



Metro Vancouver's *Clean Air Plan*

OVERVIEW, ACTIONS AND POTENTIAL IMPACTS

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New Westminster Environment and Climate Advisory Committee, July 20, 2022

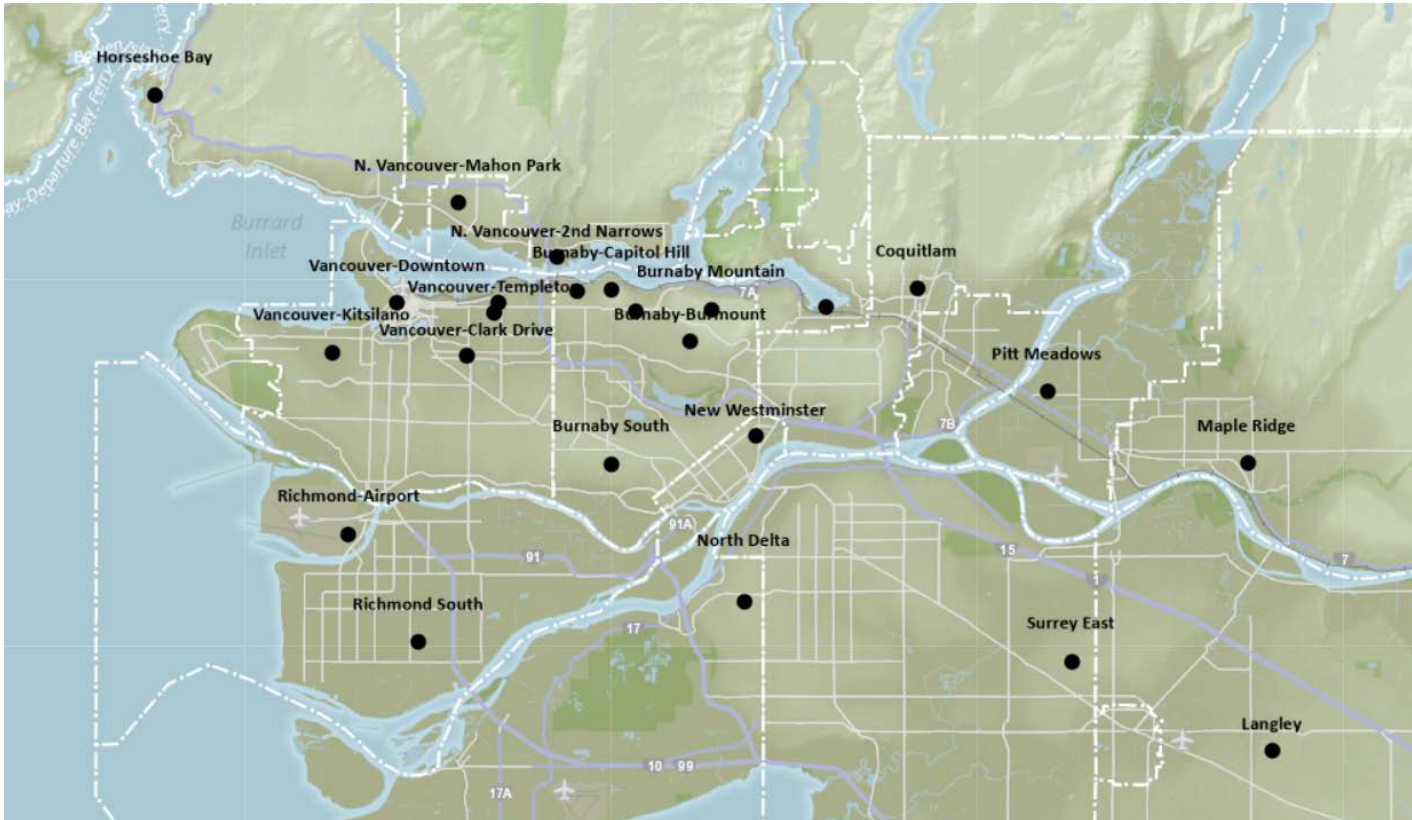
metrovancouver

AIR QUALITY AND GREENHOUSE GAS MANAGEMENT

Metro Vancouver

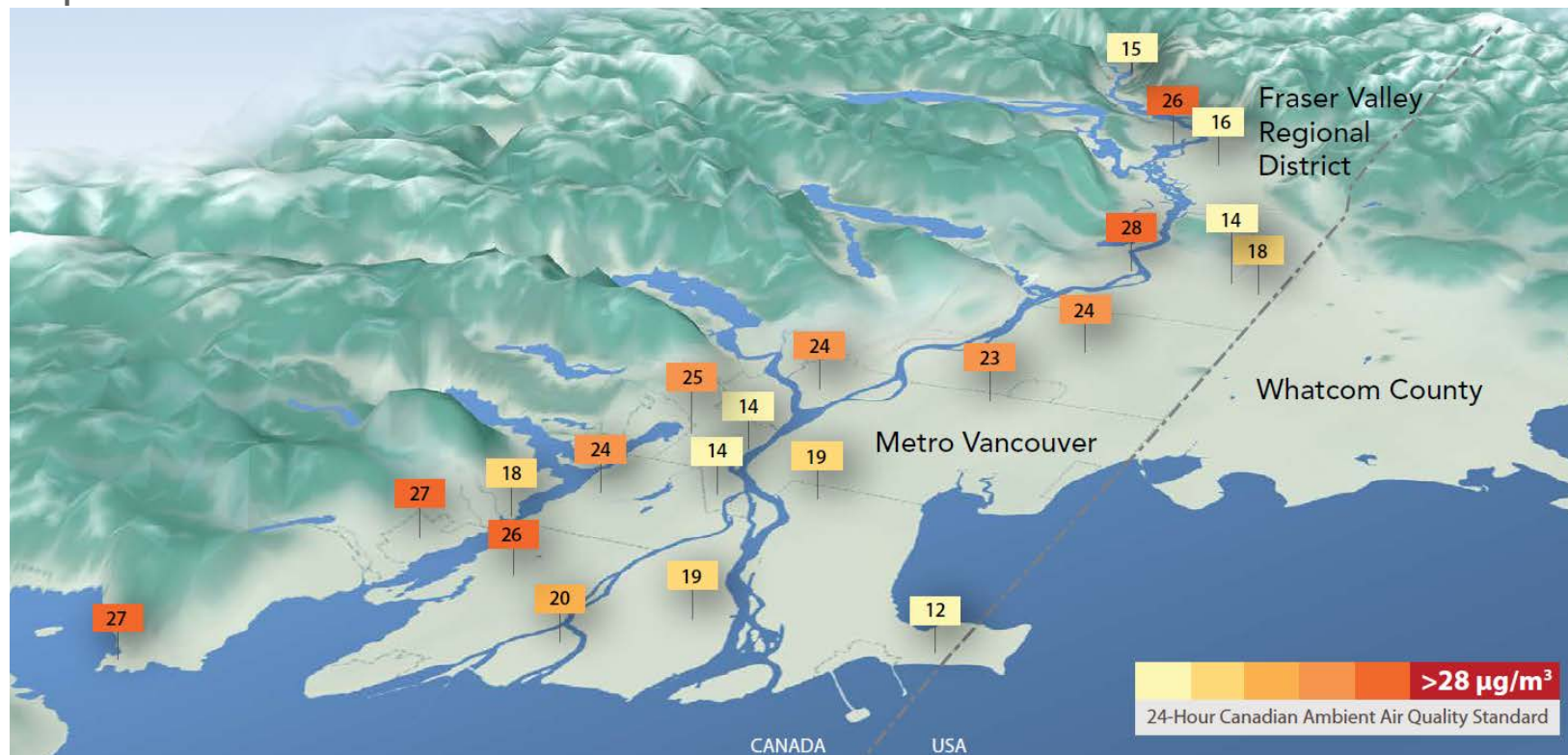
- Metro Vancouver has **delegated authority to control air pollution and manage air quality** in the region
- Convener on issues of regional significance
- Key elements of Metro Vancouver's management program:
 - Monitoring air quality and emissions
 - Issuing and promoting compliance with industrial permits
 - Developing plans, strategies and regulations
 - Delivering awareness and incentive programs

