

To: Indigenous Relations Committee

From: Laura Hope, Senior Policy Analyst, Indigenous Relations

Date: January 8, 2024 Meeting Date: February 1, 2024

Subject: **Indigenous Cultural Awareness Training Video**

RECOMMENDATION

That the Indigenous Relations Committee receive for information the report, dated January 8, 2024, titled "Indigenous Cultural Awareness Training Video."

EXECUTIVE SUMMARY

Metro Vancouver staff are developing an Indigenous cultural awareness training video. The intent is to make viewing of the video mandatory for all construction crews, contractors, sub-contractors, and staff prior to working on Metro Vancouver infrastructure projects. The purpose of the video is to help create an inclusive, respectful, and welcoming work environment for First Nations representatives visiting or working on Metro Vancouver project sites.

PURPOSE

The purpose of this report is to inform the Indigenous Relations Committee about the forthcoming Indigenous cultural awareness training video that Metro Vancouver will require all construction crews, contractors, sub-contractors, and staff to view prior to working on Metro Vancouver construction sites.

BACKGROUND

This information report is provided as part of an ongoing effort to keep the Committee apprised of Metro Vancouver's reconciliation activities focusing on strengthening relationships with First Nations. A key action identified within the 2024-2028 Financial Plan for Indigenous Relations is the completion and operationalization of a compulsory Indigenous cultural awareness training video for construction crews, contractors, sub-contractors, and staff at Metro Vancouver prior to working on infrastructure projects.

SUMMARY

Metro Vancouver project teams frequently engage First Nations staff to fulfill monitoring roles on construction projects. Metro Vancouver recognizes the value First Nations participation brings to our construction projects. Through their knowledge, stewardship practices, and history of the lands and waters, First Nations monitors surveil our projects to guide our work in a culturally appropriate manner that aligns with their community's values and interests.

Indigenous people are also present at construction sites when they are part of project teams and construction crews.

To help create an inclusive, respectful, and welcoming work environment, Metro Vancouver's Indigenous Relations team is developing an Indigenous cultural awareness training video for Metro

Vancouver staff, contractors and sub-contractors to begin developing a better understanding and awareness of Indigenous history, culture, and values.

The video will be helpful to construction crews, contractors, sub-contractors, and staff working on Metro Vancouver infrastructure projects to know why First Nations monitors are working on site, what roles they are fulfilling, and how to respectfully work with them.

The main objectives of the training video are to:

1. Create a safe and harassment-free workplace for Indigenous people working on Metro Vancouver projects
2. Introduce concepts that demonstrate why and how First Nations members and their representatives are to be respected
3. Reduce Metro Vancouver's risk of inadvertently disrupting archaeological sites protected under the *Heritage Conservation Act*

The video will be delivered in three short modules:

1. **Indigenous history:** This module will provide a short overview of First Nations histories and cultures in the region. It will introduce concepts about First Nations values and world views.
Speaker: Jenn Smith (Tlowitsis Nation), [Standing Together in Strength Consulting](#).
2. **Indigenous Knowledge, cultural humility and empathy:** This module will provide an understanding of how Indigenous Knowledge and perspectives enhance Metro Vancouver projects and ensure they are proceeding in a good way; it will also introduce the concepts of cultural humility and empathy and how they may be applied to work sites.
Speaker: Ta7taliya Michelle Nahanee (Skwxwú7mesh Úxwumixw), [Nahanee Creative Inc.](#)
3. **Archaeology and cultural heritage on construction sites:** This module outlines the importance of archaeological and cultural resources as well as why First Nations archeological monitors may be present on Metro Vancouver construction sites.
Speaker: Dr. Sean P. Connaughton, Senior Archaeologist & Manager, [Inlailawatash](#).

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

The anticipated cost for creation of the cultural awareness video is \$50,000. This project was previously identified and included in the approved Indigenous Relations program budget.

CONCLUSION

Metro Vancouver staff are developing an Indigenous cultural awareness training video that will help to create an inclusive, welcoming and respectful work environment for First Nations and their representatives working on Metro Vancouver's construction sites. The training video demonstrates Metro Vancouver's commitment to working closely with First Nations across all project areas and offering regional district staff and contractors an initial opportunity to deepen their understanding of Indigenous history, culture, and values.

REFERENCES

[Nahane Creative Inc](#)

[Inlailawatash](#)

[Standing Together in Strength Consulting](#)

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To: Indigenous Relations Committee

From: Lauren Farmer, Acting Program Manager, Indigenous Relations

Date: January 15, 2024 Meeting Date: February 01, 2024

Subject: **Quarterly Update Report on Reconciliation Activities**

RECOMMENDATION

That the Indigenous Relations Committee receive for information the report dated January 15, 2024 titled "Quarterly Update Report on Reconciliation Activities."

EXECUTIVE SUMMARY

This update report provides a summary of reconciliation events and activities undertaken by Metro Vancouver since the last Committee meeting in October 5, 2023 as well as information on upcoming events and activities over the next three months.

PURPOSE

To provide the Committee with a quarterly update report on reconciliation activities.

BACKGROUND

This quarterly update report on regional and local reconciliation activities and opportunities is part of the Indigenous Relations Committee's annual work plan. This information report is intended to identify opportunities for Committee members to learn about, and engage in, reconciliation activities in the region, and includes:

- The total number of reconciliation events and activities that were undertaken in 2023 by Metro Vancouver;
- Reconciliation events and activities that have been undertaken to-date in 2024 by Metro Vancouver;
- Upcoming opportunities in 2024 for engaging in such activities.

SUMMARY OF RECONCILIATION-RELATED ACTIVITIES

Activities listed in this report are based on the four objectives established by the [Metro Vancouver Board in October 2015](#) in its review of the Truth and Reconciliation Commission's (TRC) 94 *Calls to Action*. The four objectives are to:

1. Liaise with the TRC;
2. Raise Awareness about Indian Residential Schools;
3. Provide Cultural Competency Training; and,
4. Strengthen Relationships with First Nations.

Objectives 2 and 3 speak directly to the Truth and Reconciliation Commission's Call to Action #57: "We call upon federal, provincial, territorial, and municipal governments to provide education to public servants on the history of Aboriginal peoples, including the history and legacy of residential schools, the United Nations Declaration on the Rights of Indigenous Peoples, Treaties and

Aboriginal rights, Indigenous law, and Aboriginal–Crown relations. This will require skills-based training in intercultural competency, conflict resolution, human rights, and anti-racism”.

Examples of the different types of activities, either undertaken or identified for the previous quarterly reporting period (Q4 of 2023) as well as the current quarterly period (Q1 of 2024), are summarized below.

Fourth Quarter of 2023

From October to December 2023, Metro Vancouver staff engaged in a number of reconciliation-related activities, including the following listed in chronological order:

- Combined training for Metro Vancouver staff on archaeological Chance Find Procedures and Artifact Identification (October 10, December 14) (Objective 3)
- Municipal Technical Advisory Committee workshop on “Cultural Awareness” with the Indigenous Community for Leadership and Development (October 18) (Objective 3)
- First Nations Monthly Working Group meetings for Metro Vancouver staff to discuss First Nations engagement successes and challenges (October 20, November 16) (Objective 4)
- Quarterly Working Group with scəwáθən məsteyəx^w (Tsawwassen First Nation) to discuss our intergovernmental relationship and Metro Vancouver’s engagement process (October 27) (Objective 4)
- Municipal Technical Advisory Committee workshop on “Implementing UNDRIP at the Local Government Level” with UBC Professor Alexandra Flynn (November 3) (Objective 3)
- Quarterly Working Group with səilwətał (Tsleil-Waututh Nation) to discuss our intergovernmental relationship and Metro Vancouver’s engagement process (November 16) (Objective 4)
- Training for Metro Vancouver staff on Chance Find Procedures (November 17, December 14) (Objective 3)
- Training for Metro Vancouver staff on Metro Vancouver’s Approach to Archaeology (November 22) (Objective 3)
- Quarterly Working Group with q̓wɑ:ńłəń (Kwantlen First Nation) to discuss our intergovernmental relationship and Metro Vancouver’s engagement process (November 27) (Objective 4)
- Representing local government at the q̓ícəý (Katzie First Nation) Treaty Main Table Negotiations (November 28) (Objective 4)
- Quarterly Working Group with k̓wíkʷəłəm (Kwikwetlem First Nation) to discuss our intergovernmental relationship and Metro Vancouver’s engagement process (November 30) (Objective 4)
- Reconciliation discussions with k̓wíkʷəłəm (Kwikwetlem First Nation) and other governments and interested parties (regular ongoing meetings) (Objective 4)
- Implementation of a “First Nations medicine table” at Metro Vancouver to increase staff cultural awareness (Objective 3)
- Implementation of an audio file for Metro Vancouver’s translated Territorial Acknowledgement into the Skwxwú7mesh sníchim (Squamish language) (December 4)
- Completion of a Salmon Tracking video showcasing a research project in ǰéxətam Regional Park that could improve salmon populations in the Coquitlam River (December 12)

- Co-development of an “Indigenous Cultural Safety Training Video for Construction Crews” with external consultants (Objective 3)
- Responding to 3234 email requests from Metro Vancouver teams and external contractors in an effort to meaningfully engage with First Nations (Objective 4)
- Ongoing meetings to develop a Metro Vancouver Portal for more efficient communication with First Nations on project referrals (Objective 4)
- Discussions on areas of mutual interest with xʷməθkʷəy̓əm (Musqueam Indian Band) regarding various projects (regular ongoing meetings) (Objective 4)
- Implementation of an Indigenous Traditional Medicinal Holiday Ornament table to promote cultural humility, awareness and competencies (December 12) (Objective 3)

First Quarter of 2024

From January to March 2024, Metro Vancouver staff have and will continue to engage in a number of reconciliation-related activities, including the following listed in chronological order:

- First Nations Monthly Working Group meetings for Metro Vancouver staff to discuss First Nations engagement successes and challenges (January 18, February 16, March 21) (Objective 4)
- Quarterly Working Group with scə́waθən məsteyəxʷ (Tsawwassen First Nation) to discuss our intergovernmental relationship and Metro Vancouver’s engagement process (January 26) (Objective 4)
- Indigenous Relations Community of Practice meeting (February 1)
- Quarterly Working Group with q̓ʷɑ:ńłəń (Kwantlen First Nation) to discuss our intergovernmental relationship and Metro Vancouver’s engagement process (February 26) (Objective 4)
- Quarterly Working Group with kʷikʷə́łəm (Kwkwetlem First Nation) to discuss our intergovernmental relationship and Metro Vancouver’s engagement process (March 6) (Objective 4)
- Quarterly Working Group with sə́lilwətał (Tsleil-Waututh First Nation) to discuss our intergovernmental relationship and Metro Vancouver’s engagement process (March 21) (Objective 4)
- Half-day MTAC facilitated workshop on Consultation and Engagement with Indigenous Insight Consulting (date: TBD) (Objective 3)
- Completion of the Metro Vancouver *Meaningful Verbal Territorial Acknowledgements Guidelines* (Objective 3)
- Training for Metro Vancouver staff on cultural heritage protection and conservation, including Chance Find Procedure, Artifact Identification, Metro Vancouver’s Approach to Archaeology (dates: TBD) (Objective 3)
- Discussions on areas of mutual interest with xʷməθkʷəy̓əm (Musqueam Indian Band) regarding various projects (regular ongoing meetings) (Objective 4)
- Reconciliation discussions with kʷikʷə́łəm (Kwkwetlem First Nation) and other governments and interested parties (regular ongoing meetings) (Objective 4)
- Launch an updated in-house training from Metro Vancouver Indigenous Relations on Cultural Competency and First Nations Engagement (dates: TBD) (Objective 3)
- Quarterly Municipal Technical Advisory Committee meeting (dates: TBD)

- Updates to the Indigenous procurement sections of the Metro Vancouver Procurement Policy (dates: TBD)
- Co-development of an “Indigenous Cultural Safety Training Video for Construction Crews” with external consultants (Objective 3)
- Representing local government at the ǵíćǵǵ (Katzie First Nation) Treaty Main Table Negotiations (February 5, March 20) (Objective 4)
- Conduct research on the new Provincial Emergency and Disaster Management Act
- Development of staff guidelines for First Nations cultural interpretive elements

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

The various Metro Vancouver activities identified in this report have been included in the Indigenous Relations budget. There are no additional financial implications with respect to the items identified in this information report.

CONCLUSION

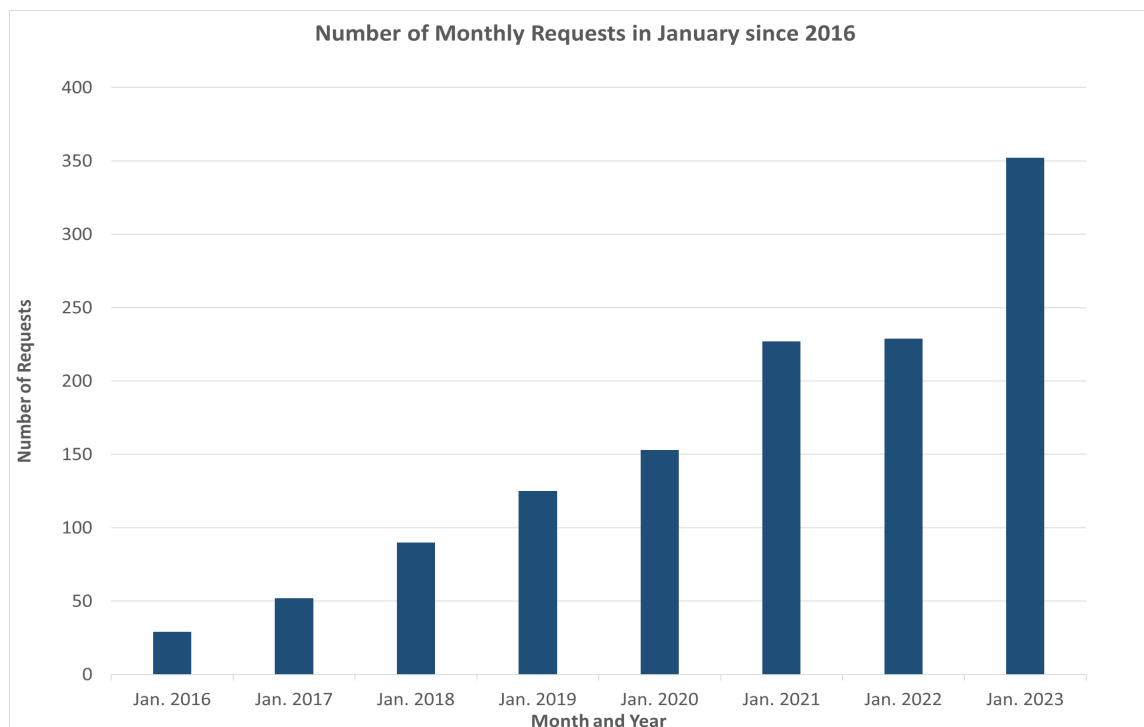
This report provides a quarterly update on reconciliation activities involving Metro Vancouver and local governments as per the Committee’s recommendations and for members’ information.

ATTACHMENTS

1. Indigenous Relations Performance Indicators

Indigenous Relations Performance Indicators

Graph 1: The Number of Monthly Requests Received in January since 2016. The monthly requests received in January 2016 totaled 29, increasing to 352 in January 2023.



The increase in monthly Indigenous Relations requests, as seen in Graph 1, necessitated a change in tracking systems due to the increase in staff time needed to manually log each request. As of May 2023, Indigenous Relations will instead be tracking the number of incoming emails to the Indigenous Relations Requests common inbox. This is the measure we will be reporting annually going forward.

