

In Franchise growth and demand

Ian Macpherson

Director, Distribution In Franchise Sales

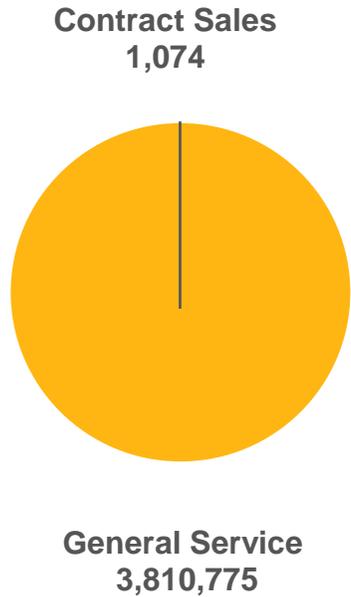


Enbridge Gas large volume distribution market

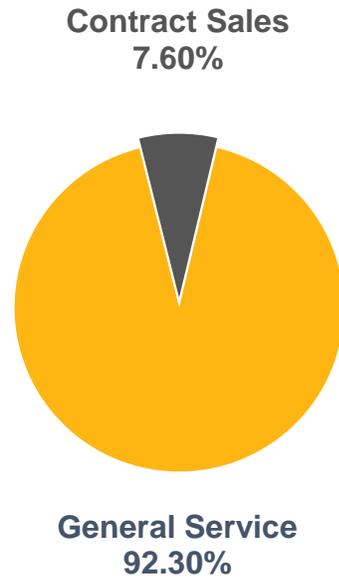
2021 actual



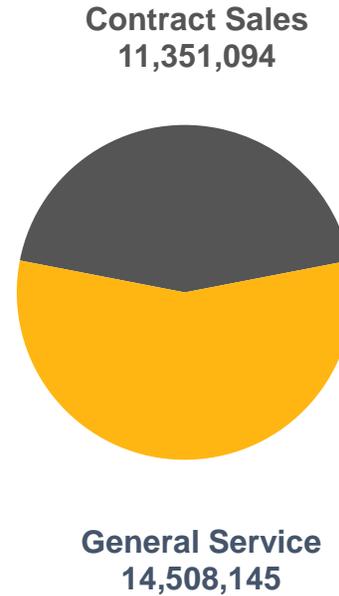
Customer meters



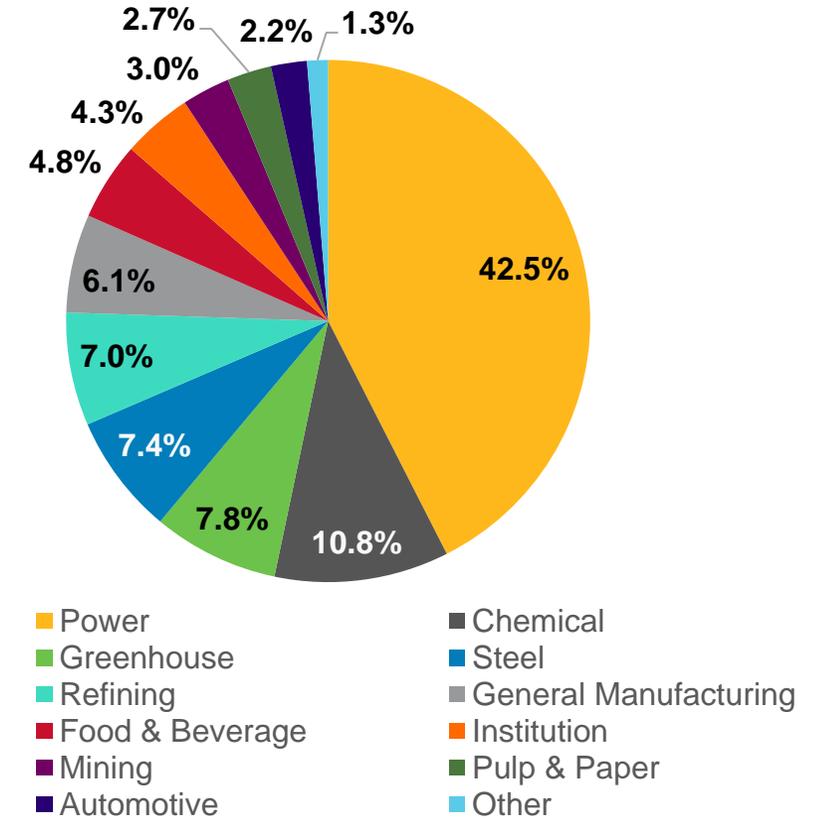
Total revenue (%)



Throughput volumes (103M3)