MEASURING AIR QUALITY



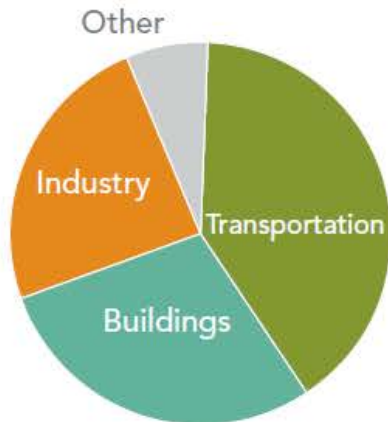
REGIONAL AIR QUALITY

Fine particulate matter in 2021

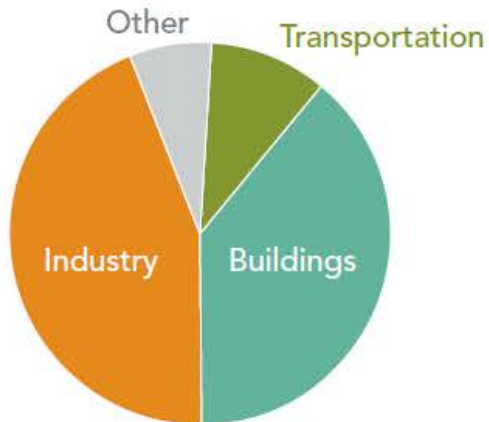


REGIONAL EMISSIONS BY SOURCE AND CONTAMINANT

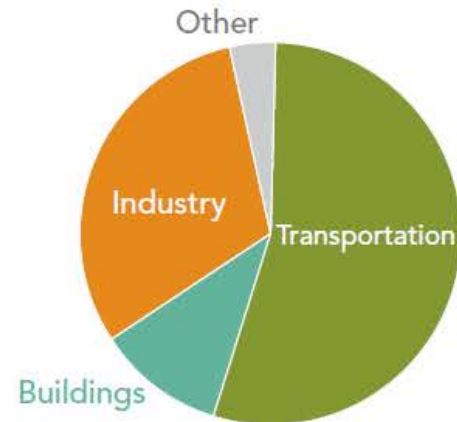
GREENHOUSE GASES



FINE PARTICULATE MATTER



NITROGEN OXIDES



CLEAN AIR PLAN

- Metro Vancouver's fourth air quality and greenhouse gas management plan, through to 2030
- **Includes actions for Metro Vancouver and other governments**
 - 29 Big Moves
 - 98 supporting actions
 - 9 corporate actions



2019 TO 2021 ENGAGEMENT

Clean Air Plan



Public forums and
webinars
450 participants



75+
detailed online
feedback forms



Social Media reach
200K+ saw the information

Social interaction
6500+ clicked, shared,
commented and liked

240 participants in Stakeholder forums



Web resource
visitors



75+
meetings, workshops, forums,
webinars, public dialogues,
community events and presentations



Project team emails
70+ composed written feedback
(including formal letters)