To: Climate Action Committee

From: Lucy Duso, Division Manager, Collaboration and Engagement, External Relations
Sandy Young, Senior Engagement Specialist, Collaboration and Engagement,
External Relations

Date: January 31, 2024 Meeting Date: February 8, 2024

Subject: **Climate 2050 Engagement and Public Education Priorities**

RECOMMENDATION

That the Climate Action Committee receive for information the report dated January 31, 2024, titled “Climate 2050 Engagement and Public Education Priorities”.

EXECUTIVE SUMMARY

The *Climate 2050 Engagement and Public Education Strategy* (Reference 1) provides a clear approach for robust engagement, collaboration with others, and broader public support for climate action in support of *Climate 2050*. Priorities in the strategy are described in three spheres — developing the *Climate 2050* Roadmap, implementing specific climate actions, and growing public awareness and support. In 2023, over 500 organizations and agencies were encouraged to participate in the Roadmaps development, and over 200 were engaged on the implementation of specific climate actions. Staff estimate over 100 hours of direct delivery through public programs and over 10,000 visits to the Climate Literacy learning platform. A focus for engagement in 2024 and 2025 is to support the implementation of the priority big moves for *Climate 2050*. This report provides an update on delivery of the *Climate 2050 Engagement and Public Education Strategy* in its second year of implementation.

PURPOSE

The purpose of this report is to update the Climate Action Committee on priorities in the *Climate 2050 Engagement and Public Education Strategy* for 2023 to 2025.

BACKGROUND

This report provides an update on the engagement and public education strategy to support *Climate 2050*. A report to the Climate Action Committee on April 8, 2022, titled “Proposed Roadmap for Climate Action Engagement to 2025 and Work Plan for 2022”, introduced the concept of a climate-focused engagement and public education strategy to support *Climate 2050*. Sustainability Innovation Fund funding was secured under the title “Responding to the Climate Emergency: Enhanced Stakeholder Engagement”, to deliver innovative components in the strategy — those beyond Metro Vancouver’s typical approach to engagement and public education. At its meeting on March 9, 2023, the Committee received a report titled “Climate 2050 Engagement and Public Education Strategy”, which introduced the new *Climate 2050 Engagement and Public Education Strategy* for 2023 to 2025.

ENGAGEMENT AND PUBLIC EDUCATION PRIORITIES FOR CLIMATE 2050

Metro Vancouver's *Climate 2050* will guide climate change policy and action in the Metro Vancouver region for the next 30 years. Reaching the goal of a carbon neutral and resilient region by 2050 requires bold leadership and effective action now. The policies set by Metro Vancouver to advance climate actions will affect change for organizations, agencies, and people across the region. The *Climate 2050 Engagement and Public Education Strategy* provides an approach to ensure robust engagement, alignment with others, and stronger public support for climate action that will significantly reduce regional emissions and prepare our region for change.

The *Climate 2050 Engagement and Public Education Strategy* presents priorities across three spheres:

- engagement on the development of the remaining *Climate 2050* Roadmaps;
- engagement to implement distinct climate actions; and
- outreach and education to broaden public support for climate action.

The first two spheres emphasize the need to involve those likely to comment, be impacted, or have a role in implementation. The third sphere, on public support, emphasizes activities to share information, increase public knowledge about effective climate actions, and build a vocal constituency supporting climate actions. To implement this strategy, staff are incorporating social science research learnings, engagement best practices, and innovative delivery methods across all three spheres, as described in the following sections.

Engagement on the Development of the Remaining *Climate 2050* Roadmaps

Metro Vancouver continues to provide opportunities to participate in the development of the remaining *Climate 2050* Roadmaps, and to promote those already endorsed, including unpacking the contents in plain language for broader audience access.

In 2023, the MVRD Board endorsed *Climate 2050* Roadmaps in four areas: energy, nature and ecosystems, industry and business, and agriculture. Staff delivered an issue-specific engagement program to support each Roadmap. The same engagement design is being applied in developing the remaining *Climate 2050* Roadmaps: human health and well-being, land use and urban form, water and wastewater, and waste.

For example, in early engagement for the roadmap on human health and well-being, staff hosted a workshop attended by five local First Nations to discuss the intersection of climate impacts, Indigenous perspectives and priorities, and health and well-being. This workshop was effective in uncovering aligned interests and ensuring Indigenous perspectives were heard at an early stage. Creating opportunities and an approach to integrate Indigenous perspective into additional *Climate 2050* engagement and education activities is a priority.

Still on the topic of human health, the engagement included a symposium featuring a panel of human health experts, and was attended by representatives from health organizations, government agencies, schools, and community groups. Together, participants explored approaches to improving regional health impacts from climate change. Discussion themes included social determinants of health, primary drivers of health outcomes, climate resilience through community connectedness,

and health equity and diversity. Recognizing the influence of trusted messengers in climate conversations, the symposium was moderated by award-winning journalist and climate communicator, Laura Lynch.

Engagement to Implement Distinct Climate Actions

The second sphere of engagement involves support for implementing climate actions in Metro Vancouver's *Clean Air Plan* and replicated in the appropriate Roadmap. Staff are currently designing and implementing engagement for some of the priority big moves identified in the report "Climate 2050: Priority Actions to Accelerate Toward our Regional Targets", which was received by this committee in January 2024.

For large buildings, this includes partnering with member jurisdictions on harmonized engagement with a building owner/operator audience. For vehicle emissions, the working partnership is between Metro Vancouver and TransLink, and this is currently in a pre-engagement phase — hearing from those with lived and professional expertise, alongside research into public attitudes. For actions addressing emissions from industry through the existing regulatory program, Metro Vancouver is the sole engagement lead in ensuring the regulated audience is aware of any proposed changes and has an opportunity to provide input.

Staff are also working to better engage and support participation to hear about equity considerations. Best practices indicate that early and supported engagement is critical to overcoming participation barriers and inviting participation of people who contribute the least to, and might be impacted the most by, climate change.

Outreach and Education to Broaden Support for Climate Action

A range of initiatives are advancing the third sphere in the strategy to broaden public support for climate action including Climate Action Dialogues, Climate Literacy learning program, community outreach, communities of practice, Climate Leadership Collaborative, and more. Each is described in the engagement and education strategy, and updates are provided below.

Public dialogues: Metro Vancouver's new regional dialogue series, the Climate Action Dialogues, launched in 2023 with expert speakers who engaged in bold conversation with residents and opinion leaders from business, academia, non-profit, and government. To date, dialogues have been held in four venue locations across the region, and offered a popular livestream option. The inaugural session in spring 2023 highlighted economic opportunities and policy drivers. The fall session on decarbonizing the region's buildings discussed the business case, available technology, and mounting workforce, and emphasized the need for stronger policies, and incentive for residents. Social promotions for the Dialogues reached approximately 300,000 residents, which contributed to over 800 registrations. Upcoming topics in the series include the economic case for lowering emissions from transportation, and land use decisions and the impact on climate goals. Future dialogues will build on the momentum of the series, and enhance networking and audience participation.

Climate literacy: Climate Literacy is Metro Vancouver's online learning program to help increase public knowledge and build support for local climate action. In a new approach, Metro Vancouver

engaged CityHive to deliver Climate Literacy workshops in person across the region, as well as virtually, in a six-week direct delivery model to over 170 residents last fall. For this, the youth-driven, non-profit, engagement organization partnered with 12 organizations, namely sustainability and environmental groups, a university cohort, a housing co-op, and more. As an added benefit, direct delivery also generated work experience for nine climate-focused youth facilitators hired by CityHive. The workshops were well received by both community partners and participants, who thought the learning tool was a useful introduction to climate resources. Metro Vancouver will continue to promote the tool for self-directed study (over 10,000 webpage visits in 2023), share to community educators, support Climate Literacy workshops, and add new learning modules.

Community outreach: Community outreach on climate action in 2024 will focus and build out displays in two core areas — promoting actions to reducing emissions from buildings, and growing public climate literacy. To help deliver the former, a new, interactive buildings display debuted at the Air Quality and Climate Action Services tent at the 2023 Pacific National Exhibition, and was showcased at events like University Neighbourhoods Association Neighbours Day and the Climate Action Dialogues.

Staff continue to explore opportunities to deliver climate messaging using existing resources. For instance, by installing an interpretive feature on an air quality monitoring station in a high-traffic public space. Staff also aim to grow the list of subscribers who receive *Climate 2050* e-mail updates to increase the reach of climate communications and engagement options.

Youth outreach: Metro Vancouver's existing youth programs and youth-led activities remain effective ways to garner youth perspective on topics of regional importance, like the urgency for climate action. Staff attended three meetings of Metro Vancouver's Youth and Education Advisory Panel in 2023 to introduce climate priorities and invite input on how climate intersects with human health, and affordability, among other topics. An approach to more purposefully integrate youth into climate engagement and education initiatives, alongside Metro Vancouver's existing youth education programming, is a priority for further development this year. For example, over 30 youth were able to participate in the Zero Waste Conference with staff support, and climate is part of our youth education programming that reaches schools across the region.

Communities of practice: Metro Vancouver is using the role of convener to create a space for professionals across the region to learn about climate engagement together. The Municipal Climate Engagement Community of Practice, now in its second year, comprises staff representatives from most member jurisdictions working on engagement and education on climate action. In 2023, the group heard from guest speakers on research and best practices, and shared their own findings from climate engagement work. Members will focus discussion and shared learning in 2024 on areas like resourcing and capacity for program delivery, and reaching residents, especially diverse populations. A parallel community of practice for representatives from non-governmental organizations, academia, and professional associations will form later this year to consider shared interests and intersecting public audiences.

Climate leadership collaborative: Metro Vancouver is exploring the potential for a Climate Leadership Collaborative that will convene senior management representative from across the

region who have substantial influence and a role in implementing climate action and building resiliency in the region. Work to conceptualize the collaborative is underway.

Remaining components in this sphere of the engagement and education strategy, for example a climate-focused public art component and a community advisory group, will be pursued in 2024 and 2025.

MESSAGING ON CLIMATE ACTION

Clarity and shared understanding can help to align decision makers and the public on climate policy priorities. The clean energy transition is an area of increasing attention for the public and decision makers. In response, staff have developed a resource of some of the most frequently asked questions on the energy transition. The resource will be available on the Metro Vancouver website and is included as an attachment to report E.3 in this agenda package.

Separately, public attitudes research will seek to understand how best to communicate the economic advantages of climate action. Recognizing growing concerns around affordability and confusion about the costs of climate action, research is underway to obtain data on how the general public best understands the economic opportunities and benefits of climate action to advance progress on mitigation and adaptation. Results of this research will be shared with the Committee at a future meeting.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

Delivery of the strategy is resourced through existing budgets in External Relations and specific project funding within the AQCAS budget allocated to engagement. Funding for additional contract support, facilities, or technologies was secured in 2021 through a Sustainability Innovation Fund (SIF) application.

CONCLUSION

Metro Vancouver's *Climate 2050 Engagement and Public Education Strategy* highlights priorities to support three areas: engagement on the development of the remaining *Climate 2050* Roadmaps, engagement to implement distinct climate actions, and broadening support for local climate action. The approach to deliver on the priorities centres collaboration, communications research, engagement best practices, innovative delivery methods, and highlights Metro Vancouver's role as a convener. As policies advance, education resources can create understanding and alignment in areas of increasing interest, for example the energy transition, and how affordability and climate intersect. Staff will continue to advance priorities in the *Climate 2050 Engagement and Public Education Strategy* to deliver robust engagement and build the public support needed to move quickly and with purpose toward a carbon-neutral and resilient region by 2050.

ATTACHMENT

1. Presentation re: "Climate 2050 Engagement and Public Education Priorities", dated February 8, 2024.

REFERENCE

1. Metro Vancouver's [*Climate 2050 Engagement and Public Education Strategy*](#)



Climate Action Dialogues, May 2023

Climate 2050 Engagement and Public Education Priorities

Lucy Duso

Division Manager, Collaboration & Engagement,
External Relations

Climate Action Committee, February 8, 2024
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Sandy Young

Senior Engagement Specialist, Collaboration & Engagement,
External Relations

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The *Climate 2050 Engagement and Public Education Strategy* provides a clear approach for robust engagement, alignment with others, and stronger public support for climate action to significantly reduce regional emissions, and prepare our region for change.

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Climate Action Dialogue, New Westminster

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APPROACH

- Research-informed communications
- Engagement best practices
- Collaboration and alignment with others
- Innovative delivery methods

ENGAGEMENT SPHERES

Engagement to support the ongoing development of the *Climate 2050* Roadmaps

Engagement to support implementation of distinct climate actions

Engagement to **continue and expand public support** for climate actions

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ENGAGEMENT ON CLIMATE 2050 ROADMAPS

- Engage to develop remaining roadmaps
- Integrate Indigenous perspective
- Promote and unpack adopted roadmaps for public



Climate Literacy workshop, UBC



ENGAGEMENT ON DISTINCT ACTIONS

- Support priority big moves: buildings, transportation, industry, energy
- Shift from policy to practice
- Consider equity in engagement design

BUILDING SUPPORT FOR CLIMATE ACTION

- Climate Literacy
- Climate Action Dialogues
- Communities of Practice
- Climate Leadership Collaborative
- Community Outreach



Climate Action Dialogue, Vancouver



Climate Literacy workshop, housing co-op



UNA Neighbours Day



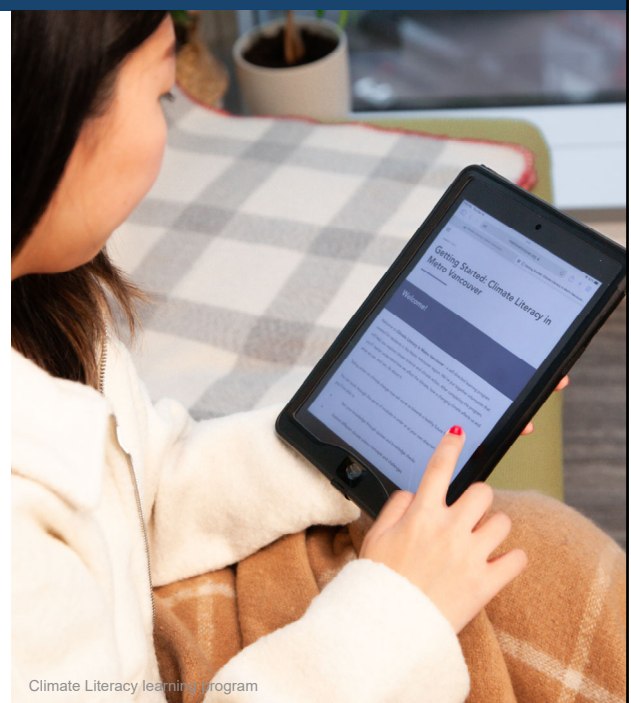
Climate Action Dialogue, North Vancouver

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ADVANCING 2024 PRIORITIES

- Continue role of convener
- Collaborate and align with others
- Message climate priorities
- Broaden public reach



Climate Literacy learning program

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Climate Literacy learning program

Thank You

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To: Climate Action Committee

From: Lucy Duso, Division Manager, Collaboration and Engagement, External Relations
Sandy Young, Senior Engagement Specialist, Collaboration and Engagement,
External Relations

Date: February 2, 2024 Meeting Date: February 8, 2024

Subject: **Energy Transition Frequently Asked Questions: Public Resource**

RECOMMENDATION

That the Climate Action Committee receive for information the report dated February 2, 2024, titled "Energy Transition Frequently Asked Questions: Public Resource".

