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January 15, 2016

VIA RESS, EMAIL and COURIER

Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street, Suite 2700
Toronto, ON M4P 1E4

Dear Ms Walli:

Re: Natural Gas Market Review – EB-2015-0237
Participant Presentation

As requested in the Board's letter dated January 4, 2016, attached please find Enbridge Gas Distribution's presentation for the 2015 Natural Gas Market Review Forum.

If you have any questions please contact the undersigned.

Sincerely,

[original signed]

Lorraine Chiasson
Regulatory Coordinator

Attachment

Natural Gas & Ontario's Energy Mix

EB-2015-0237
Natural Gas Market Review, January 2016

Norm Ryckman

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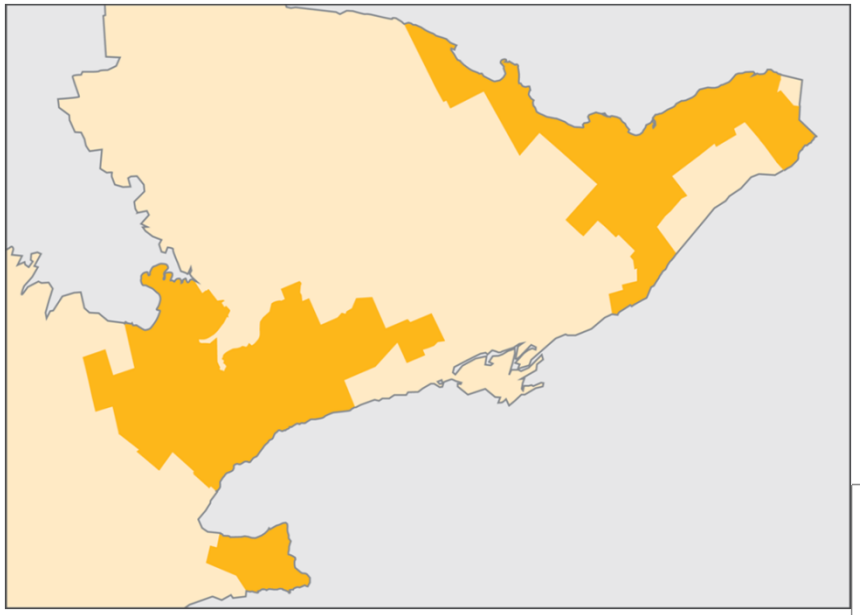
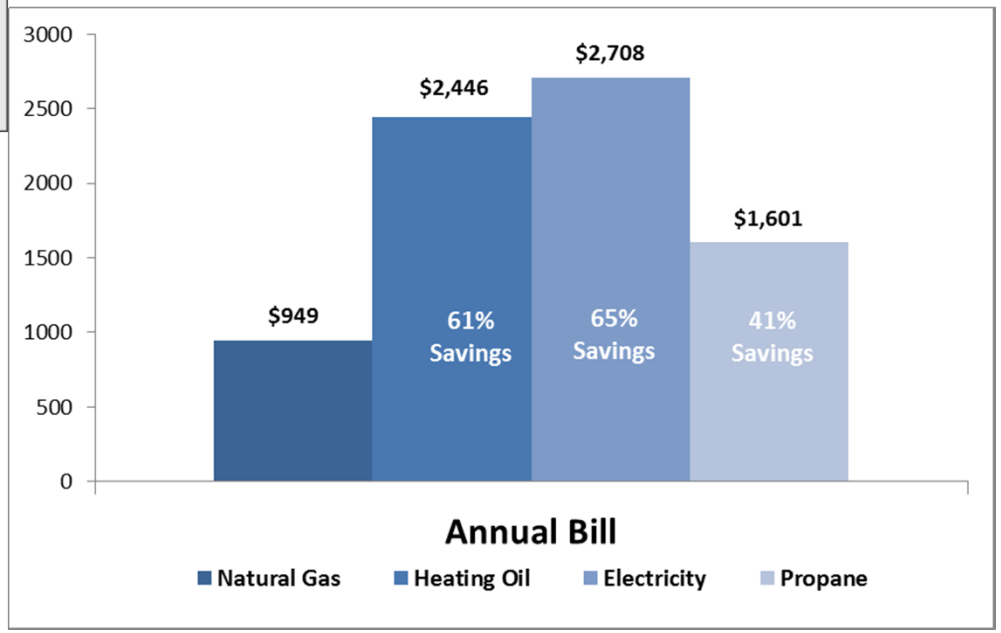
Enbridge Gas Distribution

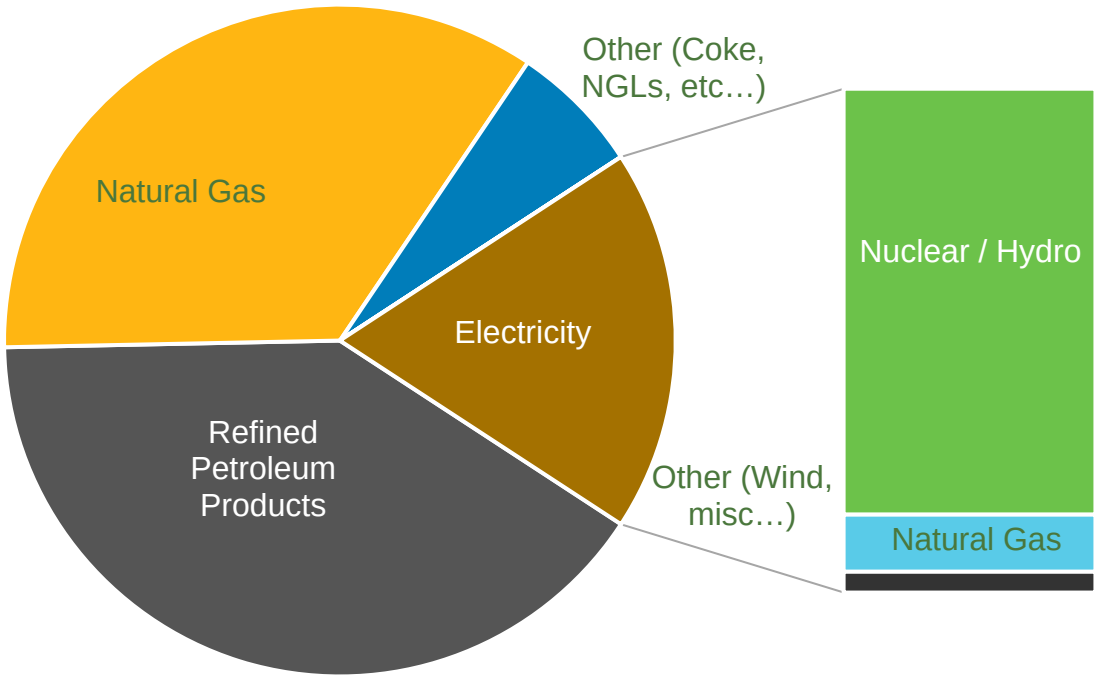


- EGD serves >2 million customers
- Adds ~35,000 customers/year

- Consumers recognize economic benefits of gas



Natural Gas is the largest energy source in Ontario and forecast to grow from 2014 to 2030



Source: ICF

Natural gas' share of Ontario's total energy final demand has grown to over 33% of the total (830,000TJ or 770 Bcf);

- New supply / demand paradigm in North America.
- Newly connected communities.
- Increasing usage in transport.
- Displacement of coal.
- Enabling renewables.