Introductory video views
5000+ watched the video

REGIONAL 2030 TARGETS

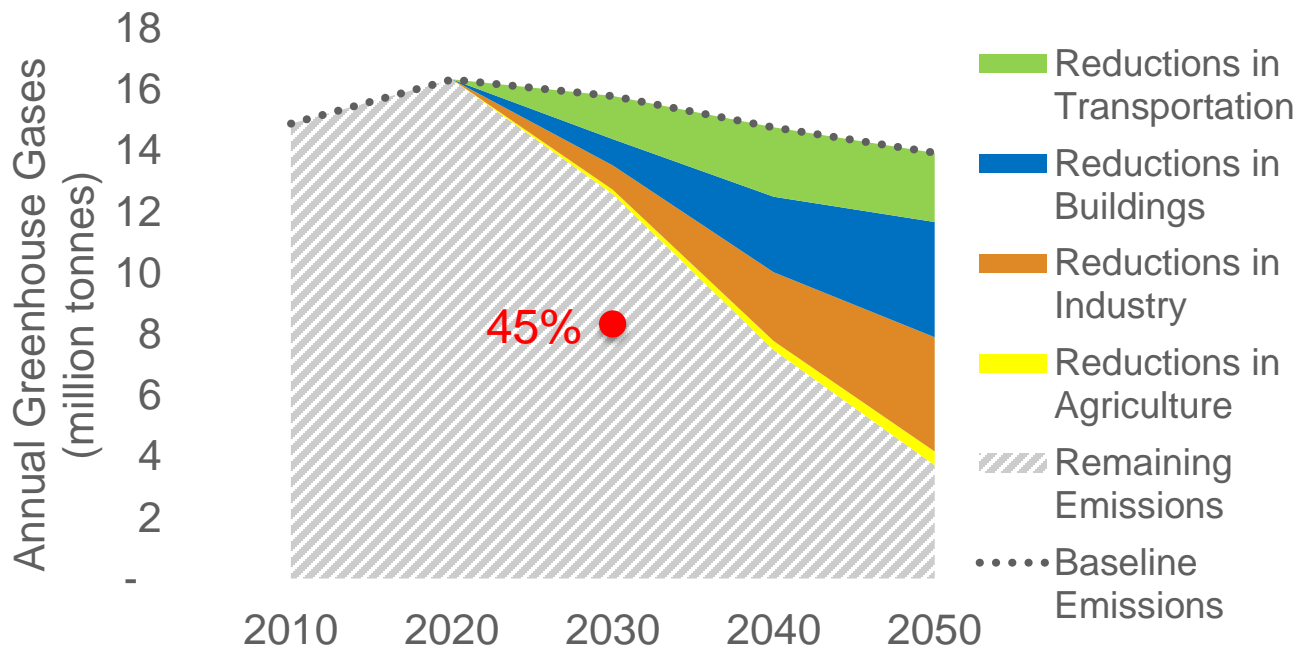
Clean Air Plan

1. **Reduce regional GHGs by 45% from 2010 levels**
2. **Air quality in the region is continually improving**, protecting human health and the environment, by ensuring that:
 - a. Ambient air quality meets or is better than the ambient air quality objectives and standards that are regularly updated by Metro Vancouver, the BC Government and the Government of Canada; and
 - b. The amount of time that visual air quality is classified as "excellent" is increasing.

POTENTIAL IMPACTS ON GREENHOUSE GASES

Clean Air Plan

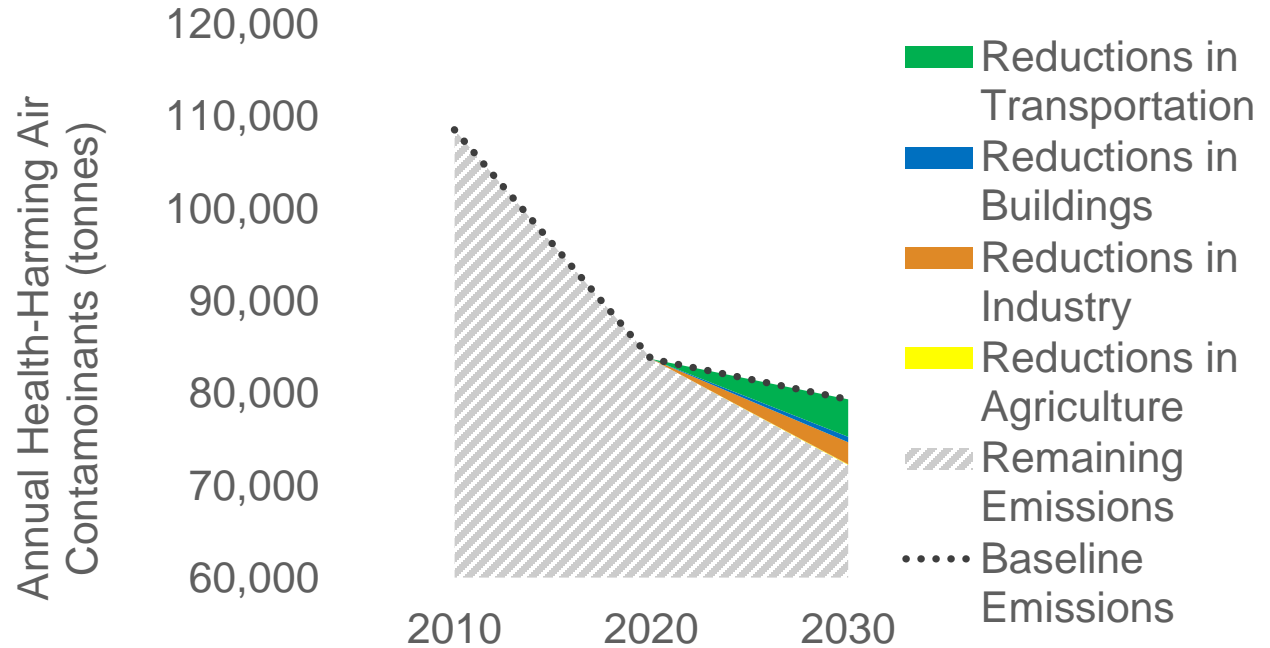
- Could reduce regional greenhouse gases by 15%, from 2010 levels