EXECUTIVE SUMMARY

In response to increasing public attention, and discussions at the Climate Action Committee and MVRD Board, staff have developed a resource of frequently asked questions about the energy transition. The draft resource is included as Attachment 1. It will also be available on the Metro Vancouver website.

PURPOSE

The purpose of this report is to update the Climate Action Committee and Board on a new resource of frequently asked questions about the energy transition.

BACKGROUND

The energy transition is a topic of increasing public attention and has been discussed at recent Climate Action Committee and MVRD Board meetings. A frequently asked questions resource can increase clarity and create shared understanding about the energy transition and energy security.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

There are no financial implications to this report.

CONCLUSION

The clean energy transition is an area of increasing attention for the public and decision makers. In response, staff have developed a resource of some of the most frequently asked questions on the energy transition. The draft resource is attached, and it will also be available on the Metro Vancouver website.

ATTACHMENT

1. "Draft Energy Transition FAQ", dated, February 2, 2024.

Draft Energy Transition FAQ

This document provides answers to frequently asked questions about the energy transition. Additional information including definitions and terminology can be found in the [Climate 2050 Energy Roadmap](#).

About the Energy Transition

What is an energy transition?

The energy transition involves expanding the use of clean and renewable forms of energy in place of fossil fuels. Residents and businesses use energy to heat buildings and water, fuel vehicles, and power industrial processes. Burning fossil fuels such as natural gas, gasoline, diesel, and propane for this energy emits greenhouse gases that are the primary cause of climate change. Fortunately, in this region there are many opportunities to use clean and renewable forms of energy, and switch away from fossil fuels.

Why is the energy transition needed?

The energy transition will help curb climate change and contribute significant economic opportunities. Metro Vancouver needs to keep pace with economies across the globe that are already benefitting from the energy transition. This transition will create good jobs and protect human health. Delayed action on climate change will create more dangerous conditions and increased costs later in time.

Supporting facts:

- Switching to electrified transportation and heating systems reduces health-harming air contaminant emissions. The potential regional health benefits from implementing the Metro Vancouver *Clean Air Plan* between 2020 and 2030 were estimated at \$1.6 billion.
- Regionally, the green building industry stands to gain \$3.3 billion in revenue between 2018 and 2032 as a result of new regulations for energy efficiency and low-carbon heating systems.
- In 2023, global investment in the energy transition reached a record high of \$1.8 trillion, including investment in power grids, electrified heat and transportation, and renewable energy.

What is Metro Vancouver's plan for the energy transition?

Metro Vancouver has developed a roadmap for the region to reduce greenhouse gas emissions and achieve carbon neutrality by 2050. *The Climate 2050 Energy Roadmap* (2023) involves substantially reducing energy use by increasing energy efficiency; transitioning to 100% clean, renewable energy; and developing an energy system that is resilient to future impacts of climate change. The potential regional health benefits from implementing the Metro Vancouver Clean Air Plan between 2020 and 2030 were estimated at up to \$1.6 billion.

Is the energy transition going to aggravate affordability issues? Won't this cost residents more?

Today's very serious affordability pressures on residents will continue to worsen without strong climate action. Investing in the energy transition can help to address affordability in an equitable way. While upfront costs for some low-carbon technologies may currently be higher than fossil fuel alternatives,

overall energy costs for households in BC will decline with a transition to clean and renewable energy. The energy transition also presents significant economic opportunities, including new jobs. Those regions able to pivot to support greentech, cleantech, EVs, etc. will be well positioned for the transitioning economy.

Supporting facts:

- Research consistently finds that switching away from fossil fuels towards electric alternatives will reduce household costs right across Canada.
- Governments also need to follow through with commitments to phase out fossil fuel subsidies that distort markets and hold back the transition.

Are the energy utilities aligned in their long term plans?

In order to meet the Province's emissions targets, the long-term plans of Fortis BC and BC Hydro need to be coordinated. Energy utilities must file long-term resource plans with the BC Utilities Commission (BCUC). Metro Vancouver, in coordination with other local governments, has been involved in BCUC proceedings for FortisBC's and BC Hydro's long-term resource plans. Currently, to meet CleanBC targets, FortisBC has proposed a gas-centric pathway, whereas BC Hydro's plan emphasizes growing the supply of clean, renewable electricity. A coordinated approach is critical to secure the necessary supply of low carbon energy, and to ensure peak energy demand is met, while avoiding unnecessary increases in energy rates. Metro Vancouver continues to provide information and input to provincial processes to advance the energy transition in the most efficient and affordable pathway.

Why is the energy transition important for human health?

The energy transition will reduce the serious health impacts of burning fossil fuels, and help protect our health and well-being from the impacts of climate change. Benefits include cleaner air, and energy-efficient buildings that provide needed cooling and protect occupants from extreme weather.

Climate change has already negatively impacted the health of Metro Vancouver residents. For example, hundreds of people succumbed to heat-related illnesses during an extreme heat event in 2021. We also see increased respiratory and cardiovascular complications during forest fires and heat waves. By collectively shifting to cleaner sources of energy at all levels of government, we can reduce these and other human health impacts of climate change.

Types of Energy

Is electricity actually a clean energy source?

The generation, transmission, and use of electricity in BC has very low emissions compared to that of fossil fuels. In BC, 98% of electricity generated by BC Hydro is from renewable sources, mainly hydroelectricity, as well as biomass, wind, and other sources. The Intergovernmental Panel on Climate Change has found that over its lifecycle, a hydropower facility produces far fewer emissions than coal, natural gas, and biomass, slightly less than solar or geothermal, and slightly more than wind or nuclear.

Is natural gas a fossil fuel?

Yes. Fossil natural gas was formed from the pressurized and heated remains of organic material over millions of years, and is mostly composed of methane, a potent greenhouse gas. When fossil natural gas is burned, it emits carbon dioxide and health-harming air contaminants. Within the Metro Vancouver region, combustion of fossil natural gas is responsible for 32% of regional greenhouse gases.

Fossil natural gas has an important role to play in providing energy to many sectors today, however, world leaders have committed to transition away from fossil fuels and significantly ramp up renewable energy supply. The energy transition is being driven by climate commitments as well as market forces.

Supporting facts:

- Across Metro Vancouver, approximately 75% of the energy used in the region comes from burning fossil fuels (including fossil natural gas, gasoline, diesel, and coal). Altogether, our use of fossil fuels produces 90% of the region's greenhouse gas emissions.
- Renewable natural gas (RNG) is produced from waste products and can act as an alternative to fossil natural gas for some applications (see below).

What is renewable natural gas? Can it replace fossil natural gas?

Renewable natural gas (RNG) is a gaseous biofuel produced primarily from anaerobic digestion of organic feedstock (such as food, agricultural, and forestry waste). It is composed mostly of methane, just like fossil natural gas. It can be substituted directly in natural gas-burning equipment.

Depending on the source of the feedstock used to produce the RNG, it can be considered a renewable, low-carbon alternative to fossil natural gas. RNG is more expensive to produce compared to fossil natural gas. As a scarce resource, RNG should be prioritized for difficult-to-electrify sectors, such as industrial applications with high temperatures or requiring combustion for process requirements. FortisBC is currently working to increase the supply of RNG, and Metro Vancouver is contributing to increased supply by generating RNG at several facilities.

What other forms of renewable, clean energy should we be using?

In BC we are fortunate to have a robust electricity system that is 98% renewable, which is expected to provide the mainstay of the energy transition. At the same time, we need to continue developing additional clean and renewable energy sources and capacity to improve resilience. Combined, these measures will enhance the reliability of our energy system. Examples include:

- batteries that can be used to store electricity within the grid, and for individual end uses such as buildings, to improve resilience.
- thermal networks that can supply a neighbourhood with heat from sources such as waste heat from the sewer system (including Metro Vancouver's sanitary sewers), industrial facilities, data centres, or heat from the ground.
- microgrids that allow locally produced electricity, such as solar panels coupled with battery storage, to supply a campus or neighborhood.
- smart grid technologies so that vehicles or buildings can feed excess power back into the electrical grid.
- biofuels and hydrogen can also fill a need for select uses that are difficult to electrify.

Increasing the use of Electricity

As we transition away from fossil fuels, how can we be confident there will be enough electricity to supply all our energy needs long term?

BC Hydro is required by law to develop long-term plans to meet present and future demand for electricity. BC Hydro's Integrated Resource Plan includes strategies to use electricity more efficiently and is investing in infrastructure to produce and transmit more electricity to meet growing demand. This IRP is to be updated within 18 months to respond to the rapid pace of the energy transition. Specific elements of this plan include:

- Measures to reduce demand, such as adjusting energy rates to incentivize shifting use away from peak electricity demand times throughout the day
- Incentives to residents to implement energy efficiency upgrades in their homes and businesses
- Upgrades to generation, transmission and distribution infrastructure
- Renewing existing electricity supply agreements
- Acquiring new clean or renewable energy

In short, BC Hydro is planning for anticipated electricity needs for building, vehicle, and industry electrification to meet the scale required for achieving climate targets right across BC.

What about power outages?

Power outages are a challenge for all energy users, whether residential, commercial, or industrial. Relying on natural gas creates similar concerns for power outages as relying on electricity alone. In general, gas heating systems will not operate during a power outage as they use components that require electricity to operate.

Supporting facts:

- As the efficiency of homes and buildings improves, they are more resilient to power outages. Well-insulated and high-performance buildings will remain warm or cool for longer in the case of power outages.
- Large buildings and essential services are required to have backup generators to keep occupants safe during power outages.

What about the environmental impacts of critical minerals required for electric batteries? Are they really better than fossil fuels?

While we need to pay attention to the environmental impacts of mining for critical minerals needed for batteries and make sure it is done as sustainably as possible, renewable energy technologies still have a much smaller environmental impact compared to fossil fuels. New battery technologies are also emerging which rely on more easily sourced materials, and at the end of their life batteries can be repurposed and the large majority of their components and minerals can be recycled. The generation, transmission, and use of electricity in BC has very low emissions over its lifecycle in comparison to the production, transport, and combustion of fossil fuels.

Do heat pumps work in the cold? Do you need to have gas back-up?

Heat pumps are used as primary heating sources in cold climates around the world, including Canada's north. Heat pump technology has improved over the decades and is proving to be a cost-efficient and zero-emissions solution to heating in cold climates as well as cooling during hot weather. In Metro Vancouver's climate, a back-up heating source is not normally needed for heat pumps in the cold, provided they are chosen with appropriate specifications and properly sized.

Supporting facts:

- There are approximately two hundred thousand heat pumps installed across BC, or 10% of the province's homes.
- The specific efficiencies of heat pumps at colder temperatures can vary widely. Modern heat pumps rated for cold climates usually function at optimum efficiency down to -10C or even as cold as -30C. Some systems decline in their efficiency in sub-zero temperatures, meaning they still function but may incur somewhat higher energy costs in these periods. A well-informed heat pump contractor can guide you to choose the best system to optimize efficiency and cost.
- There are many ways to incorporate heat pumps to replace or complement existing heating systems, whether they are gas or electric.

Why does BC sometimes import electricity from outside the province? What does that mean for the reliability and sustainability of our energy?

BC has a large and diverse network of electricity supply and storage sources extending across the province, allowing operations to be ramped up in one region when it's dry in another. The BC electrical system is also tied to the grids in neighbouring provinces and states. These interties allow the utility to buy extra power when rates are low, and sell it when rates are higher.

BC's hydroelectric dams act as giant batteries, meaning we can buy imported power and hold more water back in these reservoirs to get us through dry spells and times of higher demand, such as cold snaps. Together with the ability to tap into a larger network outside the province, this creates a resilient and flexible energy system.

Supporting facts:

- 98% of the electricity that BC Hydro generates is from clean and renewable sources.
- Over the past 10 years (2013-2023), BC has exported more power than it imports. In 2023, the electricity imported was higher than average.
- Despite record-breaking electricity demand during a cold snap in early January, 2024, BC did not need to import electricity, and also had enough generating capacity to sell electricity to its neighbours in Alberta and the Pacific Northwest who were experiencing demand and system challenges.
- Today, unsubsidized solar and wind are the cheapest options for new electrical power in most countries, including Canada.
- Electrical grids across the globe are transitioning to clean and renewable energy.

Resources and Additional Information

[BC Hydro, Integrated Resource Plan](https://www.bchydro.com/toolbar/about/strategies-plans-regulatory/supply-operations/long-term-electricity-planning/clean-power-2040/integrated-resource-plan.html) <https://www.bchydro.com/toolbar/about/strategies-plans-regulatory/supply-operations/long-term-electricity-planning/clean-power-2040/integrated-resource-plan.html>

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<https://metrovancover.org/services/air-quality-climate-action/Documents/climate-2050-energy-roadmap.pdf>

To: Regional Planning Committee

From: Mark Seinen, Senior Planner, Regional Planning and Housing Services

Date: January 22, 2024

Meeting Date: February 9, 2024

Subject: **Updating Metro 2050 Centres and Corridors Targets – Scope of Work**

RECOMMENDATION

That the Regional Planning Committee receive for information the report dated January 22, 2024, titled “Updating Metro 2050 Centres and Corridors Targets – Scope of Work”.

EXECUTIVE SUMMARY

Metro 2050 commits, as an early action, to updating the dwelling unit and employment targets for Urban Centres and Frequent Transit Development Areas via an amendment. The Updating Centres and Corridors Targets project will undertake the necessary background research and analysis to develop revised targets that are realistic yet ambitious enough to support the achievement of the shared *Metro 2050* goals (e.g., greenhouse gas emission reduction, transit-oriented affordable housing creation, increased transit ridership, putting jobs in transit friendly and walkable locations), and also provide greater clarity and identify structural improvements to *Metro 2050*’s targets to make them easier to implement. The project will be supported by a consultant and advised by a working group with a targeted completion date of early 2025. Any proposed *Metro 2050* amendments resulting from this project would occur following that in early to mid-2025 at the direction of the MVRD Board.

PURPOSE

The purpose of this report is to provide Regional Planning Committee with the objectives, scope and timeline of the Centres and Corridors Target Update for information.

BACKGROUND

Updating the dwelling unit and employment targets for Urban Centres and Frequent Transit Development Areas (FTDAs) was originally intended to be part of the development of *Metro 2050*. Staff brought a number of reports to Regional Planning Committee in support of the planned target update, culminating in the *Metro 2040* Urban Centre and Frequent Transit Development Area Policy Review Recommendations (Reference 1).

While many of the policy directions recommended in that report were implemented in *Metro 2050*, the growth targets themselves were not updated due to capacity and timeline constraints, the need for 2021 Census housing and employment data, and requirements for more fulsome engagement with member jurisdictions on the impacts of any target adjustments. For this reason, Table 2 of *Metro 2050* – Dwelling Unit and Employment Growth Targets for Urban Centres and Frequent Transit Development Areas, was brought forward unchanged from *Metro 2040*. *Metro 2050*’s Table 2 contains the following footnote:

This table provides guidance to assist in regional and local planning. It will be updated to extend the targets out to the year 2050 in an amendment following the adoption of Metro 2050.

The Updating Centres and Corridors Targets project will consider alternatives, impacts and recommend updates to the targets within the context of *Metro 2050*, as well as the recent changes to provincial legislation for transit-oriented areas, leading toward a possible *Metro 2050* amendment in early 2025.

THE IMPORTANCE OF AMBITIOUS YET REALISTIC TARGETS

The purpose of target-setting is to identify an aspiration that reflects a vision, objectives, or a desired future state; it is not simply a prediction of the future based on extrapolation. This is a key distinction between *Metro 2050's* **Projections** and **Targets**. The former (i.e., population projections) is intended to be a neutral assumption of how much growth is anticipated within the region based on current trends and modelling, and broadly speaking where that growth will occur (i.e., at a sub-regional level). While the growth projections model is calibrated to reflect growth expectations within individual jurisdictions, the model largely does not consider potential policy interventions.