Firm demand

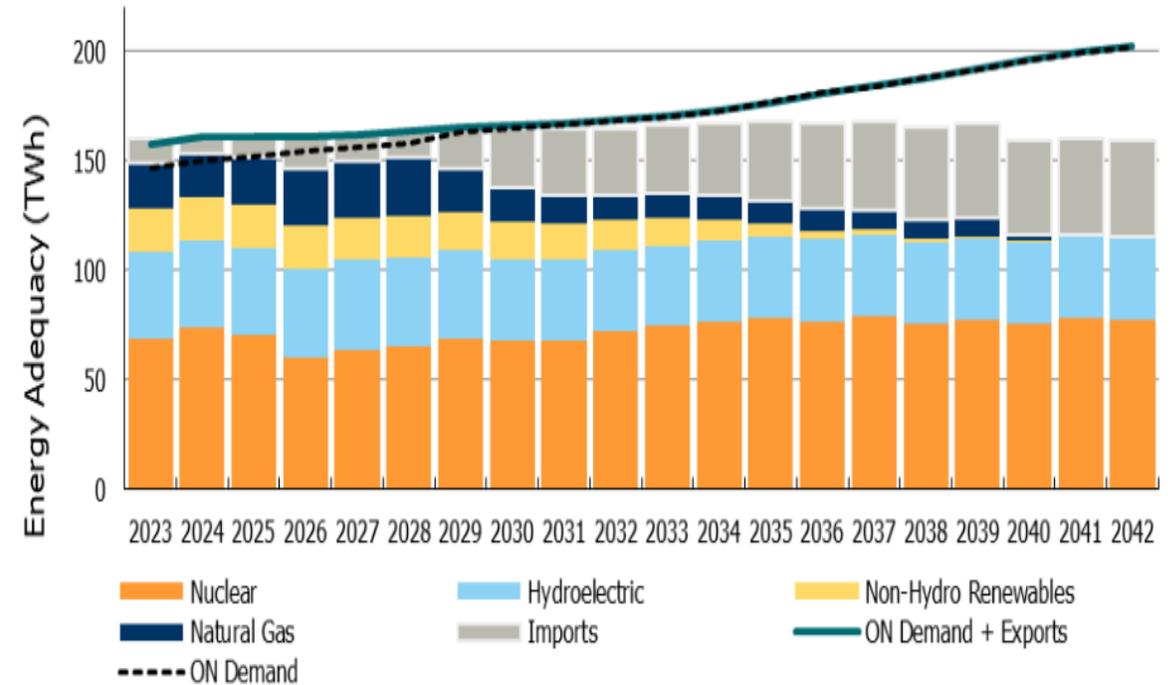
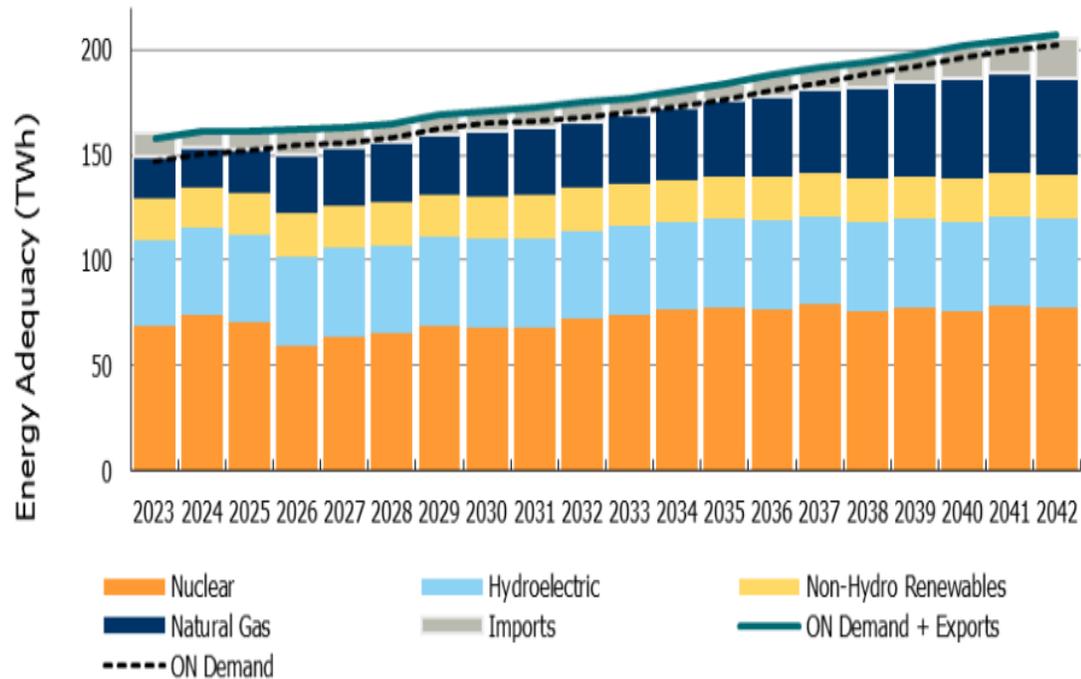


Power production outlook

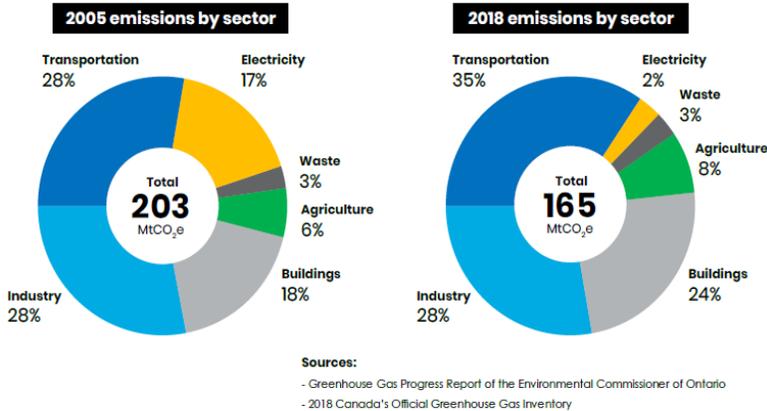


With continued availability of existing resources

Without continued availability of existing resources



Power sector key insights



Key insights

- Total Firm Contract Demand of 31M m³/day or 1200 TJ/day
- 1.9B m³ of gas consumption in 2021
- 26% increase from 2020 to 2021
- GHG emissions have been reduced by 90% since 2005

Core growth

- Emerging growth in bitcoin mining
- Nuclear fleet availability creates capacity shortfall starting in 2025
- Market renewal and additional mechanisms to meet future needs
- Gas-fired generation expected to rise to 19% of supply by 2030; currently 9%

Future outlook

- Expansions or upgrades to existing resources to meet emerging capacity need
- Electrification spurs new investments in the sector
- Natural gas and hydrogen fueled power plant
- Centres for Hydrogen Production

The battery and beast ... critical minerals

CATHODE
51%

The cathode material determines the capacity and power of a battery, typically composed of lithium and other battery metals.

