



# Regional District of Central Okanagan

## Green Vehicle and Equipment Policy Implementation Plan 2021-2040



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## DEFINITIONS

**Alternative Fuel** means a fuel that can power a motor but does not include petroleum-based fuels. Examples of alternative fuels include biofuel, hydrogen, electricity, methane, and natural gas.

**Board** means the duly elected and appointed officials of the Board of Directors of the Regional District of Central Okanagan.

**CAO** means the individual appointed by the Board to the position of Chief Administrative Officer (CAO) as the head of Administration.

**Battery Electric Vehicles (BEV)** means vehicles powered by a battery that is charged by plugging the vehicle in to charging equipment. EVs always operate in all-electric mode and have typical driving ranges from 150 to 300 miles<sup>1</sup>.

**Green Vehicles and Equipment** means managing vehicle and equipment life cycle activities with a focus on sustainable outcomes, including the reduction of GHG emissions.

**Hybrid Electric Vehicles (HEV)** means vehicles powered by an internal combustion engine and an electric motor that uses energy stored in a battery. The vehicle is fueled with gasoline to operate the internal combustion engine, and the battery is charged through regenerative braking, not by plugging in<sup>1</sup>.

**Life Cycle Activities** means the planning, acquisition, operation, maintenance, and disposition of assets.

**Light Duty Vehicles** means vehicles up to and including a Gross Vehicle Weight Rating (GVWR) of 3,856 kg. Vehicle types include: sedans, compact SUVs, SUVs, and trucks (up to F-150 and 1500 series trucks).

**Management or Manager(s)** means a person or group of persons employed by the Regional District having executive (administrative or supervisory) authority.

**Plug-In Hybrid Electric Vehicles (PHEV)** means vehicles powered by an internal combustion engine and an electric motor that uses energy stored in a battery. PHEVs can operate in all-electric (or charge-depleting) mode. To enable operation in all-electric mode, PHEVs require a larger battery, which can be plugged in to an electric power source to charge. To support a driver's typical daily travel needs, most PHEVs can travel between 20 and 40 miles on electricity alone, and then will operate solely on gasoline, similar to a conventional hybrid<sup>1</sup>.

**Rightsizing** means finding the optimal size required to perform the necessary function(s).

**Zero-Emission Vehicles (ZEV)** means a vehicle that has the potential to produce no tailpipe emissions. They can still have a conventional internal combustion engine, but must also be able to operate without using it<sup>2</sup>. ZEVs include BEV, PHEV, and Hydrogen Fuel Cell vehicles.

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<sup>1</sup> 'Alternative Fuels Data Centre', *U.S. Department of Energy Website*, year N/A, <https://afdc.energy.gov/vehicles/electric.html> , (accessed 28-06-2021).

<sup>2</sup> 'Zero-emission vehicles', *Government of Canada Website*, 2020, <https://tc.canada.ca/en/road-transportation/innovative-technologies/zero-emission-vehicles#/find/nearest?country=CA> (accessed 28-06-2021)

## CONTEXT

Created in 1967, the Regional District of Central Okanagan (RDCO) is one of 27 Regional Districts in the Province of British Columbia. It is made up of two unincorporated electoral areas and the four-member municipalities of Kelowna, West Kelowna, Peachland and Lake Country. The Regional District provides region-wide services such as parks, garbage collection, and 9-1-1 emergency telephone service. It also provides sub-regional and inter-regional services, such as dog control, and sewer. The Regional District acts as a general local government for electoral areas, providing services such as potable water, fire protection, and community halls.

Regional District assets such as vehicles and equipment are owned by individual services and not owned by a centralized department. The RDCO has chosen to centralize the maintenance and asset planning of vehicles and large equipment through the Fleet Services Program in order to ensure the consistency of asset life-cycle activities. Other equipment, including small equipment (i.e. mowers, generators), and facility or process related equipment (i.e. pumps, large generators, HVAC equipment) is managed and maintained by the department responsible for the delivery of associated services.

## BACKGROUND

As a signatory of the B.C. Climate Action Charter, the RDCO is committed to becoming carbon neutral in its corporate operations. As such, the District is focusing on reducing greenhouse gas (GHG) emissions. The reduction of GHG emissions can be accomplished in various ways, one being the introduction of alternative fuel vehicles and equipment into organizational vehicle and equipment pools, another being the incorporation of generally accepted green vehicle and equipment strategies into everyday operations.

In 2019 the Regional Board passed resolution #230/19, directing staff to draft a policy and covering report on the acquisition of electric and hybrid vehicles into the Regional District's vehicle fleet. To that end the RDCO Green Vehicle and Equipment Policy was developed and adopted in 2020. Following the adoption of the Policy, the Board asked staff to develop a policy implementation plan outlining the actions necessary for greenhouse gas emission reduction within the organization's vehicle and equipment pools.

## PURPOSE

The purpose of this plan is to provide a roadmap for the implementation of the RDCO's Green Vehicle and Equipment Policy. The plan includes implementation actions, short and long term targets, and timelines regarding the 'greening' of vehicles and equipment. Setting goals and taking action in an environment of continuous change is challenging. This document and the information in it is designed to allow for operational agility, while ensuring ongoing accountability.

