

Understanding the Project

FortisBC Energy Inc (FEI) states the Okanagan Capacity Upgrade Project is needed to address expected gas load growth in the central (Kelowna) and north Okanagan (Vernon) regions due to population increase. FEI expects that peak demand in these regions will exceed existing system capacity that needs to be addressed prior to the winter of 2023/2024.

FEI states that population growth, in the Kelowna area especially, has led to a corresponding increase in the demand for natural gas, and thus an increased demand on the Interior Transmission System (ITS). Increasing industrial load, including new CNG (Compressed Natural Gas) fuelling stations, greenhouse expansions and winery operations, along with other industrial customers on the system, has also contributed to the increase in demand.

According to FEI, a long term practical solution is required to increase the ITS capacity so that FEI can meet the forecasted peak demand and continue to provide natural gas service to customers safely and reliably. FEI reviewed three technical options and found that building a 406 mm pipeline approximately 30 km in length running from OLI PEN 406 pipeline east of Ellis Creek near Penticton to Chute Lake northeast of Naramata was the preferred solution.

Engaging with customers to manage a reduction of gas demand, including promoting electric heat pumps, was not one of the options presented. Fortis only supplies electricity to the South Okanagan and parts of the Kelowna area, and does not supply any electricity to the Lake Country and Vernon areas.

Concerns Raised by First Things First Okanagan

- The estimation of growth of natural gas in the ITS runs counter to municipal Climate Action plans. The submission of FEI does not address existing municipal Climate Action plans and First Things First Okanagan will focus on this issue as it undermines the long term need for this project.
- The proposed pipeline route runs through noted sensitive habitat with high probability of disturbing at-risk species. FEI notes this concern in their application and provides potential mitigation strategies. We cannot find evidence of the project having gone through an environmental review.
- The proposed route crosses 20 watercourses and 3 community watersheds.
- The Proponent recognizes the risk of wildfire and mentions mitigation methods. The pipeline will run the length of the Naramata Bench which is comprised of mature forest. Whereas a number of wildfires have impacted the Penticton and RDOS areas and reduced local fuel loading and forest density, the Naramata Bench remains a major area of concern. There is potential that a major wildfire will impact all pipelines placed in the Naramata Bench area in the lifetime of the pipeline.
- An increased number of distribution lines raises concerns of methane leakage. Methane is a greenhouse gas 86 times more potent than carbon dioxide over a 20 year timeframe, and is known to leak from pipelines and other gas infrastructure (“fugitive

emissions”).¹ All things being equal, more pipelines means a greater chance of fugitive emissions.

- Methane, whether from fossils (‘natural gas’) or from biological matter (‘renewable natural gas’), is now known to negatively affect the air quality inside buildings when it is used for heating or cooking. Harmful chemicals, especially nitrous oxide, are released when methane is burned. It does not seem like a good idea to continue bringing methane into homes.

Municipal Climate Action Plans

{Add introductory blurb...}Of the three major municipalities in the Okanagan Valley, Kelowna updated their Climate Action Plan in 2018 while Vernon and Penticton updated theirs in 2021. All three plans recommend renewable energy over fossil fuel use to lower emissions.²³⁴

The newer Vernon and Penticton plans explicitly recognize the need to reduce natural gas use to meet emission targets. In Vernon 26% and Penticton 30% of community Greenhouse Gas (GHG) emissions are estimated to be currently from natural gas. Over 50% of Vernon’s corporate GHG emissions come from natural gas. Homes and commercial buildings are responsible for 32% of the GHG emissions generated in Penticton. The main source of emissions is natural gas used for space and water heating, at over 90% of building emissions. Both plans use estimates supplied by Fortis regarding future annual consumption reduction per home from energy efficiency improvements and Fortis’s goal of increasing ‘renewable natural gas’.

Both plans identify the need to reduce the overall natural gas consumption to meet significant GHG emission reductions. Strategies the municipalities have committed to in their plans:

- Requirements for new construction to have low carbon energy systems (heat pumps) and increased energy efficiency. Vernon states new buildings will be much more efficient (80% more efficient by 2030 as compared to today’s base building code) and they will shift heating from natural gas to electricity through the uptake of electric air source heat pumps.
- Retrofit programs to promote heat pumps and energy efficiency of existing homes. Vernon states that by 2030, 50% of buildings in Vernon will have low carbon energy systems (12,500 private dwellings and half of all businesses).
- Collaboration with Indian Bands and local governments in the region on a coordinated 10-year campaign to market deep energy retrofits and fuel-switching from heating oil, propane, and natural gas to heat pumps.
- Educate renovators and realtors on energy efficiency and low carbon choices for space and water heating.
- Investigation of options to reduce natural gas use in all municipal facilities.

¹ [Methane - EIA \(eia-international.org\)](https://eia-international.org/)

² [community climate action plan june 2018 final.pdf \(kelowna.ca\)](#)

³ [210408_cap_full_final.pdf \(vernon.ca\)](#)

⁴ [2021 Community Climate Action Plan.pdf \(penticton.ca\)](#)

Kelowna is slated to update their plan in 2023. Currently their 2018 Climate Action Plan states that to maximize GHG emission reductions, renewable energy actions must focus on substituting natural gas with heat pumps or renewable natural gas. Energy efficiency will be a key focus to reduce energy consumption in new and existing buildings. It is expected that Kelowna's updated plan will be more in line with the Penticton and Vernon plans on setting targets and initiatives to reduce natural gas consumption.