Lithium Nickel Cobalt Manganese

The largest EV battery manufacturers are all headquartered in Asia.
80% of all cell manufacturing occurs in China.

MANUFACTURING & DEPRECIATION
24%

The anode is the negatively-charged electrode, typically made of graphite.

ANODE
12%

Separators prevent electric contact between the cathode and the anode.

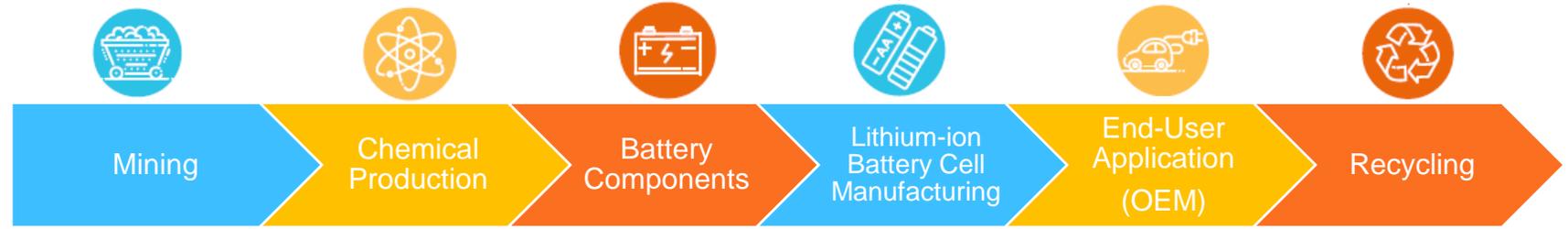
SEPARATOR
7%

The electrolyte is the medium that transports lithium ions from the cathode to the anode.

ELECTROLYTE
4%

Battery housings are cases that contain and protect battery packs, usually made of steel or aluminum.

BATTERY HOUSINGS
3%



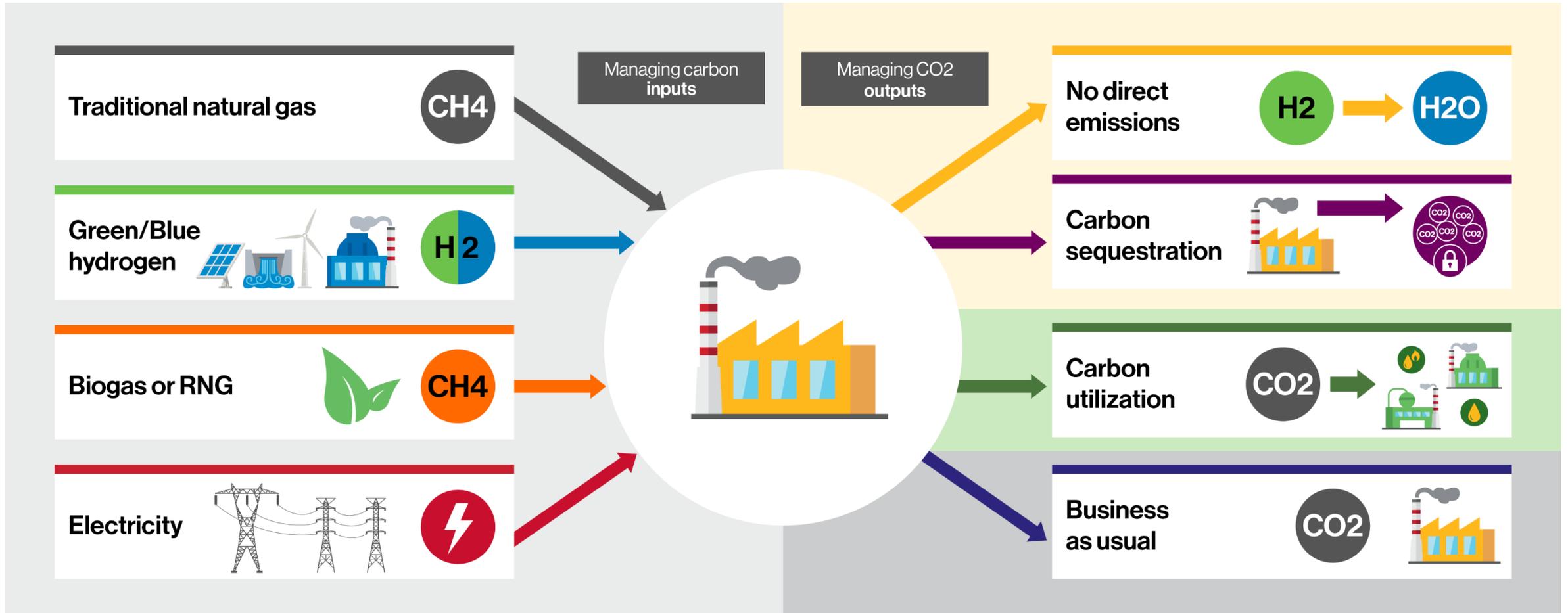
Over **\$235B USD** of announced investments through 2026



