

# Renewable Gas 360

## New Opportunities to Convert Biomass “Waste” to Renewable Methane and Green Hydrogen

### A Utility Perspective

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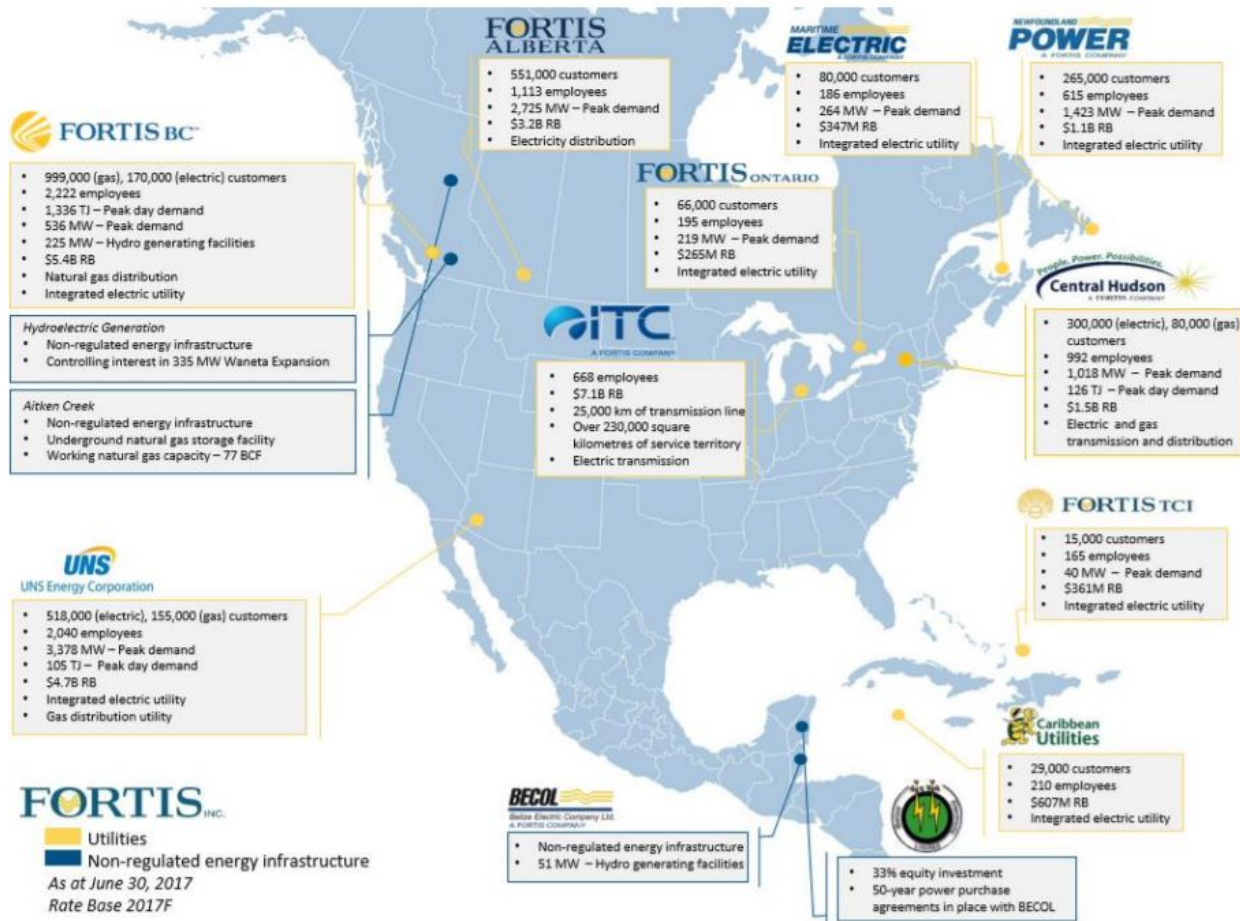
March 18, 2021

*Energy at work*



**FORTIS BC™**

# Fortis Inc. - North American Operations



# About FortisBC



FortisBC area of operations

- Serving **1.2 million customers** in **135 communities**
- Investing over **\$590 million annually** in B.C.'s energy assets
  - 50,000 km of pipelines
  - 7,200 km of electric lines
  - 2 LNG facilities
  - 4 hydroelectric generating plants
  - Underground gas storage
- Delivering **21% of B.C.'s energy needs**
  - Electricity
  - Natural gas
  - Renewable natural gas (enabled under BC Greenhouse Gas reduction Regulation (GGRR))
  - Compressed & liquefied natural gas
  - Alternative energy solutions
- 2020 Nat. Gas Res./Comm./Ind./Trans: **200 PJ/yr**