Electricity demand declined 2004 – 2014 due to CDM and loss of industry demand due to recession.

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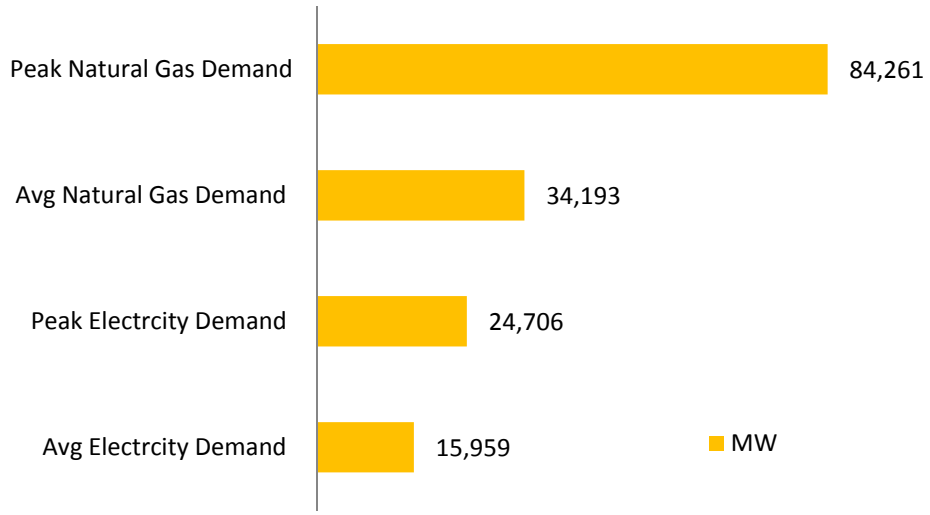
Importance of Natural Gas Infrastructure

Peak Day and average day demand

Ontario Energy Delivery by Infrastructure Type



- Ontario's electricity grid must balance in real-time or use costly, short-term storage
- Ontario's existing natural gas network offers equivalent of 80 TWh of seasonal storage
- On peak heating days, storage reserves deliver energy equivalent of 90 nuclear reactors (then you would still need to get the power to where it is needed and equipment that can use it)
- Orderly transition to a low-carbon economy can leverage existing pipelines and storage with increasing quantities of green gas supply

Footnotes:
1. Ontario Peak natural gas demand is 6.9 bcf/day
2. Avg. natural gas demand includes refill of storage
3. Peak electricity demand recorded in Summer 2006 (IESO)

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Cap and Trade in Ontario and Impacts to Enbridge Natural Gas Customers

EB-2015-0237

Natural Gas Market Review, January 2016

Norm Ryckman

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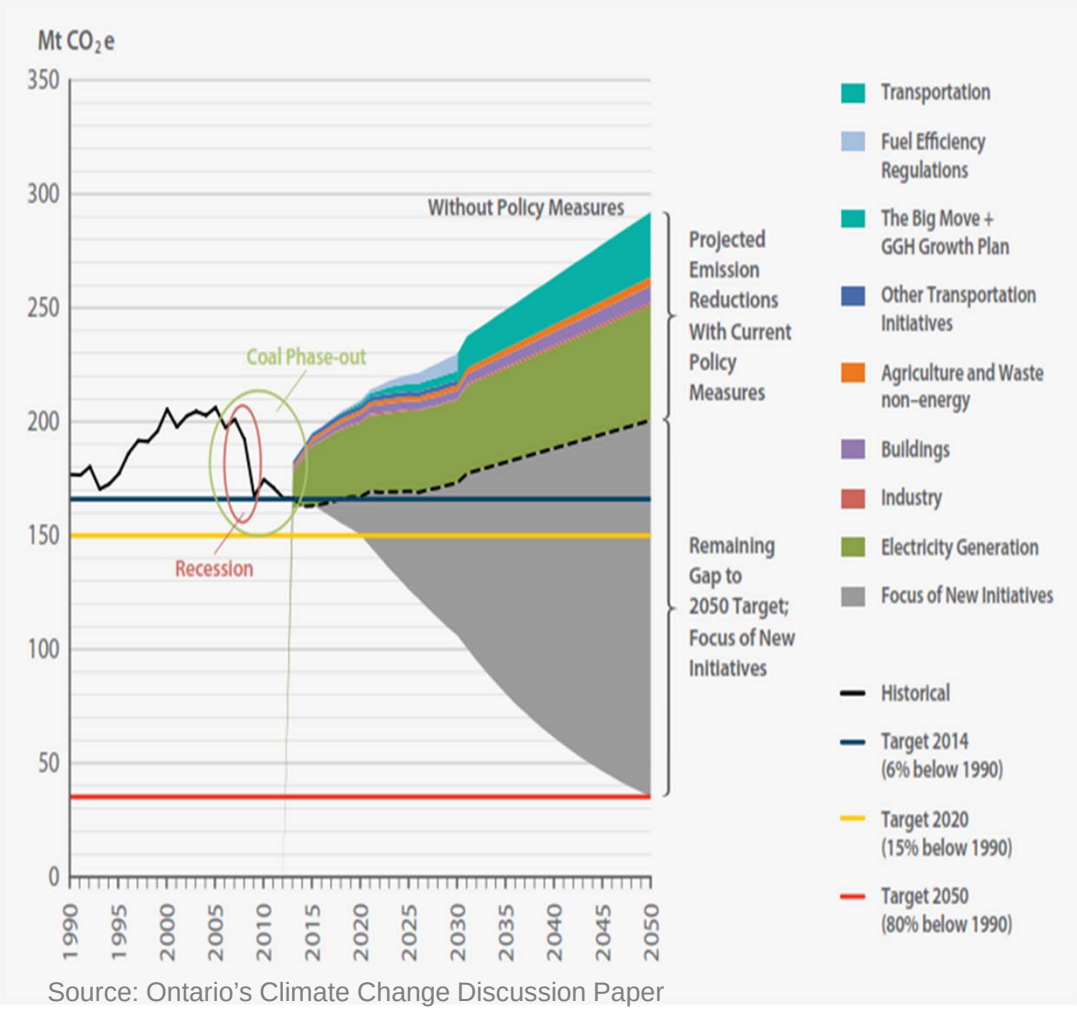
Ontario Emissions and Cap and Trade Policy

