

**RTS13199 Climate Emergency Action Plan
Council Q&A – Via Email – Prior to Nov 3 2020**

1. Page 1 of appendix F says this is a benefit of “introducing market-based residential permit parking regulations with surcharges on more-polluting vehicles”: “3. To complement the elimination of minimum parking requirements in new developments because the comprehensive curbside management will provide tools to mitigate the risk of residents parking on the street rather than in their building.” Can someone explain this in plain language? If buildings don’t have parking spaces, don’t residents have to park on the street??

A1: We want to avoid a situation in which developers build new buildings without parking because they are assuming there will be free on-street parking for residents. This would result in too much demand for on-street parking and we wouldn’t be well positioned to manage that demand.

With the introduction of market-based residential permit parking regulations, we expect that most new buildings will continue to include some parking and that residents coming to buildings with zero or low parking provisions will better understand the parking situation.

2. Page 1 of appendix F also says: “To address concerns of equity, fairness and affordability, the policy should not adversely impact people who are not in a position to replace their current vehicle, or people for whom the market does not have a suitable ZEV option.” What actual measures could be taken to ensure that lower income people aren’t impacted adversely? Need some examples.

*A2: The surcharge would only apply to **new, higher-end gas or diesel** powered vehicles, where there is a comparable electric vehicle option. It would not apply to existing vehicles, or lower priced vehicles. The definition of higher end will be determined in the next phase of work.*

3. Re recommendation H which says: H. THAT Council direct staff to bring forward recommendations in 2021 to apply a residential parking permit surcharge for vehicle model years 2022 and later with the surcharge price accounting for the vehicle’s carbon intensity and cost in accordance with Appendix F. This recommendation wouldn’t apply to cars older than 2022, right? So presumably low income people won’t be buying new cars and won’t get hit by this??

A3: Correct, see answer above.

4. Re: page 6 of Appendix J about equity in the ZEB-R strategy. There is nothing about preventing rent increases. Can this be added as a goal especially in older buildings with lower rents and lower income renters??

A4: Rental and non-market housing will not be required to retrofit their buildings until staff can determine a reasonable way to prevent renovations and manage rent increases. The Climate Emergency Action Plan does include support tools and incentives to help rental and

non-market building reduce their carbon pollution. The owners and managers of rental and non-market housing will also benefit from streamlined regulations when they decide to make improvements in their buildings.

5. Re: Equity Working Group. Can we expand the Equity Working Group to include the groups that are identified as missing and add in representatives of renters?

A5: Yes, if Council is supportive of continuing the Climate and Equity Working Group (recommendation BB), staff will be looking to expand the membership to include perspectives that were missing from its work in the first half of 2020.

6. Appendix J p. 24 says rental and non market housing won't be subject to carbon pollution limits? Hmmmm. It seems like it would be good if they could be subject to them if there were a program to pay for the upgrading. Can we lobby for this?

A6: Rental and non-market housing will not be required to retrofit their buildings until staff can determine a reasonable way to prevent renovictions and manage rent increases. However, incentives and subsidized renovations will be made available for rental and non-market housing. Higher incentive levels and funding support for non-market housing is currently available through CleanBC/BC Housing and City-supported programs. The City has partnered with the BC government and Landlord BC to pay for the full incremental cost of retrofits in rental apartment buildings through a pilot program that will be launching in 2021. City staff are working with the BC government, BC Housing and the BC Non-Profit Housing Association to increase the funding available for heat pump retrofits in non-market housing buildings. These programs will have no cost-implications for building residents.

7. Appendix J p. 43 about the city partnering with Landlord BC on apartment retrofits. Can we ensure that tenants don't have rent increases because of this or that, at least, they are in accordance with section 23 of the RTB regulations which allow landlords to apply for rent increases above the annual allowable limit under certain circumstances??

A7:

A priority of the pilot is learning how to undertake important capital and energy retrofits while maintaining tenancies and affordability for existing tenants. Agreements with pilot participants will include conditions requiring that participants not use the improvements and/or upgrades incentivized under this Program as a basis for tenant evictions and will not be the basis for future rent increases for existing tenants beyond what is allowable under the Residential Tenancy Act

This approach is consistent with agreements from similar programs offering assistance to rental owners, such as the FORTIS Rental Apartment Efficiency Program.