# FortisBC's Clean Growth Pathway to 2050

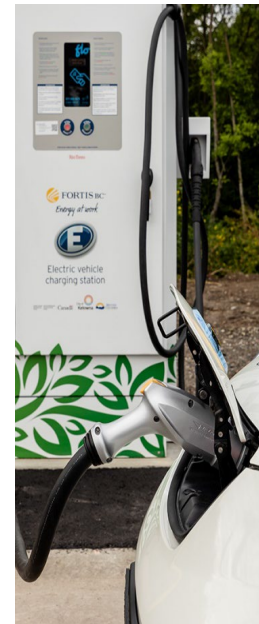
Diversified approach to reduce GHGs and support climate action goals



Energy  
Efficiency



Renewable  
Gas



Zero and  
Low  
Carbon



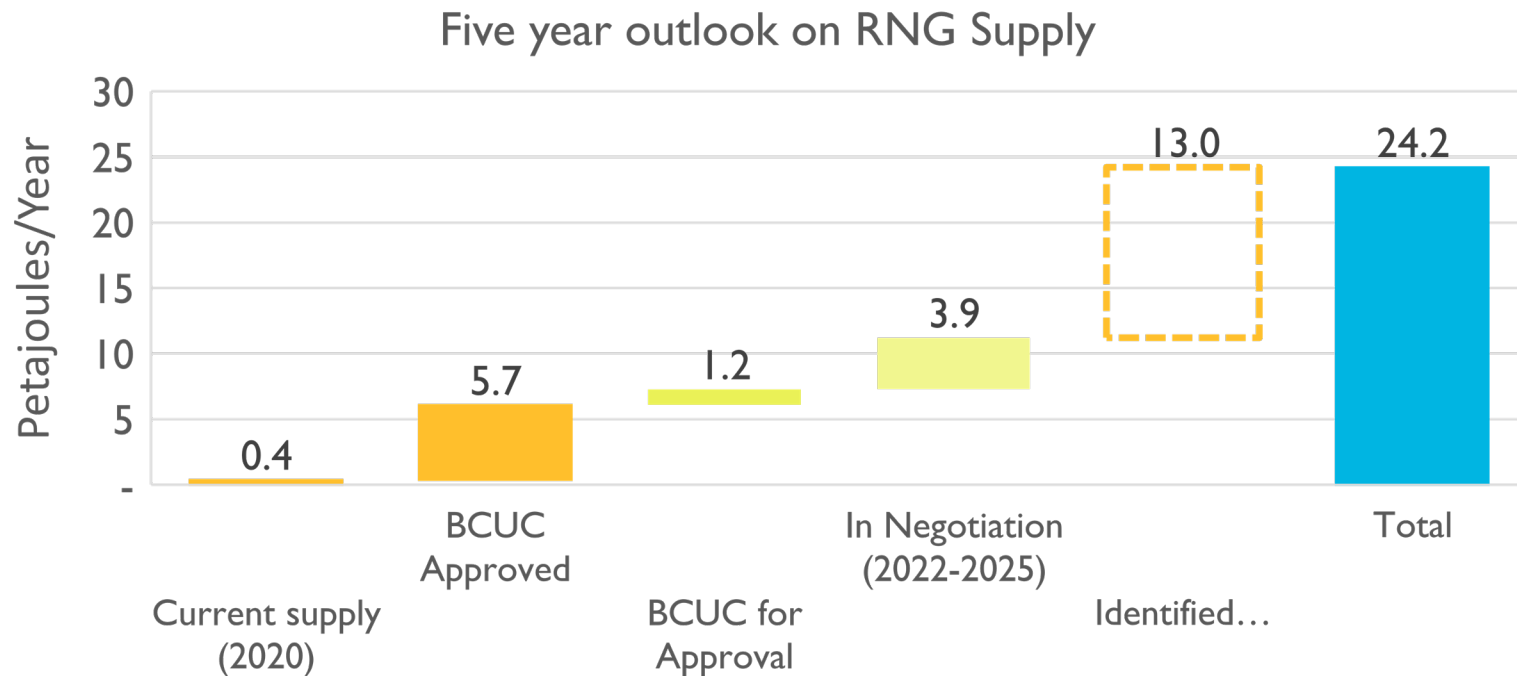
Global  
LNG

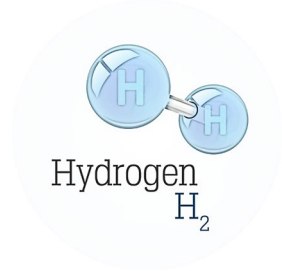
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# Renewable gas short-term supply outlook