In contrast, the *Metro 2050* Urban Centre and FTDA target framework sets a distribution of the projected growth to specified geographies (i.e., Urban Centres and FTDA) as a means of advancing the goals and objectives of *Metro 2050* and the shared Regional Planning principle to “put growth in the right places.”

Metro 2040's target framework was ambitious, introducing housing and employment targets for both Urban Centres and emerging transit-oriented locations. Collectively, the plan sought to direct more than two-thirds (68 percent) of dwelling unit growth toward these priority growth areas. This progressive framework expanded on concepts introduced in the *Livable Region Strategic Plan*, adding granularity to growth targets and striving for a greater concentration of development in priority growth areas. *Metro 2040's* flagship target – directing 40 percent of dwelling unit growth to Urban Centres – was achieved through 2016 (the latest year for which Census data is available).

Any updates to the targets as an outcome for this project should be developed to realistically achieve our shared regional planning goals of greenhouse gas reduction, transit-oriented affordable housing creation, increasing transit ridership, reducing vehicle kilometres travelled, and growing the urban tree canopy. This must be considered together with the limitations that come from land capacity, the projected population growth from modelling, the new directions in provincial legislation for transit-oriented areas, and the realities of development economics.

KEY CONSIDERATIONS TO BE ADDRESSED

The primary task of the Updating Centres and Corridors Targets project is to review and consider updates to Table 2 of *Metro 2050* (Figure 1). It is intended to be ambitious to meet the objectives set out above, and to improve the implementation of the growth targets by resolving specific issues that have emerged since the framework was introduced in *Metro 2040*. Map 4 of *Metro 2050* sets out the location and type of the region's Urban Centres and FTDA (Attachment 1). No adjustments

to the boundaries or additions or deletions of any Urban Centres and FTDA's are within scope of this project.

Figure 1 – Dwelling and Employment Targets from Metro 2050 (Table 2)

REGIONAL TARGETS FOR RESIDENTIAL GROWTH BY LOCATION	
Location	Percent of Regional Dwelling Unit Growth 2006-2041
All Urban Centre Types	40%
Frequent Transit Development Areas	28%
Urban Centre Type Breakdown	
• Metropolitan Core	5%
• Surrey Metro Core	6%
• Regional City Centres	16%
• Municipal Town Centres*	13%
REGIONAL TARGETS FOR EMPLOYMENT GROWTH BY LOCATION	
Location	Percent of Regional Employment Growth 2006-2041
All Urban Centre Types	50%
Frequent Transit Development Areas	27%
Urban Centre Type Breakdown	
• Metropolitan Core	10%
• Surrey Metro Core	5%
• Regional City Centres	19%
• Municipal Town Centres*	16%

*Includes Municipal Town Centres and High Growth Municipal Town Centres.

**This table provides guidance to assist in regional and local planning. It will be updated to extend the targets out to the year 2050 in an amendment following the adoption of Metro 2050.

The following key considerations for the Updating Centres and Corridors Targets project have been identified. Each will require analysis, option development, and extensive discussion with member jurisdictions

1. Targets are specified only on an aggregate (regional) level

The current target framework sets out the Urban Centre and FTDA targets in aggregate (i.e., regionally) based on Centre type, treating Regional City Centres, Municipal Town Centres and FTDA's as single geographies comprising numerous individual areas. Only the Metro Core and Surrey Metro Core have unique individual targets (five and six percent of growth, respectively) given their scale and the significant role each plays in the region.

While the current approach provides a helpful overview of regional growth for monitoring purposes, it has been challenging for member jurisdictions in terms of: implementation in Regional Context Statements; building a shared understanding of the roles that the respective Urban Centres and FTDA's play in supporting regional growth; determining whether each Urban Centre and FTDA is on target; and if the vision and goals of the Regional Growth Strategy are being supported. It also makes it more challenging for TransLink to plan transit investments.

This issue could be addressed by disaggregating the targets for each Urban Centre and FTDA by listing each one in an updated Table 2 of *Metro 2050*, showing how the targets add up to broader regional targets by category (e.g., Regional City Centres, all Urban Centres).

2. Targets are expressed only as shares, not as growth rates or as absolute numbers

The current Urban Centre and FTDA target framework expresses growth only as shares of total dwelling unit and employment growth, with the remaining growth distributed elsewhere in the region.¹ While this approach can support long-term policy planning, it is not helpful for member jurisdictions who want to know how much of their projected growth is targeted to occur in their respective Urban Centres and FTDA when making decisions about particular development projects or area plans. Absolute numbers and growth rates associated with each Urban Centre and FTDA could better support implementation and monitoring, although absolute numbers would have to be updated regularly with any updates to the municipal and sub-regional growth projections.

This issue could be addressed by including three sets of numbers for each Urban Centre and FTDA:

- 1) the share of regional growth targeted;
- 2) the absolute number that this growth represents (i.e., amount of population, number of dwelling units and jobs); and
- 3) the growth rate that this growth represents (i.e., from the current baseline).

3. FTDA targets are not set using FTDA geographies

The current FTDA target does not use FTDA as its policy geography; it uses an 800 metre buffer surrounding TransLink's 2040 Frequent Transit Network Concept, which is not a formal policy geography in *Metro 2050* or in any local Official Community Plan. The Updating Centres and Corridors Targets project provides an opportunity to better support growth around transit corridors and monitor FTDA over time. *Metro 2050* includes a new corridor geography, Major Transit Growth Corridors (MTGCs) (Attachment 2), which guides the creation of new FTDA around the Major Transit Network. The MTGCs may be a suitable replacement for the current FTN-based corridor geography for targeting and monitoring purposes.

4. Employment growth in the Centres and FTDA is well below targeted levels

The current employment growth targets for Urban Centres and FTDA have fallen short of targeted levels. The Updating Centres and Corridors Targets project will consider whether current employment growth targets are reasonable, factoring in the reality that 27 percent of jobs are located on industrial lands that fall outside of Urban Centres and FTDA and that are often not well-served by transit. The project will provide an opportunity to consider the tools available to Metro Vancouver and member jurisdictions to effectively encourage job growth within Urban Centres and FTDA. Additional research and collaboration with member jurisdictions, Invest Vancouver Advisory Committee, and industry stakeholders may be required to determine area-specific incentives or economic development initiatives that can best support these efforts.

5. The recent changes to provincial legislation affecting transit-oriented areas and housing targets are not yet fully understood

¹ This has led to some confusion about whether the targets are meant to be achieved or exceeded. The Target Update project will clarify that the targets are meant to be minimums.

In November 2023, the Provincial Government introduced a set of legislation intended to stimulate housing supply in transit-oriented areas. The Housing Statutes (Transit-Oriented Areas) Amendment Act (Bill 47, 2023) establishes minimum residential development heights and densities in transit-oriented areas (i.e., within 800 metres of a SkyTrain station and within 400 metres of a bus exchange) and prohibits setting minimum parking requirements. While the legislation sets out height and density minimums, amended targets and zoning can go beyond the provincial requirements for these areas. This legislation follows the Housing Supply Act, released earlier in 2023, which grants the B.C. government the authority to set housing targets in municipalities with the greatest need and highest projected population growth. Any proposed adjustments to dwelling unit targets for Urban Centres and FTDAs will have to consider the relationship between the defined transit-oriented areas, the new provincial housing targets, and the Urban Centre and FTDA geographies to ensure that they are mutually-supportive.

PROPOSED TIMELINE AND ENGAGEMENT WITH MEMBER JURISDICTIONS

This report was presented to the Regional Planning Advisory Committee (RPAC) at its meeting on January 19, 2024, seeking feedback on the six key considerations that have been outlined. RPAC members supported the project and agreed with its need and importance, but provided the following comments which will be addressed in the scope of work:

- Concern was expressed about the proposed timing of the project, with limited planning staff capacity to participate in a working group ahead of the June 30, 2024 deadline to amend zoning bylaws and Official Community Plans to comply with the new provincial housing legislation;
- There was general agreement that from RPAC this work should proceed ahead of or in parallel to updates to local Official Community Plans and preparation or Regional Context Statements for *Metro 2050*; and
- General support was expressed towards using this project as an opportunity to reconcile regional and provincial growth geographies, which could include adjusting Urban Centre and FTDA boundaries for consistency with the legislated Transit-Oriented Areas (TOAs) or advocating to the Province to update TOA boundaries to match Urban Centres and FTDA.

Next steps for this project include:

- Engage a consultant in early 2024;
- Strike a Target Review Working Group, comprising policy or technical staff from interested member jurisdictions, TransLink, and local First Nations to meet regularly during the project;
- Host a stakeholder workshop in mid to late 2024;
- Conduct an interim check-in with Regional Planning Committee in late 2024;
- Bring forward recommendations to Regional Planning Advisory Committee, Regional Planning Committee and MVRD Board in early 2025; and
- Subject to Board direction, advance a *Metro 2050* amendment to update the Urban Centre and FTDA targets in early to mid- 2025.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

Funding to support hiring a consultant in the amount of \$25,000 is part of the Board-approved 2024 Regional Planning budget.

CONCLUSION

Metro 2050 commits to updating the dwelling unit and employment targets for Urban Centres and Frequent Transit Development Areas via an amendment following its adoption. The Updating Centres and Corridors Targets project will undertake the necessary background research and analysis to develop revised targets that are realistic yet ambitious enough to support the achievement of *Metro 2050's* goals and objectives (e.g., greenhouse gas emissions reduction, transit-oriented affordable housing creation, increased transit ridership), and also identify structural improvements to *Metro 2050's* targets to make them easier to implement. The project will be supported by a consultant and advised by a member jurisdiction working group, with a targeted completion date of early 2025, followed by a potential *Metro 2050* amendment.

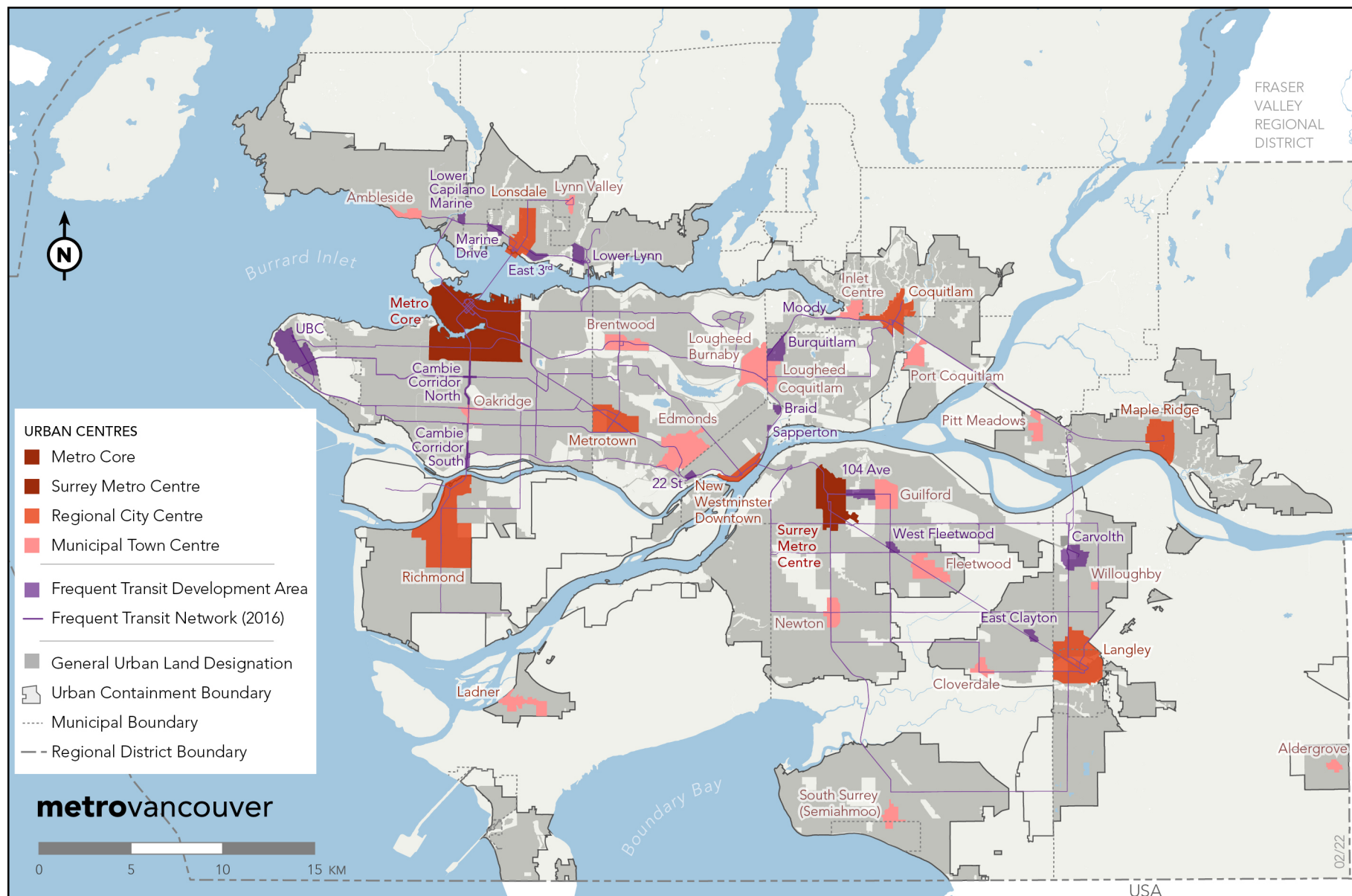
ATTACHMENTS

1. Map 4 of *Metro 2050* – Urban Centres and Frequent Transit Development Areas
2. Map 5 of *Metro 2050* – Major Transit Growth Corridors and Major Transit Network
3. Presentation re: Updating *Metro 2050* Centres and Corridors Target Update – Scope of Work