Compliance with these conditions will be monitored and tracked during and following the pilot, and key learnings will be included in ongoing reporting.

As well, rental and non-market housing will not be required to retrofit their buildings until staff can determine a reasonable way to prevent renovictions.

8. Appendix J. p.50 about the PACE program. Can we get something in this program that will prevent tenants from being saddled with big rent increases?

A8: Regardless of any work support by the City of Vancouver or required due to City regulation, landlords must comply with the Residential Tenancy Act (RTA) regarding allowable rent increases. A primary objective of a future PACE or other financing programs will be to offer lower interest rates, longer borrowing terms and off-book financing to reduce the cost burden of projects. These financing tools will decrease the pressure for building owners to increase rents. In developing the financing programs, the City will work to ensure compliance with RTA requirements around rent increases.

9. Re: congestion pricing: Can we get specific examples of how lower income people could be protected from a huge financial impact? Would some of the congestion pricing revenue be used to improve transit service?

A9: Yes, some revenue from Transport Pricing would be used to improve transit service. People with lower incomes will benefit from additional transit service and other improvements to walking and cycling. This will give people who rely on transit more choices to get into the Metro Core. Other options to minimize impacts include possible discounts, tax credits or rebates. This would all be looked at in the first phases of developing the strategy.

10. What happens to people who live in the core area? How much do they pay? What happens if you have to drive through the core for work? What about taxi's and Ubers? What about trades people who need their vehicle cause it holds their equipment? What about families going to Stanley Park? Does the congestion pricing apply only at certain hours?

A10: These are all scenarios that will be considered through the development of the strategy. Part of this work will include learning from other cities that use transport pricing, where people living in the metro core area are typically priced differently or have a lower fee applied. The specific price and boundary for our Vancouver context would be determined in the first phase of work.

11. What about the business folks complaint that we need a regional focus on this, not a city only one?

A11: There is currently no example in the world of where a transport pricing strategy has been applied initially at the regional level. All successful examples have started with a city centre approach at a similar scale as our Metro Core. We will work with Regional partners to see how a Vancouver pricing can be a testbed to be expanded to the Region over time.

12. Recommendation D – would this apply to all vehicles or would it exclude EVs?

A12: The main intention is to reduce vehicle use overall and shift to active transportation and transit. All types of vehicles use street space and contribute to congestion. It will likely apply to all vehicles, but this will be determined through the first phase of work.

13. Recommendation FF – would the next environmental plan be building off of the Greenest City 2020 Action Plan?

A13: Yes and No. While it will likely have some similar themes and build on Vancouver's experience over the last 10 years, the next environmental plan will be framed under the Vancouver Plan and may have new or different priorities than GCAP 2020. Council has also already established some post-2020 environmental objectives (e.g. Climate Emergency, Rewilding, and Zero Waste 2040) that will be incorporated into the next environmental plan.

14. Page 36 – Carbon Pollution Surcharge – what kind of charge are we talking about in terms of real dollars per vehicle? (report indicates it will be 'significant' enough to influence purchasing decisions – are we talking hundreds of dollars, thousands of dollars?)

A14: This will be determined through the first phase of work and brought back to council for consideration in 2021. The base permit fees will be based on location and demand so may be very low-cost or zero dollars in some neighbourhoods.

15. Page 36 – how will this work for residents or families who purchase newer second-hand vehicles to meet their needs?

A15: This will not apply to those residents. Only vehicles with a model year of 2022 and newer might have pay a surcharge.

16. Page 37 – are we in fact talking about two new fee programs – citywide parking permit and additionally a surcharge on newer gas/diesel vehicles?

A16: This is the same program, so only one new fee, but with different rates. Just like a visitor parking tag may have a different cost than a regular parking permit, there will be different rates for different locations and for different vehicle types. For example, a 2023 gas/diesel Mercedes SUV will have a higher parking permit fee than a 2018 minivan, but they are each only paying one permit fee. The actual fees are to be determined after more engagement and details will be brought back to council for consideration in 2021.

