Draft Climate Action Framework

City Council Workshop

Sept. 19, 2022

CITY OF Vancouver WASHINGTON

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Discussion Overview

Policy Questions for Council:

Building Energy: supply for residential structures (2 topics)

Transportation: ZEVs and step-down fuels (2 topics)

Governance: Two-cycle engines (1 topic)

Natural Systems: Proposed budget requests

Discussion Overview

Objective for today's workshop

Staff are seeking clear Council direction on each of the key policy questions presented.

Staff will pursue action based on the direction supported by the Council.

Building Energy

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Context: New residential construction

- All-electric construction ensures future housing is powered by the cleanest energy source available.
- Ensures new homes have air conditioning (life-saving in extreme heat).
- All-electric construction saves ~$2K in upfront construction and average ~$1K annually.*

Financial Impact of Fuel Conversion on Consumer Owned Utilities and Customers in Washington, Final Report. Energy and Environmental Economics, Inc.(E3). May 2022

Context: Residential power supply

- Incentives are generally less effective for large-scale change.
- The State Building Energy Code does not currently specify fuel types for new single-family and low-multifamily homes (new construction or existing).
- Legal question as to whether Vancouver could require stronger energy efficiency standards than the State.

Policy Questions

6. How should the CAF consider energy supply of new construction single-family and low multifamily residential buildings?

Option A
Explore the full range of options related to electrification requirements for new build residential.

Option B
Remain consistent with State Building Energy Code but advocate in support of extending electrification requirements to new build residential.

Option C
Remain consistent with State Building Energy Code and do not seek stronger energy efficiency requirements.

Should the City incentivize all-electric or net zero new construction?

Policy Questions

6. How should the CAF approach the energy supply of existing single-family and low multifamily residential buildings?

Option A: Explore the full range of options related to requiring a transition to electric heat pumps for space and water heating for existing single-family and low multifamily residential buildings.

Option B: Remain consistent with State Building Energy Code and work through incentives only to encourage homeowners to transition to electric power for space and water heating

Should the City advocate for State legislation to provide more tools to incentivize voluntary fuel transitioning?

Transportation

Context: The automotive landscape

Even if all vehicle sales are electric by 2035, gas-powered vehicles will still be on the road in 2050.

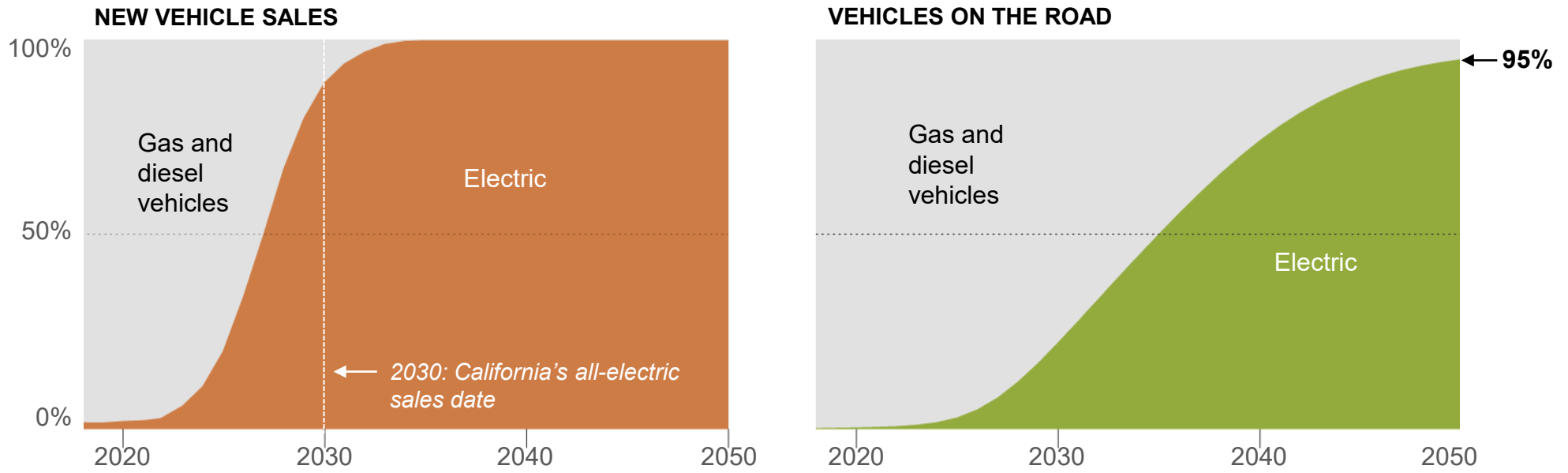


Image: from *Plumer, Brad, Popovich, Nadja, and Migliozzi, Blacki. "Electric Cars are Coming. How Long Until They Rule the Road?" New York Times, March 10, 2021.*