Fortis has boldly predicted that 15% of their distributed natural gas will be from renewable sources by 2030 and the majority of the gas they deliver will be renewable by 2050⁵. The City of Kelowna Glenmore Landfill is the sole large generator of 'renewable natural gas' in the Okanagan Valley at this time. Currently the City of Kelowna and the Regional District of Central Okanagan intentionally do not divert food waste from landfills so as to ensure the maximum amount of landfill gas is generated. In 2020 the Glenmore Landfill estimated they captured 66% of the methane gas from their landfill. Approximately 700 tonnes of this gas was sold to Fortis. Using the 20 year calculation method for methane, the 34% of gas not collected is almost 30,000 tonnes of CO₂equivalent. Although this is a crude calculation it does raise concerns about the ability to reduce overall emissions when creating 'renewable natural gas'. Diverting food waste from landfills and composting it naturally (aerobically) would be a better way to reduce emissions as no methane would be produced, so non-capture would not be an issue (in this example, about 30,000 tonnes of CO₂equivalent emissions would be avoided).

First Things First does not support using 'renewable natural gas' in buildings as a means to achieve municipal Climate Action plan targets. The ability of electric heat pumps to replace gas furnaces for heat has been proven to be cost effective and to dramatically reduce GHG emissions.

Biomethane ('renewable natural gas')

'Renewable natural gas' is neither renewable nor natural. It is used once (when it is burned), so is not renewable, and is produced by breaking down biowaste in artificial (anaerobic) settings followed by a refining process, so is not natural. It is more accurately called biomethane.

Energy is required to transport biowaste to and from processing plants, to build processing infrastructure, and to refine biogas into biomethane, all of which increase its carbon footprint. It is not carbon neutral and is only low carbon when used where it is produced, e.g. Toronto municipal garbage trucks use biomethane that is produced on-site at its own landfill.

Furthermore, obtaining biomethane from multiple sources and transporting it through pipelines, as FEI proposes to do, increases the risks of fugitive emissions and methane non-capture.

Biomethane is useful as a replacement for diesel back-up generators, in long-haul transportation and other situations where there are no low carbon alternatives. First Things First Okanagan believes biomethane should be reserved for such situations, not used in buildings where renewable options are already available.

BCUC decision making

⁵ [DOC 62612 B-16-FEI-Response-to-BCOAPO-IR2.pdf \(bcuc.com\)](#)

In September 2021 the Union of BC Municipalities presented Resolution NR27 'Reform of the BC Utilities Commission' to the provincial government:

"Whereas the Province of British Columbia and municipalities share common goals of:

- reducing carbon emissions through electrification of buildings and transportation*
- improving energy affordability and reducing the incidence of poverty, and*
- enhancing local energy resilience and self-sufficiency in municipalities and Indigenous communities;*

And whereas the British Columbia Utilities Commission is currently governed by outdated legislation that limits its ability to guide the transformation of BC's energy system and its ability to direct utilities to realign their activities in line with the objectives stated above:

Therefore be it resolved that the UBCM request the Province of British Columbia to amend and modernize the Utilities Commission Act, expanding the scope of the BCUC's mandate and giving it clear direction to consider environmental, equity, resilience, and reconciliation objectives in its decision-making."

In its response in February 2022, the Ministry of Energy, Mines and Low Carbon Innovation stated that

"..[the BCUC] is required to consider British Columbia's energy objectives outlined in section 2 of the Clean Energy Act, which include objectives related to reducing greenhouse gas emissions, fostering the development of First Nations and rural communities, and encouraging economic development. In some circumstances, it is also required to consider the "public interest" in its decision making, which is a broad concept that can capture a variety of public policy objectives."; and

*"The existing legislative and regulatory framework allows the Province to provide direction to the BCUC to inform the BCUC's decision making. A 2015 Independent Review of the BCUC confirmed that it is the provincial government's prerogative to set provincial energy policy, to define the BCUC's mandate, and to direct the BCUC on specific matters. **For example, under the Clean Energy Act, the Province is empowered to prescribe undertakings for the purpose of reducing greenhouse gas emissions in B.C.**"⁶*

First Things First Okanagan supports UBCM's Resolution NR27 and believes that BCUC assessment criteria should be broadened to include GHG emission reduction objectives set out by BC in its Clean Energy Act and by communities in their Climate Action plans.

Anti-Electrification Consortium

FEI is one of a 15 member consortium whose mission is "to create effective, customizable, marketing materials to fight the electrification/anti-natural gas movement"⁷. This group is striving to obstruct electrification throughout North America⁸ by organizing around major themes⁹ and actions¹⁰. In its recent report, the Intergovernmental Panel on Climate Change has stated unequivocally that we cannot keep global warming below 1.5 Celcius without "a substantial

⁶ [UBCM 2021 Resolutions Response Package - Feb 21, 2022.pdf](#)

⁷ List of Constortium members (1) (eenews.net)

⁸ POLITICO Pro | Article | Leaked docs: Gas industry secretly fights electrification

⁹ Major themes.png (eenews.net)

¹⁰ Call to action.png (eenews.net)

reduction in overall fossil fuel use". "The continued installation of unabated fossil fuel infrastructure will 'lock-in' greenhouse gas emissions," the report states, making it more difficult to reach global climate goals.¹¹ Yet in this time of necessary transition away from fossil fuels, the consortium is purposely impeding electrification. First Things First Okanagan believes the BCUC should give this serious consideration when reviewing FEI's proposals to expand gas infrastructure.

First Things First Okanagan seeks to advance climate action by working in a productive, cooperative and non-partisan manner, and is open to working collaboratively with FEI to promote electrification throughout the Okanagan.

¹¹ Five takeaways from the IPCC's report on limiting dangerous global heating ([climatechangenews.com](https://www.climatechangenews.com))