17. Page 37 – are EVs excluded from the proposed residential parking permit program?

A17: No. All vehicles will require a permit and pay an appropriate fee. However, there will be a higher permit fee for new higher-end polluting vehicles where options to purchase a zero emission vehicle are more available.

18. Page 45 – carbon pollution limits for buildings – would this apply for all existing and new homes/buildings?

*A18: Carbon pollution limits already apply to most **new** buildings and this will continue. For **existing** buildings, the initial 2025 carbon pollution limits will be set to impact the worst-performing 10% of large commercial office and retail buildings and detached homes - and will be able to be met with relatively simple, low-cost, high energy-savings measures. Carbon pollution limits for other building types will be introduced later following consultation and addition analysis.*

Existing purpose build rentals and existing non-market housing will not be subject to carbon pollution limits until staff can determine a way to ensure rent increases and renoviction risks are not exacerbated.

19. Page 45 – would property/building owners be expected to retrofit all buildings by 2025? What would enforcement look like? What are the potential implications for rental buildings in terms of rent increases?

A19: No. Only the very worst polluting buildings combined with those owners most able to afford retrofits are expected to have to make changes to meet carbon limits by 2025. This is likely less than 10% of the buildings that will be initially covered by the regulation, which is large commercial office, retail and detached homes. There will be a variety of means available for owners to meet those limit: not only retrofits but operational improvements and/or the purchase of renewable gas. This will allow the market to bring down costs as more stringent carbon limits are introduced between 2030 and 2050, which will also give owners and managers time to plan for the changes that make sense for their building. Enforcement will be determined following additional consultation and analysis, but may be in the form of a non-compliance fee that could be given back to building owners to support retrofits.

20. Appendix A page 8 – would staff please expand on the capital necessary for road pricing (reference to procurement and construction)? Also, what are the administrative requirements of such a program (e.g #FTE, operational costs)?

A20: The \$250M cost in the report is based on costs from London and Oslo, for the same scale of implementation. It's meant to be a conservative estimate as we expect new technologies would enable us to deliver our transport pricing for a lower total cost.

Costs for procurement, construction and administration will be determined through the first phase of work. These costs will be part of the information brought back to council prior to 2025 as the program is developed.

21. Appendix F – page 2 – what other jurisdictions (other than Sydney and Montreal) have put in place a city-wide market based parking permit program?

A21: Residential Permit Parking programs are common in many major cities across North America and the world; however, their implementation varies from city to city. In Toronto, for example, about half the city has residential parking permits with variable pricing depending on a resident's circumstances. Paris, France has a city-wide system in place where residents are allowed to purchase a parking permit at a preferential rate and all other vehicles must pay the full rate for parking.

22. Appendix F – page 3 – what does a 'low-cost permit parking system' in phase 1 look like in real dollars/per household or resident?

A22: This is to be determined after more engagement and details will be brought back to council for consideration in 2021. However, base permit fees will be based on location and demand so may be very low or zero dollars in some neighbourhoods.

23. General question – using an equity lens – was any consideration given to working families with two working parents who have to take their children to multiple daycare and school locations, while also needing to travel to work (sometimes not within city boundaries)?

A23: Equity and affordability was considered for all of the policies in this report and the Plan is designed to avoid burdening disproportionately impacted communities and focus regulatory and pricing actions on those most able to afford them. While some people may need to pay more now, the actions in the Plan are intended to reduce costs over the life of the plan both for individuals and society. The details of those costs (e.g. transport pricing and parking permit fees) will be subject to further analysis and engagement and then brought back to Council for consideration. Not moving forward with this plan now will be costlier both financially and socially for Vancouver and the region.

24. Putting in place parking restrictions and mobility pricing will just make it much more costly for tradespersons to do simple repair jobs and increase the cost of living for everyone in Vancouver. Unless you expect these folks to somehow transport all their tools and equipment on public transit.