Ontario has defined 2020 and 2030 targets and a path to material de-carbonization by 2050



Source: Ontario's Climate Change Discussion Paper 2015, Ministry of the Environment and Climate Change

- Historic emission reductions from coal shut-downs and decline of industrial sector energy consumption.
- Ontario electricity emissions intensity = 0.05 t/MWh.
- Reductions associated with urban public transportation projects and energy efficiency are factored into the projection.
- Future reductions will need to come from energy efficiency and re-fueling current transport fuel and natural gas consumers.
- Ontario's emissions need to fall to 110 Mt by 2030 and 35Mt CO_2 by 2050.

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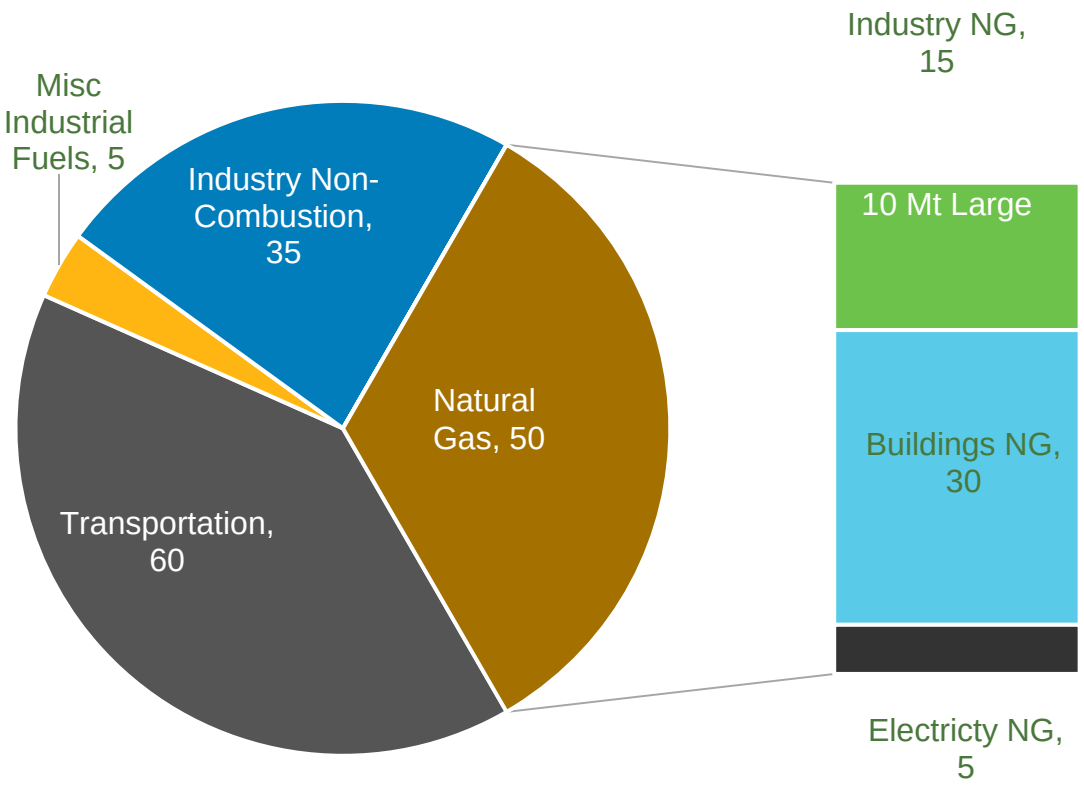
Based on Ontario's emissions profile reductions must come from reduction in natural gas / transport fuel use



Source: ICF

Ontario Forecast 2017 GHG emissions for sectors /sources covered under proposed cap and trade ($MtCO_2e$)

Ontario's 2017 GHG emissions profile for "Cap" covered sectors;

- 60 Mt CO_2e from transport fuel usage
- 50 Mt CO_2e from NG usage (950 Bcf)
  - 15 Mt industry
  - 30 Mt commercial and residential
  - 5 Mt electricity
- 5 Mt CO_2e from miscellaneous fuels
- 35Mt CO_2e from non-combustion / fixed process emissions

