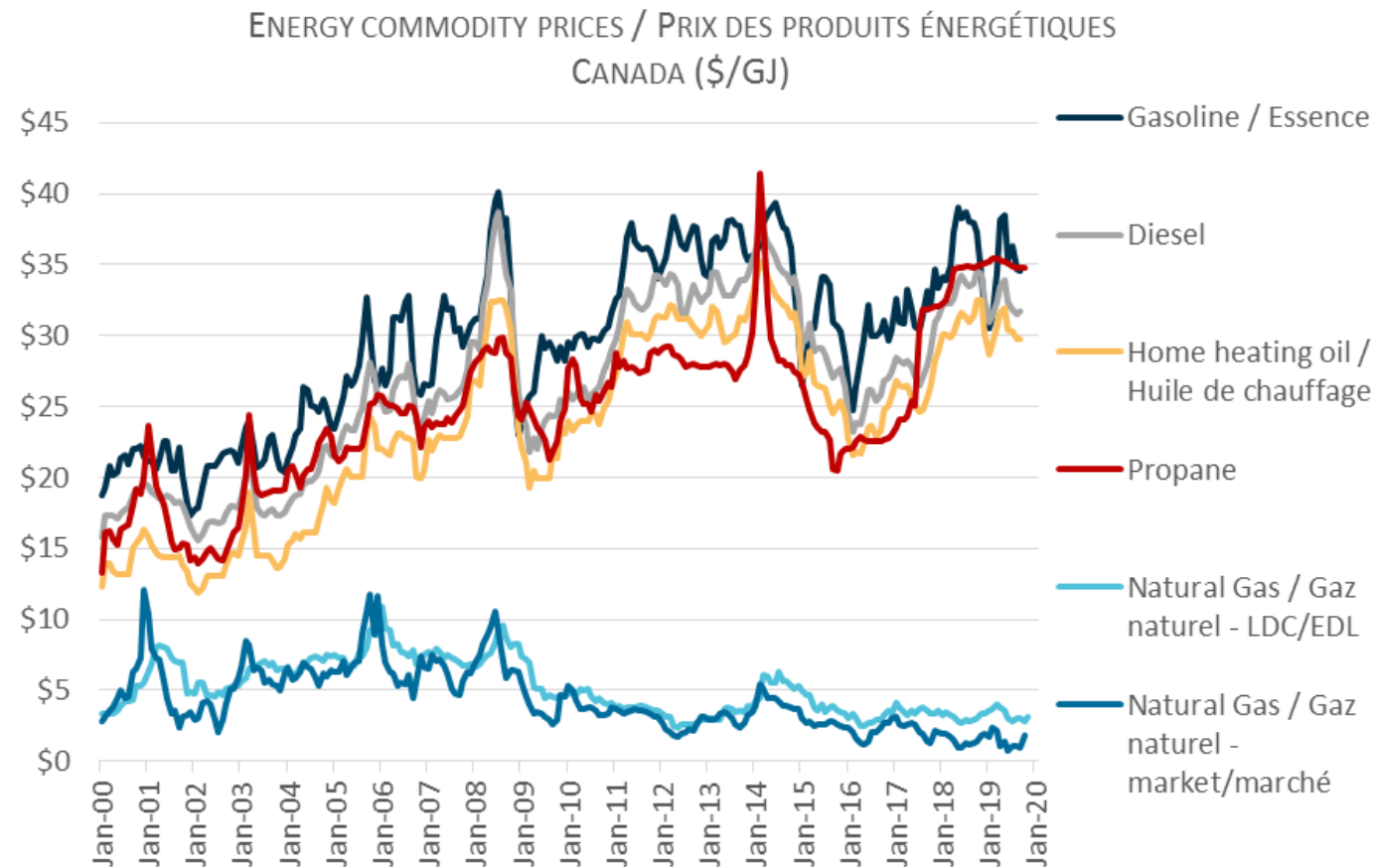
- Depleted Field
- Salt Cavern

Working Gas Capacity (Bcf)