Tesla Model S – 100kWh 550km Range
Battery cost ~ \$25K USD / MSRP \$100K USD

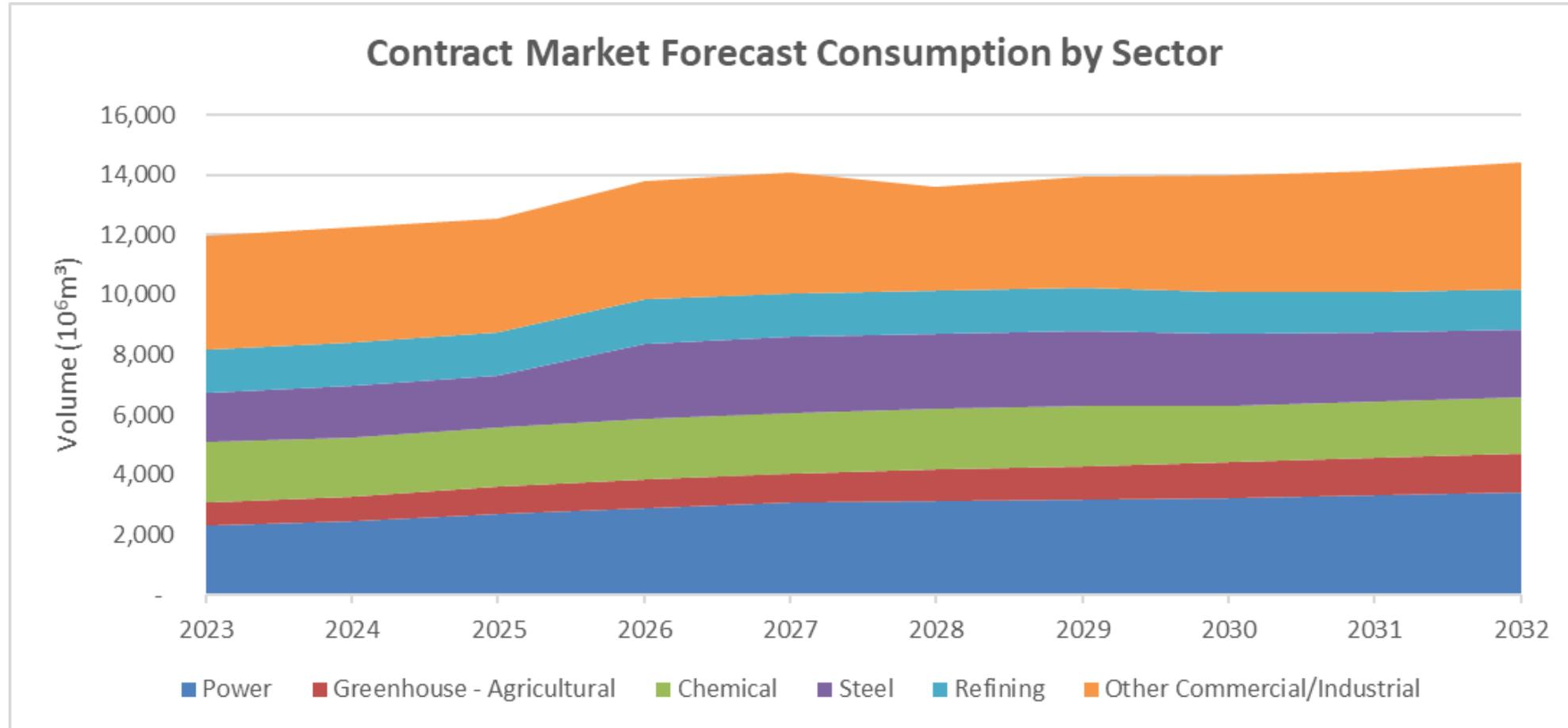
- Over \$16.5B investments for Canada since Q1 2021:
- Becancour, QB: **\$500M** Cathode plant – GM / Posco
 - Loyalist Township, ON: **\$1.5B** Cathode plant – Umicore
 - Windsor, ON: **\$5B** Battery Plant – Stellantis / LG Energy Solutions

Steel sector



Transformational changes underway.

Large volume consumption outlook



Large commercial/industrial segments expected to continue to grow.

Major projects and operations update

Andrea Seguin

Director, Storage and Transportation Sales



Project development update



- Projects

- Panhandle expansion

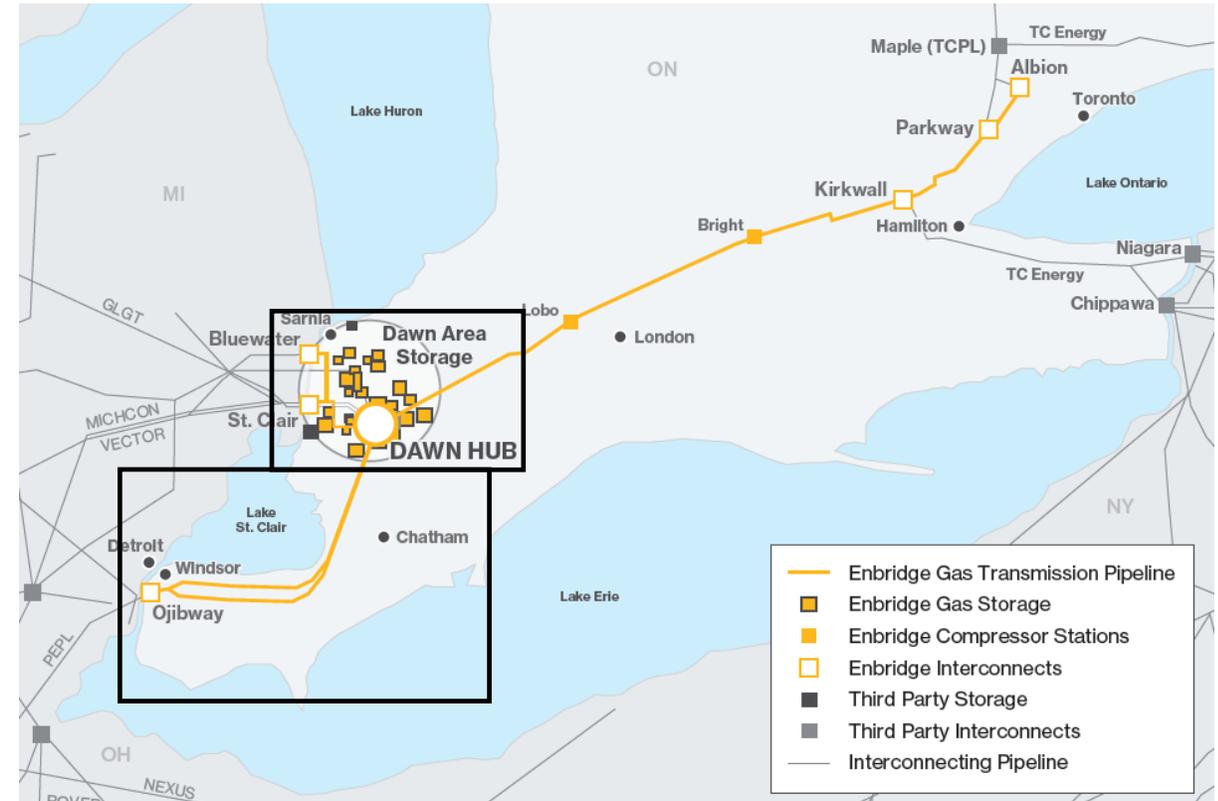
- Filed in June with the Ontario Energy Board

