



cleanBC

CLIMATE
LEADERSHIP
SYMPOSIUM

Public Sector and Local
Government Action

A photograph of two people riding bicycles on a paved path. The person on the left is wearing a grey jacket and dark pants. The person on the right is wearing a black vest with 'CRD' on it, a grey long-sleeved shirt, and black pants. They are both smiling. The background shows a metal railing and a building with a corrugated metal roof.

Driving Change: Capital Regional District's Low-Carbon Mobility Initiatives

October 18, 2023

Nikki Elliott, Manager of Climate Action Programs
Capital Regional District



About

- 237,000 ha.
- 70 Islands
- 13 Member Municipalities
- 3 Electoral Areas
- Population 439,950
- 20 Traditional Territories
- 11 First Nations with Reserves

CRD Climate Action Service

Local government support

Partnerships and programs

Data and indicators

Provincial liaison and Board advocacy support

Corporate climate leadership



- ✓ CRD staff
- ✓ Local Govt staff
- ✓ Elected officials
- ✓ Utilities
- ✓ Regional institutions
- ✓ Non-profit agencies
- ✓ Businesses
- ✓ Provincial & federal govt.
- ✓ Residents

Established 2009, Bylaw No. 3510

Climate Action Strategy

Climate Action Strategy Taking Action on the Climate Emergency



Regional target

Reduce regional greenhouse gas (GHG) emissions 61% by 2038 based on 2007 levels (as per 2018 Regional Growth Strategy).

Corporate target

Reduce corporate GHG emissions 45% by 2030 based on 2007 levels, and reach net-zero GHG emissions before 2050.



Decisions



Buildings



Land



Ecosystems



Mobility



Waste

Low- Carbon Mobility



Goal 3: Rapidly reduce corporate fleet emissions. Support, endorse and encourage active, public and zero-emission transportation options.

CRD's Current Role:

- **CRD fleet**
- Regional trail system
- **Public charging**
- Regional planning & **policy support**
- Electoral Area transportation
- Advisor on transit
- Data management
- **Community programs**

What are we up to?

E-Mobility at the CRD

Investigation

- First EVs
- Hydrogen Pilot
- Academic Studies

Policy

- Green Fleet Policy
- Carbon Price Policy

Implementation

- EVs
- E-Bikes
- Chargers

E-Bikes in CRD Fleet



- Pilot first
- Expanded to HQ and at Regional Parks
 - 10 total in fleet, multiple sizes
- E-Bike SOP (HR/safety informed)
- Pre-requisite training for users
- Book through regular fleet system



Corporate EV Transition Progress 2023

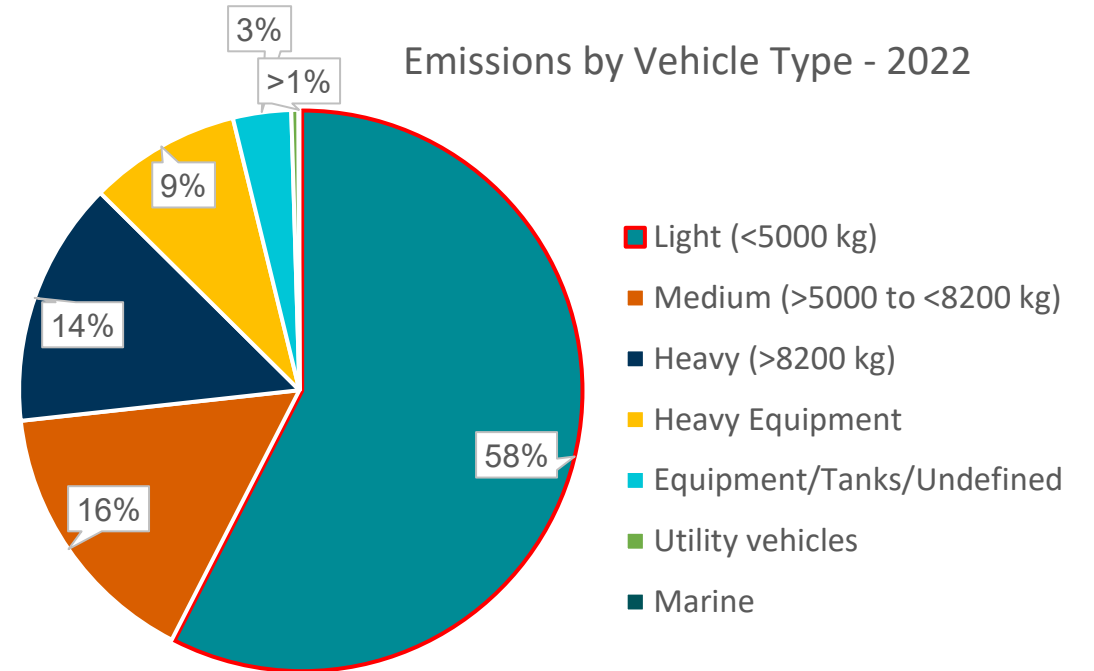
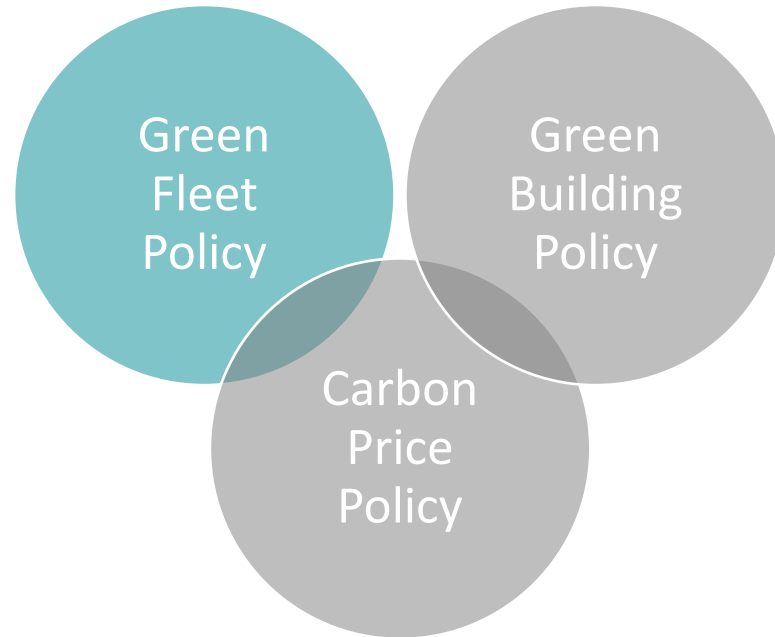