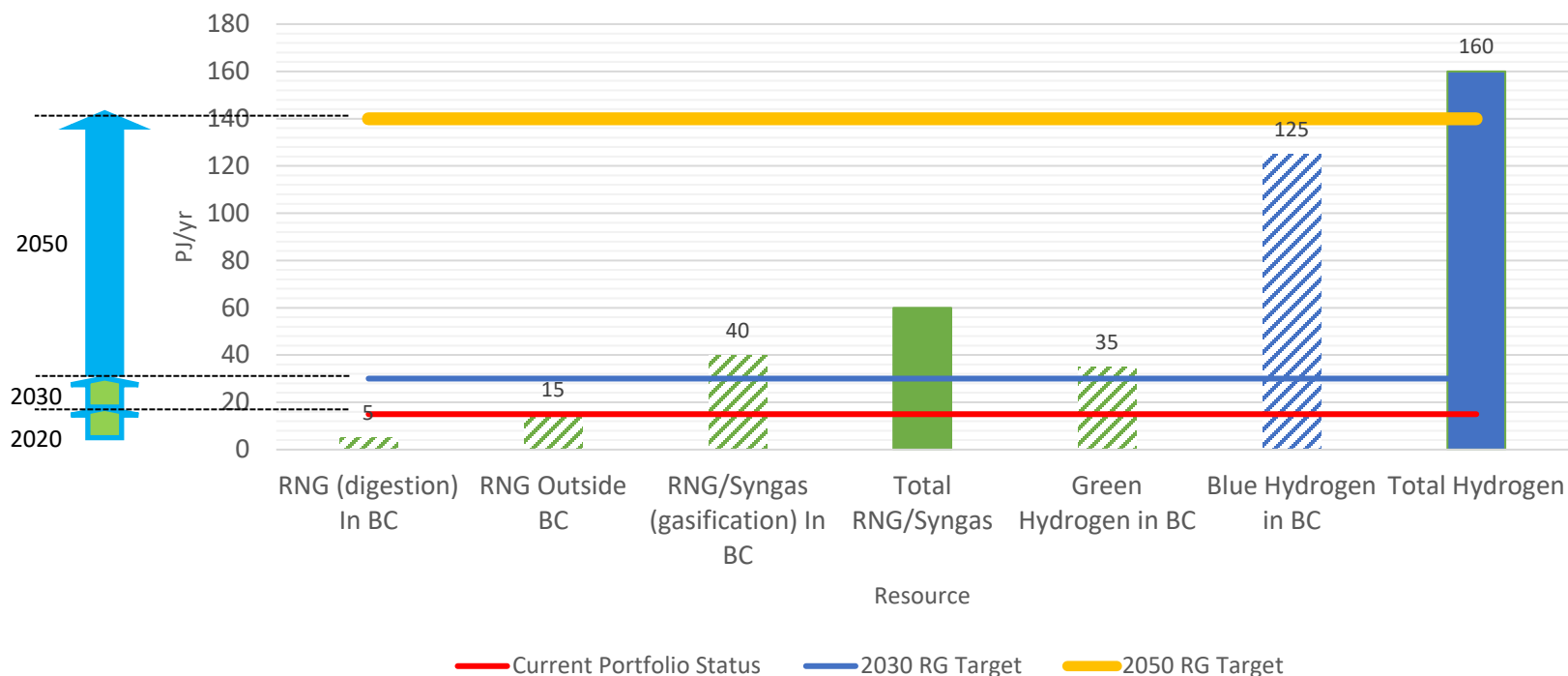




# Supply Potential Vs RG Targets

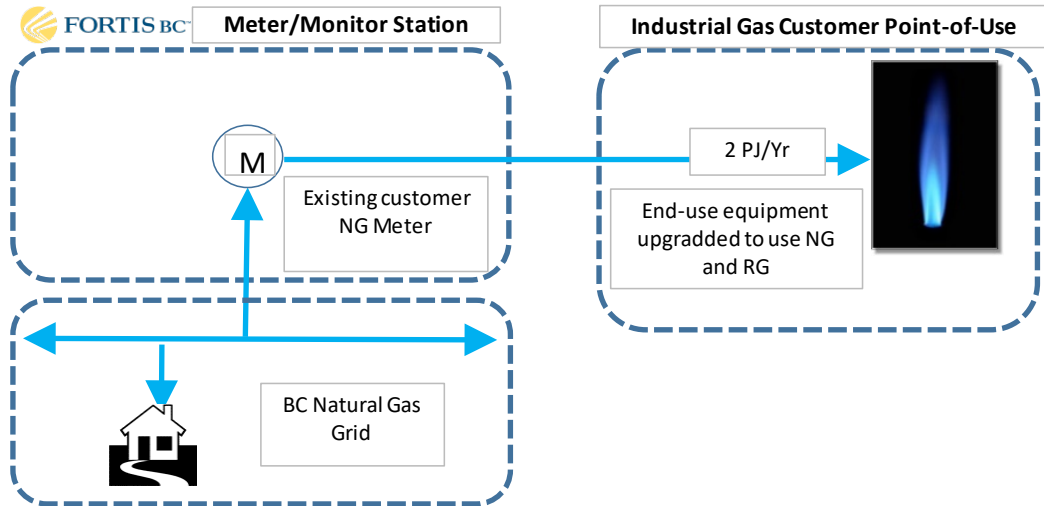
Taking into account certain realities, such as potential feedstock unavailability, less than 100% capacity production at plants, or technology underperforms

