MOTION

UB1. Increasing the Climate-Smart Supply of Renewable Energy in Vancouver

At the Council meeting on January 17, 2023, Council referred the following motion to the Standing Committee on Policy and Strategic Priorities meeting on January 18, 2023, in order to hear from speakers, followed by debate and decision. Due to audio issues, Council referred this motion to the Council meeting on January 31, 2023, as the first item of Unfinished Business.

Moved by: Councillor Carr

WHEREAS

1. Vancouver, like cities and countries around the world, is facing an Increasing numbers of record-breaking extreme weather events, including heat waves, droughts, floods and storms. Extreme weather is evidence of Earth's rapidly changing climate, which is detailed by the Intergovernmental Panel on Climate Change (IPCC) (see https://www.ipcc.ch/report/sixth-assessment-report-working-group-3/ and https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryForPolicymakers.pdf);

2. Accelerating climate change is putting people, infrastructure, economies and natural ecosystems at increasing risk as evidenced by the death of 99 Vancouverites in the 2021 "heat dome", storm damage to Vancouver's sea wall and Kitsilano pool, disruptions to supply chains, and loss of trees; (see https://vancouversun.com/news/local-news/stanley-parks-trees-pushed-to-the-brink-by-drought-moths ;

3. Climate change is also increasing the burden of costs for municipal governments. According to the Federation of Canadian Municipalities (FCM), local governments own and are responsible for about 60% of public infrastructure. A 2020 report by the FCM and the Insurance Bureau of Canada, noted that climate adaptation is estimated to cost municipalities $5. 3 billion annually. (see https://fcm.ca/en/news-media/news-release/climate-adaptation-estimated-cost-municipalities-5-billion-annually#:~:text=According%20to%20the%20report's%20findings,to%200.26%25%20of%20Canada's%20GDP). In a report released November 30, 2022, the total economic costs of the extreme weather events that BC experienced in 2021 are between $10.6 and $17.1 billion (see: A Climate Reckoning | Canadian Centre for Policy Alternatives ;

4. Scientists are imploring every political jurisdiction to ramp up its efforts to reduce its GHGs, rapidly reduce the use of fossil fuels and increase renewable energy (see: UN climate report: It's 'now or never' to limit global warming to 1.5 degrees https://news.un.org/en/story/2022/04/1115452 and https://www.un.org/en/climatechange/powering-safer-future and https://news.un.org/en/story/2022/05/1118452 ;

5. Although the City of Vancouver is committed to reducing by 50% its GHG emissions over 2007 levels by 2030 and achieving net zero emissions by 2050 --commitments that are in line with globally-agreed-to targets

negotiated by the UN Climate Change Conference of the Parties -- we have only reduced our emissions by 15 percent to date (see: https://vancouver.ca/files/cov/2021-ceap-annual-report.pdf);

6. In Vancouver, 57 percent of our emissions come from burning gas in buildings and 37 percent from transportation. The uptake in Vancouver is high for the purchase of Zero Emission Vehicles (ZEVs): 12% of 2020-2021 vehicles sold. By 2030 all new construction will be net zero emission. The city's Climate Emergency Action Plan also will require all current buildings to be retrofit to net zero emission by 2050. Vancouver is able to be a leader in climate-smart buildings due to our own building code as well as our investment in the training of contractors and tradespeople through the Vancouver-initiated Zero Emissions Building Exchange (ZEBX) and Metro Vancouver Zero Emissions Innovation Center. In addition, the city accelerated uptake in installation of heat pumps by offering matching grants to the provincial rebates for heat pumps;

7. Both EVs and building retrofits, including the installation of heat pumps, EV charging and electric hot water heating, are creating increased demand for electricity supply. However, B.C. Hydro's Five-Year Electrification Plan, released by the government in September of 2021, estimates that it has sufficient supply of clean electricity, including from Site C dam, only to 2030;

8. Motions submitted by the City of Vancouver for consideration by the Union of BC Municipalities (UBCM) related to pursuing distributed renewable energy were passed by consensus or near-consensus at UBCM's September 2022 Convention, specifically:

    a. That the Government of B.C. pursue as quickly as possible adding financial incentives, including increased feed-in-tariffs, for home and building owners to install solar photovoltaic panels and solar-hot-water systems, and modify the B.C. Building Code, and include in a future BC. Existing Buildings Alterations Code specifications including design and placement standards, and load-bearing requirements for solar (photovoltaic) panels and solar hot water systems.

    b. That the Government of British Columbia support and provide funding for training programs for workers deep energy retrofits and construction of deeply affordable climate-smart housing, including installing solar panels, solar hot water systems and heat pumps;

9. Recognizing the need to quickly shift to renewable energy, other jurisdictions are requiring solar energy production. For example, starting in 2023 Berlin is requiring solar panel (PV) installations for all new buildings and major renovations. Copenhagen, due to its district energy system and green electricity grid which is largely powered by wind energy, is aiming to be net carbon neutral by 2025. Also, 802 cities in Europe have re-purchased private utility companies to green their grids and keep

consumer costs low. And in November, 2022, France announced that it will require all parking lots with 80 or more spaces to be covered by solar panels. See: https://www.cnbc.com/2022/12/03/parking-lots-becoming-as-important-as-cars-in-climate-change-efforts.html# ;

10. If installed properly, rooftop solar applications are synergistic with greens roofs, which are currently required in Vancouver on large commercial and institutional buildings but may in future be required on other buildings types as part of Vancouver's Rain City Strategy and Climate Emergency Action Plan. See Photo Voltaic on Green Roofs – the Scandinavian Way (livingarchitecturemonitor.com);

11. Solar photovoltaic systems would not only help meet the increasing demand for renewable electricity but, together with solar hot water systems, would greatly reduce energy costs for families and businesses.

THEREFORE BE IT RESOLVED THAT Vancouver City Council direct staff to:

a. Consult with appropriate agencies including BC Hydro, renewable energy experts, and relevant contractor and trades worker associations, including Metro Vancouver Zero Emissions Innovation Centre (ZEIC), regarding how best to expedite increasing the supply of renewable energy in Vancouver;

b. Consult with the appropriate B.C. government ministries regarding their timelines and processes for implementing the renewable energy-related motions tabled by the City of Vancouver and passed unanimously or near-unanimously at the 2022 UBCM convention, including provincial requirements for installation of renewable energy systems, training of installers, and consumer rebates for solar PVC and solar hot water systems;

c. Evaluate the potential of different types of renewable energy, including solar photovoltaic systems, solar hot water systems, wind and renewable district energy systems, to reduce Vancouver city's GHGs, increase reliability of energy supply and reduce consumers' energy costs;

d. Determine changes that would be needed in the Vancouver Building By-law and other by-laws, policies and codes to enable expanding renewable energy production in Vancouver; and

e. Report back to Council by Q4 2023 with results of the above work and a plan that includes options, costs and benefits, and timelines for the City of Vancouver to aggressively pursue increasing production of renewable energy within city limits.

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