REFERENCES

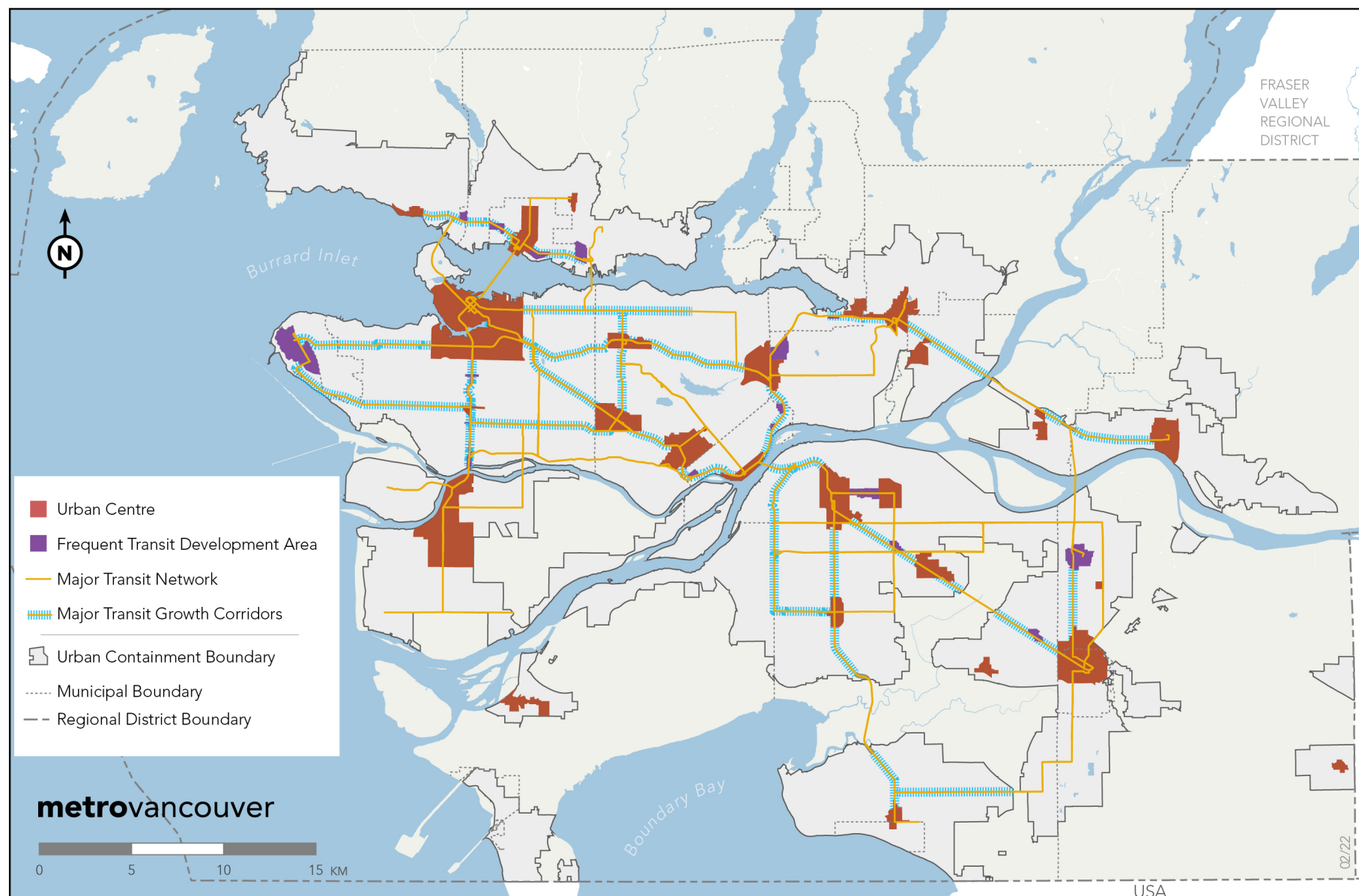
1. [*Metro 2040* Urban Centre and Frequent Transit Development Area Policy Review Recommendations](#)

MAP 4 Urban Centres and Frequent Transit Development Areas

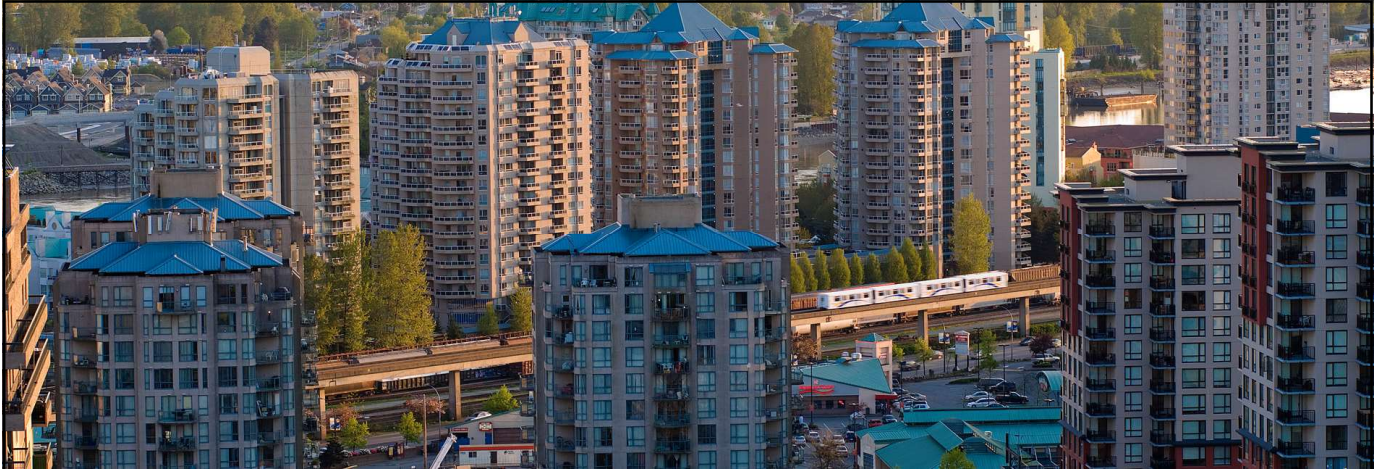


Urban Centres and FTDAs are overlays for structuring residential and employment growth. The boundaries are identified by member jurisdictions. Where overlays cover areas other than General Urban or Employment, the intent and policies of the underlying regional land use designations still apply.

MAP 5 Major Transit Growth Corridors and Major Transit Network



The Major Transit Growth Corridors include a buffer area of approximately 1km on either side of select segments of the Major Transit Network. Not all areas within MTGCs are appropriate for growth. The Major Transit Network is defined in Transport 2050 and is subject to periodic updates; it is shown for illustrative purposes only.



Updating Metro 2050 Centres and Corridors Targets

SCOPE OF WORK

Mark Seinen

Senior Planner, Regional Planning and Housing Services

Regional Planning Committee | February 9, 2024

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WHAT ARE TARGETS IN METRO 2050?

- Goals (not projections / forecasts) for dwelling unit and job growth
- Purpose: support the development of compact, complete, transit-oriented communities
- Only apply to:
 - Urban Centres
 - Frequent Transit Development Areas
- No targets at the local level



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2

WHAT WE ARE UPDATING AND WHY

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**This table provides guidance to assist in regional and local planning. It will be updated to extend the targets out to the year 2050 in an amendment following the adoption of Metro 2050.

PROJECT OBJECTIVES

Ambitious Yet Realistic Targets that Can Be Implemented

1. Generally seek to increase targets

- In line with ambitious regional planning goals

2. Reality-check against:

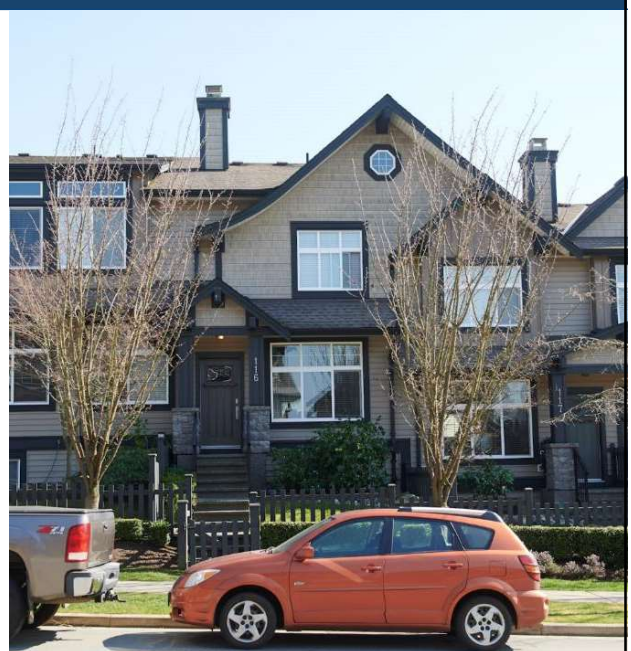
- Member jurisdiction input
- Population and housing projections
- New provincial housing bills

3. Fix structural issues and improve information

- To make implementation easier and more effective

5 KEY ISSUES

1. Targets specified only in aggregate
2. Targets expressed only as shares
3. Mismatch between FTDA target and FTDA geographies
4. Job growth in Centres & FTDA is below targeted levels
5. Provincial housing bills need to be considered



TARGETS ARE SPECIFIED ONLY IN AGGREGATE

1

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TARGETS ARE EXPRESSED ONLY AS SHARES

2

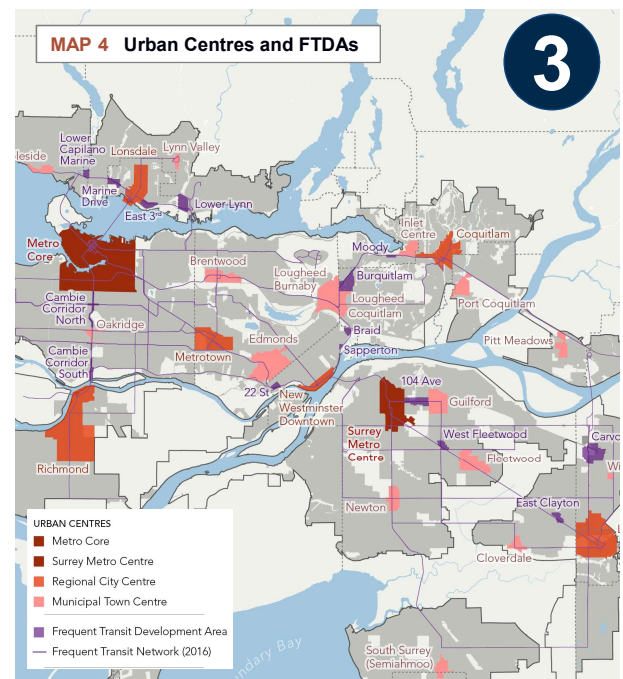
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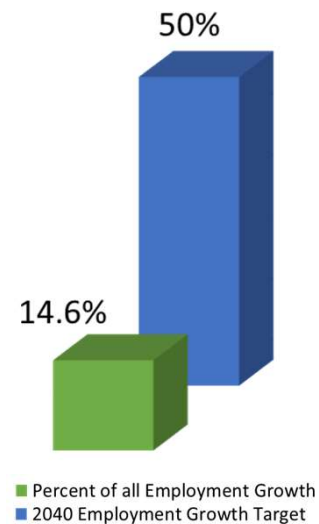
FTDA TARGET / GEOGRAPHY MISMATCH

- Dwelling unit target for FTDA's: 28%
- Based on FTN corridors instead of FTDA's
- Challenge of monitoring a growing and changing area
- Amend the targets or better define the geography



JOB GROWTH IS BELOW TARGETED LEVELS

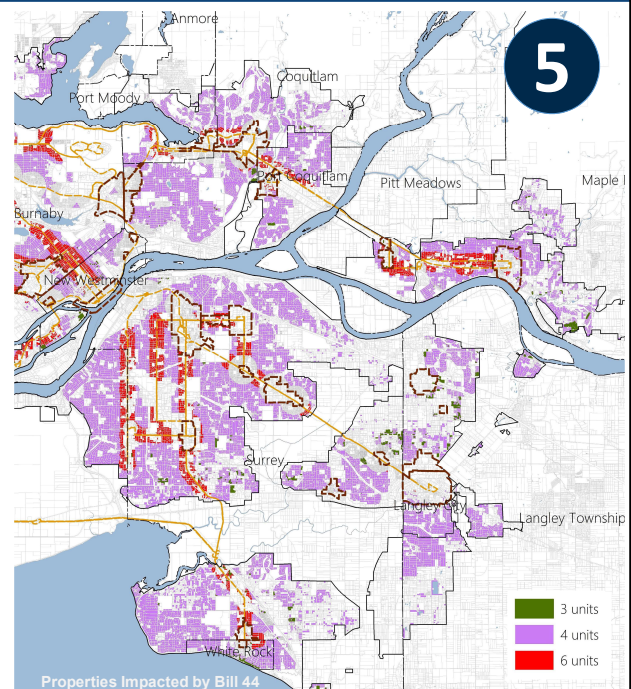
- Ambitious targets are based on the Complete Communities concept
- Need to consider options (e.g. maintain, increase)
- Project will review available tools to encourage job growth in centres



Percent of Regional Employment Growth in Urban Centres, 2006-2016

CONSIDER NEW PROVINCIAL HOUSING LEGISLATION

- Bill 47 (TOAs) could increase growth in Centres & FTDAs
- Bill 44 (SSMUH) could increase growth outside Centres & FTDAs
- Bill 43 (Housing Targets) influences growth across the board
- Net effects will need to be modelled, considered and incorporated



TIMELINE AND ENGAGEMENT

- Targets Working Group
 - Help finalize scope of work
 - Provide ongoing feedback and review
- Staff workshop in mid-late 2024
- Regional Planning Committee & Board late 2024 / early 2025
- Possible *Metro 2050* amendment in 2025



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Thank you

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To: Regional Planning Committee

From: Eric Aderneck, Senior Planner, Regional Planning and Housing Services

Date: January 22, 2024 Meeting Date: February 9, 2024

Subject: **Regional Industrial Lands Strategy Bring-to-Market Project – Scope of Work**

RECOMMENDATION

That the Regional Planning Committee receive for information the report dated January 22, 2024, titled “Regional Industrial Lands Strategy Bring-to-Market Project – Scope of Work”.

EXECUTIVE SUMMARY

The *Regional Industrial Lands Strategy* was approved by the MVRD Board in mid-2020. It sets out 10 priority actions and 34 recommendations that continue to be implemented. Metro Vancouver is advancing one priority action through the Bring-to-Market project, which entails identifying an underutilized industrial site with the potential to be redeveloped and densified / intensified.

The Metro Vancouver region is experiencing a critical shortage of industrial land. Some of the region’s remaining vacant industrial lands suffer from site or area specific challenges, such as limited infrastructure, environmental constraints, or under-sized parcels. Where vacant lands have not come to the market due to one or more of these or other challenges, municipalities may support an assessment of the constraints, and the preparation of a Bring to Market plan. This project will identify the issues that have prevented the development of the lands for a select site, and prepare a plan to advance development and achieve the host jurisdiction’s land use planning and economic development goals.

PURPOSE

To provide the Regional Planning Committee a scope of work for the Bring-to-Market project that would entail identifying a site or area that has underutilized industrial lands with a potential to be redeveloped and densified / intensified through a focused and coordinated effort.

BACKGROUND

Industrial lands are an important part of the region’s land base and economy. As has been well-documented, the Metro Vancouver region has a limited supply of industrial lands and a strong demand for industrial space which has resulted in extremely low vacancy rates, with very high rental rates and land prices. As documented in a study about the contribution of industrial lands and activities to the regional economy (Reference 1):

- Industrial lands represent 4 percent of the region’s land base;
- These industrial lands accommodate 27 percent of jobs in the region (direct employment represents 364,100);
- These jobs pay about 10 percent higher wages than the regional average; and
- Annual business activity contributes \$9 billion in taxes to various levels of government.

POLICY RESPONSE

Regional Industrial Lands Strategy

The *Metro Vancouver Regional Industrial Lands Strategy* (RILS) was approved in 2020 and contains a series of action items that continue to be implemented (Reference 2). Many of these actions are led by Metro Vancouver, but also require close coordination with various other organizations and agencies in the region. RILS identifies 34 recommendations to respond to the 4 principal challenges facing the region's industrial lands, with 10 priority actions for early implementation. Implementing RILS requires partnerships, collaboration and support among diverse interests to achieve the vision.

Bring to Market Project Description

Amongst the 10 RILS priority actions, #6 is to "Prepare Bring-to-Market Strategies for Vacant or Under-Developed Industrial Lands", which is described as a means to:

Proactively address issues preventing the development of vacant or under-utilized industrial lands, which may have unique site challenges, such as servicing limitations, soil qualities, and ownership assembly.

RILS identifies the Bring-to-Market action as Big Move #3, and describes the need for it as:

Certain parts of the vacant industrial land supply suffer from site-specific challenges, such as limited infrastructure support, environmental concerns, and under-sized parcels. Where vacant lands have not come to the market, local municipalities may benefit from the preparation of a bring-to-market strategy. Such a strategy would identify the issues that have prevented the development of the undeveloped or under-developed industrial land, while providing a roadmap to achieve the municipality's economic goals for its remaining industrial lands.