- Dawn Storage system

- Dawn-Corunna Project: regulatory proceeding currently underway
- 2021/2022 Storage Enhancement: construction underway

- Services

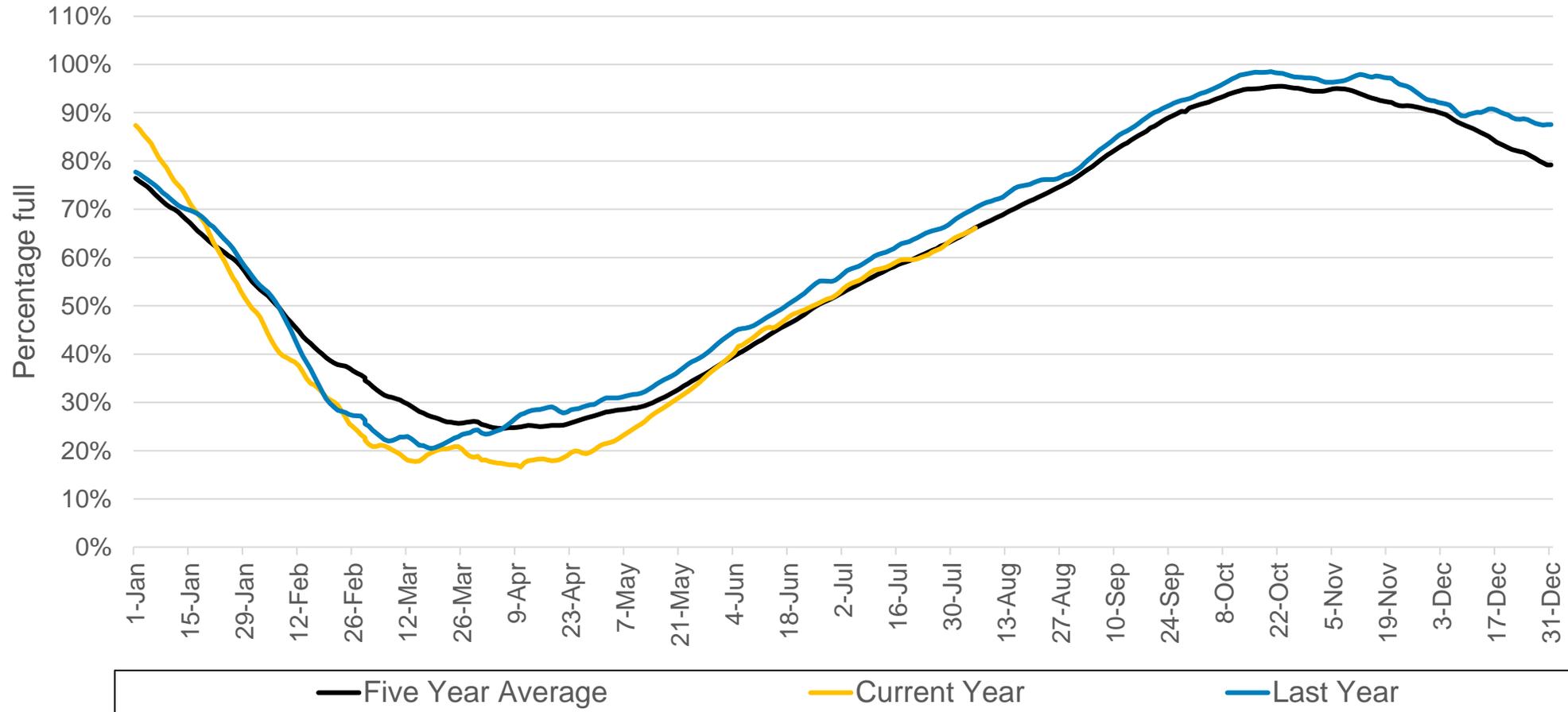
- No open seasons at this time



Projects and services continue to be developed to meet growing demand.