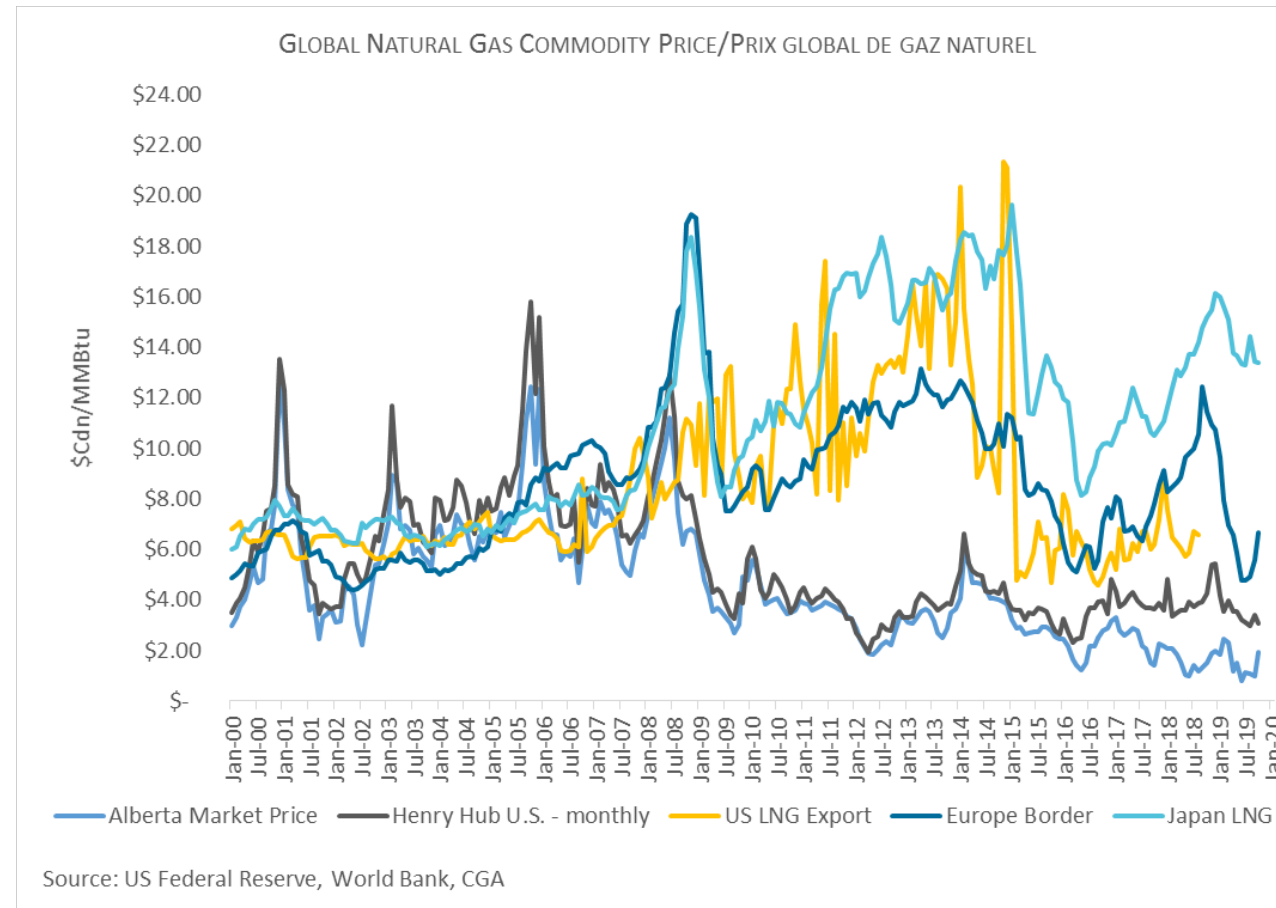
+ a b | e a u

ENERGY COMODITY PRICES

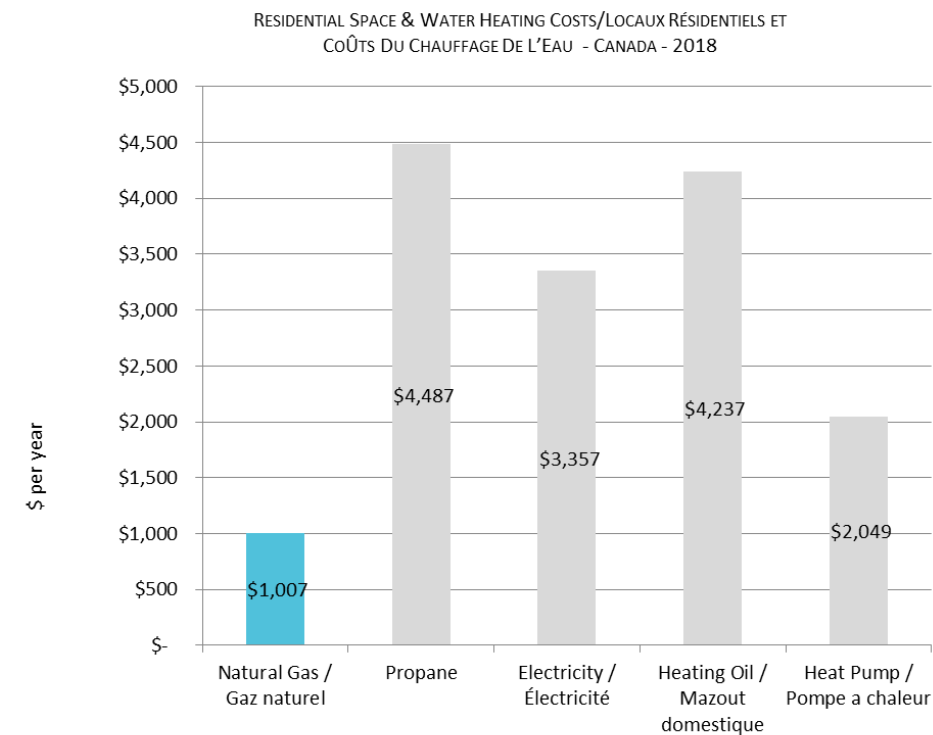


Source: StatsCan 18-10-0001-01, Kent Group, CGA

GLOBAL NATURAL GAS PRICES



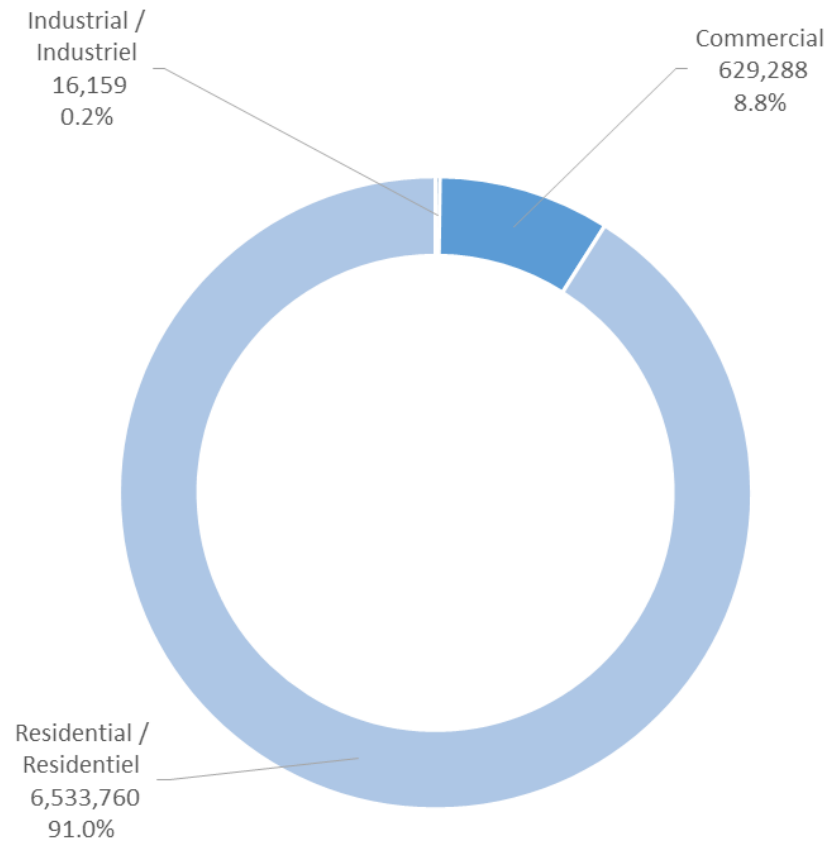
NATURAL GAS AFFORDABILITY



Source: StatsCan, Kent Marketing, Canadian Gas Association

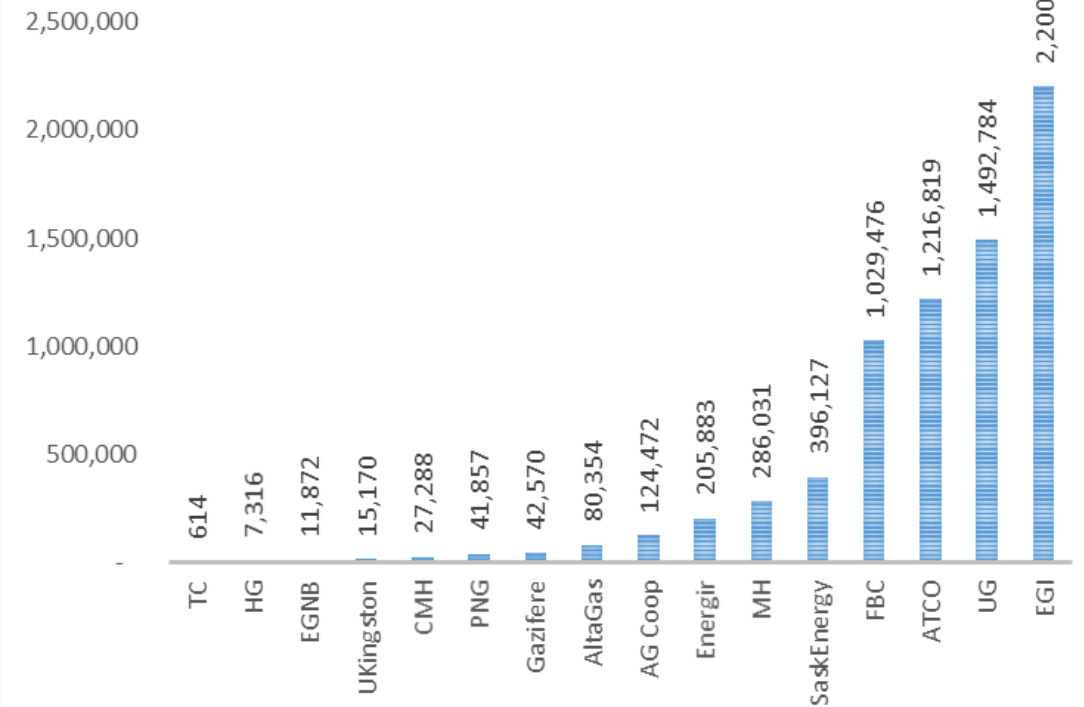
NATURAL GAS CONSUMERS – BY TYPE

NATURAL GAS CUSTOMERS/CONSOMATEURS DE GAZ NATUREL - 2018



Source: CGA

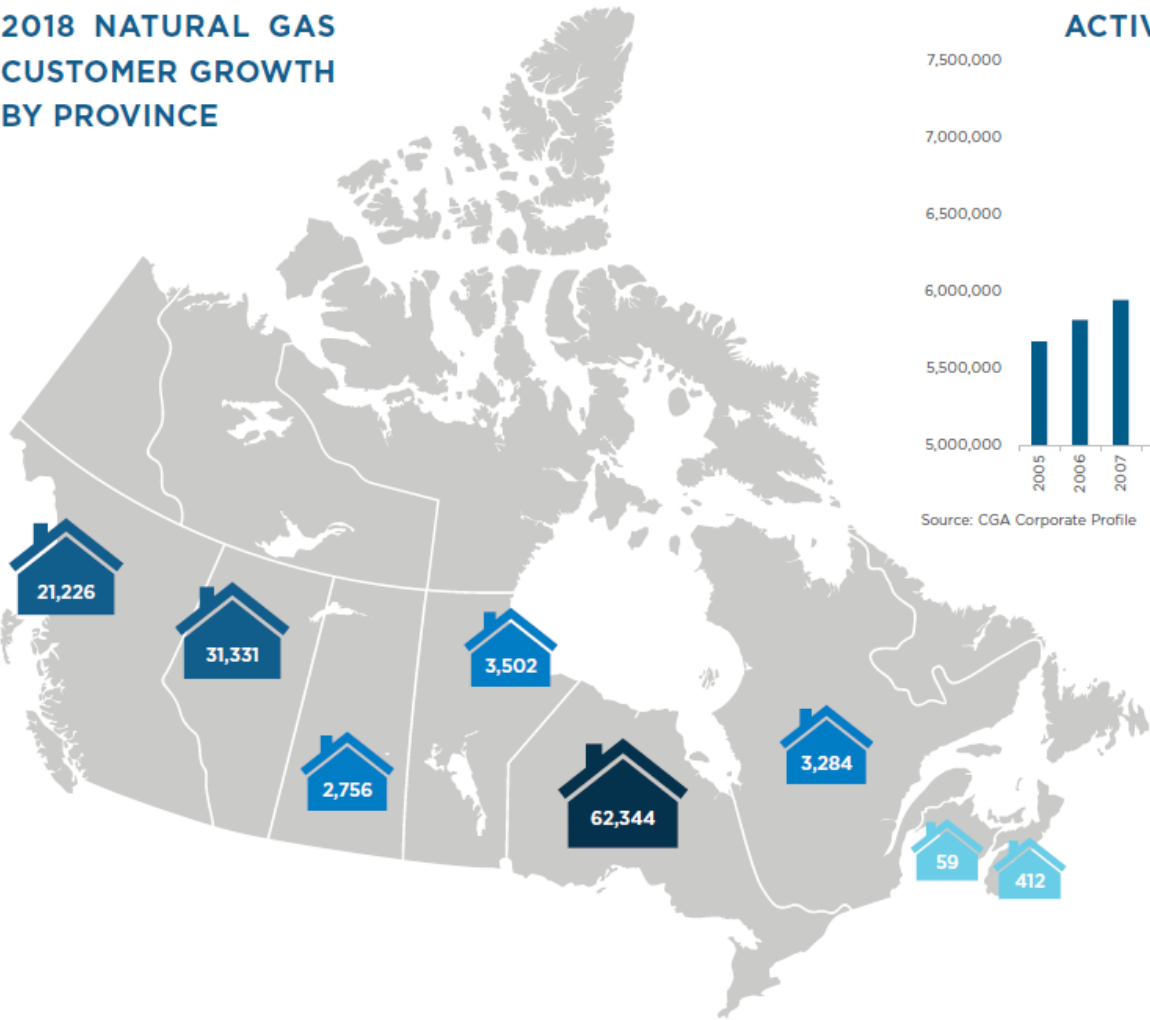
CUSTOMER COUNT - 2018