Renewable/Low-Carbon Gas Portfolio (P50 Resource Recovery)



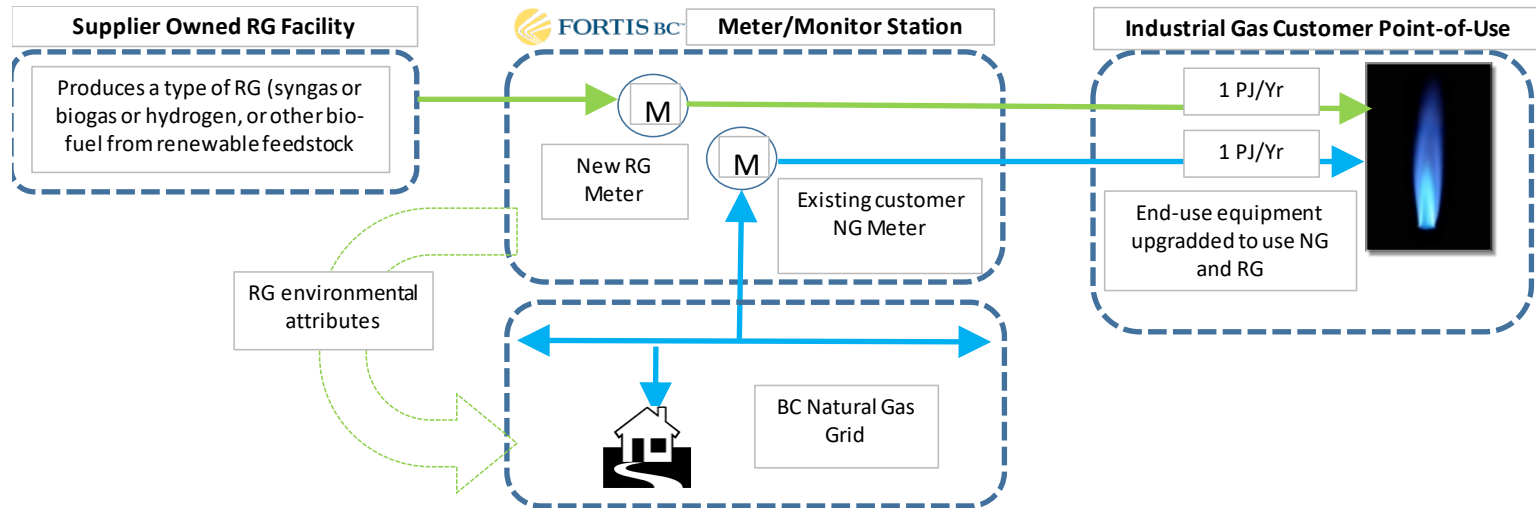
1. Hallbar report: B.C. Hydro's forestry feedstock estimation; RNG production potential is estimated to be 51.3 PJ/year. If NRCan's forestry feedstock estimations are used, RNG production potential is estimated to be 93.6 PJ/year. 2 RNG (organics) In BC max supply potential no tech advancement Hallbar Consulting Report, 3. Syngas (wood) max supply potential with technology advancement Hallbar report, 4 Hydrogen supply potential from BC Hydrogen Study

# Current Industrial Natural Gas Supply



- Industrial customer owns and operates the equipment, e.g. kilns, boilers etc., to use NG.
- Utility owns and operates the facility to meter and monitor NG energy delivered from the BC gas grid to the industrial customer for accounting/billing.

# Enabling RG through NG Displacement



- Supplier (developer or industrial customer) owns and operates the facility to produce RG.
- Industrial customer owns and operates the equipment, e.g. kilns, boilers etc., to use RG and displace NG at the point-of-use.
- Utility owns and operates the facility to meter and monitor the NG and RG delivered (including NG energy displaced) between the contracted parties for custody transfer and billing purposes.





# Questions?

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