

Climate 2050 and COVID-19 Recovery

FOCUS ON INFRASTRUCTURE AND BUILDINGS

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SERVICES AND SOLUTIONS FOR A LIVABLE REGION

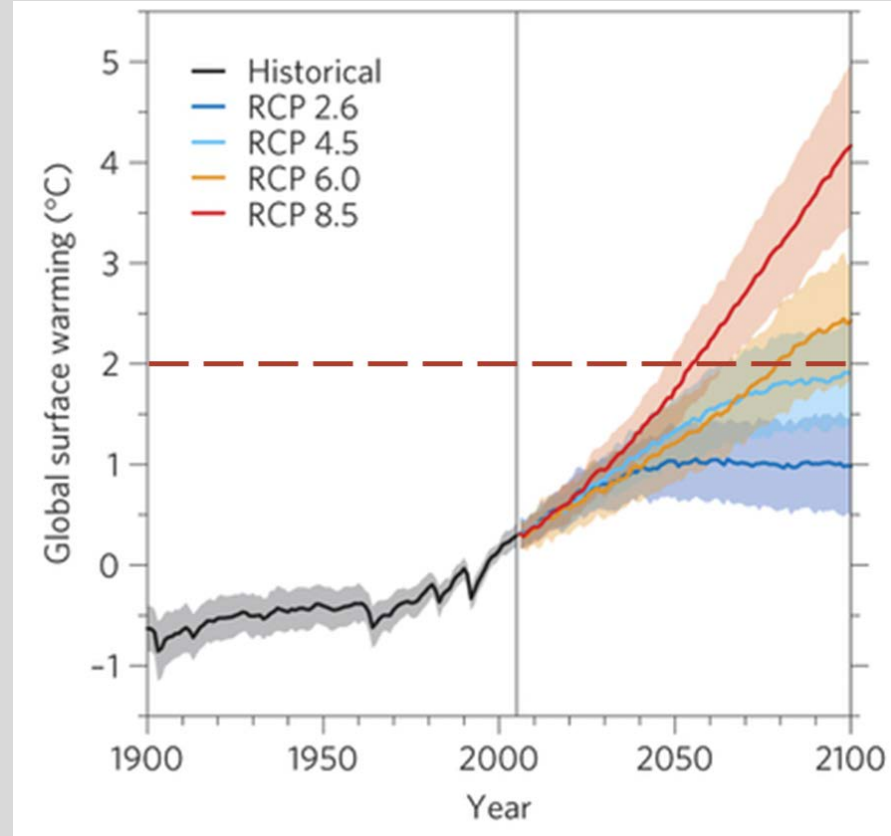
Climate 2050

Metro Vancouver demonstrates bold leadership in responding to climate change:

- **Carbon neutral region** by 2050
- Target a **45% reduction** in emissions from 2010 levels, by 2030
- Infrastructure, ecosystems and communities are **resilient** to the impacts of climate change



- *Climate 2050* relies on the most current science, as summarized by IPCC
- Limit warming to 1.5 °C, per October 2018 special report