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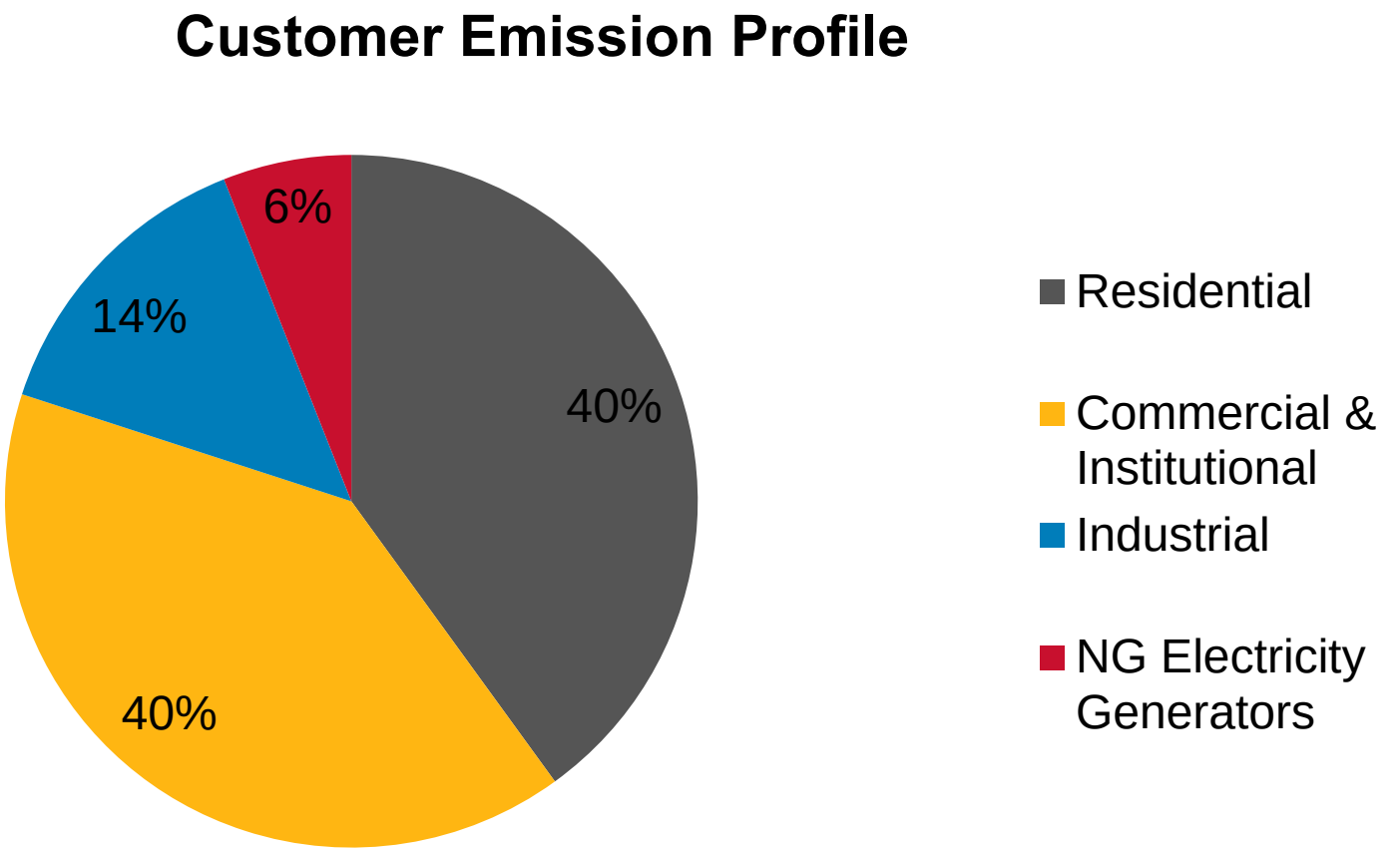
Customer Impacts

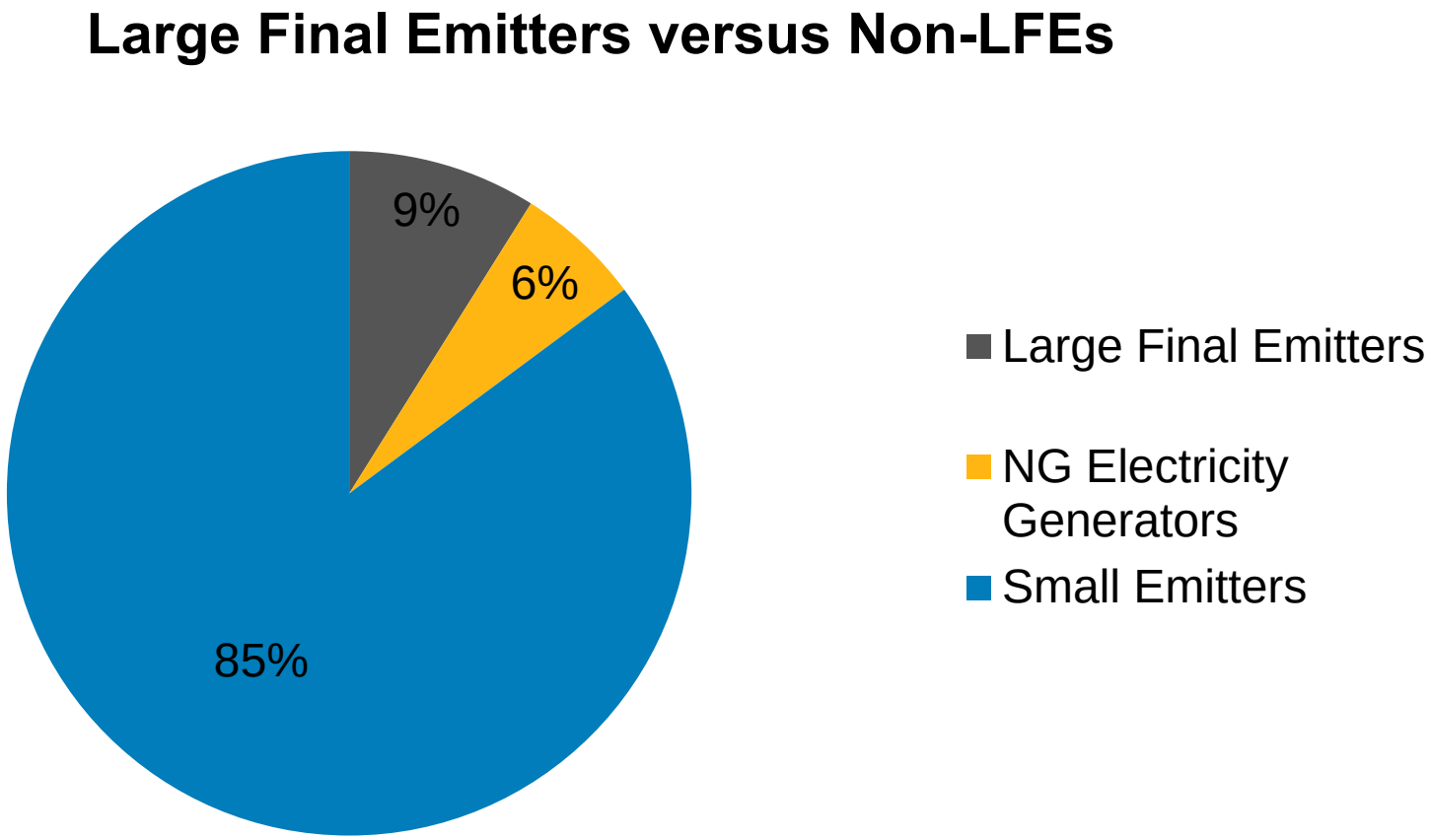
Emissions by Enbridge's Customer Type

This graph shows where emissions are derived from our customer base due to combustion of NG



Emissions for Enbridge's Large Final Emitters vs. Non-LFEs

This graph shows the percentage of emissions from those under and over the 25,000 tCO2e threshold for LFE



