

MEMORANDUM OF UNDERSTANDING

between

FortisBC

(Including FortisBC Energy Inc. ("FEI"), and
FortisBC Alternative Energy Service Inc. ("FAES"),
collectively known as "FortisBC")

-and-

The City of Vancouver

("the CoV")

WHEREAS the CoV has adopted their Renewable City Strategy with the goal of improving air quality and reducing greenhouse gas (GHG) emissions by at least 80% below 2007 levels before 2050, which is consistent with Provincial and Federal climate and energy objectives;

AND WHEREAS the CoV has created plans, policies and bylaws, and has made investments to support the Renewable City Strategy;

AND WHEREAS these strategies, plans, policies, and bylaws require continued investment to support timely transformation in the areas of energy efficiency, energy conservation, emissions reductions and the development of renewable energy supply;

AND WHEREAS FortisBC has a portfolio of investments, programs and initiatives that support timely transformation in the areas of energy efficiency, energy conservation, emissions reductions and the development of renewable energy supply;

AND WHEREAS FortisBC is prepared to increase its portfolio of investments, programs and initiatives in Vancouver in support of the Parties' mutual objectives in energy efficiency, energy conservation, emissions reductions and the development of renewable energy supply;

AND WHEREAS the CoV and FortisBC are committed to climate action initiatives that support innovation, safety, reliability, and affordability;

AND WHEREAS the CoV and FortisBC can collectively achieve greater progress towards climate action initiatives by working together;

THEREFORE, the CoV and FortisBC ("the Parties") will pursue the following within the non-legally binding framework of this memorandum in accordance with the principles set out in section 9 and Appendix A:

1. Increase access to energy efficiency and conservation investment

To enable greater access to energy efficiency investment through FortisBC's demand side management (DSM) programs, greater flexibility for new building

developers, and increased alignment with federal and provincial objectives and policy:

- a) FortisBC will develop DSM programs to include, where permitted by Provincial DSM Regulation, energy efficiency rebates in alignment with each step of the BC Energy Step Code, by March 31, 2018, subject to BCUC approval. FortisBC will consult with the CoV and other stakeholders in developing its programs.
- b) The CoV will create, subject to Council approval, alternative compliance pathways for all building energy and GHG emissions-related policies and bylaws, as follows:
 - i. Alternative pathways will be based on the BC Energy Step Code performance requirements and will not include a GHG intensity target.
 - ii. Alternative pathways will adopt the step of the BC Energy Step Code that achieves equivalent emissions outcomes to CoV objectives. The CoV may adopt a lower step in order to reach or accelerate the implementation of its objectives.
 - iii. The CoV will maintain prescriptive pathways where they align with the requirements above.
 - iv. Consequential amendments to the current Green Buildings Policy for Rezoning and Vancouver Building Bylaw (if any) as a result of this memorandum will be recommended to Council for approval by March 31, 2018.

2. Increase investment in Low Carbon Energy Systems (LCES)

In order to increase investment in LCES:

- a) The CoV will follow through on its commitments to create a Low Carbon Energy System (LCES) Policy that supports investment and private ownership of LCES. In addition, the City will update existing policies to remove mandated neighbourhood energy system (NEU) connectivity and use to enable third-party thermal energy contracts with the exception of areas served by district energy systems owned by the CoV. Recommendations on the LCES Policy and changes to NEU connection and use requirements will be recommended to Council for acceptance by December 31, 2017.
- b) The CoV and FortisBC will continue to identify and pursue opportunities to reduce barriers for LCES.
- c) FortisBC will pursue LCES investment opportunities within Vancouver.

