

# ATTACHMENT B



## CITY OF NANAIMO GREEN FLEET STRATEGY 2020

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2/21/2020



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<b>City of Nanaimo</b>	Fleet Services
<b>Fleet Manager</b>	Jason Evans
<b>Regarding</b>	Green Fleet Strategy

## Executive Summary

The Green Fleet Strategy (GFS) summarizes research and data collected to identify actions undertaken by all departments in order to reduce GHG emissions and improve fuel efficiency of the City's Fleet. The purpose is to reduce GHG emissions and improve fuel efficiency. This can be achieved through operational practices such as, alternative fuel usage, implementation of effective driver training and responsible purchasing of fleet vehicles. To be successful, the strategy must allow departments to operate in the most economical and environmentally responsible fashion, while meeting the needs of the City's operation. The GFS allows the City to make an organized and directed approach to improve efficiency within the City's Fleet by reducing fuel usage, maintenance costs, improving the resiliency of the fleet, and promoting environmentally responsible actions to the community.

In the Province of BC, transportation accounts for over 60 percent of the GHG emissions; therefore, the City has taken action to reduce emissions from the City Fleet, in support of the Climate Action Plan. Fleet services has made significant efforts to "green the fleet" over the last 10 years and has taken steps to reduce GHG emissions. These efforts, combined with corporate policies, have clearly articulated two simple and measurable goals:

- **Reduce GHG emissions by 33% percent of 2007 levels by 2020.**
- **Reduce GHG emissions by 80% percent of 2007 levels by 2050.**

In order to effectively achieve these goals, the GFS has three guiding principles. These principles will help shape the actions, the City's Fleet will pursue to have the most effect on reducing GHG emissions:

- **REDUCE FUEL CONSUMPTION** - Implement policies and training to increase operational efficiencies, reduce idle time, and improve driver behavior, ultimately reducing fuel consumption.
- **USE OF ALTERNATIVE FUELS** - Continuously investigate and implement all cost effective alternative fuel sources where operational needs allow.
- **ELECTRIC VEHICLE CHARGING INFRASTRUCTURE PLAN** - Corporately collaborate with senior management to develop a City of Nanaimo charging infrastructure plan/strategy.

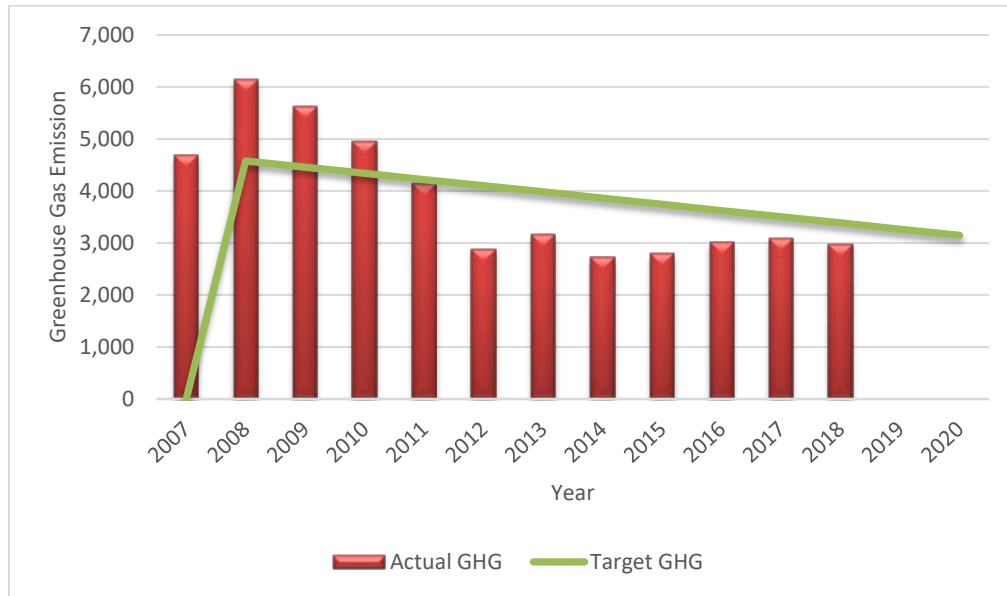
As per any solution to a problem, each guiding principle comes with its own implementation challenges: Departments must cooperate in finding new and innovative methods to deliver services.