Enbridge's Cap & Trade Information

Cap & Trade anticipated for January 1st 2017

- Under Ontario's Cap & Trade, EGD expected to purchase Greenhouse Gas (GHG) Allowances on behalf of customers under 25,000 t CO_2e
  - Large Final Emitters > 25,000 tCO_2e will purchase their own allowances
  - Customers between 10,000 and 25,000 tCO_2e required to report their emissions, but EGD will purchase allowances
  - Purchases of Allowances for natural gas power gen customers to be clarified.
- Calculation of allowances based on "custody transfer station" calculation, which would also include EGD's own emissions as unaccounted for gas (calculated as if gas is combusted)
- EGD anticipates recovering costs of purchasing allowances through a separate volumetric charge on customer bills to ensure Company & ratepayers are kept whole
- EGD anticipates maintaining a variance account for allowance purchases
- The volumetric charge likely to be updated quarterly to reflect changes in the price of emission allowances, minimizing volatility in the charge
- Anticipate filing of a GHG application with the OEB in fall 2016

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Potential Bill Impact

Rate Class	Cap and Trade Unit Rate	Annual Volume ("Typical Customer")	Current Annual Bill	Annual Cap and Trade Charge	Annual Bill with Cap and Trade	Bill Impact
Rate 1	$0.03/$m^3$	2,400m^3	$819.63	$77.52	$897.15	9.5%
Rate 6	$0.03/$m^3$	22,606m^3	$5,982.40	$730.17	$6,712.57	12.2%
Rate 110	$0.03/$m^3$	9,976,120m3	$1,747,941	$322,229	$2,070,169	18.4%
Rate 115	$0.03/$m^3$	69,832,850m^3	$11,745,005	$2,255,601	$14,000,606	19.2%
Rate 135	$0.03/$m^3$	598,567m^3	$98,394	$19,334	$117,683	19.7%
Rate 145	$0.03/$m^3$	598,567m^3	$108,159	$19,334	$127,493	17.9%
Rate 170	$0.03/$m^3$	69,832,850m^3	$10,517,949	$2,255,601	$12,773,550	21.4%

Footnotes: Assumes ~$17 per tCO2e. Customer bills based on 2016 Q1 Total Annual Bill excluding Riders.
Rate 100 not included given small sample size (n=2)

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Initial Thoughts From ICF

Potential Implications for Enbridge and Customers

1. Energy Efficiency / Demand Side Management
   - Rate of energy efficiency needs increase dramatically with GHG reductions as the key objective
2. EGD will need to acquire $300M–$500M of allowance per year
   - Current settlement price of $17/t results requires roughly $350M of allowance (depending on inclusion of unbundled customers)
3. EGD will need to build allowance acquisition infrastructure
   - Accounting, finance, trading, analytics, offset/allowance sourcing, brokerage, MM&V, billing, customer relations, DSM, IT, etc.
4. EGD will need to re-imagine infrastructure and business model
   - Residential, commercial, institutional NG consumption could need to decline by ~40% by 2030
   - Even if protection afforded industrial emitters consumption will need to decline by 20 – 30%
   - No net increase in NG consumption for electricity generation
   - Electrification of transport and buildings

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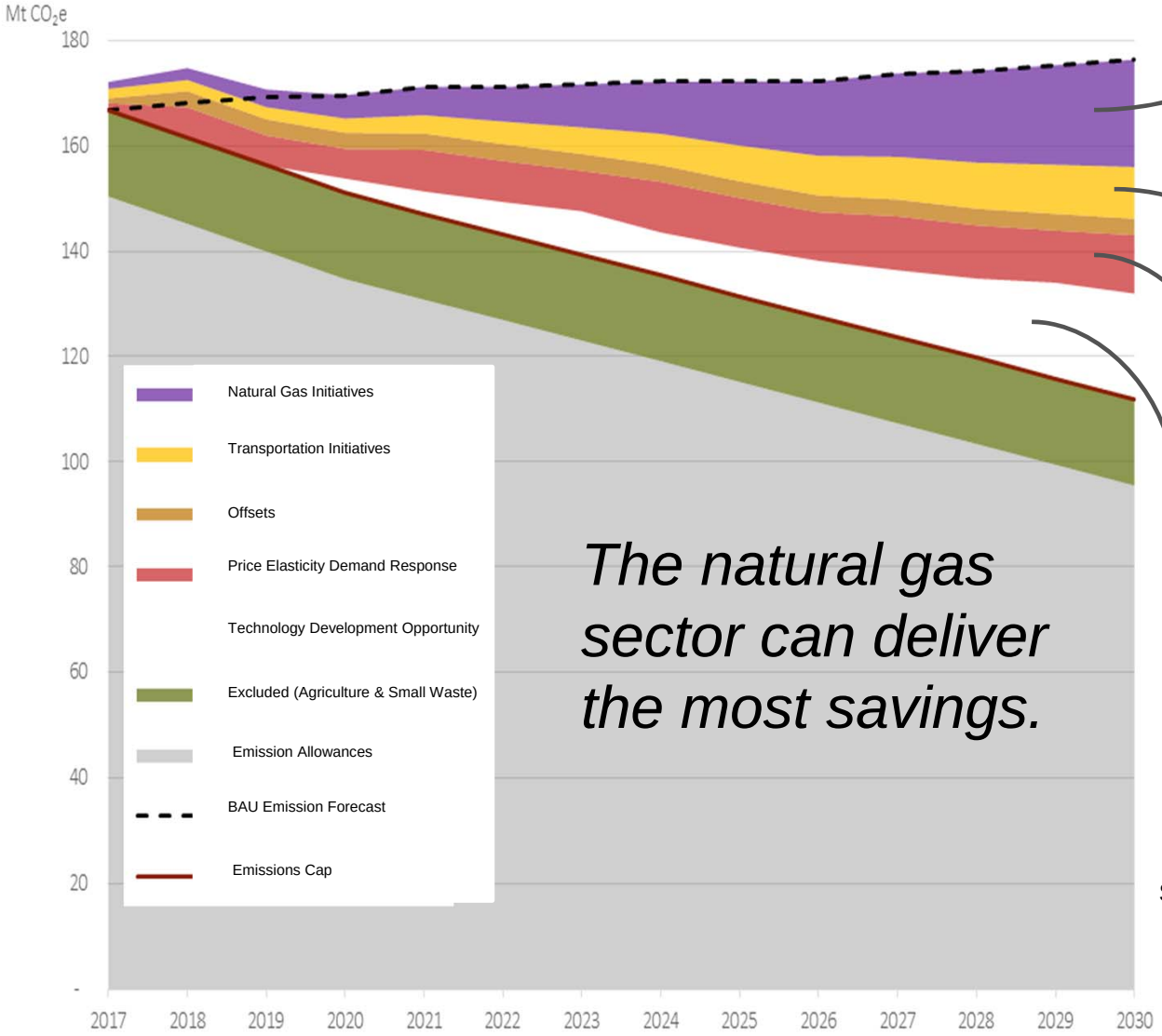
Natural Gas is Part of the Solution

Part Of The Solution - Ontario's Emission Reduction Forecast (2017- 2030)



The natural gas sector can deliver the most savings.