3. Improve safety and efficiency of gas furnace retrofit installations

In order to collaboratively improve the ease, quality and safety of installing high efficiency gas furnaces:

- a) The CoV will publish a bulletin clarifying venting requirements for high efficiency space heating appliances, including the application of exterior vertical venting, by October 1, 2017.
- b) In consultation with FortisBC, the CoV will host a workshop between city staff, FortisBC, and industry by December 31, 2017 to develop alternatives to the current approach to sidewall venting. The scope of the discussion will include additional flexibility under the current bylaw, industry best practices, and the adoption of an updated bylaw aligned with neighboring jurisdictions.
- c) Updates to the bylaw or bulletin will be submitted for approval to Council by March 31, 2018.
- d) The CoV will maintain a restriction on sidewall venting for high efficiency space heating installations in new construction. Sidewall venting in other gas appliances will remain unrestricted in new and retrofit applications.
- e) FortisBC and the CoV will meet periodically to review opportunities to further mitigate noise, moisture and permitting concerns with furnace sidewall venting applications.
- f) FortisBC and the CoV will implement a program to educate stakeholders, including natural gas contractors that operate in Vancouver, about safe, efficient and neighbourly installation, venting, and maintenance of furnaces and hot water tanks.
- g) FortisBC will continue to require customers to obtain requisite permitting in order to access DSM rebates.

4. Develop a Deep Energy Retrofit Pilot Project

In support of energy efficiency and conservation efforts, the Parties agree to develop a pilot project to demonstrate and enable a deep energy retrofit in a commercial building. The pilot project will strive to:

- Achieve energy savings;
- Achieve emissions reductions;
- Involve other partners and secure other sources of funding; and
- Explore how the pilot could be replicated in the future.

The Parties agree to create a working group, develop a project scope, cost-benefit analysis, cost-sharing arrangement and targeted energy and emission savings. The working group will submit a viable project to their respective principals for approval and implementation.

5. Development of renewable energy supply and usage

In support of GHG reduction initiatives:

- a) The Parties will continue to pursue and attempt to conclude an agreement for the Vancouver Landfill Renewable Natural Gas (RNG) supply project provided they are able to agree on terms that are satisfactory to, and align with the respective policies of, each Party.
- b) The CoV will follow through on its commitment to develop an internal corporate carbon pricing policy that will provide a framework to assess the use of RNG, and other low carbon solutions, in CoV buildings, fleets and neighbourhood energy utilities by December 31, 2017 subject to Council approval. The CoV will consult FortisBC and other stakeholders on the development of the policy.
- c) The Parties will continue to pursue and attempt to conclude a commercial agreement that allows the CoV to increase the use of RNG in CoV buildings, CoV fleets and CoV neighbourhood energy utility provided they are able to agree on terms that are satisfactory to, and align with the respective policies of, each Party.
- d) FortisBC is committed to investing in additional RNG supply projects throughout BC in alignment with Provincial legislation.
- e) The Parties will review and identify other potential RNG supply and usage projects in Vancouver.
- f) The CoV and FortisBC will work cooperatively in the identification, and development of future RNG supply and usage projects with various governmental bodies.
- g) FortisBC and the CoV will develop and implement a workshop for CoV staff on emerging RNG innovations and policy best practices by December 31, 2017. The scope of the workshop could include other gas grid innovations such as hydrogen.

6. Improving local air quality and reducing GHG emissions in transportation

In order to improve local air quality, promote emissions reductions, and promote the adoption of lower carbon energy infrastructure in the transportation sector:

- a) FortisBC will assist the CoV in developing its business case for optimizing the use of its compressed natural gas station by October 31, 2017.
- b) FortisBC is committed to pursuing the use of natural gas for transportation (NGT) in medium and heavy duty, rail and marine applications in alignment with Provincial legislation.
- c) The CoV will support FortisBC in the ongoing development and deployment of NGT with other governmental bodies where the deployment reduces GHG

and local air emissions relative to currently viable alternatives and where the deployment represents a reasonable step towards climate objectives.