A Bring-to-Market strategy for vacant or under-developed industrial lands can consider:

- a site's or area's relevant strengths, weaknesses, opportunities and challenges;
- new strategies to encourage reinvestment and more intensive use;
- the possibilities for municipal assembly and consolidation of fragmented parcels;
- any environmental remediation required; and
- if local servicing and infrastructure improvements are needed, and if they can be accommodated through front-ending infrastructure investment agreements.

PROJECT OUTLINE

The Bring-to-Market project will document any area-specific matters that are obstacles or barriers to developing / redeveloping and densifying / intensifying industrial lands. Local considerations and issues will be explored, documented, and recommendations provided to address such factors as:

- land ownership patterns and assembly / consolidation potential;
- servicing deficiencies and requirements;
- infrastructure funding sources;
- soil contamination and remediation requirements;
- soil geotechnical limitations; and

- environment attributes such as watercourse setbacks, etc.

Benefits

Once an appropriate industrial site or area has been identified, a study will be undertaken with the findings, lessons learned, and recommendations documented to support similar initiatives in other areas of the region. This project will also include supportive resources and references, such as a best practice guide, examples, or templates.

The project's results will benefit both the host jurisdiction and other parties by:

- addressing and overcoming local issues / obstacles to bringing additional industrial lands to market and increase the supply and capacity of the region's limited industrial lands;
- summarizing and sharing the findings, although area-specific, which could inform and support similar initiatives in other parts of the Metro Vancouver region; and
- supporting the policy goals in both RILS and *Metro 2050*, as well as advance municipal land use, economic development, and related objectives.

Process and Partners

Metro Vancouver plans to co-lead the project (be it through coordination, convening, in-kind contributions, funding), with a partner member jurisdiction. Key participants in the project will include: the host jurisdiction, as well as relevant business organizations (such as business improvement association, chamber of commerce), economic related agencies (such as an economic development office), and local industrial landowners and developers. Given the economic, employment, and transportation considerations and implications associated with such an initiative, it would also benefit from participation and key inputs by Invest Vancouver staff, the Invest Vancouver Advisory Committee, TransLink, and possibly other agencies such as the Port of Vancouver.

A terms of reference for the project has yet to be developed, but it will clearly outline the project objectives, roles, responsibilities, resources, timeline, deliverables, etc. Prior to initiation, some important components of the project must be agreed-upon by the partners including:

- one project will be selected through a call for proposals for subject participants / areas;
- Metro Vancouver will provide resources and assistance in the form of staff time, technical expertise, facilitation / collaboration role, and a limited financial contribution towards external consultant support;
- support by a consultant could supplement staff resources and expertise by completing such tasks as an analysis of the subject lands, infrastructure capacity, business information, market research, financial testing, engagement facilitation, study drafting;
- unless otherwise agreed-upon, the results of the project will be made publicly available and be shared with other member jurisdictions and parties to inform other efforts and initiatives; and
- the entire project is to be completed within one year.

The project's recommendations could include: changes in municipal land use policies and / or regulations; infrastructure servicing upgrades; introducing municipal incentives; transportation enhancement requirements (which may include coordination with TransLink, etc.). Advancing any recommendations and timing would be the responsibility of the member jurisdiction and / or property owner(s).

Metro Vancouver cannot purchase lands, install infrastructure, or any other capital related expenditures as part of this project, although staff could help others advocate for other organizations or agencies to advance such investments and actions using the project study as supporting information.

Subject Area Criteria

Possible subject areas will need to meet established criteria to be deemed a viable and appropriate project, including:

- a member jurisdiction (both staff and political levels) prepared to make a commitment towards the project in terms of staff time, expertise, resources, and additional funding (if applicable);
- a subject site or area is designated and intended for industrial uses, as documented through relevant plans, policies, or regulation, that are evidently underutilized and not fulfilling their full potential;
- the land being privately owned, but could include some publicly-owned land that may have some industrial potential;
- a local business group / association that is supportive of the initiative, and willing to participate and support it, such as attending meetings, facilitating input from members, sharing relevant data and information, etc.; and
- interest by the development community (e.g., local industrial developers, engineering or architecture consultants) to participate to share their input, knowledge, data, etc.; however, possible benefits of the project for the site / area should not be exclusively for one property owner or developer.

Work Program Summary

The project tasks include the following:

- confirm the study area through the project selection process after a call for proposals;
- establish a project team and terms of reference, reporting schedule, etc.;
- confirm the scope, scale and desired outcomes of the project;
- compile and review available documents;
- retain a consultant;
- identify / document the issues that have prevented the development of the undeveloped / under-developed industrial lands;
- document and define strengths, weaknesses, opportunities and threats (SWOT Analysis), to encourage redevelopment and reinvestment for more intensive industrial uses;
- for each noted issue / challenge, identify a response / recommendation;

- create an action plan to achieve these goals for the industrial lands; and
- summarize the findings and document lessons that could be applicable to other similar properties or areas of the region in a final study.

NEXT STEPS

This report was presented to the Regional Planning Advisory Committee on January 19, 2024, and to the Invest Vancouver Advisory Committee on January 17, 2024 seeking feedback on the preliminary outline for the project, including possible subject areas for exploration.

Subject to any feedback received from the Regional Planning Committee, the project will be initiated and a call for proposals will be issued. A status update will be provided to the Committee and Board as the project advances. The final study and recommendations will be presented to a future meeting of the Committee and publicly shared and posted on the Metro Vancouver website. Staff anticipate calling for proposals in the Spring of 2024, with the project to be completed within a year. Depending on the interest and results, Metro Vancouver may explore expanding this initiative to address additional sites.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

A budget of \$30,000 associated with this project is included in the MVRD Board approved 2024 Regional Planning budget. Metro Vancouver will also seek other funding sources through project partners to enhance the work, as appropriate.

CONCLUSION

The *Metro Vancouver Regional Industrial Lands Strategy* was approved by the MVRD Board in 2020. Since then, Metro Vancouver has completed a number of projects to advance and implement actions to RILS. In 2024, Metro Vancouver is intending to advance one of RILS's priority actions by completing a Bring-to-Market project. This would entail working closely with a member jurisdiction, that has an identified underutilized industrial lands with potential to be redeveloped and densified / intensified, through a focused and coordinated effort to complete an assessment of the associated challenges and opportunities related to developing those lands for industrial purposes. Subject to any feedback received from the Regional Planning Committee, Metro Vancouver staff will initiate the project including a call for proposals.

REFERENCES

1. [Metro Vancouver Industrial Lands: Economic Impact and Future Importance, 2019](#)
2. [Metro Vancouver Regional Industrial Lands Strategy, 2020](#)

To: Regional Planning Committee

From: Laurie Bates-Frymel, Senior Planner, Regional Planning and Housing Services

Date: January 20, 2024 Meeting Date: February 9, 2024

Subject: **Invasive Species Best Management Practices – Japanese Beetle Guidebook**

RECOMMENDATION

That the Regional Planning Committee receive for information the report dated January 20, 2024, titled “Invasive Species Best Management Practices – Japanese Beetle Guidebook”.

EXECUTIVE SUMMARY

Adding to the existing regional library of technical guidance for priority invasive species, Metro Vancouver has worked with the Invasive Species Council of Metro Vancouver, federal and provincial authorities, member jurisdictions, and other local experts to produce a guidebook for the invasive Japanese beetle (*Popillia japonica*). This guidebook is designed to introduce local government staff and their contractors to the eradication efforts being undertaken by the multi-agency Japanese beetle response. The document also provides information about current distribution, potential impacts on the agricultural and horticultural sectors in BC, and how to identify, track, report, prevent further spread, and effectively control the Japanese beetle. In addition, the guidebook describes how this species may adapt as our climate changes, increasing the urgency to proactively control and prevent further spread of this high risk species. An accompanying one-page fact sheet has also been created to raise public awareness.

PURPOSE

To provide the Regional Planning Committee with the new Japanese beetle guidebook and accompanying fact sheet for information.

BACKGROUND

In April 2023, the MVRD Board adopted the *Climate 2050 Nature and Ecosystems Roadmap* (Reference 1), which commits Metro Vancouver to:

“Support regional invasive species management by developing and promoting best practices, tracking disposal options, and working with researchers to improve our understanding of the potential spread of invasive species as our climate continues to change”.

Metro 2050 also includes an action for member jurisdictions to:

“...reduce the spread of invasive species by employing best practices, such as the implementation of soil removal and deposit bylaws, development permit requirements, and invasive species management plans” (Policy Action 3.2.7c) iii).

The Regional Planning Committee receives reports regarding best management practices for priority invasive species of concern in the region. This staff report conveys a recently-completed Guidebook for local government staff and contractors (Reference 2) and accompanying fact sheet (Reference 3) about the Japanese beetle.

HISTORY OF THE JAPANESE BEETLE IN BC

In July of 2017, Japanese beetles were detected in the False Creek area of Vancouver by the Canadian Food Inspection Agency during routine annual surveillance. This was the first time Japanese beetle had been found in BC, and it is not known how the beetles arrived. The potential consequences of Japanese beetle establishment include severe damage to nurseries, farms, lawns, landscapes, golf courses, gardens and parks, and negative impacts on BC's horticultural and agricultural sectors (Reference 4). Further spread of this beetle would result in increased costs to impacted municipalities, industry and the public due to crop and plant losses and the cost of control measures (Reference 5). Its establishment may result in the loss of BC's 'Japanese beetle pest-free' status and onerous industry requirements to establish and maintain Japanese beetle-free certification programs (Reference 4), which may impact domestic and international trade of the over 300 plant species upon which Japanese beetle feeds.

In 2018, the Invasive Species Council of BC hosted a 'call to action' meeting, and it was determined that no one organization held the key to eradicating the Japanese beetle. As a result, a multi-agency Japanese beetle response was initiated, overseen by a Steering Committee of representatives from the federal, provincial, regional and municipal governments, along with industry and other stakeholders.

Table 1 provides an overview of CFIA's beetle detections in BC by year, illustrating the range expansion beyond the original detection area. The decreasing number of detections within the City of Vancouver in recent years demonstrates the effectiveness of treatment and movement restrictions.

Table 1 – Japanese Beetle Detections by Year and Geography

Year	Total number of Japanese beetles detected in BC	Municipality			
		Vancouver	Burnaby	Port Coquitlam	Others
2017	958	958	-	-	-
2018	8276	8275	-	-	Delta (1)
2019	1157	1157	-	-	-
2020	214	213	-	1	-
2021	79	73	5	1	-
2022	201	39	35	126	Richmond (1)
2023	643	4	29	611	-

OVERVIEW OF THE JAPANESE BEETLE GUIDEBOOK

In 2022, Metro Vancouver member jurisdictions requested guidance to help local governments plan for and prepare to respond to Japanese beetle detections within their boundaries. Using the existing regional best management practices as a template, Metro Vancouver retained the Invasive

Species Council of Metro Vancouver (ISCMV) to produce a guidebook. Prepared in close collaboration with members of the Japanese Beetle Steering Committee and its Communications Subcommittee, the Guidebook was designed to introduce local governments and contractors to the collaborative eradication efforts underway.

Guidebook Contents

The Japanese Beetle Guidebook contains information about the current distribution, potential impacts on the agricultural and horticultural sectors in BC, and how to identify, track, report, prevent further spread, and effectively control the Japanese beetle. The guidebook also clearly identifies roles and responsibilities for each response member, including regulatory requirements. Table 2 briefly describes the roles of the agencies represented on the Japanese Beetle Steering Committee.

Table 2 – Japanese Beetle Response Member Roles

Member	Role
Canadian Food Inspection Agency (CFIA)	The CFIA oversees surveillance efforts by distributing traps across the region and beyond, for the purposes of tracking beetle movement and the effectiveness of treatments. Informed by the previous year's detections, the CFIA consults with the Japanese Beetle Steering Committee and establishes or revises regulated / containment areas, implements movement restrictions for regulated articles ¹ originating from the regulated areas ² , and issues movement certificates. When establishing or revising the boundaries of a regulated area, the location of all current and previous year detections, geography, impact to stakeholders, expectations concerning natural and human assisted spread of the beetle, and ease of communication with the public are considered. A CFIA-issued movement certificate is required year-round to move regulated articles out of a Japanese beetle regulated area.
Government of BC / BC Ministry of Agriculture and Food (MAF)	The MAF oversees the Japanese beetle treatment program in BC. Around detection sites, the Government of BC may issue a <i>Notice to Treat</i> public or private lands. To date, the Government of BC has been providing municipalities with larvicide at no cost. Private lands located within treatment zones may be eligible for free treatment.
Local governments ²	Local governments are responsible for treating public lands within their jurisdictions. Changes to municipal standard operating procedures (SOPs) are recommended. For example, the City of Burnaby has SOPs for handling green waste, parks operations (securing material, cleaning, etc.), and for movement of regulated articles outside parks.
Metro Vancouver	Metro Vancouver supports invasive species and solid waste management coordination across the region.
BC Landscape and Nursery	The BCLNA provides industry perspective and outreach to its members who are or may be directly impacted by the Japanese beetle response. Members

¹ As of May 2023, the regulated articles are 'plants with soil or soil-related matter attached', such as turf grass, sod, annuals, perennials, bulbs, shrubs, and bedding plants.

² As of May 2023, [Japanese beetle regulated areas](#) are in effect within the Cities of Burnaby, Port Coquitlam, Coquitlam, and Vancouver.

Association (BCLNA)	include landscape trades, garden centres, wholesale and retail nurseries, suppliers and others.
The Invasive Species Council of BC (ISCBC)	At the request of governments and industry, the ISCBC is serving as project facilitator for multi-agency planning, meeting, and information exchange across government and non-government stakeholders involved in the Japanese beetle response.

Climate Change Adaptation

The Guidebook also describes how the Japanese beetle may adapt as our climate continues to change. For example, researchers in the United States have observed higher Japanese beetle leaf consumption and associated plant mortality with rising temperatures (Reference 6). An extended growing season, which is also expected with climate change, will increase the probability of two Japanese beetle life cycles per year in northern latitudes around the world, including parts of Canada (Reference 7). Continued eradication efforts are recommended to minimize potential impacts on the agricultural and horticultural sectors, and to reduce control costs over the long term.

Fact Sheet

A plain language fact sheet (Reference 3) has also been produced to share information with residents. Both the fact sheet and guidebook have been posted on the Metro Vancouver website (Reference 8).

NEXT STEPS

In 2024, Regional Planning will again be partnering with the City of Burnaby and the ISCMV to produce regional best practice guides for three additional priority invasive species: bamboo, periwinkle, and cherry laurel.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

The 2023 MVRD Board-approved Regional Planning budget included \$5,000 for the Japanese Beetle Guidebook.

CONCLUSION

Metro Vancouver has worked with the Invasive Species Council of Metro Vancouver and the Japanese Beetle Steering Committee to produce a guidebook for the Japanese beetle (*Popillia japonica*) in the Metro Vancouver region. Designed to introduce local government staff and contractors to the eradication efforts being undertaken, this guidebook provides information about current distribution, potential impacts on the agricultural and horticultural sectors in BC, and how to prevent further spread and effectively control the Japanese beetle. In addition, the Guidebook describes how the Japanese beetle may adapt as our climate continues to change, increasing the urgency to proactively control and prevent the spread of this high risk species. The Guidebook, and accompanying one-page fact sheet, are being shared with the Regional Planning Committee for information.