A24: The detailed design for both parking permit fees and Transport Pricing intend to account for income/wealth inequities. Specifically, for tradespeople, we would do further analysis on implementation scenarios and that will include more detailed analysis on the implications for tradespeople and other commercial trips/vehicles.

We know that Transport pricing in other cities has made trips more reliable. This allows businesses to be able to more accurately predict how long it takes for trips and reduce time spent in traffic, which can lead to savings and/or facilitate more jobs in a given time.

Additional Q&A

1. Would people who live within the zone where you have to pay extra when you drive through it have to pay the extra when they drive?

This will be determined through the development of the strategy. Part of this work will include learning from other cities. In other cities that use transport pricing, people living in the metro core area are typically priced differently or have no fee applied. The specific price and boundary would be determined in the first phase of work.

2. The section on equity doesn't say anything about protecting tenants from rent increases caused by climate renos. Can this be inserted into our equity and PACE programs?

Rental and non-marking housing will be exempt from the requirement to do energy retrofits. We're proposing these exemptions because we want to wait until costs come down, which they will over time, and ensure that we have mechanisms to protect residents from renovations and rent increases. We are doing pilots with BC Housing to test those ideas, and the financial strategy includes resources to provide support for rental and non-market housing.

3. Recommendation H wouldn't apply to older cars??

Correct, the goal is to incent people who are buying new cars to buy electric cars so the idea is that the surcharge only apply to new, more expensive cars where the purchaser has the means to choose an electric vehicle.

4. To what extent are the folks who are working on biking, walking and rolling considering that folks with disabilities and seniors sometimes can't do these things and we need to preserve mobility for them? How can we do this?

Accessibility for all will continue to be key priority as we move ahead, particularly as the population ages. The more people who are walking, biking, and taking transit, the more space there is for the people who don't have an option but to drive. The improvements to transit that we will be planning for will be key to serving the people who can't move around through active transportation. For those who need to drive for accessibility reasons we will make it easier to choose zero emission vehicles and we'll ensure people with mobility issues are not compromised.

5. Can we get some examples of how lower income drivers could be protected from transport pricing?

See answer earlier on

Our current transportation system is already inequitably priced – as a society we subsidize driving more than any other mode, which favours the more wealthy, and also doesn't support GHG reduction, best use of space, and public health, etc. In terms of lower-income people who need to drive, we have various programs which do means testing to determine who pays less - this will be considered as we start to study transport pricing. For example, parking permits in the West End are means tested, so that there is a lower rate for low-income residents.

6. What will carbon pollution limits mean for building occupants?
 - *More comfortable buildings year-round due to fewer drafts and heat pumps which provide efficient heating in winter and cooling in the summer.*
 - *Better indoor air quality, which is healthier especially during smoke events.*
 - *More air conditioning (heat pumps) which is becoming necessary in some buildings with a warming climate.*
 - *Avoid displacement and mitigate negative outcomes. Actions were identified that mitigate negative and inequitable impacts, including initial retrofit and ongoing energy costs, disruption caused by retrofitting buildings and avoiding loss of housing or business tenure/renoviction*

7. What will carbon pollution limits mean for building owners?
 - *Owners will need to understand how natural gas is used in their building and plan to reduce these emissions as part of other needed or planned building improvements or equipment replacements.*
 - *Flexible options, including switching to high efficiency heat pumps, choosing renewable natural gas, and deferring capital investments until they make sense.*
 - *Support from the City and its partners: decision-support tools, equipment incentives, funding for demonstration projects and financing.*
 - *Ensure everyone does their fair share. The carbon pollution limits will set higher expectations through regulation for those with resources and opportunities, and will set lower expectations for those lacking resources or facing exceptional barriers.*
 - *Prioritize support for those with the highest needs. We will prioritize financial support and capacity-building is provided to those who most need it.*
 - *From now to the end of this year, the BC government has doubled its incentives for heat pumps so when coupled with top-ups for Vancouver residents an owner can get up to \$14,000 in rebates. For details go to: betterhomesbc.ca*
 - *After more engagement in 2021, we are proposing carbon limits beginning in 2025 for the largest commercial buildings and detached houses. Building owners and managers will be supported in meeting the limits with information, tools, and incentives.*

