

October 5th, 2016

Sean Pander,  
Green Building Manager,  
City of Vancouver,  
453 West 12<sup>th</sup> Avenue,  
Vancouver, BC V5Y 1V4

**RE: Proposed Green Building Policy for Rezoning**

Dear Mr. Pander,

FortisBC appreciates the opportunity to review and comment on the proposed Green Building Policy for Rezoning to be implemented in 2017. As we understand it the proposed changes are in order to enable the city to achieve its Renewable City Strategy. While we have provided some general comments on this specific proposal, FortisBC is still concerned that these proposed changes are being put through in a short timeframe and are based upon the overarching Renewable City Strategy and Net Zero Buildings Plan of which FortisBC has already voiced its concern. FortisBC is therefore not able to support the changes as proposed.

The overarching Renewable City Strategy and the Net Zero Buildings Plan sets out an ambitious plan and as such the matters under consideration have broad-reaching consequences. Moving forward to quickly update components of the building code does not allay the concerns that FortisBC has in regards to the Renewable City Strategy and Net Zero Buildings Plan. Furthermore, an achievement of such objectives will present challenges, and therefore would benefit from a more thorough process of review, consultation and evaluation by all affected parties, to ensure a more thoughtful understanding of the issues, challenges and benefits of achieving the strategy contemplated by the document.

While FortisBC is encouraged that the city is taking steps toward a more thorough consultation, it appears that many of the consultations are segmented and it is difficult to understand how all the components fit together. Each component of the plan appears to have a consultation with each component of the plan showing costs and benefits. However it is not possible to fully understand how each of these components fit together and what the total cost is to consumers. It also appears that many groups are segmented for the purpose of consultation, with some individuals/organizations being spoken to separately. It is therefore not possible to know their positions or how the plan may change based upon their input.

FortisBC continues to believe that there is value in ensuring greater representation from actual energy consumers, that energy consumers should continue to have the ability and right to choose the form of energy that works best for them, and that these considerations would be beneficial to the forming the overarching Renewable City Strategy document, the Net Zero Buildings Plan along with this specific proposal. The costs and benefits of actions contemplated by the strategy will ultimately be for the

account of consumers, and therefore greater consumer representation in the consultation process is warranted.

In this response we have just scratched the surface in terms of an assessment of the proposed Green Building Policy for Rezoning provided in stakeholder consultation on August 25, 2016.

While we support market transformation to higher efficiency natural gas equipment and improved building envelope to encourage energy conservation, such a transition should happen in manner and timeline that does not adversely impact consumer choice and affordability. In our analysis both of these principles have not been upheld and therefore FortisBC cannot support the proposal.

FortisBC **does not support** the Low carbon NEU mandatory connection requirements as outlined on slide 7. In fact, the City approach is contrary to the most recent BCUC decision which denied Creative Energy mandatory connection rights to developments in NEFC and Chinatown areas. In that decision, the BCUC upheld the public interest in acknowledging that *approval of "these (mandatory connection) provisions (would) effectively grant Creative Energy a monopoly on the provision of heat and hot water in NEFC and for new buildings and significant renovations in Chinatown".<sup>1</sup>*

The commission goes on to clarify its position:

*The Commission is deliberate in its choices to typically not grant a franchise that has inherent rights, privileges or concessions that:*

- *Provide for exclusivity of supply; and/or*
- *Require mandatory connection; and/or*
- *Require mandatory end use; and/or*
- *Grant exclusive provision of end use.<sup>2</sup>*

*"The Panel reaffirms this fundamental principle – to regulate only where required and to not impede competitive markets, unless there is an inability of competitive forces to operate with greater efficiency and effectiveness than a sole service provider. Accordingly, to grant a franchise that confers the greatest degree of monopolistic powers would require a compelling reason to demonstrate that it is in the public interest to do so."<sup>3</sup>*

Furthermore, the cost savings that consumers can achieve by way of in-building systems versus a new DES like the city is contemplating is significant:

- With consumers being required to pay 60% more for service with a mandatory connection DES than they would pay for in building boilers fired by natural gas (including carbon tax);
- consumers being required to pay 34% more for service based on the low carbon conversion being contemplated by the city than they would pay for 75% RNG, and with greater GHG emissions than 75% RNG;

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<sup>1</sup> Creative Energy Vancouver Platforms Inc. ~ Application for Reconsideration and Variance of Order G-88-16 ~ Final Order with Reasons, Page 19,