## SCOPE

The Green Vehicle and Equipment Policy Implementation Plan applies to all vehicles and equipment owned and/or operated by the Regional District of Central Okanagan, including:

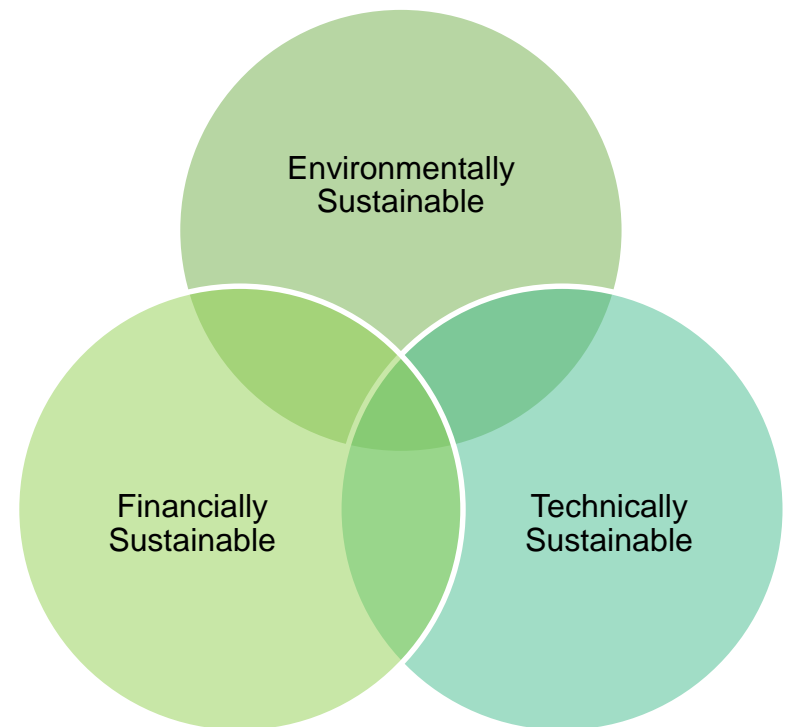
- vehicles
- large equipment (over \$2500)
- facility related equipment (ex. HVAC equipment)
- process related equipment (pumps and generators)

Equipment related to Information Technology is not included in the scope of this plan.

## PRINCIPLES

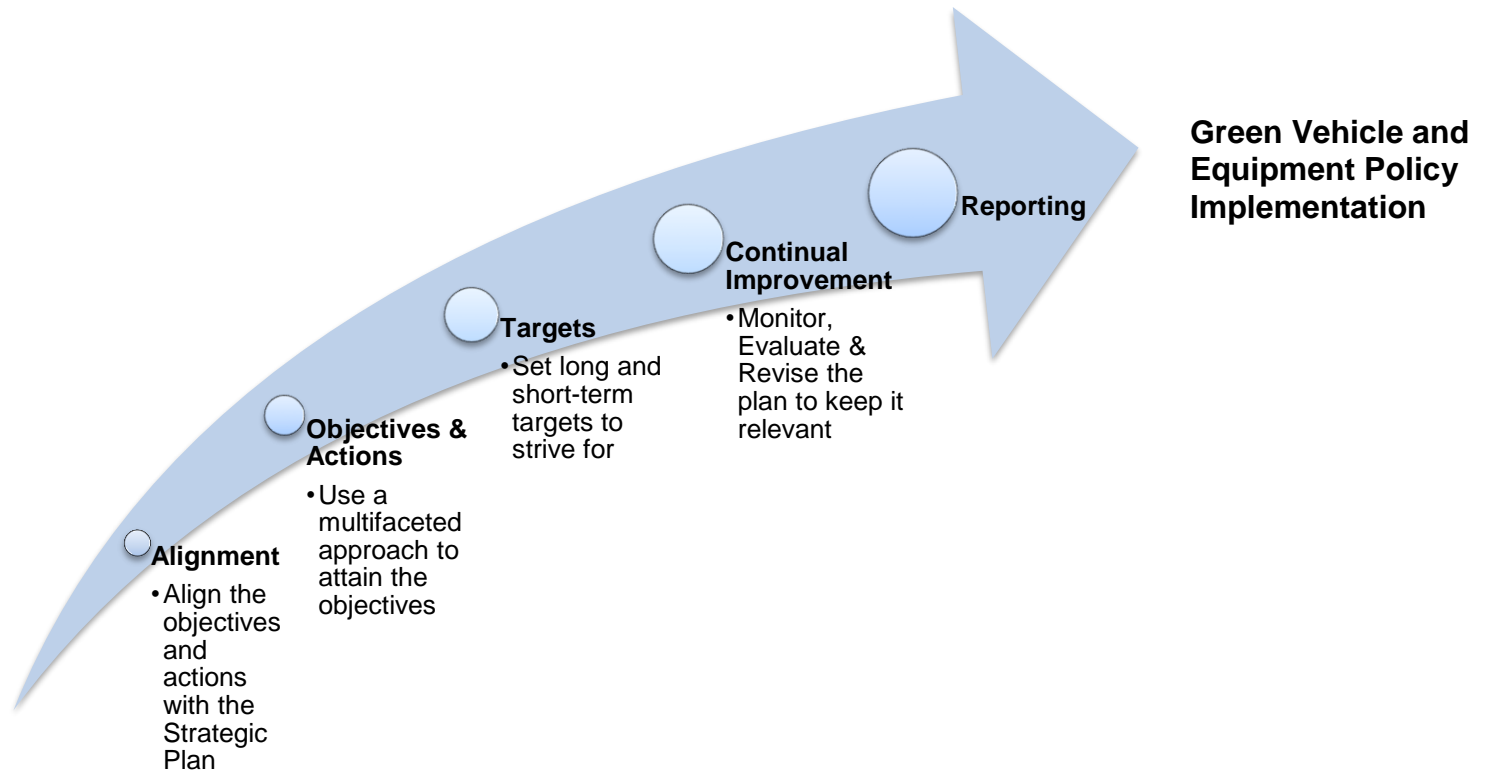
In order to encourage resilience and alignment when purchasing vehicle and equipment assets, it is recommended that the following principles be considered and weighed equally. Is the asset...