Natural Gas Initiatives offer 20 Mt CO2e

Electrify light-duty cars and biofuels offer 10 Mt CO2e

Price-related demand reductions 11 Mt CO2e

Technology Innovation can address 20 Mt CO2e

Source: ICF

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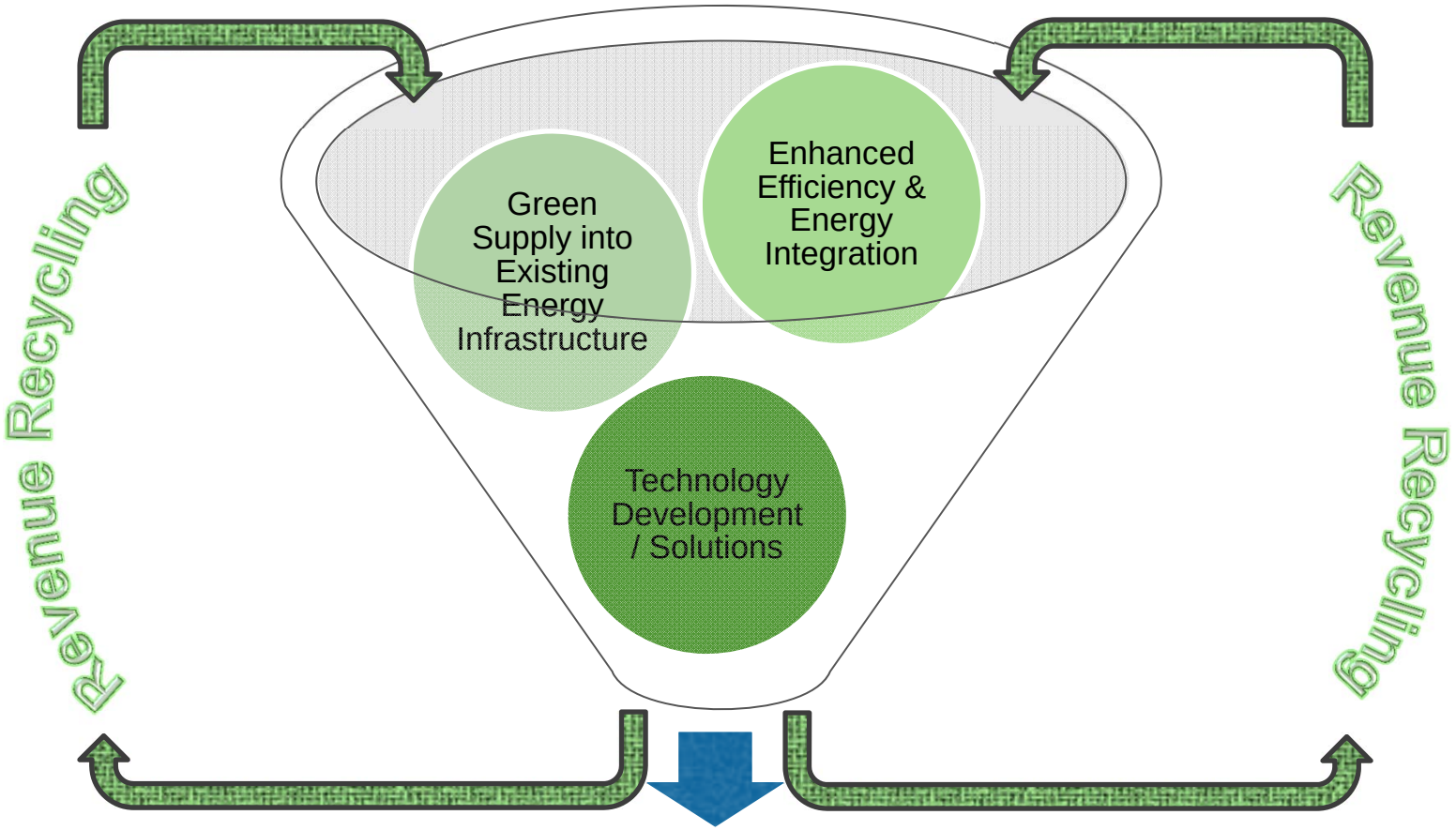
Transforming the Natural Gas Energy Landscape



Optimized Infrastructure = Material Progress Towards Emission Goals While Maintaining Economic Competitiveness

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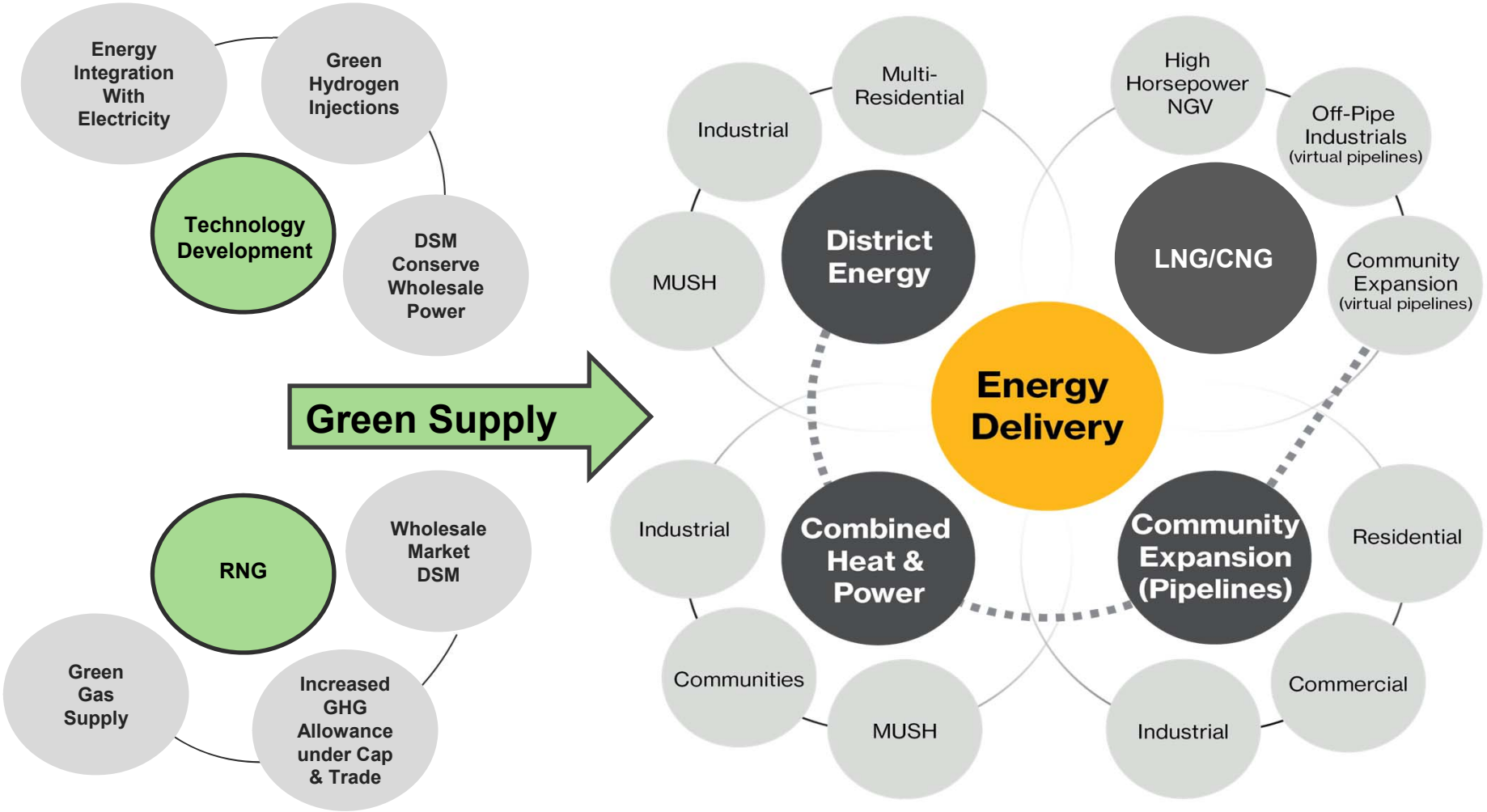
Transforming the Landscape