ATTACHMENT

1. Presentation re: Invasive Species Best Management Practices – Japanese Beetle Guidebook

REFERENCES

1. [*Climate 2050 Nature and Ecosystems Roadmap*](#)
2. [*Guidebook for Japanese Beetle in the Metro Vancouver Region*](#)
3. [*Tackling Japanese Beetle - Fact Sheet*](#)
4. [*CFIA - Japanese beetle in British Columbia: an ongoing response 2018 to 2023*](#)
5. [*Government of BC - *Popillia japonica* \(Japanese Beetle\) Pest Alert*](#)
6. Niziolek, O. K., Berenbaum, M. R., & DeLucia, E. H. (2013). [*Impact of elevated CO₂ and increased temperature on Japanese beetle herbivory*](#). *Insect Science*, 513-23.
7. Kistner-Thomas, E. J. (2019). [*The Potential Global Distribution and Voltinism of the Japanese Beetle \(*C. Scarabaeidae*\) Under Current and Future Climates*](#). *Insect Science*, 1-13.
8. [*Other invasive species best management practices*](#)

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Best Management Practices for Invasive Species

JAPANESE BEETLE GUIDEBOOK

Laurie Bates-Frymel

Senior Planner, Regional Planning and Housing Services

Regional Planning Committee | February 9, 2024

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GUIDEBOOK CONTENTS

- Impacts
- Climate change adaptation
- Roles, responsibilities and regulatory requirements
- History and distribution in BC
- Surveillance
- Movement restrictions
- Treatment



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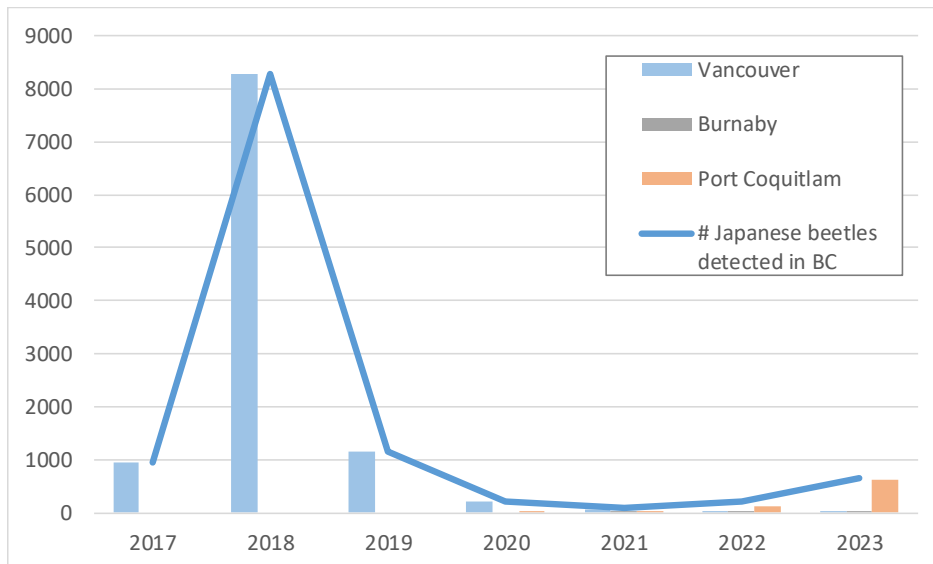
JAPANESE BEETLE RESPONSE COLLABORATIVE

Members	Role
Canadian Food Inspection Agency (CFIA)	Oversees surveillance, establishes regulated areas, and issues movement certificates for regulated articles*
BC Ministry of Agriculture and Food (BC MAF)	Oversees treatment of public and private lands (larvicide currently free)
Local governments**	Treating public lands, standard operating procedures
Metro Vancouver	Support (e.g., the guidebook, transfer station signage)
BC Landscape and Nursery Association	Outreach to landscapers, garden centres, and nurseries
Invasive Species Council of BC	Facilitation

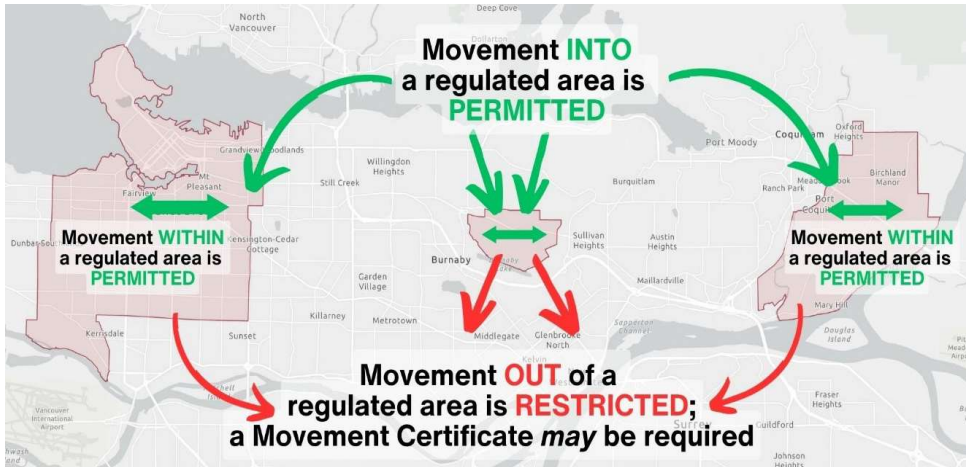
* Currently plant with soil and soil-related matter attached

** Currently the cities of Vancouver, Burnaby, and Port Coquitlam

DISTRIBUTION IN BC



JB REGULATED AREAS AS OF MAY 2023



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Credit: Steven Katovich, Bugwood.org

TOGETHER
WE MAKE OUR REGION
STRONG

Thank you

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To: Caucus of Committee Chairs

From: Climate Action Committee

Date: February 9, 2024

Meeting Date: February 21, 2024

Subject: **Climate 2050: Priority Actions to Accelerate Toward our Regional Targets**

That the Caucus of Committee Chairs receive for information the report dated February 9, 2024, titled "Climate 2050: Priority Actions to Accelerate Toward our Regional Targets".

The attached report titled "Climate 2050: Priority Actions to Accelerate Toward our Regional Targets" was received by the Climate Action Committee at its meeting of January 11, 2024. The Climate Action Committee added a recommendation as presented below in underline style, and forwarded the report to the MVRD Board at its meeting of January 26, 2024. The MVRD Board passed the following resolutions:

That the MVRD Board:

- a) receive for information the report dated December 15, 2023, titled "Climate 2050: Priority Actions to Accelerate Toward our Regional Targets"; and
- b) direct staff to forward a copy of the report dated December 15, 2023, titled "Climate 2050: Priority Actions to Accelerate Toward our Regional Targets" to the Caucus of Committee Chairs for discussion and information.

The report is now being presented to the Caucus of Committee Chairs for information.

Climate Action Committee members identified the importance of a broad and inclusive discussion on the priority actions identified in the report, in the context of affordability and housing considerations, and a desire for all standing committees of the Board to be aware of, and understand the criticality of, these priority actions in advancing substantive climate action toward the Board-adopted climate action plans and targets.

Staff have updated the slides presented to the Climate Action Committee for the purpose of this meeting, to respond to some of the Board's comments at the open MVRD Board meeting of 2024 January 26, arising from discussion of item E2.2. "Proposed Regulatory Approach to Reduce Greenhouse Gas Emissions from Existing Large Buildings: Phase 2 Engagement", which also have relevance for this report.

ATTACHMENTS

1. "Climate 2050: Priority Actions to Accelerate Toward our Regional Targets", dated December 15, 2023.
2. Presentation

To: Climate Action Committee

From: Lise Townsend, Division Manager, Air Quality and Climate Action Policy
Jason Emmert, Program Manager Regional Climate Action Policy,
Air Quality and Climate Action Services

Date: December 15, 2023

Meeting Date: January 11, 2024

Subject: **Climate 2050: Priority Actions to Accelerate Toward our Regional Targets**

RECOMMENDATION

That the MVRD Board receive for information the report dated December 15, 2023, titled “Climate 2050: Priority Actions to Accelerate Toward our Regional Targets”.

EXECUTIVE SUMMARY

Metro Vancouver, alongside other similar jurisdictions, is at a critical juncture: The MVRD Board has adopted the necessary targets and plans aligned with the global science to avoid the worst impacts of climate change. The pathway to a zero-emissions and resilient region – the technology, regulations, and investments – is well understood. Metro Vancouver’s *Clean Air Plan* and *Climate 2050* strategy and supporting Roadmaps outline the necessary actions and roles. The next step is to move swiftly from comprehensive planning to bold leadership through implementation. This report identifies priority Big Moves needed to accelerate toward the Board-adopted greenhouse gas (GHG) emissions reduction targets.

For Metro Vancouver, these are:

1. Developing and adopting a regional GHG emission regulation for existing large **buildings**
2. Developing and adopting regional regulations for shifting to sustainable **transportation**
3. Developing and adopting regional GHG emission regulations for **industry**
4. Strong regional advocacy for the transition to clean, renewable, and resilient **energy**

For member jurisdictions priority actions that complement the above include:

1. Zero Carbon Step Code, EV-ready bylaws, and support for existing buildings regulations
2. Community plans, zoning, and infrastructure to enable sustainable transportation
3. Collaboration on advocacy for clean, renewable energy policy

Collectively, the Big Moves for buildings and transportation, together with supporting policies and investments from other orders of government, could reduce regional emissions by up to 6 million tonnes per year by 2050, and up to 2.8 million tonnes by 2030 (40 per cent of the 2030 target). In this fiscally challenging time, affordability and equity are key considerations; it is imperative that regulatory measures are grounded with related supportive policies. Without these Big Moves, the region will not meet its climate action targets. Staff will be seeking direction from the MVRD Board on these priority Big Moves and other *Climate 2050* actions in the near future.

PURPOSE

This report highlights the biggest near-term priorities for reducing GHG emissions for Metro Vancouver and member jurisdictions. These Big Moves are identified in Board-adopted plans, and in municipal climate plans. The intent of this report is to support the Board in its decision-making and communications with external agencies and partners.

BACKGROUND

Metro Vancouver has committed to targets and actions to address climate change in the *Clean Air Plan*, *Climate 2050*, *Metro 2050*, and TransLink's *Transport 2050*. Climate Action is one of the five Strategic Directions in the 2022-2026 *Board Strategic Plan*. Implementation of these plans is underway, however, action must be accelerated to meet the Board-adopted 2030 and 2050 targets. Decisive and coordinated effort by all orders of government is needed in the face of challenges ranging from continued expansion of fossil fuel industries to low climate literacy (Reference 1).

Metro Vancouver is authorized by the Province's *Environmental Management Act* to regulate or prohibit the discharge of air contaminants. GHG emissions are considered to be air contaminants because they can harm public health and the environment. Metro Vancouver also collaborates with and advocates to other orders of government on emissions reduction policies. Stringent regulations that reduce GHG emissions at the source are proven to be among the most effective policy instruments, in combination with supporting policies and programs such as incentives and infrastructure investments (References 2 & 3).

This report highlights priority near-term Big Moves among the actions in Board-endorsed plans for Metro Vancouver and member jurisdictions, which have the potential to substantially reduce GHG emissions and advance the region toward its adopted climate targets.

BIG MOVES FOR METRO VANCOUVER IN 2024 TO 2026

Metro Vancouver staff have heard that elected officials are seeking clarification about the biggest opportunity areas among the Board-approved *Climate 2050* Roadmaps. While all actions in the Roadmaps are necessary and work together, swiftly adopting and implementing the Big Moves highlighted below can significantly accelerate progress toward the regional GHG reduction targets.

Regional GHG Emission Regulation for Existing Large Buildings

Buildings are the second-largest source of regional GHG emissions, yet there are no regionally applicable regulations for reducing emissions from existing buildings. Of the total approximately 450,000 buildings in the region, two-thirds will still be in use in 2050. Upgrading buildings can reduce health-harming air contaminants, reduce over-heating in summer, and create safer, more comfortable spaces that cost less to heat and cool.

Big Move 1.1 in the *Climate 2050 Buildings Roadmap* proposes a regulation to reduce greenhouse gas emissions from existing large buildings that would be implemented through the Board's adoption of a regional regulation.

Affordability is being addressed by focusing on the largest, professionally-managed retail and office buildings first, and providing support and resources for building owners and managers, including the Retrofit Accelerator, a partnership with the Zero Emissions Innovation Centre. Retrofits can also provide a return on investment through energy savings and health benefits. The proposed regulation would complement pending federal and provincial regulations and programs, as well as a bylaw recently enacted by the City of Vancouver, and establish a regionally consistent approach.

According to preliminary analysis, full and rapidly-scaled implementation of a comprehensive regulation for existing large buildings could reduce this sector's emissions by approximately 6 per cent (85,000 tonnes per year) by 2030, and by 21 per cent (approximately 300,000 tonnes per year) by 2050. This would be additional to reduction achieved by existing policies and would be amplified by complementary pending policies including provincial equipment efficiency standards.

Report E.3 in this agenda package outlines the regulatory proposal supporting this Big Move, and seeks Board direction to proceed with the second phase of engagement throughout 2024. Staff would report back to the Climate Action Committee and Board with outcomes of the engagement and a proposed regulation in early 2025.

Regional Regulations for Shifting to Sustainable Transportation

On-road transportation is the largest source of regional GHG emissions. Alongside vehicle electrification, reducing these emissions requires shifting more trips to walking, cycling, and transit, which also improves health, reduces vehicle congestion, and supports low-cost transportation options. This shift requires expanded funding and investment in transit and active transportation. Further, while the electric vehicle (EV) transition is progressing rapidly, many people still do not have the option to own an EV due to their income or a lack of home or workplace charging.

To address these challenges, Metro Vancouver is working with TransLink on a project to understand what combination of supportive and regulatory policies can best achieve the region's GHG targets for passenger vehicles, alongside new funding mechanisms for transit infrastructure. This project would support implementation of Big Move 2.1 in the *Climate 2050 Transportation Roadmap*, focused on regional passenger vehicle requirements, as well as other actions in Strategies 1 and 2, focused on shifting to walking, cycling and transit, and supporting EV adoption.

According to preliminary analysis, stringent vehicle emissions regulations, combined with expansion of transit, could reduce passenger vehicle emissions by up to 20 per cent (approximately 800,000 tonnes per year) by 2030. This would be additional to significant reduction achieved through existing policies including the Zero Emissions Vehicle Act and an escalating carbon tax. By 2050, the combined effect of these regulations could achieve near-zero emissions for all passenger trips.

Affordability is being addressed in this project by considering financial mechanisms that support the most sustainable and efficient transportation choices with increased funding for transit, active transportation, and measures to improve access to EVs for lower-income households.

Staff are preparing to bring a report addressing this Big Move and related actions to the Climate Action Committee in early 2024.

Regional GHG Emission Regulations for Industry

Industrial facilities and non-road equipment in Metro Vancouver account for 25 per cent of regional GHG emissions or 3.6 million tonnes per year. Metro Vancouver already regulates health-harming air contaminant emissions and GHGs from some of these sources, among 150 permitted facilities and over 3,000 industrial and commercial boilers, heaters, and non-road equipment. Integrating GHGs in Metro Vancouver's industrial regulatory programs has the potential to achieve more holistic outcomes to reduce both health-harming air contaminants and GHG emissions.

Big Move 1.2 in the *Climate 2050 Industry and Business Roadmap* would apply Metro Vancouver's regulatory authority to address air contaminant emissions to the reduction of GHG emissions from industrial sources.

This Big Move complements provincial regulations including the Output-Based Pricing System, methane regulations, and a proposed provincial oil and gas sector emissions cap.

This Big Move is being addressed with research to evaluate opportunities to improve emissions regulations for the industrial sector and the appropriate role for Metro Vancouver, including estimating the potential GHG reduction impact. Staff anticipate bringing forward policy recommendations for consideration by the Committee and Board in 2025.