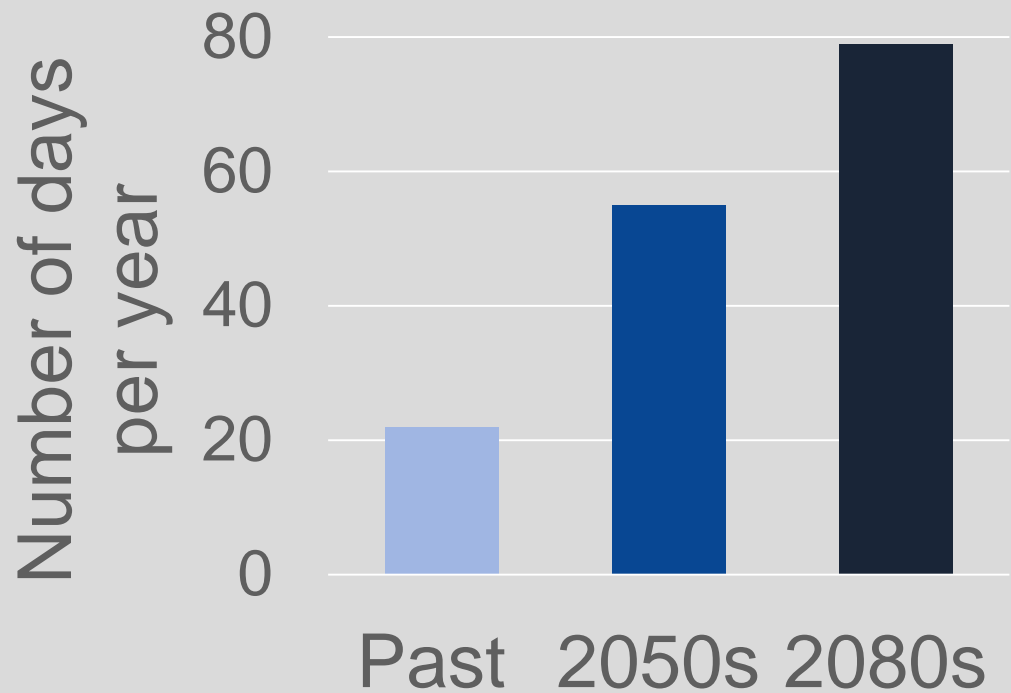


Climate Projections to the 2050s

- Longer, hotter, drier summers
- Warmer, wetter winters
- More extreme weather events
- Decreased snowpack
- Sea level rise



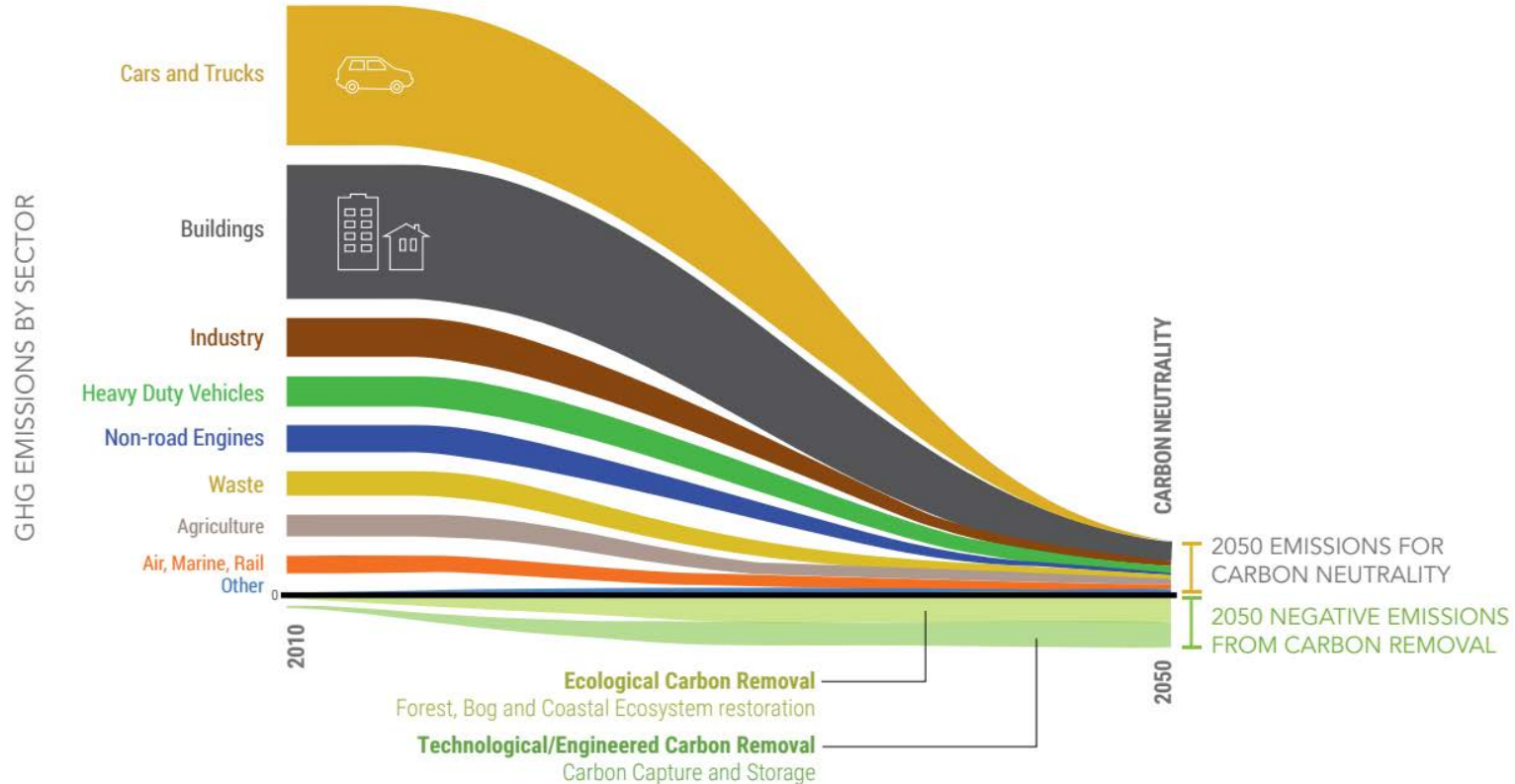
Summer days ($T > 25^{\circ}\text{C}$)



Impacts of Hotter, Drier, Longer Summers

- Changes to how we heat and cool buildings: opportunity for electrification and heat pumps (both new builds and retrofits)
- Water use restrictions
- Local air quality (ozone, particulate matter)
- Wildfire smoke from out of region
 - degraded air quality can exacerbate COVID-19 response

How Can We Create A Carbon Neutral Region by 2050?