POTENTIAL IMPACT ON AIR QUALITY

Clean Air Plan

- Plan could create **health benefits of up to \$1.6 billion**



INTEGRATING EQUITY

Clean Air Plan

- Long-term approach
- Community input process
- Air quality equity tool
- Metrics and targets



ISSUE AREAS

Clean Air Plan

1. Transportation
2. Buildings
3. Industry
4. Agriculture
5. Health
6. Measure, Monitor and Regulate



ISSUE AREAS

Clean Air Plan

- | | |
|----------------------------------|--------------------------------------------------------|
| 1. Transportation | Generates
more than 90%
of regional
emissions |
| 2. Buildings | |
| 3. Industry | |
| 4. Agriculture | |
| 5. Health | |
| 6. Measure, Monitor and Regulate | |



PERSONAL TRANSPORTATION ACTIONS (1)

Clean Air Plan

1.1.3 Expand Active Transportation Networks. Advocate to member jurisdictions to expand regional and local active transportation networks so it's the most convenient choice for most shorter trips.

- Network expansion should prioritize under-served areas to ensure all residents have access to active transportation options in a connected region.
- The networks should be well-connected, comfortable for most, and integrated with public transit.
- Network elements should include walking and cycling paths, regional greenways, separated bike lanes, and end-of-trip facilities.

PERSONAL TRANSPORTATION ACTIONS (2)

Clean Air Plan

1.1.6 Regional Parking Strategy to Reduce Driving. Develop a Regional Parking Strategy to prioritize active transportation and other low emission transportation options, coordinating with member jurisdictions and TransLink.

- The strategy could include replacing building parking minimums with maximums, establishing parking minimums for bicycles, implementing dynamic parking pricing and reducing free parking spaces.
- The strategy could also support uptake of electric and car-share vehicles by establishing EV charging requirements for parkades, and enhancing preferential parking rates and spaces for electric and car-share vehicles.

PERSONAL TRANSPORTATION ACTIONS (3)

Clean Air Plan

1.2.2 Develop Regional Emission Requirements for Passenger Vehicles. Develop regulatory emission requirements for existing passenger vehicles, to be implemented by the BC Government or Metro Vancouver.

- Any regulatory program must consider equity and be coordinated with member jurisdictions.
- Requirements could include low or zero emission zones, or a vehicle emissions levy with rebates for replacing older vehicles, targeting both health-harming air contaminants and greenhouse gases.
- Any program could also support actions focused on reducing total driving distances, including Action 1.1.2 on pricing driving.

PERSONAL TRANSPORTATION ACTIONS (4)

Clean Air Plan

1.2.4 Regional EV Charging Strategy. Develop a long-term regional strategy for EV charging infrastructure, coordinating with member jurisdictions, energy utilities, TransLink, industry, and other regional partners.

- A strategy would identify where additional publicly accessible EV chargers are needed to ensure equitable access.

1.2.6 Expand EV Charging in Buildings. Work with member jurisdictions, the BC Government, BC Hydro and the Government of Canada to expand access to EV charging in buildings.

- This should also include increased funding for EV charging in existing buildings.
- Funding should prioritize groups who generally would not have access to chargers, such as residents living in rental buildings, strata buildings, non-market housing or secondary suites.

COMMERCIAL TRANSPORTATION ACTIONS (1)

Clean Air Plan

1.3.1 Regulate Existing Medium and Heavy Trucks. Develop regulatory requirements to reduce emissions for existing medium and heavy duty vehicles, to be implemented by the BC Government or Metro Vancouver.

- Approaches could include an inspection and maintenance program that requires repairs on higher emitting trucks, registration requirements targeting older trucks, a regional smoking vehicle hotline, and low or zero emission zones
- Requirements should be developed in coordination with local governments, the Port of Vancouver and other regional partners
- Requirements would initially target health-harming air contaminants but should eventually include greenhouse gas emissions.