- **Environmentally Sustainable**  
Reducing GHG emissions, incorporating alternative fuel, and conserving fuel and energy in operations where feasible
- **Technically Sustainable**  
Meeting technical needs, meeting safety requirements, and meeting regulatory requirements
- **Financially Sustainable**  
Maximizing return on investment, ensuring that the cost of the asset is appropriate for the service budget available, considering total cost of ownership



# STRATEGY

The current market for green technology is changing so rapidly that the implementation of the new RDCO Green Vehicle and Equipment Policy must be flexible in nature in order to capture value while reducing asset related, and corporate risks. The RDCO will successfully implement the Green Vehicle and Equipment Policy by aligning the Plan with the Strategic Priorities, using a multifaceted approach to attain the objectives, setting short and long-term targets, continually improving on internal processes, and reporting to the Board annually.



**Alignment:**

The actions outlined in this plan align with the Regional Board 2019-2023 Strategic Priorities through the RDCO Green Vehicle and Equipment Policy objectives.

PRIORITY AREA	PRIORITY AREA GOAL
Environment	<p>The Regional District of Central Okanagan (RDCO) will initiate and support efforts to reduce our environmental footprint, adapt to climate change and connect with nature.</p> <ul style="list-style-type: none"> <li>▪ Regional District of Central Okanagan 2019-2023 Strategic Priorities Plan</li> </ul>
POLICY	POLICY GOAL
Green Vehicle and Equipment Policy	<p>As a signatory of the B.C. Climate Action Charter, the Regional District of Central Okanagan is committed to reducing the amount of greenhouse gas emissions produced by the vehicles and equipment used in the delivery of RDCO services.</p>
OBJECTIVES	
#1	<ul style="list-style-type: none"> <li>• Incorporating alternative fuel vehicles and equipment into operations where financially and technically sustainable;</li> </ul>
#2	<ul style="list-style-type: none"> <li>• Rightsizing vehicles, equipment, and overall fleet size; and</li> </ul>
#3	<ul style="list-style-type: none"> <li>• Conducting all fleet and equipment life cycle activities in a manner supporting efficiency and return on investment while reducing petroleum use.</li> </ul>



## **Attaining the Objectives**

### Objective 1 - Incorporating Alternative Fuel

- Prioritize replacement of highest fossil fuel consuming vehicles & equipment
- Set long and short term purchasing targets (zero-emission vehicles)

### Objective 2 - Rightsizing

- Utilize a standard approach when renewing vehicles and equipment across the organization – New Acquisition Forms
- Renew vehicles and equipment in a timely manner
- Report to the Board annually on fleet expansion, linking additional units to a change in services provided.

### Objective 3 - Efficient Life-Cycle Activities

- Include 'green' vehicle and equipment purchasing guidelines in 2021 update to the RDCO Purchasing Procedures
- Prioritize preventative maintenance
- Prioritize operator and fleet mechanic training

## **Short-Term Targets**

- Replace 10% of all light duty vehicles in the RDCO fleet with zero-emission vehicles by 2025
- Implement life-cycle actions listed this plan

## **Long-Term Targets**

- Align long-term zero- emission light duty vehicles implementation goals with the timeline provided in the Province of British Columbia's Zero-Emission Vehicle Act (30% ZEVs by 2030, 100% ZEVs by 2040)
- Reduce Corporate Greenhouse Gas Emissions by replacing vehicles and equipment fueled by petroleum based fuels with vehicles and equipment fueled by alternative fuels (small and large engines)

## **Plan Monitoring, Evaluation & Revision**

Monitoring and evaluating the success of this plan will be the responsibility of organizational Senior Leadership, Department Directors, Department Managers, and the Fleet Services Supervisor. Further to in-house fleet evaluations, third-Party Fleet Review Reports will be undertaken every four years to allow for external subject matter expert perspective on implementation progress and potential plan revisions.

The initial review of the fleet is currently underway (2021) and being undertaken by the Richmond Sustainability Project's E3 Fleet Review Team. It is recommended that future fleet reviews also be undertaken by third-party subject matter experts specializing in, fleet sustainability, zero-emission technology and government processes.

Plan revision is a key component to adapting to future changes of external and internal demand drivers. This Plan is meant to be a living document and can be revised as needed. All revisions of the plan will be presented to the Regional Board and align with the general RDCO policy review process as per the recommendations of the CAO.

## **Reporting**

It is recommended that the following information be included in a report brought forward to the RDCO Governance and Services Committee or the Regional Board annually:

1. Progress on the activities listed in this plan
2. Progress on the implementation of Zero-Emission Vehicles (ZEV), specifically the rate of light duty vehicle replacement with Zero Emission Vehicles (target: 10% ZEVs by 2025)
3. The following percentages (report current values and show comparison over the previous three-year time period):
  - Percent of large equipment (over \$2500) replaced with alternative fuel options
  - Percent of light duty vehicles replaced with alternative fuel options (includes HEV, PHEV, and EV)
  - Percent of medium and heavy vehicles replaced with alternative fuel options (includes HEV, PHEV, and EV)
  - Number of units per department fleet expansion (Vehicle and Equipment Request Acquisition Form)
4. Corporate Greenhouse Gas Emissions (unless already reporting through a required report, historically the CARIP report)