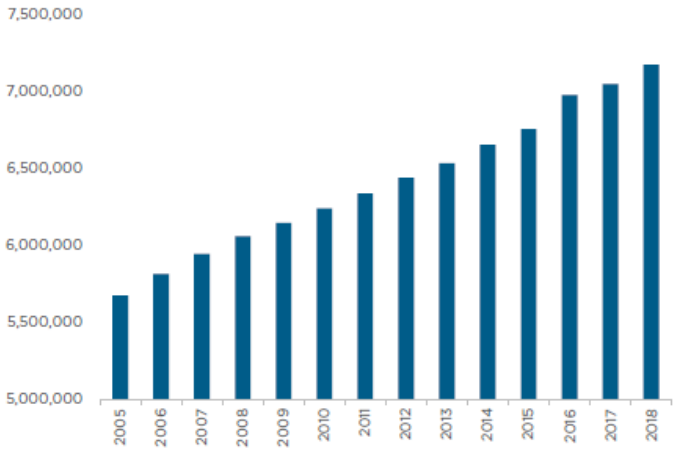
Source: CGA Corporate Profile Survey

NATURAL GAS CONSUMER GROWTH

2018 NATURAL GAS
CUSTOMER GROWTH
BY PROVINCE

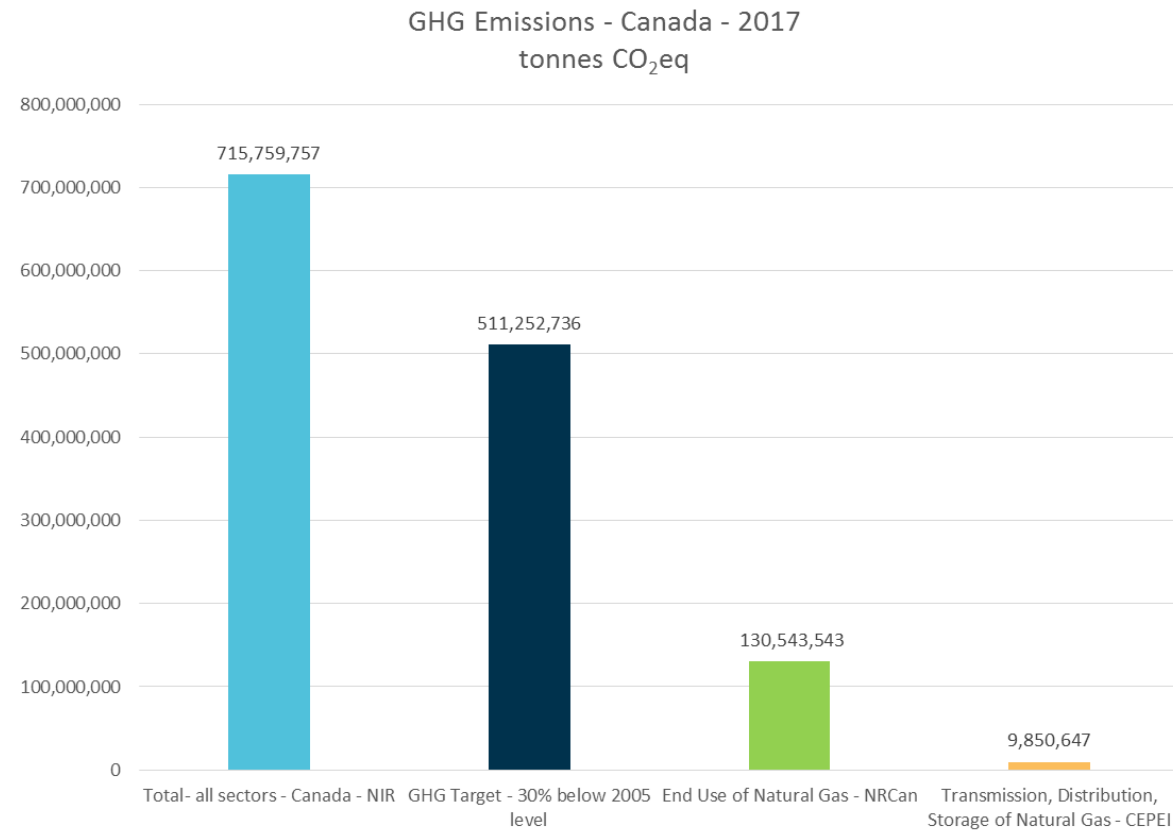


ACTIVE CUSTOMER LOCATIONS



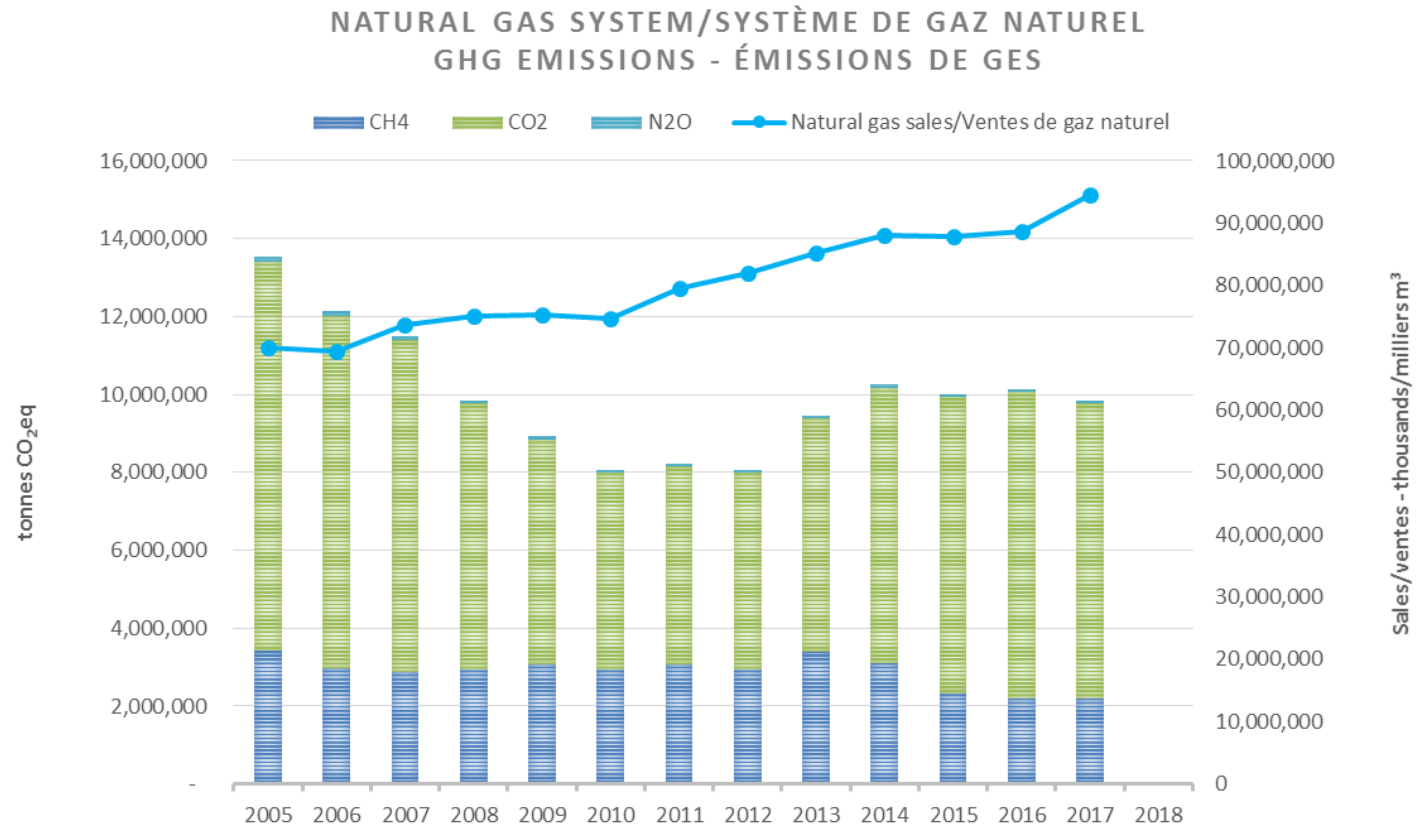
Source: CGA Corporate Profile

NATURAL GAS – GHG EMISSIONS



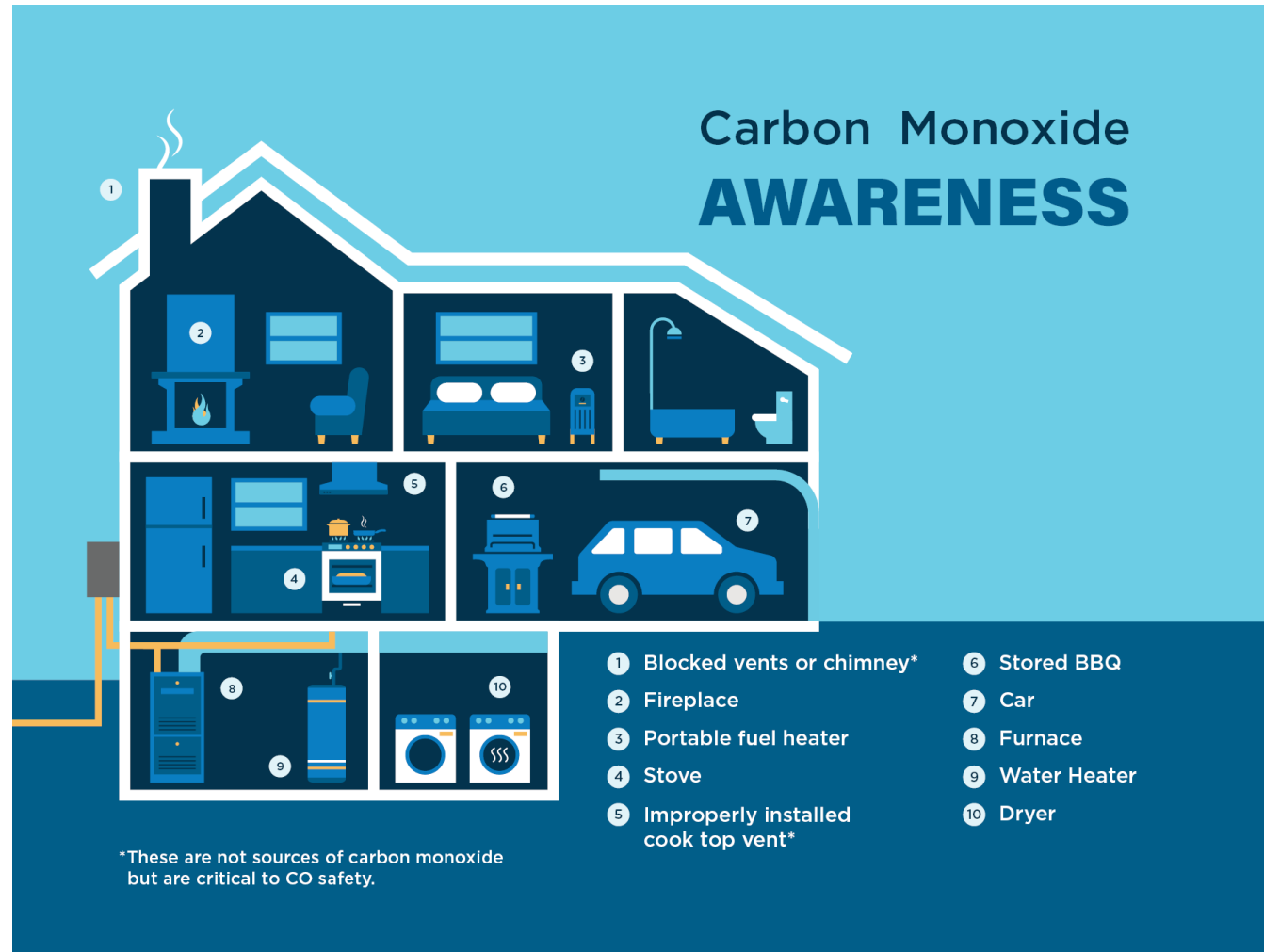
Sources: ECCC NIR report 2018, CEPEI

NATURAL GAS PIPELINE EMISSIONS



Source: Canadian Energy Partnership for Environmental Innovation ; Statistics Canada #25-10-0058-01, #25-10-0059-01