Energy Efficiency and Conservation (Demand Side Management)

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Summary

- In partnership with our customers, Enbridge believes we can help government and customers achieve more cost-effective GHG reductions going forward
- Pipelines can offer more cost-effective renewable energy supplies (green or renewable natural gas) - to date, this market remains untapped in Ontario
- Government policies should be tailored to our energy intensive and export-based economy, and must enable us to remain competitive while making meaningful reductions in GHG emissions
- Technology development and commercialization is critical to the creation of a lower carbon economy in Ontario; seek opportunities to support existing industry with new revenue sources (e.g. technology adoption for conversion of CO_2 in high-value commodities such as chemicals, fuels, etc.)
- Compliance options should focus on promoting both near-term reductions and the advancement of technology for larger future reductions over time
- Regulatory considerations need to be given on carbon allowance purchasing strategy and operational needs to implement cap and trade policy, including timelines and additional resources

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Community Expansion

EB-2015-0237
Natural Gas Market Review, January 2016

Ian Macpherson

Natural Gas Expansion

– To review Enbridge's progress in developing new expanded guidelines to support the OEB's direction on expansion of natural gas distribution

- Benefits of system expansion
- Proposed policy changes
- High level results
- Ideas for achieving greater access

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Benefits of Natural Gas Expansion

- Supports Government policies:

  - Extending natural gas service to currently unserved communities
  - Significant reductions in GHG and other emissions
  - Economic development in rural areas
  - Fuel displacement to low carbon fuel in transportation sector

- Numerous requests from municipalities for service

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Political & Regulatory Environment

- Government Support for extension of natural gas service
  - $200 million in loan funding
  - $30 million in grant funding

- Ontario Energy Board (OEB)
  - February/15 OEB requested proposals to extend gas service that incorporates;
    - Guideline flexibility (e.g. ROE, depreciation period, recovery of capital contribution, etc.),
    - Predictability and cost certainty for consumers, and
    - Reasonable impacts on existing natural gas ratepayers

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Current Thinking on Moving Forward

- The Enbridge proposal will take an integrated approach that combines Guideline Flexibility, a Community Expansion Surcharge and Provincial Government financial support

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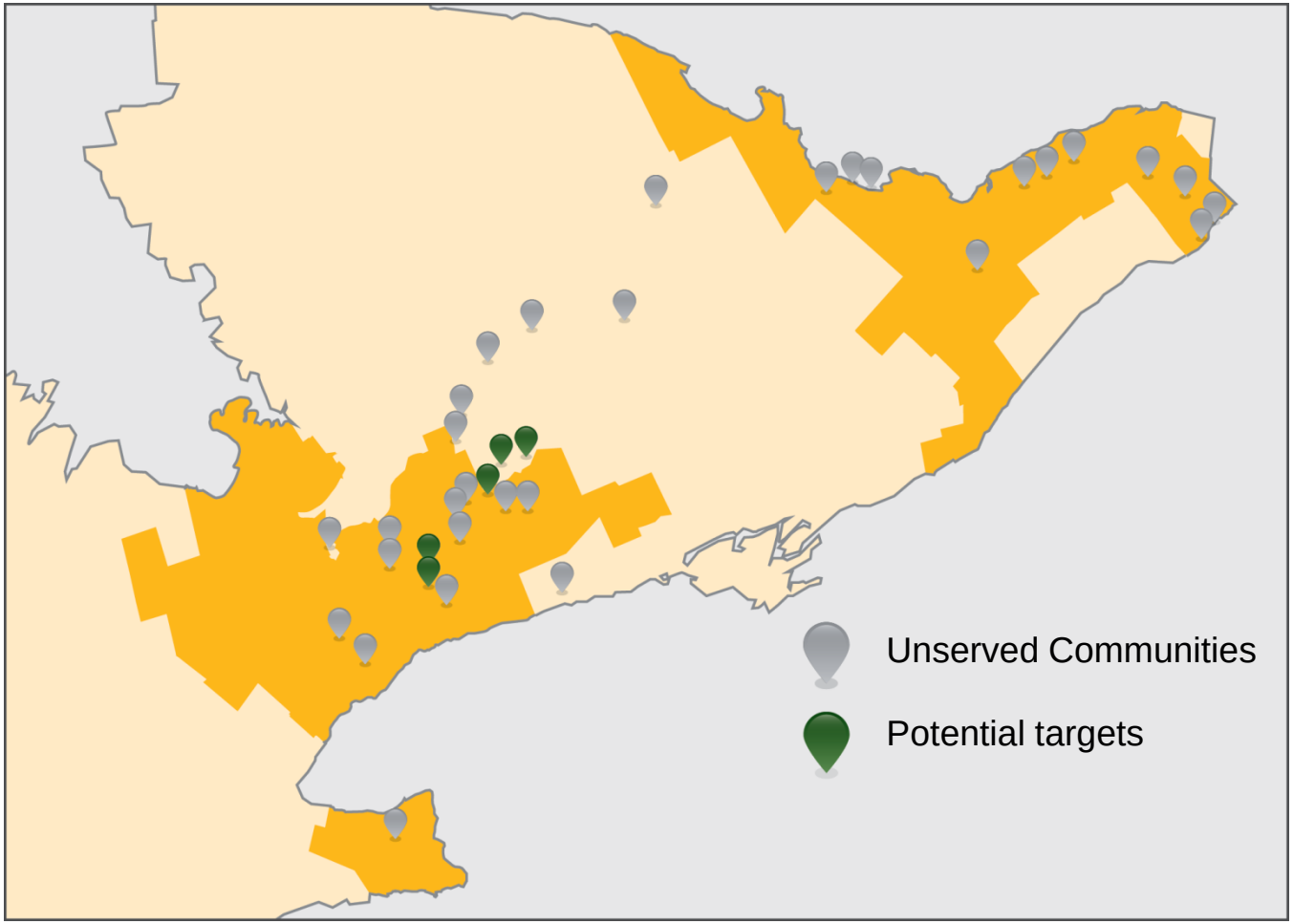
Proposed Policy Changes