## ACTION PLAN

OBJECTIVE #1 Incorporating alternative fuel vehicles and equipment into operations where financially and technically sustainable				
ACTIVITY	TARGET DATE	RESOURCES REQUIRED	LEAD PERSON	FEQUENCY OF ACTION
Conduct Facility Assessments to Accommodate Electric Chargers <ul style="list-style-type: none"> <li>• ADMINISTRATIVE BUILDING – 002</li> <li>• EECO CENTRE - 142</li> <li>• DOG POUND - 046</li> <li>• WASTEWATER TREATMENT PLANT – 401</li> </ul>	2021	<ul style="list-style-type: none"> <li>• Staff time</li> <li>• Operating funds:</li> <li>• \$3500 – 002</li> <li>• \$3500 – 142</li> <li>• 046 - assessment covered by grant</li> <li>• 401 – Self assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Senior Energy Specialist</li> </ul>	<ul style="list-style-type: none"> <li>• Once 2021</li> <li>• As required to meet the needs of the fleet</li> </ul>
Install Electric Charging Infrastructure	2022	<ul style="list-style-type: none"> <li>• Staff time for coordination</li> <li>• Grant funding available to cover part of capital costs</li> <li>• Payback and maintenance program available through FortisBC</li> </ul>	<ul style="list-style-type: none"> <li>• Senior Energy Specialist</li> </ul>	<ul style="list-style-type: none"> <li>• One time</li> </ul>
Update applicable capital plans as per Appendix C <ul style="list-style-type: none"> <li>• Capital plans must be approved by the Regional Board before purchases can take place</li> </ul>	2022	<ul style="list-style-type: none"> <li>• Staff time</li> </ul>	<ul style="list-style-type: none"> <li>• Department Directors</li> </ul>	<ul style="list-style-type: none"> <li>• Updates to capital plans will be ongoing</li> </ul>
Replace fleet units with ZEV vehicles <ul style="list-style-type: none"> <li>• 10% of light duty fleet</li> </ul>	2025	<ul style="list-style-type: none"> <li>• Staff time for coordination</li> </ul>	<ul style="list-style-type: none"> <li>• Fleet Services</li> </ul>	<ul style="list-style-type: none"> <li>• One time</li> </ul>

**OBJECTIVE #2 Rightsizing vehicles, equipment, and overall fleet size**

ACTIVITY	TARGET DATE	RESOURCES REQUIRED	LEAD PERSON	FREQUENCY OF ACTION
Implement New Vehicle and Equipment Request/Acquisition Forms across the organization <ul style="list-style-type: none"> <li>• Justification of fleet expansion</li> <li>• Forms attached as Appendix B &amp; C</li> </ul>	2021	<ul style="list-style-type: none"> <li>• Staff time</li> </ul>	<ul style="list-style-type: none"> <li>• Department Staff</li> </ul>	<ul style="list-style-type: none"> <li>• Review and update form every four years</li> </ul>
Implement Standard Vehicle Useful Life and Disposal timeframes across organization. <ul style="list-style-type: none"> <li>• Renew vehicles in a timely manner</li> </ul>	2021	<ul style="list-style-type: none"> <li>• Staff time</li> </ul>	<ul style="list-style-type: none"> <li>• Department Managers, Fleet Services</li> </ul>	<ul style="list-style-type: none"> <li>• Review and update useful life and disposal timeframes across every four years</li> </ul>
Conduct Third Party Fleet Reviews <ul style="list-style-type: none"> <li>• Purpose of the Fleet Review is to provide third party insight into the environmental sustainability of the RDCO Fleet</li> </ul>	2021	<ul style="list-style-type: none"> <li>• Fleet Services Staff time to collect data</li> <li>• Initial review cost is \$2500 (E3 Fleet Review)</li> </ul>	<ul style="list-style-type: none"> <li>• Fleet Services</li> </ul>	<ul style="list-style-type: none"> <li>• Every four years</li> </ul>
Replace the highest fossil fuel consuming light duty vehicles with a high resale value at five years instead of ten years: <ul style="list-style-type: none"> <li>• Based on results of Third Party Fleet Review</li> </ul>	2022	<ul style="list-style-type: none"> <li>• Fleet Services Staff Time</li> </ul>	<ul style="list-style-type: none"> <li>• Fleet Services</li> </ul>	<ul style="list-style-type: none"> <li>• Every four years</li> </ul>

**OBJECTIVE #3 Conducting all fleet and equipment life cycle activities in a manner supporting efficiency and return on investment while reducing petroleum use**

ACTIVITY	TARGET DATE	RESOURCES REQUIRED	LEAD PERSON	FREQUENCY OF ACTION
<p>Update the RDCO Administrative Purchasing Procedures Document to include the following:</p> <ul style="list-style-type: none"> <li>▪ Where applicable, include low emission criteria and/or energy use evaluation criteria in Vehicle and Equipment Procurement Processes (RFPs, Request for Quotes, etc.) (for vehicles and equipment not included in the ZEV category).</li> <li>▪ Include a preference for low GHG emission and low energy use alternatives in all facility and process related equipment purchases (i.e. HVAC systems, pumps, and WWTP process equipment).</li> <li>▪ Include a requirement for all service providers utilizing RDCO vehicles and equipment to maintain the equipment to industry and/or required standards.</li> <li>▪ Include a request for a supplier buy-back option in the vehicle procurement process, whereby the dealership or ‘seller’ of the vehicle provides the RDCO with a buy-back price up to five years after initial vehicle purchase.</li> </ul>	2021	<ul style="list-style-type: none"> <li>• Purchasing Consultant Time</li> </ul>	<ul style="list-style-type: none"> <li>• Purchasing Consultant</li> </ul>	<ul style="list-style-type: none"> <li>• Update procedures every four years</li> </ul>
<ul style="list-style-type: none"> <li>• Complete the implementation of Preventative (scheduled) Maintenance across all RDCO vehicles and equipment.</li> </ul>	2021	<ul style="list-style-type: none"> <li>• Staff time</li> <li>• Cost of preventative maintenance</li> </ul>	<ul style="list-style-type: none"> <li>• Fleet Services</li> </ul>	<ul style="list-style-type: none"> <li>• Update procedures every four years</li> </ul>
<ul style="list-style-type: none"> <li>• Provide BEV Maintenance Training for Fleet Mechanics</li> </ul>	2022	<ul style="list-style-type: none"> <li>• Staff time</li> <li>• Cost of Training</li> </ul>	<ul style="list-style-type: none"> <li>• Fleet Services</li> </ul>	<ul style="list-style-type: none"> <li>• Continual training as per industry recommendations</li> </ul>
<ul style="list-style-type: none"> <li>• Provide Equipment and Vehicle Operators with training – Fuel Efficient Driving</li> </ul>	2022	<ul style="list-style-type: none"> <li>• Staff time</li> <li>• Cost of Training</li> </ul>	<ul style="list-style-type: none"> <li>• Fleet Services</li> </ul>	<ul style="list-style-type: none"> <li>• Continual training per industry recommendations</li> </ul>