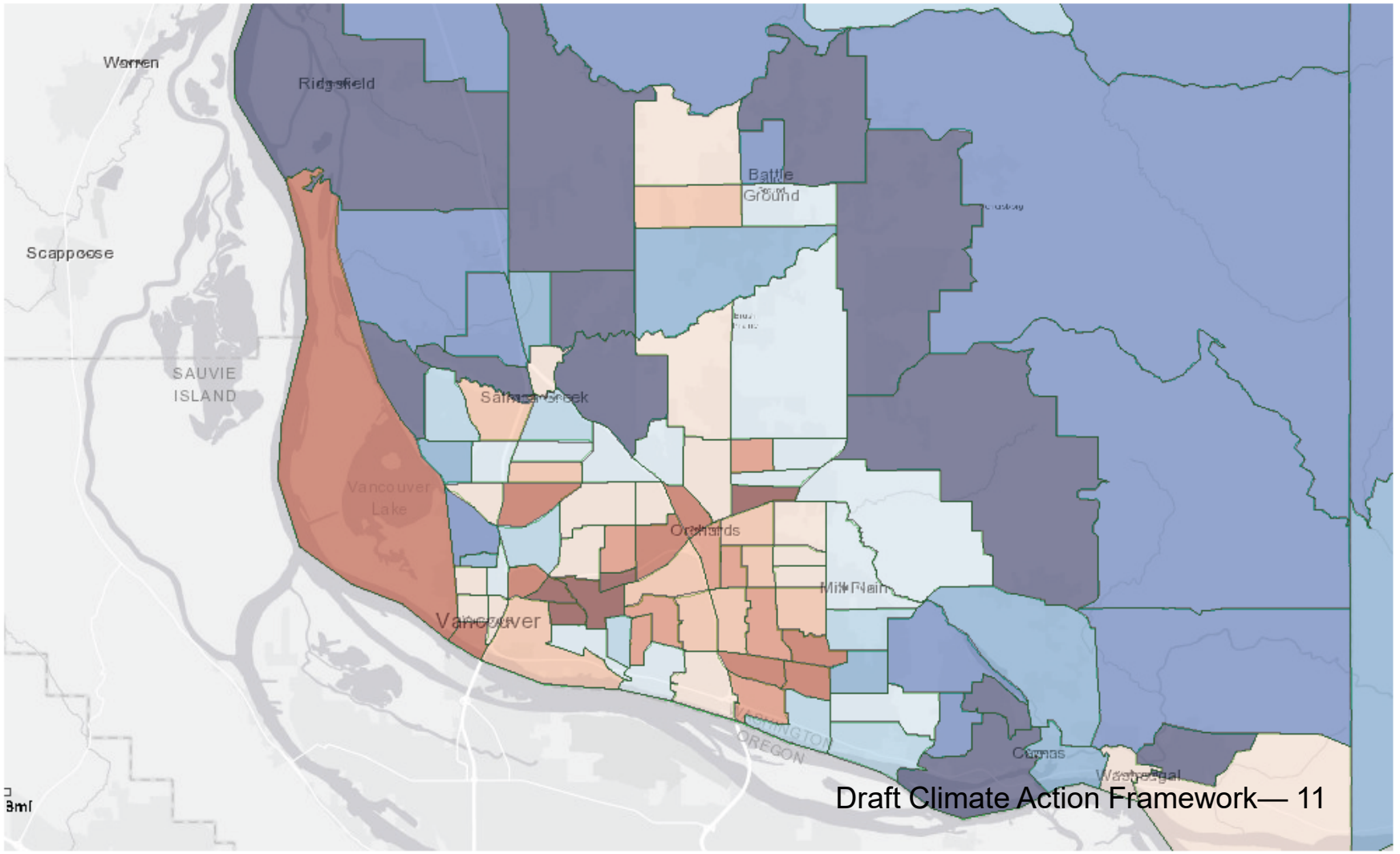
Context: Vehicles and Air Quality

Washington State Department of Health

Selection: Diesel Pollution and Disproportionate Impact -> Priority Populations **Date: 09/13/2022 at 12:48 PM**