- d) FortisBC will involve the CoV in existing working groups to assess and support the opportunity to reduce emissions through the use of natural gas for yard tractors, drayage trucks and marine bunkering at the Port of Vancouver and in Vancouver by October 31, 2017.
- e) FortisBC and the CoV will develop and implement a workshop for CoV staff on emerging NGT innovations, policy best practices and identifying fleet opportunities at the CoV by December 31, 2017 and may include annual updates as necessary.

7. Ongoing collaboration

In support of this memorandum and in future collaboration:

- a) The relationship principles, management structure, and key contacts relating to this memorandum are contained in section 9 and Appendix A.
- b) FortisBC commits, under the FortisBC Climate Action Partnership Pilot Project, to fund (or provide, subject to mutual agreement) a two-year, temporary, full time CoV position in order to enable the implementation of initiatives described in this memorandum. The Parties will develop and agree on the work plan for this position.

8. Public Communication

The Parties value transparency and accountability. Accordingly, each Party intends to communicate the benefits of this memorandum publicly and will coordinate all communications in respect of the activities contemplated by this memorandum in accordance with the protocol as set out below:

- a) The Parties will identify opportunities to jointly promote this memorandum and the projects flowing from it.
- b) The Parties will consult with each other in order to align messaging regarding this memorandum.
- c) Except as required by a regulator or by law, neither Party will make public statements about initiatives arising from this memorandum without obtaining express permission of the other party prior to doing so, which will not be unreasonably withheld.
- d) Communications activities may include, without limitation, major public events or announcements, or communications products such as speeches, press releases, websites, social and digital media, advertising, promotional material or signage.

- e) The Parties agree that joint communications activities marking the signing of this memorandum and other key milestones will involve both Parties in their planning and execution.
- f) In addition to joint communications activities, the Parties may include messaging in their own communications products and activities.
- g) The Parties will make reasonable efforts regarding the timing of public events to allow for the Parties to plan their involvement.

9. Term, dispute resolution, principles and other conditions

- a) This memorandum shall have an initial term of 5 years from the date of its signing; however, it may be revised by written agreement as needed.
- b) Each Party recognizes, and is respectful of the fact that, FortisBC's Board of Directors where approval is required and the CoV's City Council have ultimate discretion over any initiative outlined in this memorandum. The CoV also recognizes that some initiatives may be subject to regulatory approval. The Parties recognize that the exercise of discretion above will be guided by, amongst other things, the need to be accountable to their stakeholders, constituents and customers, as the case may be.
- c) Should a Party fail to receive approval from its Board of Directors, the regulator or Council, where required, on any items contained in this memorandum, the Parties will meet to discuss alternatives and agree on a revised proposal for submission or alternative resolution for implementation.
- d) Specific dates set out in this memorandum are intended as target dates which the Parties will work to achieving, on a commercially reasonable efforts basis.
- e) The Parties will design and conduct the activities contemplated by this memorandum in accordance with applicable laws.
- f) Should a dispute arise concerning the application of this memorandum, the issue will be resolved through escalation to the executive sponsors.
- g) When pursuing an initiative together, the Parties recognize they may need to negotiate and enter into separate legally binding agreements to document the specific terms and conditions of such initiative.
- h) With the exception of the terms directly below, this memorandum represents a non-legally binding framework for enhanced collaboration between FortisBC and the CoV.
- i) This memorandum is not an exclusive arrangement and does not restrict either Party from pursuing its mandates, either on its own, or in collaboration with any other party.

- j) Each Party is to bear its own costs in relation to this memorandum unless otherwise set out in a separate written agreement.
- k) This memorandum does not grant any right to either Party to use each other's logos, trademarks or other intellectual property. Any such use will only be permitted through a legally binding written agreement between the Parties.

SIGNED this 22 day of September, 2017

City of Vancouver


Sadhu Johnston, City Manager

FortisBC Energy Inc.


Doug Stout, VP, Market Development and External Relations

FortisBC Alternative Energy Services Inc.


Doug Slater, General Manager