8. What will be the impact of carbon pollution limits on heritage homes and buildings?
 - *The focus of Big Move 4 and the Zero Emission Building Retrofit Strategy are on making existing buildings more resilient, comfortable and future proof.*

- *Carbon pollution limits enable a high degree of flexibility for home owners in the retrofits that they chose to undertake.*
 - *Following Council direction, staff will conduct additional research and engagement to develop the carbon pollution limits as per the report recommendation, they will look at creating a specific exemption or deferral option for Heritage designated buildings should there not be a viable retrofit pathway.*
9. Why are you forcing people to make changes to existing building as requirements? Why aren't they optional/voluntary?
- *Many building owners and managers have been making these changes voluntarily for years. However with the urgency of climate change, voluntary action is not fast enough to hit the targets scientist demand to avoid catastrophic impacts of climate change.*
 - *For this reason, we need to send a clear signal to owners and industry through setting limits for carbon pollution from buildings.*
 - *The longer we wait, the more building owners and managers will invest in replacement equipment that would exceed the carbon pollution limits down the road. It is important to establish these limits right away to allow people to make decisions that make sense at time of equipment replacement.*
 - *We, as a society, have a responsibility to stop creating dangerous carbon pollutant created by fossil fuels, especially when there are alternatives. Setting these changes as requirements ensure we get zero emissions space and hot water heating, and it allows industry to invest in training to design and install zero-emission systems and helps protect society from the impacts of climate change.*
10. What makes a heating and hot water system have zero emissions?
- *A heating and hot water system that does not use fossil fuels is zero emissions. One example is a heat pump or electric hot water tank. Another example would be a boiler running on 100 per cent renewable gas. Electricity in BC is mandated to be a minimum of 93 per cent hydroelectric, or nearly zero emissions. By switching space heating and hot water equipment from natural gas to electricity, we're transitioning to zero emissions.*
11. What is an electric heat pump?
- *An electric heat pump is a device that transfers heat from a colder area to a hotter area by using a compressor to concentrate this heat. A refrigerator or air-conditioner is a form of heat pump pulling heat from inside the fridge and putting it out into the room. We typically think of heat pumps as providing cooling but they can be designed to do both heating and cooling (pumping heat from outside into the house in the winter and taking heat from the house and putting it outside in the summer. Heat pumps are 150 per cent to 350 per cent efficient, and provide year-round home comfort, heating and cooling without carbon pollution and minimal to no additional utility costs.*

12. What about the refrigerants from air conditioning, don't they cause global warming as well?
- *When refrigerants leak, they do contribute to climate change, which we want to avoid. We're working with industry on training to ensure high quality installations that minimize leaks, and by building the demand for electric heat pumps, we'll see more and more models that use refrigerants that are better for the environment such as CO2 if they leak.*
 - *This is something that we are taking action on internally with our City-owned and managed buildings and may be something that we look into for privately owned buildings in the future.*
13. Are you banning natural gas?
- *The City of Vancouver is not banning natural gas.*
 - *We will be setting regulations that lead to a steady reduction in fossil based natural gas usage over a period of 20 years. This reduction will take place through adoption of high efficiency electric equipment for space heat heating and hot water, such as heat pumps, increasing the efficiency of building envelopes (e.g. windows, insulation, draft proofing), and transitioning to renewable natural gas..*
 - *The Climate Emergency Action Plan aims to accelerate the transition from fossil fuels and take strong climate action by improving energy efficiency and increasing the use and supply of renewable energy in the buildings and transportation sectors.*
14. What is renewable natural gas and how is it different than natural gas or electricity?
- *To the user, renewable natural gas works no differently than natural gas. Whereas fossil natural gas was created millions of years ago and is extracted from rock formations underground using large amounts of energy, renewable natural gas comes from biogenic sources, such as methane released from landfills and agricultural waste.*
 - *An example is the Vancouver Landfill, where FortisBC and the City of Vancouver are developing a project to upgrade landfill gas into a source of renewable gas. So instead of being burned at the landfill, that waste gas can displace natural gas from fossil sources and the associated environmental impacts.*
15. Is there enough renewable natural gas?
- *Presently, nearly five per cent of the gas in Fortis BC's system is renewable and they are working quickly to expand this to 15% by 2030. The existing natural gas grid and supporting infrastructure could be well suited to help existing homes transition from fossil fuel over the coming decades. Fortis and the Province are researching the potential to blend hydrogen into the existing grid, and figuring out what upgrades would be required to accept higher blends of hydrogen. We wouldn't expect to see a stand-alone hydrogen delivery grid.*