- Piloted hydrogen and EV
- 41 total PHEV and EVs
 - 8 PHEV (6 in service, 2 on order)
 - 33 EVs (18 in service, 11 in road prep, 4 on-order)
Expect to have the road prep EVs in service by end of Nov.
 - 6 more EVs will be on order by end of October.
- Challenges:
 - Supply chain delays
 - Increased costs to services
 - Charging at multiple locations
- Opportunities:
 - Fleet rightsizing
 - Academic partnerships
 - Industry capacity building
 - Grants, grants and more grants!

CRD Corporate EV Chargers:

- 48 to date

Corporate Green Fleet Policy



 Total Fleet
1,176 tonnes tCO₂e

 Total buildings,
facilities &
infrastructure
1,669 tonnes tCO₂e

This policy primarily affects **light-duty** vehicles, given available technologies.

Corporate Green Fleet Policy

Lifecycle Costing	<ul style="list-style-type: none">• Considers the purchase price, fuel consumption, maintenance, and other costs over the expected life of the vehicle (using the Fleet Procurement Analysis Tool from Atlas Public Policy)
Rightsizing	<ul style="list-style-type: none">• Proactive, strategic planning• Optimizes fleet size to have the right number of the right vehicles• Minimizes unused and overused assets and unnecessary expenditures
Low-Emission Fuel Hierarchy	<ol style="list-style-type: none">1. Zero-Emission i.e., Electric2. Plug-in Hybrid3. Regenerative Hybrid4. Internal Combustion (gas) Engine
Carbon Pricing	<ul style="list-style-type: none">• Quantifies the benefits of reducing emissions• \$170/tonne CO₂e, based on the CRD Carbon Price Policy
10% Cost Variance	<ul style="list-style-type: none">• Decision-making parameter to emphasize consider analysis uncertainties while prioritizing low-carbon choices• The low-carbon option is selected if the net-present value life-cycle cost is within 10% of the alternative

Green Fleet Policy

Example (SUV)

Hyundai KONA (gas)



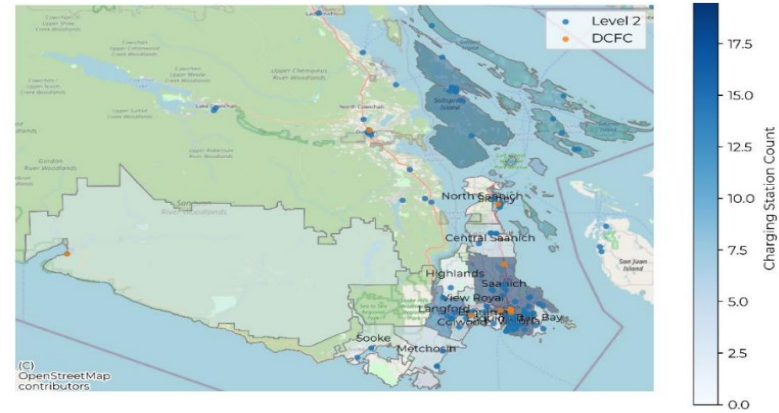
Hyundai KONA Electric



MSRP \$	\$	22 000	45 000
Incentives	\$	-	8000
Fuel/Electricity	\$	7300	1100
Maintenance	\$	3700	1800
Resale value	\$	5000	14000
Total NPV	\$	35 500	32 300
Annual CO2e Emissions	kg	1 400	70