- Challenge internal policies that result in additional vehicle miles traveled and invest in communication technology to reduce travel.
- Equipment manufacturers must get new electric vehicles to market (half-ton trucks).
- The City must allocate funds for increased acquisition costs of vehicles and charging infrastructure.
- The cost of implementing green fleet initiatives.
- The lack of knowledge on green fleet programs and their benefits among key stakeholders, and departments "resistance to change" such as Rightsizing.
- Staff "buy in" and training to change culture and driver habits.
- Shortage of staff to meet the demand of a climate emergency



The City has been working hard to be environmentally responsible, but we still have a long way to go. The GFS update provides the necessary actions to overcome these challenges and achieve success. The goal chart below shows as a corporation, with the assistance of Organic Waste Diversion credits, we have reached our target for 2020 and are working towards our target for 2050.

### Goal Chart



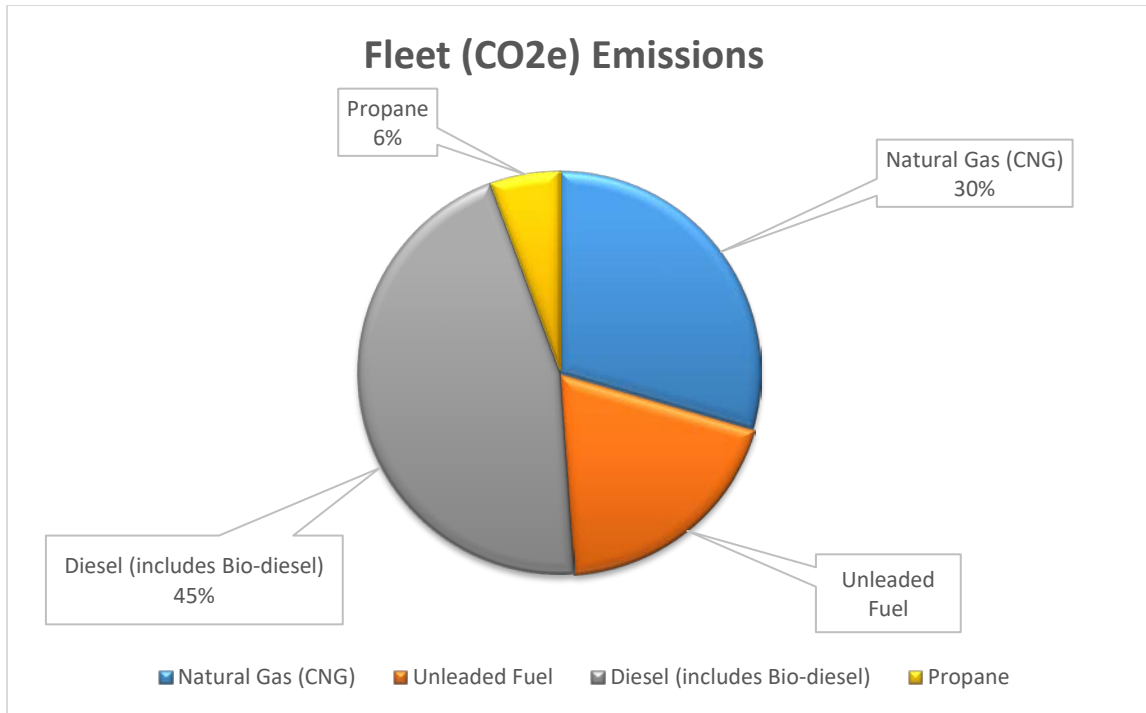
### Introduction

Nanaimo relies on its fleet of vehicles to provide many essential services in the community; however, the City recognizes that fleet vehicles are a major source of air pollutants that contribute to GHG emissions. With growing concerns over climate change, and Council declaring a climate emergency, the City of Nanaimo is taking a leadership role in energy conservation and reduction in GHG emissions. This can be measured in terms of social, economic, and environmental benefits, such as improved energy efficiency, cleaner air that contributes to a better quality of life, and a reduction in health care costs. The GFS promotes affordable, reliable and renewable solutions that are sustainable.

The City of Nanaimo currently operates 466 vehicles and pieces of equipment with the Public Works Operations and 36 Fire Department related units. Fuel and gas represents about .58% of the City's overall Operating Budget, with a cost of \$737,802.33 in 2019, excluding Fire and Emergency Services (Appendix A).

Over the past 10 years, Fleet Services has been dedicated to reducing fuel consumption and fleet vehicle emissions. With the introduction of internal policy, procedures and innovative solutions, fleet has shown great progress. In 2007, Fleet was the largest contributor of all departments for CO<sub>2</sub> emissions, responsible for 2,119 tonnes of CO<sub>2</sub> or 45% of the city's total emissions. In 2018, Fleet was responsible for 1,839 tonnes of CO<sub>2</sub> or 35% of the City's total emissions, a reduction of 10%. This accomplishment is a testament to what we can achieve with dedicated resources and committed leadership.