# Appendix A RDCO Green Vehicle and Equipment Policy



## Regional Board Policy GREEN VEHICLE AND EQUIPMENT POLICY

<b>Category:</b> Corporate Services	<b>Number:</b> #BP10 - 2020	<b>Replaces:</b> N/A
<b>Type:</b>	<b>Authority:</b>	<b>Approved By:</b>
<input checked="" type="checkbox"/> Policy <input type="checkbox"/> Procedure	<input checked="" type="checkbox"/> Board <input type="checkbox"/> Administrative	<input checked="" type="checkbox"/> Board <input type="checkbox"/> CAO <input type="checkbox"/> Department Head
<b>Office of Primary Responsibility:</b> Engineering Services		
<b>Date Adopted:</b> Dec. 7, 2020	<b>Board Resolution Number:</b> #199-20	<b>Date to be Reviewed:</b> 5-Year, or as required
<b>Manner Issued:</b> Posted on the RDCO Website and the RDCO Loop (staff intranet)		

### PURPOSE AND SCOPE

The purpose of this policy is to make progress towards carbon neutrality in RDCO corporate operations. This policy applies to all vehicles and equipment owned and/or operated by the Regional District of Central Okanagan (RDCO).

### POLICY

#### Definitions

**Alternative Fuel** means a fuel that can power a motor but does not include petroleum-based fuels. Examples of alternative fuels include biofuel, hydrogen, electricity, methane, and natural gas.

**Board** means the duly elected and appointed officials of the Board of Directors of the Regional District of Central Okanagan.

**CAO** means the individual appointed by the Board to the position of Chief Administrative Officer (CAO) as the head of Administration.

**Green Vehicles and Equipment** means managing vehicle and equipment life cycle activities with a focus on sustainable outcomes, including the reduction of GHG emissions.

**Life Cycle Activities** means the planning, acquisition, operation, maintenance, and disposition of assets.

**Management or Manager(s)** means a person or group of persons employed by the Regional District having executive (administrative or supervisory) authority.

**Rightsizing** means finding the optimal size required to perform the necessary function(s).

#### Policy Statement

As a signatory of the B.C. Climate Action Charter, the Regional District of Central Okanagan is committed to reducing the amount of greenhouse gas emissions produced by the vehicles and equipment used in the delivery of RDCO services.

This will be achieved by:

- Incorporating alternative fuel vehicles and equipment into operations where financially and technically sustainable;
- Rightsizing vehicles, equipment, and overall fleet size; and
- Conducting all fleet and equipment life cycle activities in a manner supporting efficiency and return on investment while reducing petroleum use.

#### RESPONSIBILITIES

##### Responsibilities of the Board

- To review and adopt this policy in order to provide direction for staff regarding future vehicle and equipment life cycle activities.

##### Responsibilities of the CAO and Management

- To champion and enforce the adoption of this policy across the organization in order to support its success. This includes:
  - Requesting and allocating the appropriate level of financial resources required to support this policy;
  - Developing and implementing administrative policies and procedures in support of this policy; and
  - Providing staff with the education necessary to maintain and operate alternative fuel vehicles and equipment.

#### RELATED POLICIES, PROCEDURES, AGREEMENTS AND/OR BYLAWS:

- B.C. Climate Action Charter
- RDCO Strategic Plan 2019-2022
- Regional Growth Strategy, Bylaw No. 1336
- RDCO Purchasing Policy No. 7.20
- RDCO Vehicle Engine-Idling Policy Resolution No. 68/04
- RDCO Fleet Procedures

\*\*\* END OF POLICY \*\*\*

Policy No.	Date Adopted	Date Reviewed	Amended (Y/N)	Date Reissued	Authority(Resolution #)
BP#10/2020	Dec. 7, 2020				#199/20

# Appendix B Vehicle and Equipment Request/Acquisition Forms



Engineering Services  
 Fleet Services  
 1450 K.L.O. Road  
 Kelowna, B.C. V1W 3Z4  
 Telephone: (250) 469-6241  
 fleet@rdco.com  
 www.rdco.com

## VEHICLE REQUEST ACQUISITION FORM

*EMAIL COMPLETED FORM TO FLEET@RDCCO.COM*

DATE:	REQUESTOR:
DEPARTMENT:	COST CENTRE:
	GL CODE:

SECTION A: VEHICLE REQUEST	
Fleet expansion or vehicle replacement	<input type="checkbox"/> Expansion <input type="checkbox"/> Replacement <i>(Complete Section E for Expansion Requests)</i>
Vehicle use term	<input type="checkbox"/> Year Round Use <input type="checkbox"/> Temporary/Seasonal: Please specify which months, the vehicle will be in use for: _____
Primary use	<input type="checkbox"/> Individual Operator <input type="checkbox"/> Shared Use (Group) Name of operator/group: _____ Primary Location/Zone: _____
Personal mileage	Will the operator be taking the vehicle home: <input type="checkbox"/> No <input type="checkbox"/> Yes If yes, state no. of KMs from operator's main place of work to operator's home: _____ Location of operator's main place of work: _____
SECTION B: VEHICLE TO BE REPLACED	
Unit No. _____	Make: _____ Model: _____ Year: _____
VIN: _____	Current Odometer: _____ Annual KMs Driven: _____
Operator/Group: _____	Location: _____
Vehicle to be: <input type="checkbox"/> Sold at Auction <input type="checkbox"/> Sold to Dealership <input type="checkbox"/> Sold Online	Minimum Bid/Sale Price: _____
Fuel Type: <input type="checkbox"/> Gasoline <input type="checkbox"/> Diesel <input type="checkbox"/> EV (electric vehicle) <input type="checkbox"/> HEV (hybrid electric vehicle)	
<input type="checkbox"/> PHEV (plug-in hybrid electric vehicle) <input type="checkbox"/> Other (specify fuel type): _____	
Is the revenue for this sale included the cost center's capital budget? <input type="checkbox"/> No <input type="checkbox"/> Yes, amount included \$ _____	
Is Vehicle Damaged (summarize damages): _____	
_____	
_____	

<b>SECTION C: REQUESTED VEHICLE</b>	
<b>Annual kms driven</b>	<i>(Estimated; May be same as section B)</i>
<b>Vehicle category</b>	<input type="checkbox"/> Light Duty (GVW of 3,856 kg or less) <input type="checkbox"/> Medium Duty (GVW between 3,856 kg and 4,536 kg) <input type="checkbox"/> Heavy Duty (GVW over 4,536 kg) <input type="checkbox"/> Fire Truck (Engine/Tender) <input type="checkbox"/> Other <i>(please specify)</i> : _____
<b>Fuel type</b>	<input type="checkbox"/> Gasoline <input type="checkbox"/> Diesel <input type="checkbox"/> EV (electric vehicle) <input type="checkbox"/> HEV (hybrid electric vehicle) <input type="checkbox"/> PHEV (plug-in hybrid electric vehicle) <input type="checkbox"/> Other <i>(specify fuel type)</i> : _____
<b>Electric chargers</b> <i>(only if purchasing an EV)</i>	Is a charger available for this vehicle at the primary location: <input type="checkbox"/> Yes <input type="checkbox"/> No  Which level of charger is available: <input type="checkbox"/> Level 1 – 120 volts <i>(adds 5-9 kms of driving range / hour charge time)</i> <input type="checkbox"/> Level 2 – 240 volts <i>(adds 25-40 kms of driving range / hour charge time)</i> <input type="checkbox"/> Level 3 – 400 volts <i>(adds 300+ kms of range / hour charge time)</i>  Does the operator require a Level 1 charger for their home: <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Additional options</b> <i>(check all that apply)</i>	<b>SEDAN/HATCHBACK</b> <input type="checkbox"/> Compact <input type="checkbox"/> Mid-Size <input type="checkbox"/> Hatchback <input type="checkbox"/> Full-Size <input type="checkbox"/> Station Wagon <input type="checkbox"/> Plug-In Electric <b>SUV</b> <input type="checkbox"/> Compact <input type="checkbox"/> Mid-Size <input type="checkbox"/> Full-Size <b>VAN</b> <input type="checkbox"/> Minivan <input type="checkbox"/> 12-Passenger <input type="checkbox"/> Cargo <b>TRUCK</b> <i>(check all that apply)</i> <input type="checkbox"/> Cab & Chassis w/Dump Body <input type="checkbox"/> Crew Cab <input type="checkbox"/> Regular Cab <input type="checkbox"/> Extended Cab <input type="checkbox"/> Crew Cab <input type="checkbox"/> Short Box <input type="checkbox"/> Long Box  <input type="checkbox"/> AWD/4WD <input type="checkbox"/> Snow Plow <input type="checkbox"/> Lightbar <input type="checkbox"/> Cab Office/laptop stand <input type="checkbox"/> Bedliner <input type="checkbox"/> Step Boards <input type="checkbox"/> Security Divider <input type="checkbox"/> Canopy <input type="checkbox"/> Headache Rack <input type="checkbox"/> Back-up alarm <input type="checkbox"/> Back-up camera  <input type="checkbox"/> Fire Services Equipment: _____ <input type="checkbox"/> Tow pkg w/Min. GVWR of _____ lbs. <input type="checkbox"/> Toolbox <i>(specify style)</i> : _____ <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____



**SECTION D: Alignment with RDCO Green Vehicle and Equipment Policy**  
 This section is to be completed by the purchasing team (incl. operator, supervisor, manager).