Capital Region EV Infrastructure Roadmap



Coordinate & Invest

- Pursue regional infrastructure funding
- Support planning and coordination on site selection
- Engage with BC Hydro on infrastructure planning

Educate

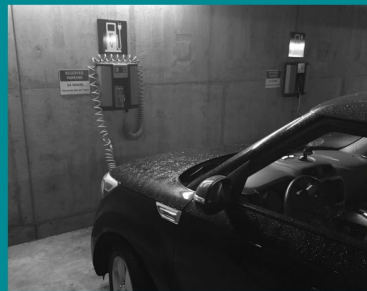
- Act as a central resource to support capacity building and education of potential:
 - EV drivers
 - Infrastructure builders and site hosts
 - Engineers, electricians and other trades

Track

- Track and share EV charging infrastructure data
- Support future siting and design decisions and improve user experience

EV Charging – Policy and Technical Guidance

Capital Region Local Government Electric Vehicle (EV) + Electric Bike (E-Bike) Infrastructure Planning Guide



Prepared by: WATT Consulting Group

Prepared for: Capital Regional District

November 2018



Electric Vehicle Infrastructure Roadmap

Transportation electrification for a connected region

Prepared for:
Capital Regional District



March 22, 2021



**ARCHETYPE 1
SURFACE PARKING LOT (LARGE)**

- Surface parking lot
- Commercial centre (e.g., shopping mall)

**ARCHETYPE 2
SURFACE PARKING LOT (MEDIUM)**

- Surface parking lot
- 1 to 10 establishments or commercial units

**ARCHETYPE 3
SURFACE PARKING LOT (SMALL)**

- Surface parking lot
- 1 establishment or commercial unit

**ARCHETYPE 4
UNDERGROUND PARKING FACILITY**

- Underground facility (e.g., publicly accessible parkade)

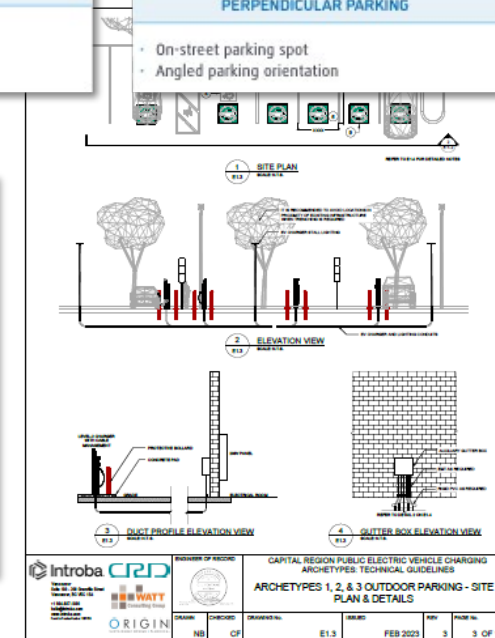
**ARCHETYPE 5
ON-STREET PARALLEL PARKING**

- On-street parking spot
- Parallel parking orientation

**ARCHETYPE 6
ON-STREET ANGLED AND PERPENDICULAR PARKING**

- On-street parking spot
- Angled parking orientation

CRD
CAPITAL REGION PUBLIC ELECTRIC VEHICLE CHARGING GUIDE
FEBRUARY 2023



Public EV Charging – Infrastructure

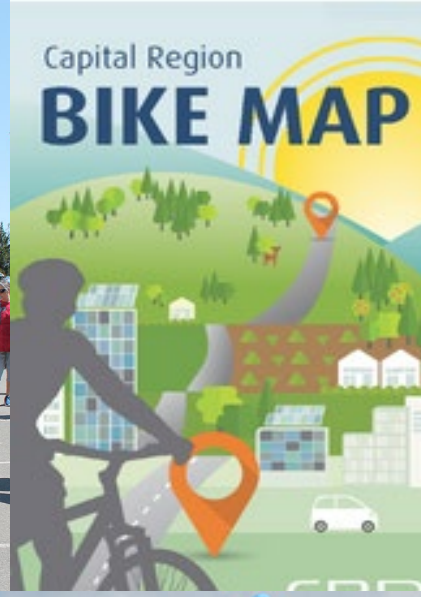


- Partnerships & municipal collaboration
- Core funding to build out regional network
 - Provincial and Federal grants applications!
- CRD Public Level 2 chargers @ sites
- BC Hydro EV Charger MOU
 - DCFC site support
 - Charging pilots



cleanBC
our nature. our power. **our future.**

Community Outreach & Education



Greater Victoria

Fall GoByBike Weeks: October 16-29, 2023



Questions?

Connect with us!

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