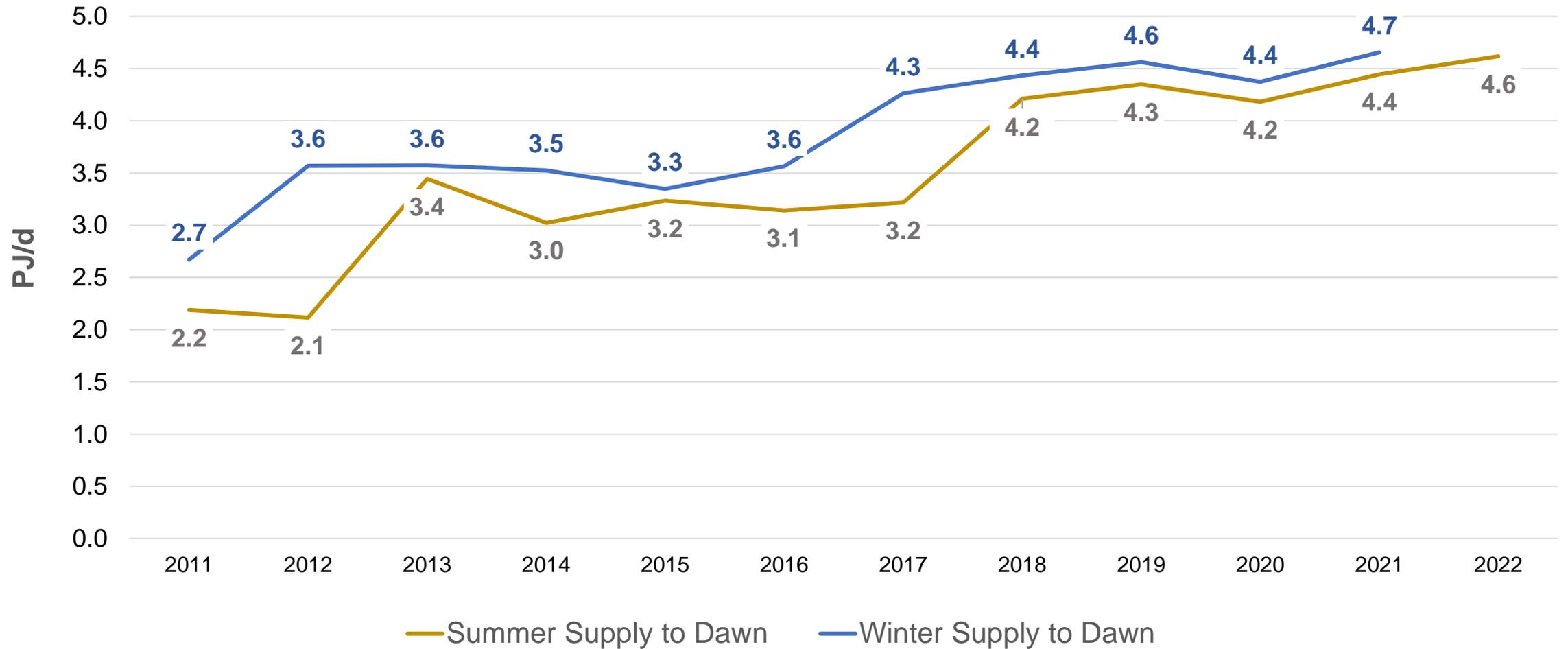
Operations update

Storage inventory



After lower-than-normal spring position, levels match five-year average.