NATURAL GAS SAFETY



ENERGY REGULATION QUARTERLY

www.energyregulationquarterly.ca

[About ERQ](#) [Archives](#) [Sponsors](#) [Contact](#)

[Français](#)

ENERGY REGULATION QUARTERLY

A forum for discussion and debate on issues affecting regulated energy industries



[Home](#) [Articles](#) [Book Reviews](#) [Case Comments](#) [Editorials](#) [Regular Features](#)

RECENT

EDITORIALS

2013: A Challenging Year for Canadian Energy Regulators

Authors: Rowland J. Harrison, Q.C. and Gordon E. Kaiser, FCIArb

Managing Editors It is always useful to look back at the end of each year and analyse the main developments in energy regulation and identify the challenges going forward. That, after all, is one of the purposes of the Energy [...]

May 06, 2014 0 comments

ARTICLES

The Crown's Duty to Consult and the Role of the Energy Regulator

Author: Keith B. Bergner

Introduction This coming fall—November 18, 2014—will mark ten years since the Supreme Court of Canada released two seminal decisions on the Crown's duty to consult Aboriginal peoples: Haida Nation v. British Columbia (Minister of Forests), 2004 SCC 73 and Taku [...]

May 06, 2014 0 comments

ARTICLES

The 2013 North American Natural Gas Market – a Year in Review

Author: Gordon Pickering

Introduction The North American natural gas market in 2013 was a hot topic news item again, as it has taken center stage in a variety of media outlets over the last several years. While a portion of the industries gas [...]

May 05, 2014 0 comments

ARTICLES

Fostering Competition Amongst Regulated LDCs: The Dutch Experience

Author: Dr. Hugo Schotman

Introduction Rate setting for local distribution companies (LDCs) is often a labor-intensive task for

CASE COMMENTS

Northern Gateway: Round No.1

Author: Rowland J. Harrison, Q.C.

The release of the Report of the Joint Review Panel for the Enbridge Northern Gateway Project,1 on December 19, 2013 will likely prove to be a watershed

CASE COMMENTS

Enbridge Gas Distribution New Brunswick Decision

Author: David MacDougall

The Court of Appeal of New Brunswick issued its Decision in Enbridge Gas New Brunswick Limited Partnership et al v. the

SEARCH

RECENT POSTS

2013: A Challenging Year for Canadian Energy Regulators

Tuesday May 6th, 2014

The Crown's Duty to Consult and the Role of the Energy Regulator

Tuesday May 6th, 2014

The 2013 North American Natural Gas Market – a Year in Review

Monday May 5th, 2014

Fostering Competition Amongst Regulated LDCs: The Dutch Experience

Monday May 5th, 2014

Northern Gateway: Round No.1

Monday May 5th, 2014

CATEGORIES

Articles

(4)

**For more information visit
www.cga.ca**