Discussion Papers



COVID-19 Recovery: Infrastructure

- *Climate 2050* Infrastructure Discussion Paper is in development
- Infrastructure Projects can support **economic recovery** and sustainability in the Metro Vancouver region

 Iona Island Wastewater Treatment Plant	 Biosolids Dryer
 North Shore Wastewater Treatment Plant Tertiary Upgrade	 Widgeon Marsh Regional Park
 Annacis Water Supply Tunnel	 MV Housing
 Waste-to-Energy District Energy	 Climate 2050
 Coquitlam Lake Water Supply	 Metro 2050

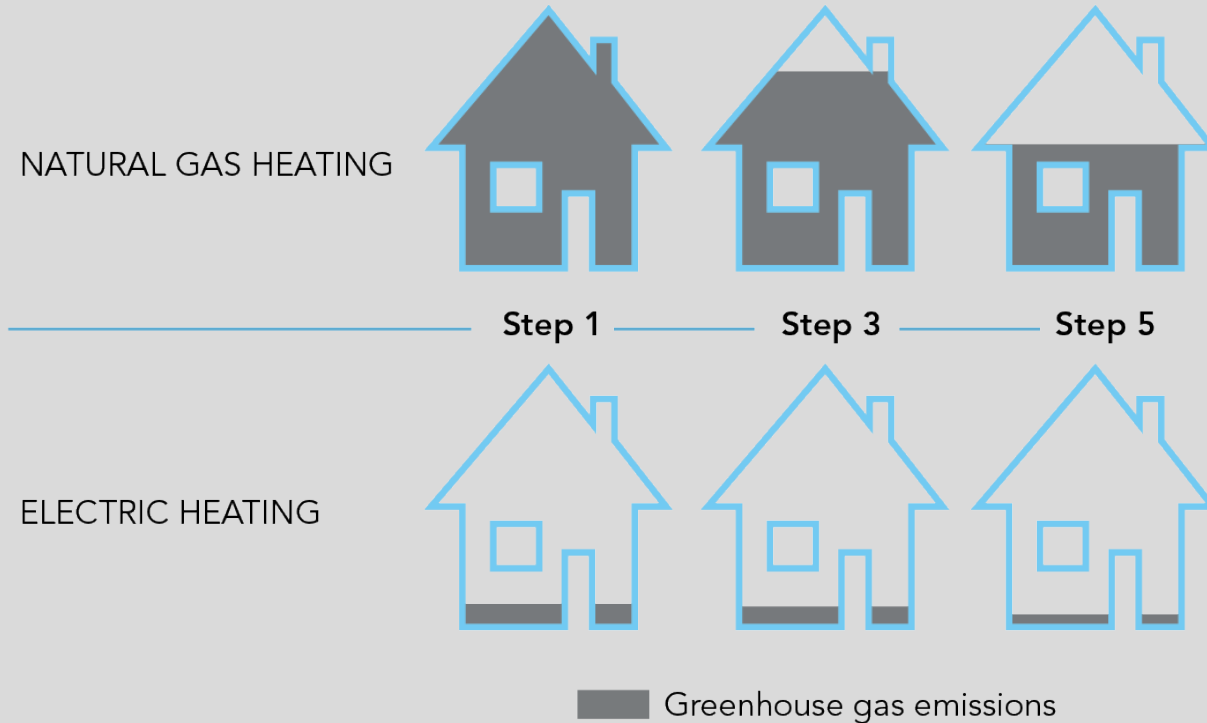
Proposed Buildings Long-Term Goal



**All buildings are zero emissions
from heating and cooling**

Buildings Big Idea

Electrify buildings to achieve zero emissions






Buildings Big Idea

Reduce emissions from existing buildings with emission performance requirements

- Targets can be tightened over time
- Approach being used around the world

Working together



A woman with long dark hair, wearing a light grey dress, stands at a wooden podium in a conference room. She is holding a white document and speaking into a microphone. The podium has a smartphone, a keyboard, and a mouse on it. In the background, several people are seated in rows of chairs, listening. The room has a modern, professional appearance with wood paneling and blue chairs.

**COVID-19 and the
imperative to build
back better**



Thank you!



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