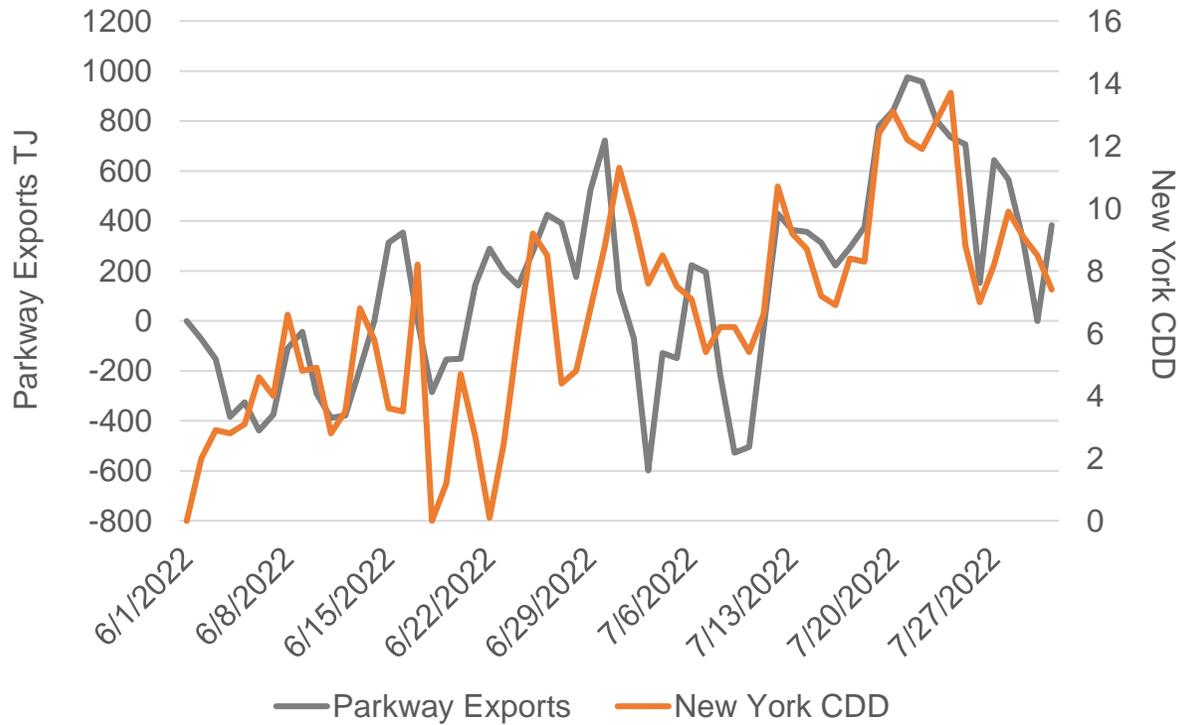
Average receipts



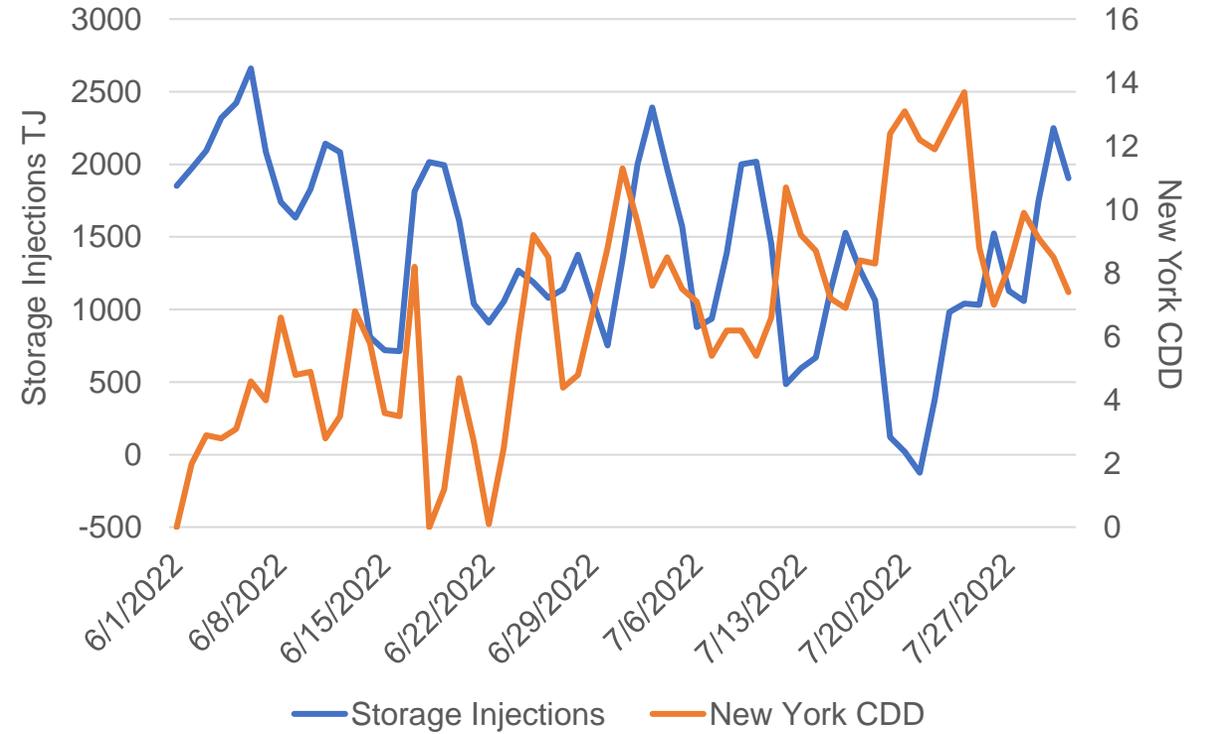
Value of Dawn



New York CDD vs. Parkway Exports



New York CDD v Storage Injections



Advancing energy transition – affordably and reliably

Nicole Brunner

Manager, New Energy Supply

Energy transition in Ontario

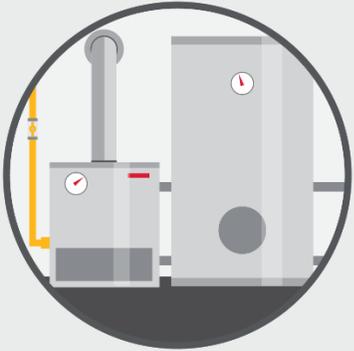
- Enbridge Gas exists to meet the energy needs of our customers, safely, reliably and affordably.
- 75% of Ontario households depend on natural gas as an affordable and reliable energy choice.
- At the same time, families, businesses and storage and transportation customers are increasingly focused on lowering GHG emissions.
- Enbridge Gas has the scale and experience to help society transition to a lower-emissions future.
- We have committed to achieving net-zero GHG emissions in our own operations.



Enbridge Gas – Part of a lower carbon future



Using less gas



- Energy conservation programs
- Hybrid heating – dual fuel space heating
- Natural gas heat pumps
- District energy systems

Non-gas solutions



- Geothermal heat pumps for heating and cooling
- MicroGeneration: Low grade heat waste recovery
- Carbon capture utilization and storage (CCUS)
- Battery storage
- Integrated resource planning (IRP)

Carbon-neutral gas



- Hydrogen: Power to Gas
- Developing Renewable Natural Gas (RNG) hub at Dawn

Fuel switching



- Replacing oil, propane and wood for home and water heating
- Compressed natural gas (CNG) vehicles

A sustainable, affordable pathway to a low-carbon future

Carbon-neutral gas



Hydrogen, power-to-gas,
Renewable natural gas (RNG)

Key initiatives and enablers

Developing an RNG hub at Dawn

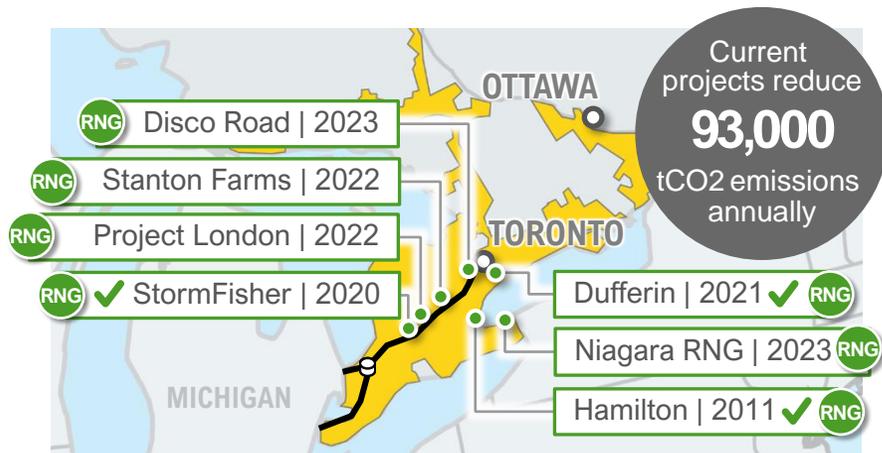
- Supply:
 - Enbridge Gas is working with municipalities, food and beverage processors, waste management companies and agribusinesses to develop the RNG market in Ontario. Enbridge Gas offers biogas cleaning and injection services, bringing supply to the Dawn Hub.
- Demand:
 - The Voluntary RNG program, is a low-cost, low-GHG option for customers. As part of our rebasing application, we are evaluating how we can further utilize RNG in our gas supply portfolio.