COMMERCIAL TRANSPORTATION ACTIONS (2)

Clean Air Plan

1.3.9 Large Fleets to Adopt “ZEV-First” Procurement. Develop and support implementation of “ZEV-first” fleet procurement policies to transition large fleets to zero emission vehicles by the late 2040s, coordinating with local governments and large fleet operators in the region.

- Policies would be supported by regularly updated information on the availability of zero emission medium and heavy duty vehicles
- Policies could also include guidance on right-sizing fleets, and calculating total lifetime costs of zero emission vehicles
- Policies could support regional coordination of purchases (i.e., bulk buy) of zero emission vehicles for fleets to help reduce costs

BUILDINGS ACTIONS (1)

Clean Air Plan

2.1.1 Greenhouse Gas Performance Requirements for Existing Large Buildings. Develop regulatory requirements for existing large buildings to meet greenhouse gas emission performance targets, which would reach zero carbon emissions before 2050.

- Requirements would apply to all existing commercial and large residential buildings, and would include energy consumption benchmarking, reporting and performance requirements.
- The requirements could be developed with member jurisdictions.
- Public sector organizations could play a leadership role by establishing zero emission targets for their own existing buildings earlier.

BUILDINGS ACTIONS (2)

Clean Air Plan

2.2.2 Online Decision Support Tools for Low Carbon Upgrades in Buildings.

Work with the BC Government, the Government of Canada and member jurisdictions to develop innovative online decision support tools to help significantly increase public awareness of low carbon solutions.

- These tools would help home and building owners choose these solutions by simplifying the planning, financing and execution of low carbon upgrades in buildings.

2.2.3 New Financing Tools for Low Carbon Upgrades. Work with the BC Government, the Government of Canada, member jurisdictions, energy utilities and other partners to develop strategic financing tools for home and building owners to accelerate low carbon upgrades in buildings.

- These tools (e.g., PACE and on-bill financing) allow owners to spread the cost of upgrades over a longer period, making them more affordable.

BUILDINGS ACTIONS (3)

Clean Air Plan

2.5.2 Use Building Materials with Low Embodied Emissions. Work with the BC Government and member jurisdictions to update or create policies (e.g., procurement, design guidelines, zoning) to prioritize the use of building materials with low embodied emissions, including BC forest products.

- This should include development and maintenance of widely-supported standard calculations for the life cycle emissions of common building products.

NON-ROAD EQUIPMENT ACTIONS (1)

Clean Air Plan

3.2.4 Identify Infrastructure Needs for Zero Emission Non-Road Equipment. Work with energy utilities, local governments, Port of Vancouver, industry and other regional partners to identify the regional infrastructure needs to support a long-term transition to zero emission non-road equipment

- This would consider the refueling and charging needs for different types of non-road equipment, funding requirements, potential pilot projects
- Should align with similar actions for passenger vehicles and medium and heavy duty vehicles

NON-ROAD EQUIPMENT ACTIONS (2)

Clean Air Plan

3.2.6 Awareness Program on Zero Emission Non-Road Equipment.

Develop and implement an awareness and outreach program for residents and businesses about the benefits of zero emission non-road equipment, working with local governments and other regional partners.

- Program would include regularly updated information on the availability of zero emission equipment and guidance on right-sizing non-road fleets, as well as supporting regional coordination of purchases (i.e., bulk buy) to help reduce costs

ONGOING REGIONAL ACTIONS

Metro Vancouver

- Explore regulatory policies for existing passenger and commercial vehicles
- Collaborate with BC Government on Clean Transportation Action Plan
- Outreach on requirements for residential wood burning appliances
- Conduct engagement on GHG standards for existing large buildings
- Continue engagement on regulations for open-air burning, odour, and cannabis industry

FINAL CONSIDERATIONS

Clean Air Plan and Metro Vancouver management program

- Regional authority supports local and targeted responses
 - Can be more nimble than senior governments
- **Ongoing collaboration and engagement is critical**
- Key challenges:
 - Costs to residents and businesses
 - Technology availability
 - Equity of actions
 - Balancing air quality and greenhouse gas reductions



New Brighton Park

Questions?

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Together we make our region strong