ACS: Limited English (LEP), No High School Diploma (%), People of Color (Race/Ethnicity), Population Living in Poverty <=185% of Federal Poverty Level (%), Unaffordable Housing (>30% of Income), Unemployed (%)

Legend: (High) 10 9 8 7 6 5 4 3 2 1 **(Low)**



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Context: Vehicle fuels

- **Zero-emission vehicles** (ZEV) include both hydrogen fuel cell and battery electric vehicles.

Daimler Truck North America has announced that it will install hydrogen-powered fuel cells in Freightliner Cascadia Class 8 trucks as soon as 2024

- **Clean fuels** such as propane, ethanol, and renewable diesel reduce GHG emissions for gas- and diesel-powered vehicles.

- **WA Clean Fuel Standard** requires reductions in fuel carbon emissions and creates incentives to increase renewable fuels.

Policy Questions

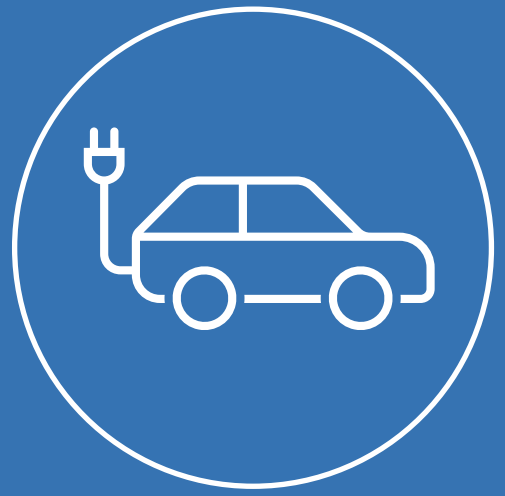
6. How should the City consider clean fuels for private and commercial use?

Option A
The City <u>should</u> actively support the distribution of clean fuels, accelerating the systemic availability and capacity for clean fuels.

Option B:
The City should <u>not</u> actively support the distribution of any clean fuels, allowing market forces to deliver these supply changes.

Option C:
The City <u>should</u> actively support clean fuel distribution for some fuels but remain neutral on others, allowing market forces to deliver these supply changes.

Policy Questions



5. How should the City consider hydrogen fuel cell electric vehicles for public and commercial use?

Option A
The City generally supports them as an option but should not actively explore opportunities for hydrogen fueling production and distribution facilities.

Option B:
The City supports them and should explore opportunities for development of hydrogen fueling production and distribution facilities.

Option C:
The City should not pursue hydrogen electric vehicles at this time and should focus on battery electric vehicles as the preferred ZEV option.

New Area of Regulations

Context: Gas-powered two-cycle engines

- Laws phasing out their use or sale exist in over 170 communities.
- Gas-powered lawn equipment and other two-cycle engines emit large quantities of hazardous air pollutants for workers and neighbors.

Context: Gas-powered two-cycle engines

Emissions from two-cycle engines are significant.

1 hour lawn mower use

=

Driving 300 miles from Vancouver, WA to Vancouver, BC

1 hour leaf blower use

=

Driving 1,100 miles from Vancouver, WA to San Diego

Source: California Air Resources Board

Policy Questions

Should the CAF include measures to begin a phase-out of small two-cycle engine lawn equipment?

If **yes**, should staff include one or more of the following in the CAF?:

- Restrict **municipal** use of small two-cycle engine lawn equipment.
- Prohibit **City contractors** from using two-cycle engine lawn equipment as part of a Green Procurement Policy.
- Develop an ordinance for Council consideration to equitably phase out **private and commercial** small two-cycle engine lawn equipment.
- Advocate for statewide legislation providing more tools for local air quality protections around small two-cycle engines.

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Natural Systems

Proposed package

- Accelerate urban tree canopy infill.
- Preserve the integrity of the existing mature tree canopy
- Expand natural greenspaces
- Supporting community organizations that train youth and BIPOC residents on green infrastructure skills.

Thank You

Questions?

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