<p><b>Functional Statement</b>  <i>(State the scope of work for this vehicle. Ensure the scope of work aligns with the level of service required by your department)</i></p>	<p><i>(i.e. This unit transports dogs from around the RDCO to the dog pound and other facilities. It must be able to go off-road and requires 4WD. The unit must have a crew cab to accommodate at least two officers, and an injured dog. The vehicle must also have a separate and contained/safe area for the transportation of dangerous dogs).</i></p>
<p><b>Green Vehicle and Equipment Policy Principles:</b></p>	<p>Describe how your vehicle specification (new vehicle) meets the principles of the Green Vehicle and Equipment Implementation Plan:</p> <ul style="list-style-type: none"> <li>• Environmentally Sustainable:</li> <li>• Efficient Operations <i>(meets operational needs)</i>:</li> <li>• Financially Sustainable:</li> </ul>
<p><b>SECTION E: ADDITIONAL JUSTIFICATION FOR EXPANSION VEHICLES</b>                  This section must be completed for expansion vehicle requests.</p>	
<p><b>Reason for Expansion:</b> Check all that apply and then describe in detail in the space provided below:</p> <p> <input type="checkbox"/> New Regulatory Requirements  <input type="checkbox"/> Providing an increased level of service  <input type="checkbox"/> Department/Corporate change in strategic direction  <input type="checkbox"/> Expansion of service (incl. land purchase, facility purchase)                 </p> <p><input type="checkbox"/> Other: _____</p>	
<p>Describe the need to expand the fleet here and how the travel/function is currently being accomplished. Also, indicate if this will result in cost-savings to the service (cost centre) and any adverse impacts if the requested vehicle is not acquired.</p>	

**SECTION F: APPROVAL OF DEPARTMENT**

	Signature	Printed Name	Date
Operator			
Supervisor			
Manager			
Director			

**For Fleet, Finance, and Purchasing Use**

**New Vehicle Information**

Unit No.:	PO No:	PO Issue Date:
RFP/RFQ No & Lot No:	Vehicle Make/Model Accepted:	Cost (incl. OH & GST)
Bill of Sale and Invoice to AP: <input type="checkbox"/> Yes	Cheque issue date:	Fleet Binder Ready: <input type="checkbox"/> Yes
Gas Card No.:	Plate No:	

**Vehicle Sale Information (replaced vehicle)**

Date of Sale:	Location of sale (auction, online etc.):	Sale price
Bills of sale and payment to Janelle Harrison (Finance) <input type="checkbox"/> Yes	Insurance cancelled: <input type="checkbox"/> Yes	
Sale price before taxes:	GST:	PST:
Buyer/Seller Name:		
Is the buyer/seller a register Dealer (Y/N)? (has a dealer# on the transfer form)		

# Appendix C Vehicle and Equipment Request/Acquisition Forms



Engineering Services

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 Telephone: (250) 469-6241  
 fleet@rdco.com  
 rdco.com

## EQUIPMENT OVER \$2500 REQUEST ACQUISITION FORM

DATE:	CONTACT NAME:
DEPARTMENT:	COST CENTRE:
	GL CODE:

### SECTION A: EQUIPMENT REQUEST

Equipment pool expansion or replacement	<input type="checkbox"/> Expansion <input type="checkbox"/> Replacement <i>(Complete Section E for Expansion Requests)</i>
Equipment use term	<input type="checkbox"/> Year Round Use <input type="checkbox"/> Temporary/Seasonal: Please specify which months, the vehicle will be in use for: _____
Primary use	<input type="checkbox"/> Individual Operator <input type="checkbox"/> Shared Use (Group) Name of operator/group: _____ Primary Location/Zone: _____

### SECTION B: EQUIPMENT TO BE REPLACED

Unit No. \_\_\_\_\_ Make: \_\_\_\_\_ Model: \_\_\_\_\_ Year: \_\_\_\_\_

SERIAL NO.: \_\_\_\_\_ Current Hours: \_\_\_\_\_ Annual Hours: \_\_\_\_\_

Operator/Group: \_\_\_\_\_ Location: \_\_\_\_\_

Equipment to be:  Sold at Auction  Sold to Dealer  Sold Online Minimum Bid/Sale Price: \_\_\_\_\_

Fuel Type:  Gasoline  Diesel  Electric  Other (specify fuel type): \_\_\_\_\_

Is the revenue for this sale included the cost center's capital budget?  No  Yes, amount included \$ \_\_\_\_\_

Is equipment damaged (summarize damages): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

SECTION C: REQUESTED VEHICLE	
<b>Annual Hours Anticipated</b> <i>(Estimated; May be same as section B)</i>	
<b>Equipment Type</b>	<input type="checkbox"/> Generator <input type="checkbox"/> E-Bikes <input type="checkbox"/> Marine - Boat Trailer <input type="checkbox"/> All-Terrain Vehicle (ATV) <input type="checkbox"/> Utility Terrain Vehicles (UTV) <input type="checkbox"/> Service Capsule/Canopy/Truck Body (over \$2500) <input type="checkbox"/> Tractor/Loader <input type="checkbox"/> Turf Vac <input type="checkbox"/> Brush Chipper <input type="checkbox"/> Beach Groomer <input type="checkbox"/> Tender Trailer/ Pump Trailer <input type="checkbox"/> Mower  <input type="checkbox"/> Other <i>(please specify)</i> : _____
<b>Fuel type</b>	<input type="checkbox"/> Gasoline <input type="checkbox"/> Diesel <input type="checkbox"/> Electric <input type="checkbox"/> Other <i>(specify fuel type)</i> : _____
<b>Operation of Equipment</b>	<p>Will operators and/or the mechanics require training on the new equipment? <input type="checkbox"/> Yes <input type="checkbox"/> No  <i>(ensure all training aligns with regulations and industry standards)</i></p> <p>Indicate frequency of training required:</p> <input type="checkbox"/> At purchase only: Training required when purchasing a new type of equipment or a new model with additional functions. <input type="checkbox"/> Annually: Training required annually due to level of risk involved in operating the equipment, required by regulation, or accepted industry standard. <input type="checkbox"/> Other: _____ <p>Have you included training for this equipment in your on-boarding process? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<b>Repair and Maintenance</b>	<p><i>When purchasing new equipment ensure that it can be repaired locally, and that the parts required for the repair of the equipment are available locally.</i></p> <p>The equipment can be repaired locally: <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Parts for equipment repair are available locally: <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Can the equipment be repaired by the RDCO Fleet Mechanics? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Do repairs and maintenance require coordination with an external party:  <i>(Only if equipment cannot be repaired by the Fleet Mechanic)</i>  <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes:</p> <ul style="list-style-type: none"> <li>• Name external party: _____</li> <li>• Has a formal agreement been established with external party responsible for repairs and maintenance? <input type="checkbox"/> Yes <input type="checkbox"/> No</li> </ul>