Enbridge Gas Distribution	Union Gas
– Profitability index (“PI”) of 0.4 or greater	– Same
– Temporary expansion surcharge (“TES”) rate of $.23 /m3 (volumetric rate rider)	– Same
– TES applied 10 years, commencing from customer in-service date	– TES applied 10 years, commencing from the in-service date of the project
– Incremental tax equivalent (“ITE”) mechanism to collect municipal contributions	– Same
– Capital investment for community expansion not included in current IR, therefore EGD will seek a pass through to rates (‘Y-factor”) for these investments	– Regulatory model includes pass through mechanism

Evaluation of Unserved Communities



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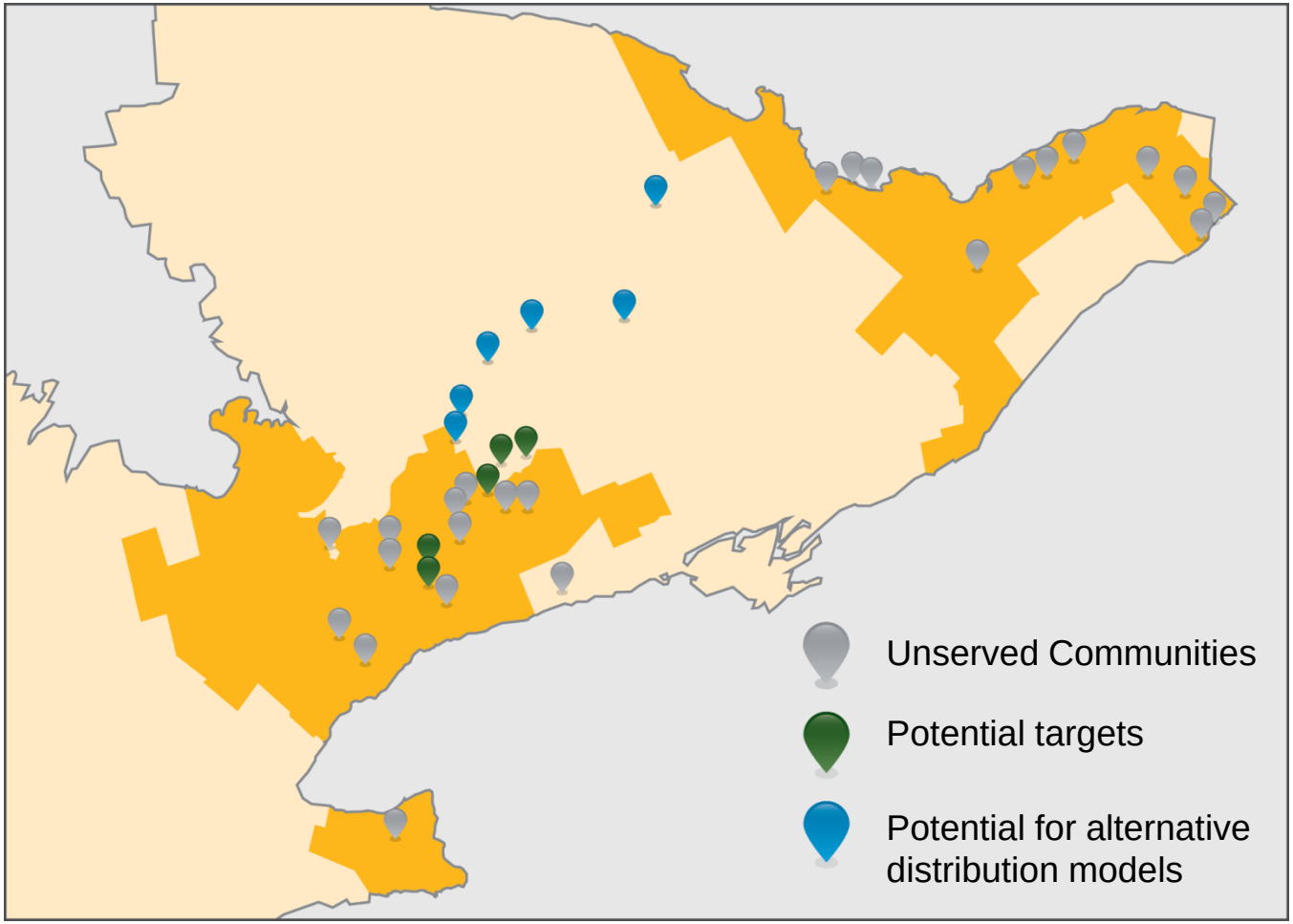
Evaluation of Unserved Communities



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Alternative Distribution odels → Policy Implications

- LNG/CNG can innovate the distribution model and may be the least cost alternative, or interim methods for a smaller system to achieve scale
- Policy implications:
  - How would costs related to liquefaction/compression and logistics be treated?
    - Simply commodity costs that are part of the supply mix
    - Commodity surcharge to recover some (or all) of the incremental costs
  - Guideline to limit quantity of alternative gas supply within the gas supply mix

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Next Steps

- Projects advanced based on policy/guideline clarity
- Additionally EGD may consider alternative distribution models (LNG/ CNG)