Hydrogen production and blending

- Enbridge Gas has a pilot project to blend up to 2% hydrogen for approximately 3,600 natural gas customers in Markham, leveraging our leading power-to-gas facility.
- Potential uses in transport, power generation, industry, as a feedstock.

Building on RNG capabilities

Expanding utility portfolio



Strategic partnerships



RNG at Dawn



- In franchise development
- Digestion to injection facilities
- 60+ projects in early stage and advanced development
- Working on a proposal to encourage long-term market development.

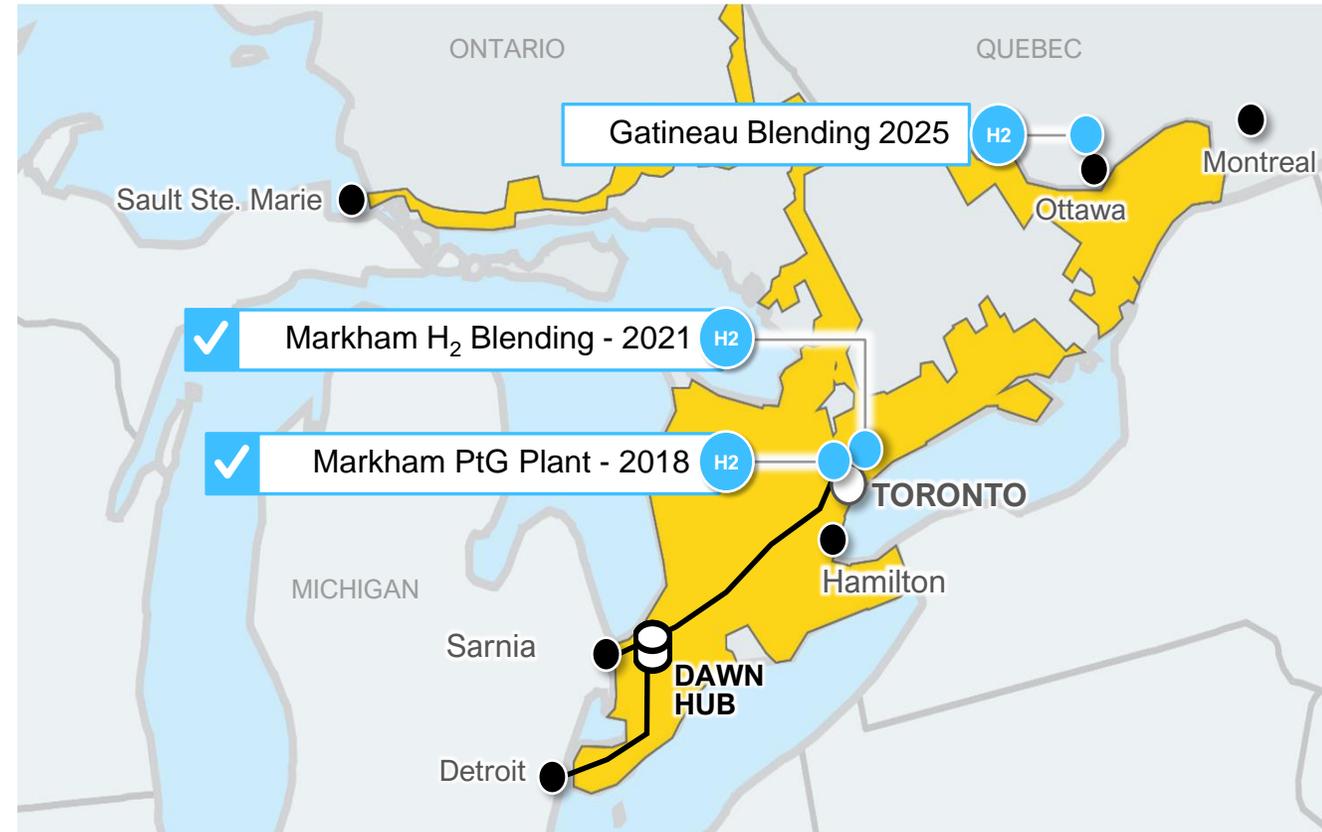
- Partnered with Walker Industries and Comcor Technologies
- Existing relationships with ~40 landfills across Canada
- Wellfield to injection facilities

- Enerline has tracking and reporting functionality for producers and storage and transportation customers buying and selling RNG at Dawn.

Utilize existing infrastructure to lower emissions and maintain affordable energy supply.

Low-carbon growth: Hydrogen

- 10 to 15 potential projects in early stages of development.
- Focus on transportation fleets and large industrials.
- Blending pilot: multi-year review and progress reporting.
- Expansion of Markham pilot project.



Developing market-ready RNG solutions and proven hydrogen technology to position Enbridge Gas for long term growth.

Enabling low carbon energy opportunities

Given our scale, Enbridge Gas is uniquely positioned to play a market facilitation role, bringing new lower carbon solutions while continuing to meet the demand for safe, reliable and affordable energy.

We are already leading in this space, delivering innovative solutions that engage government, regulators and private industry.