Regional Advocacy for the Transition to Clean, Renewable, and Resilient Energy

A clean and renewable energy transition underpins the other Big Moves in the *Climate 2050 Roadmap* actions, including those highlighted in this report. This transition involves reducing energy demand and shifting to 100 per cent clean, renewable energy to heat our homes, move people and goods, and power industrial processes. Clear and comprehensive provincial policy is needed to ensure that the transition is successful, fair, and equitable.

Metro Vancouver's continued and strengthened advocacy and participation in provincial energy policy discussions is supported by *Climate 2050 Energy Roadmap* Strategy 1, "Plan for the Transition to Clean, Renewable, and Resilient Energy", Strategy 2, "Accelerate Electrification", and Strategy 4, "Limit Expansion of Fossil Fuel Production".

As directed by the Board, Metro Vancouver is engaging with relevant BC Utilities Commission processes, in collaboration with several member jurisdictions, and advocating to the Province for energy policies that support *Climate 2050* and *CleanBC* targets. This includes calling for improved coordination of long-term energy planning by Fortis BC and BC Hydro, and advocating for reform of the BC Utilities Commission with a strong climate mandate. Pending provincial energy policies, such as the Climate-Aligned Energy Framework and a GHG emissions cap for gas utilities, have the potential to support and accelerate the clean energy transition, provided they are aligned with science-based targets and best practices as reflected in *Climate 2050*.

Recognizing that clean, renewable electricity is a mainstay of the energy transition in the province and the region, staff are also engaging with BC Hydro on their policies, and partnering on innovative approaches to support the region's energy needs. Staff are working with BC Hydro on a guiding document that would clarify shared objectives and opportunities for the two organizations to collaborate in advancing energy efficiency and electrification.

In 2024, staff will provide updates on these initiatives and seek further direction from the Board to advocate to the Province for stronger legislation for a coordinated and efficient transition to clean and renewable energy.

BIG MOVES FOR MEMBER JURISDICTIONS FOR 2024 TO 2026

In addition to the Big Moves for Metro Vancouver outlined above, member jurisdictions have critical roles to play. Many have adopted GHG reduction targets aligned with those of Metro Vancouver, supported by comprehensive climate action plans. Municipal Big Moves with significant potential to accelerate progress toward regional climate targets include the following:

Zero Carbon Step Code, EV-ready Bylaws, and Support for Existing Building Regulations

Bylaws requiring new buildings to meet the highest level of the provincial Zero Carbon Step Code at the earliest possible date, and to include EV charging infrastructure, reduce the need for (and cost of) retrofitting buildings, provide for cooling with efficient and zero-emissions heat pumps, and enable residents to own an EV. These outcomes complement regional Big Moves outlined above.

Transitioning existing buildings to zero-emissions will require a coordinated effort across all orders of government. Although municipalities lack the authority to regulate GHG emissions in existing buildings (a gap that Metro Vancouver's proposed regulation would seek, in part, to fill), they can partner with Metro Vancouver on the proposed regulation for large buildings (e.g., to share data and communicate with building owners), support programs for small building retrofits (e.g., the North Shore's "Jump on a Heat Pump" Program, Reference 4), develop partnerships and strategic plans (e.g., the City of Burnaby's Zero-Emissions Building Retrofit Strategy, Reference 5), and collaborate on advocacy to senior governments for retrofit incentives.

These Big Moves are included in Metro Vancouver's *Climate 2050 Buildings Roadmap* (Big Move 1.3), *Transportation Roadmap* (2.6), and in various municipal climate action plans. Report E.4 provides an update on Zero Carbon Step Code adoption by member jurisdictions to date, and an update on municipal adoption of EV-ready bylaws will be included in a future report.

Community Plans, Zoning, and Infrastructure to Enable Sustainable Transportation

Municipalities can further enable a shift to sustainable modes with land use planning that focuses more growth close to frequent transit and amenities, consistent with *Metro 2050*, and as outlined in many Official Community Plans (OCPs) and OCP updates. Investing in more protected and connected infrastructure for walking and cycling, and reallocating road space for transit-priority infrastructure and active transportation, can unlock latent demand for these transportation options and reduce vehicle emissions. Together, these measures also improve health, reduce congestion, and make neighbourhoods more vibrant, safer, and greener.

These Big Moves are identified in Metro Vancouver's *Climate 2050 Transportation Roadmap* (Big Move 1.3), *Metro 2050*, TransLink's *Transport 2050* 10-year priorities, and in various municipal climate action and land use plans.

Collaboration on Advocacy for Clean, Renewable Energy Policy

Metro Vancouver's advocacy on provincial energy policies and involvement in the BC Utilities Commissions proceedings, described above, was strengthened through collaboration with several member municipalities. Continued and strengthened collaboration is needed to advocate for the provincial and federal government policies, infrastructure investments, and incentives needed to support a rapid, efficient, and fair transition to clean and renewable energy.

BIG MOVES' EMISSIONS REDUCTION POTENTIAL

The emissions that could be reduced by collectively implementing these Big Moves depends on the timing and scale of their implementation. Comprehensive regulations that reduce emissions from large buildings and passenger vehicles, together with supporting programs and complementary regulations by other orders of government, could reduce up to six million tonnes of GHG emissions annually by 2050. As a period of phasing-in is required, early adoption of these regulations is critical to minimize cumulative emissions in the interval. If full implementation of these policies, were to begin in the next few years they could reduce emissions by up to 2.8 million tonnes annually by 2030, approximately 40 per cent of the 2030 target.

NEXT STEPS

Staff will be seeking the Board's direction for the Big Moves noted above for Metro Vancouver in 2024 and 2025. In this timeframe, the remaining Climate 2050 Roadmaps will also be provided for the Board's consideration and endorsement, including for *Land Use and Urban Form*, *Human Health and Wellbeing*, *Waste*, and *Water and Wastewater Infrastructure*. As previously directed by the Board, options for enhancements to *Metro 2050* to strengthen climate action will also be advanced for the Board's consideration in 2024.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

The resources supporting initial policy development for the Big Moves described in this report are approved within current program budgets. Financial implications for implementing these initiatives will be outlined for the Board's information and approval as appropriate in upcoming reports. New or updated regulatory programs implemented by Metro Vancouver will be consistent with Metro Vancouver's practice of assigning fees to entities responsible for air contaminant discharges, recognizing their environmental and societal impacts (Reference 6). Cost recovery to support program implementation would also be achieved through administrative fees.

Potential financial benefits associated with the highlighted Big Moves can also include energy cost savings resulting from building retrofits, time savings and increased productivity from reduced

traffic congestion, and health benefits associated with improved air quality. The potential regional health benefits from implementing the *Clean Air Plan* between 2020 and 2030 were estimated at up to \$1.6 billion. Finally, reducing GHG emissions to meet science-based climate targets can mitigate the financial costs of climate impacts to society and households (Reference 7).

CONCLUSION

Meeting Metro Vancouver's approved climate targets will require decisive, coordinated and accelerated effort among all orders of government and partner agencies. The MVRD Board has an opportunity to continue to demonstrate bold leadership by leveraging Metro Vancouver's regulatory and advocacy roles.

This report highlights priority Big Moves from Metro Vancouver's approved plans to address four issue areas with the potential to significantly reduce regional GHG emissions and health-harming air contaminants from buildings, transportation, industry, and the energy transition. Specific regulatory proposals and advocacy efforts supporting these priorities will be advanced for the Board's consideration and direction in upcoming reports in 2024 and 2025.

REFERENCES

1. Metro Vancouver [Climate 2050 Annual Report 2022/2023](#)
2. Hoppe, J. et al. 2023. [Three Decades of Climate Mitigation Policy: What Has It Delivered?](#) Annual Reviews of Environment and Resources 48 (2023)
3. Axen, J. et al., 2020. [Crafting strong, integrated policy mixes for deep CO₂ mitigation in road transport](#). Nature Climate Change 10 (2020)
4. North Shore [Jump on a New Heat Pump](#) Program
5. City of Burnaby – [Zero Emissions Building Retrofit Strategy](#)
6. [Metro Vancouver – Amendments to Air Quality Permit and Regulatory Fees](#)
7. Canadian Climate Institute, 2022. [The GDP costs of climate change for Canada](#)

Attachment 2



Climate 2050: Priority Actions to Accelerate Toward our Regional Targets

CAUCUS OF COMMITTEE CHAIRS

Conor Reynolds

Director, Air Quality & Climate Action Services

Lise Townsend

Division Manager, Air Quality & Climate Action Policy
Air Quality & Climate Action Services

February 21, 2024

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WHY ARE WE HERE TODAY?

Report responds to Climate Action Committee request to identify the priority actions needed from Metro Vancouver and members

CAC added a recommendation to bring it to Caucus of Committee Chairs to broaden the discussion and understanding of “BIG MOVES” that the Board will consider in this term

At the last Board meeting, staff heard concerns about:

- ensuring regulations are within Metro Vancouver’s mandate
- avoiding duplication with the Province
- charging fees to change behaviour; in conflict with affordability

Staff are incorporating this input into all climate policy work

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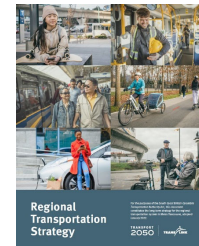
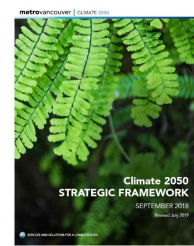
GEARING UP

Strengths

- ✓ Approved plans
- ✓ Science-based targets
- ✓ Delegated authority
- ✓ Multi-government alignment
- ✓ Established technology and practices

Challenges

- ~ Multiple priorities
- ~ Energy transition
- ~ Misinformation and distrust



WHAT DO WE HAVE TO GAIN?

Strong policies based on **collaboration and coordination** that leverage Metro Vancouver's **role** and **authority** can:

- Protect health and safety and build resiliency for residents (e.g. heat domes, floods)
- Foster economic innovation and new jobs (e.g. risk of moving too slowly)
- Reduce emissions and build resiliency: Climate Action

WHY PLAN FOR IMPACTS AND REDUCE EMISSIONS?

E.g. zero-emissions, climate-safe buildings

If global emissions continue to climb,
by the 2050s:

Number of heat wave days per year

- historically 1 → **16** (up to **46**)

Number of hot nights (>16°C) per year

- historically 6 → **57** (up to **92**)

321 people in the region died in 2021 due to
the heat dome, most in their own homes

New Vancouver climate projections reveal 'big public health risk'

Vancouver climate projections shows scorching summers, a spike in extreme rainfall and a steep decline in snowfall

By Stefan Labbé, Glacier Media | February 8, 2024, 7:45am



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AFFORDABILITY

- Critical / top of mind issue for residents; 'death by a thousand cuts' with each additional charge
- Regulations needed to *support* cost-effective solutions
- Policy options must consider:
 - Equity and fairness
 - Costs and benefits analysis
 - Climate impacts on household costs
 - Planning ahead to help minimize cost impacts

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METRO VANCOUVER'S REGULATORY AUTHORITY

for air pollution control and air quality management

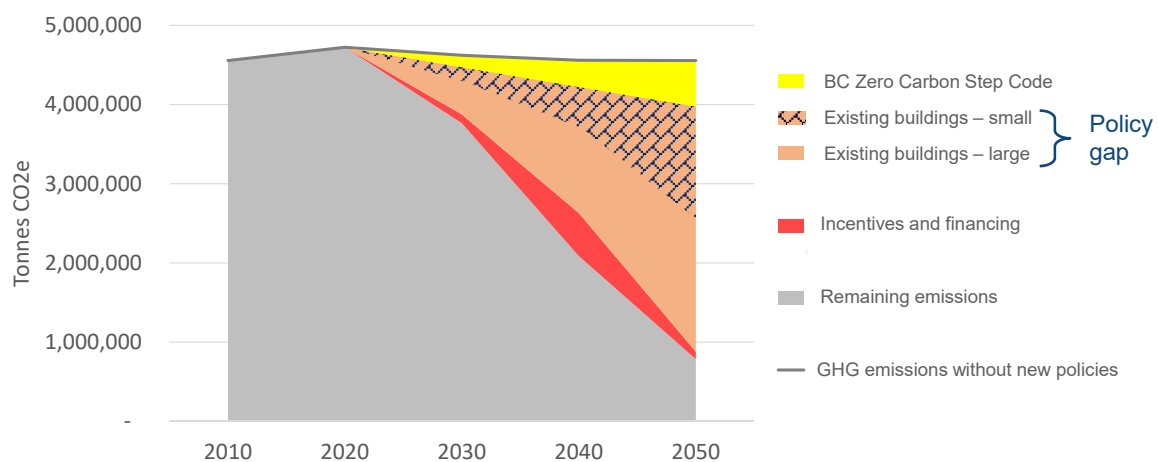
Delegated authority under BC *Environmental Management Act* includes regulating discharge of air contaminants – including GHGs

- Prohibit the discharge of air contaminants except in compliance with bylaws
- Regulated air contaminants include: particulate matter, hazardous air pollutants, VOCs, NO_x, SO₂, methane, GHGs
- Current MVRD Board adopted air quality and emissions bylaws include:

- | | |
|--------------------------------|-----------------------------------|
| • Air Quality Management Bylaw | • Boilers & Process Heaters |
| • Air Quality Management Fees | • Non-Road Diesel Engines |
| • Automotive Refinishing | • Residential Indoor Wood Burning |
| • Concrete Products | • Agricultural Boilers |
| • Gasoline Distribution | • Open Burning |

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ESTIMATED IMPACT OF BUILDINGS' POLICIES



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PRIORITY REGIONAL BIG MOVES (2024-2026)



Existing **buildings**



Regional **transportation**



Industry regulatory programs



Advocacy for the clean
energy transition



Impact is amplified by complementary Big Moves by member jurisdictions,
and supporting policies & programs by other orders of government

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Existing large buildings GHG regulation

Member jurisdictions



Zero-carbon new construction

Support for existing building regulation






450,000 existing buildings

9,000 existing large buildings

2% of buildings = 35% of regional
building GHG emissions


4,000+ new buildings each year



<p>metrovanancouver TRANS LINK</p>  <p>Regional sustainable transportation regulations</p>	<p>32% of regional GHG emissions</p> <p>8 million trips per day (70% by light duty vehicles)</p> <p>\$20 billion needed for transit</p>
<p>Member jurisdictions</p> <div>  Community plans & zoning </div> <div>  Transit-priority & active transport infrastructure </div> <div>  EV-ready new construction </div>	

<p>metrovanancouver</p>  <p>Expanded industry regulatory programs to include GHGs</p>	<p>25% of regional GHG emissions</p> <p>150 permitted facilities</p> <p>>3,000 boilers, heaters, non-road engines</p>
<p>Scope of work in 2024 (Metro Vancouver)</p> <p>Research opportunities to improve emissions regulations for industry and appropriate role for Metro Vancouver</p>	

metrovanancouver Member jurisdictions




Collaborative regional advocacy for clean & renewable energy transition

Fossil fuels supply 75% of energy in region







90% of regional GHG emissions are from burning fossil fuels

Metro Van's provincial advocacy to date includes:

- Coordinated utility planning
- Climate-aligned energy framework
- Alignment with Climate 2050 & CleanBC



PRIORITY BIG MOVES: MEMBER JURISDICTIONS

 <p>Buildings</p>	 <p>Zero Carbon Step Code, and support for existing buildings regulations</p>
 <p>Transportation</p>	 <p>Community plans; zoning; EV-ready bylaws; infrastructure for sustainable transportation</p>
 <p>Energy Transition</p>	 <p>Advocacy for decisions supporting the clean energy transition</p>

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