**SECTION D: Alignment with RDCO Green Vehicle and Equipment Policy**  
 This section is to be completed by the purchasing team (incl. operator, supervisor, manager).

**Functional Statement**  
*(State the scope of work for the equipment. Ensure the scope of work aligns with the level of service required by your department)*  
 (i.e. This UTV will be used on the greenway to transport personnel, small tools, and supplies. The unit must be able to carry a payload of 1250 lbs. and accommodate two passengers. Supply and tool transportation requires a flat deck at the rear of the unit. Unit must be usable in both summer and winter (all types of weather – air conditioning not required)).

**Green Vehicle and Equipment Policy Principles:**

Describe how the equipment spec. meets the principles of the Green Vehicle and Equipment Implementation Plan:

- Environmentally Sustainable:
- Efficient Operations (meets operational needs):
- Financially Sustainable:

**SECTION E: ADDITIONAL JUSTIFICATION FOR EXPANSION EQUIPMENT OVER \$2500**  
 This section must be completed for expansion vehicle requests.

**Reason for Expansion:** Check all that apply and then describe in detail in the space provided below:

- New Regulatory Requirements
- Providing an increased level of service
- Department/Corporate change in strategic direction
- Expansion of service (incl. land purchase, facility purchase)

Other: \_\_\_\_\_

Describe the need to expand the equipment pool here and how the work is currently being accomplished. Also, indicate if this will result in cost-savings to the service (cost centre) and any adverse impacts if the requested equipment is not acquired.

**SECTION F: APPROVAL OF DEPARTMENT**

	Signature	Printed Name	Date
Operator			
Supervisor			
Manager			
Director			

**For Fleet, Finance, and Purchasing Use**

<b>New Vehicle Information</b>	
Unit No.:	PO No:
RFP/RFQ No & Lot No:	Equipment Make/Model Accepted:
Bill of Sale and Invoice to AP: <input type="checkbox"/> Yes	Cheque issue date:
Gas Card No.:	Plate/ RCMP Permit No:
	PO Issue Date:
	Cost (incl. OH & GST)
	Fleet Documents Ready: <input type="checkbox"/> Yes
<b>Vehicle Sale Information (replaced vehicle)</b>	
Date of Equipment:	Location of sale (auction, online etc.):
Bills of sale and payment to Finance <input type="checkbox"/> Yes	Insurance/ RCMP Permit cancelled: <input type="checkbox"/> Yes
Sale price before taxes:	GST:
Buyer/Seller Name:	PST:
Is the buyer/seller a register Dealer (Y/N)? (has a dealer# on the transfer form)	

## Appendix D Electric Vehicle Infrastructure

### Electric Charging Infrastructure

In order to move forward with the addition of zero-emission vehicles to the RDCO fleet, planning for the addition of corporate electric charging stations has already started. The electric charging infrastructure facility upgrades required to meet the organization's targets will be rolled out in three phases. Phase one will meet the fleet conversion target of 10% for 2025, phase two will meet the fleet ZEV conversion target of 30% for 2030, and phase three will meet the fleet conversion target of 100% by 2040<sup>3</sup>.

### Charging Infrastructure Timeline (Short-Term)

#### 2021

Facility Assessments: The following facilities have been identified as potential facilities to receive electric charging infrastructure for fleet vehicles: the K.L.O. Administration Building, the Dog Pound, the EECO at Mission Creek, and the Westside Wastewater Treatment Plant. As such these facilities will be assessed to ascertain the per facility costs of electric charging infrastructure to meet the 2025 zero-emission vehicle target. The assessments will include the anticipated future cost of converting all RDCO light duty vehicles to zero-emission vehicles<sup>4</sup>. By understanding the immediate and long-term charging needs of the organization, staff can make the implementation of electric charging infrastructure as efficient as possible and incorporate available grant funding.

#### 2022

Phase One electric charging infrastructure costs will be included in the 2022 capital budget for review and approval by the Regional Board. Phase one infrastructure projects will commence following budget approval and be completed by the end of 2022. Level two chargers are recommended for fleet vehicles at this time as the return on investment per level two chargers is shorter than the return on investment per level three chargers. Estimated cost per level two charger including electric upgrades and installation is \$15000 per charger. Estimated cost per level three charger is \$100,000+ per charger including electric upgrades and installation. Level three chargers for fleet units may be appropriate in the future as the PHEV and EV fleet increases and the quantity of level two vehicle chargers required becomes unsustainable.

### Public Chargers

RDCO staff will continue to monitor the demand for public chargers at RDCO sites.

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<sup>3</sup> Phases are required as new technology, including hydrogen fuel cell vehicles may be purchased over electric vehicles and therefore not require the addition of future electric charging infrastructure for all light duty vehicles.

<sup>4</sup> Assessment estimates are based on 2021 number of light duty vehicles per service.