<sup>2</sup> Ibid, Page 21

<sup>3</sup> Ibid, Page 22

FortisBC cannot support the aggressive targets for rezoning as outlined in the slide deck. The performance path proposal for high rise MURBS shows a 29% reduction in EUI from 170 to 120 kWh/m<sup>2</sup>/yr but the greenhouse gas intensity ("GHGI") target shows a reduction of 64% from 16.5 kgCO<sub>2</sub>/m<sup>2</sup>/yr to a proposed 6 kgCO<sub>2</sub>/m<sup>2</sup>/yr. The low rise MURB rezoning proposal shows a 52% reduction in GHG. Such metrics cannot reasonably be achieved through improvement in building envelope performance and increases in equipment efficiency alone. The change will likely require developers to switch to electricity for space and domestic water heating, as the only option for meeting the requirements. This appears to be the city's underlying objective judging by the proposed mechanical requirement of "Electric-in-suite: for high rise MURB. FortisBC views the proposed Green Building Policy for Rezoning's aforementioned change as fuel switching, eliminating resident's fuel choice for high rise MURBs and as such FortisBC BC is unable to support such a change.

Furthermore residents will carry the financial burden of paying higher utility costs for electricity which for high rise MURB could be in the range of \$250 per year for each suite and over \$35,000 per year for common area electricity. Residents in low rise MURBS are estimated to see an annual increase of \$385 per year or 31% increase in utility bills. FortisBC does not support the performance path for offices (non-residential buildings) retail and hotel space, which shows a 60% reduction in GHGs. Such metrics cannot conceivably be achieved through improvement in building envelope performance and increases in equipment efficiency alone. The change will require developers to switch to electricity as the sole source of energy, for space heating and domestic hot water. This will provide undue hardship on businesses in the City as it is estimated the annual utility bills would increase by 11% through the switch from natural gas to electricity for the sole purpose of meeting the GHGI cap.

On slide 9 the City references the Passive House standard. We caution the adoption of a European standard that has not been tried and tested in B.C. Furthermore, we do not recommend the city adopt a standard that is considered a rigorous but VOLUNTARY standard for energy efficiency in buildings even in Germany which has the highest number of passive structures.

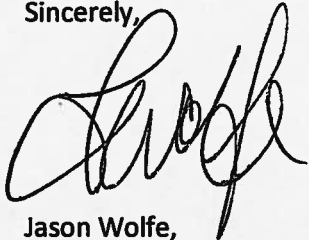
FortisBC does not support the proposal of eliminating on gas heating in suites. That is the requirement as outlined on slide 14 that mechanical equipment in high rise MURBS should move from hydronic to electric in-suite. FortisBC notes that it is required to serve customers if requested and this proposal is contrary to that requirement. Furthermore, the prescriptive requirements for envelope performance from RSI-4.5 effective to RSI-9.2 effective is a substantial change from current building practice. To put this into perspective RSI-9.2 is equivalent to R-50 (imperial units) which is a higher insulation requirement than Net Zero Home Energy requirements. Note, that this is requirement put in place for high rise MURB which means a drastic departure from current building practice and probably not well understood in builder/ developer community. This may potentially pose a risk on what was experienced in the "leaky condo" situation. Again we reiterate that this proposal requires a thorough consultation process.

Individual metering can help consumers understand their energy consumption and therefore better manage usage. FEI believes that individual metering can be valuable in multi-family dwellings as well as in certain commercial developments. However, depending upon the circumstances, individual metering could increase costs to consumers. Further, installation of sub-metering equipment may only be used for informational purposes (but not permitted for determining a bill or cost) in many cases. FortisBC believes that customers should have the option to choose their preferred metering solutions rather than a selection being forced upon them through regulation.

FortisBC is supportive of working with the CoV on desired outcomes that will not have a detrimental impact on CoV resident's energy choice, or place undue financial hardship to residents. FortisBC is interested in participating in further stakeholder consultation in regards to future VBBL changes as this is a critical matter. We also encourage the City of Vancouver to engage in wider community consultation of its proposed changes with residents and businesses before rushing into decisions that are likely to have broad-reaching implications across the city.

Please do not hesitate to contact the undersigned at 604-592-7516 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jason Wolfe', written in a cursive style.

Jason Wolfe,  
Director Energy Solutions  
FortisBC Energy Inc.