16. Isn't electricity and renewable gas expensive?
- *Shifting to electric heat pumps or renewable gas should cost building owners about the same amount as they pay now, especially as the market for these matures. Electric heat pumps are often over 250% efficient so a building will need significantly less electricity to remain comfortable, thereby offsetting the higher unit costs of electricity compared to fossil fuels. Similarly, a building that planned to switch to renewable gas would likely be undertaking significant improvements to insulation, windows, air tightness, and/or heat recovery to reduce total energy use and thereby keeping total costs comparable.*
17. Is Vancouver's/British Columbia's electrical grid able to handle the load for existing buildings?
- *Yes, BC Hydro has been delivering electricity and improving its grid for 60 years. As existing buildings gradually transition away from natural gas, the electrical grid will continue to improve to deliver the electricity needed in a zero-emission world. BC Hydro is projected to have a surplus of electricity at least until 2030 and the City will work closely with BC Hydro to make minimize the need for grid improvements and at the same time, making the improvements that are required easier and less expensive to ensure the grid is ready for the increased demand from heat pumps and electric vehicles.*
18. Who did you consult in developing the recommended action for Big Move 4 – Zero Emission Space Heat and Hot Water?
- *We have facilitated broad public engagement on the Climate Emergency Action Plan, including asking residents and businesses their level of comfort with a series of actions aimed to reduce carbon pollution from operating buildings by and what the City would need to consider to be successful.*
 - *We received 17,000 comments from the public and a high degree of support to transition to renewable energy, such as electricity and renewable natural gas, and reduce energy consumption in our homes. Over 70% were comfortable with setting carbon pollution limits on existing building. The public also helped to identify issues that would need to be addressed and a wealth of ideas on how to make the transition to renewable energy as easy and as equitable as possible.*
 - *If the Strategy is approved, we will undertake detailed research and consultation with building owners and industry on specific proposed changes beginning in 2021 and continue to do so as the programs and requirements evolve over the next ten years.*
 - *In addition to consultation with the public, we sought input from owner and industry associations, other government agencies, environmental NGOs, energy utilities and other experts including:*

Stakeholders consulted included:

- *Building Owners and Managers Association of BC*
- *REALPAC*
- *Condominium Home Owners Association of BC*

- *BC Non-Profit Housing Association*
- *Landlord BC*
- *BC Housing*
- *BC Hydro*
- *FortisBC*
- *David Suzuki Foundation*
- *The Sustainabiliteens*
- *Pembina Foundation*
- *Canada Green Building Council*
- *Mechanical Contractors Association of BC*
- *Home Builders Association Vancouver (HAVAN)*
- *Home Performance Stakeholders Council*
- *Thermal Environment Comfort Association*
- *Heating, Refrigeration and Air Conditioning Institute*
- *Canadian Institute of Plumbing and Heating*
- *District Heating providers: Creative Energy, River District Energy, Fortis Alternative Energy Solutions*
- *BC Government*
- *Metro Vancouver*
- *Natural Resources Canada*
- *Vancouver School Board*
- *Plus over 140 organisations including equipment providers, contractors, other levels of government, energy retrofit experts, environmental non-profit associations and our energy utilities have been consulted to date in the development of a collaborative Building Electrification Road Map which has closely informed the Zero Emissions Building Retrofit Strategy (Big Move 4)*