### 2007 – 2018 GREEN VENTURES

- Installed automated fuel management system
- Implemented a preventive maintenance system
- Adopted bio-diesel 5 blend
- Adopted a Corporate anti-idling policy
- Developed a Bicycle Share Program
- Implemented a Pool Car Program
- Purchased alternative fuel vehicles
- Converted existing gas vehicles to alternative fuel vehicles

### 2019-2020 GREEN VENTURES

- Completed an E3 Fleet review
- Increased the use of alternative fuel vehicles in the Fleet (propane & CNG)
- Introduced the City's first, fully electric, bicycle
- Completed multi-year tender for the purchases of fully electric cars
- Increased number of electric vehicle charging stations for Fleet vehicles
- Working with facilities to develop a Corporate EV Charging Station Strategy
- Develop greener servicing intervals to avoid over servicing
- Adopted the use of synthetic oils to increase service intervals
- Implementing the use of bio-diesel blend B20 April to October
- Right-sizing of department vehicles and equipment before purchasing
- Implementing in 2020, Fleet management software upgrade (Assetworks), allowing for increased level of reporting on fuel and equipment usage
- Provide monthly fuel utilization reports to Managers
- E3 Fleet rating
- Completing E3 Fleet rating



## KEY FINDINGS

### E3 Fleet Review

In 2019, with the support of Council, Fleet Services collaborated with the E3 Fleet Program (supported by the Fraser Basin Council), to conduct a review of the City's Fleet. This review assisted with developing the framework that, if supported, will help the Fleet reduce GHG emissions and lower fuel consumption.

E3 Fleet analyzed the City's 2018 operational Fleet data, selected Key Performance Indicators (KPIs) that provide a snapshot summary of operating parameters. These KPIs reflect operating costs, emissions and service levels. E3 Fleet review has provided recommendations to the City to assist in lowering fuel consumption, operating costs, and GHG emissions, to help us meet our targets.

## E3 RECOMMENDATIONS

1. *E3 recommendations: Our recommended actions are to (1) regularly monitor fleet median fuel efficiency and (2) set a target for ongoing improvement.*

Median Fuel Efficiency indicates the Fleet's overall performance, and therefore, it is a critical success factor to watch closely. Past E3 Fleet Reviews have shown continuous improvements to our median fuel efficiency from 2009 to 2013. This indicates the Fleet is on a healthy trend, and the strategies undertaken to improve our Fleet performance, are working.

Median Fuel Efficiency is calculated using two data points (fuel use & kilometers - travelled).

2018-19 E3 Fleet Review, input data included kilometers-driven and fuel-used by Sanitation vehicles – data points which were not part of previous reviews. For this expanded data set, Median Fuel Efficiency calculated for 2018-19 to be 23.7-l/100 km.

### Actions:

Software update: Fleet management software upgrade (Assetworks), for 2020. This update will allow Fleet precise and in-depth reporting, to share with departments and reported to Council, yearly.

Approved in the 2020 budget.

- \$67,350.00 software upgrade
- \$12,000.00 6 tablets



- E3 recommendation: Consider adding more hybrid, plug-in hybrids and battery-electric vehicles to your fleet and ongoing investment in EV charging systems.*

Rapid fleet electrification – build the Electric Vehicle (EV) Charging infrastructure; deploy market ready EVs, and pilot emerging EV technology in medium and heavy-duty vehicles.

**Actions:**

Work corporately to develop an EV Charging Station Strategy for the City of Nanaimo, to identify the City's needs moving forward. Collaborate with other municipalities; take full advantage of Provincial buyer's groups and grants offered to GHG emission reduction.

In 2020, Fleet issued a multi-year tender for five EV vehicles with the intent to increase EV vehicles every year. Fleet has budgeted for 2020 for the updating of existing charging stations and the addition of four charging ports (Fleet dedicated) in SARC. Charging stations will be purchased using the BC Government CSA for Electric Vehicle Charging Stations.

Approved for 2020 budget:

- \$178,200 four fully electric Building Inspector cars
- \$ 40,000.00 fully electric car replacement (gas to electric)
- \$ 20,000.00 updating of existing charging stations and the addition of four charging ports

- E3 recommendation: For further GHG reductions, consider higher blends of ethanol (up to E10 and up to E85 for your flex-fuel enabled vehicles) if practical and if a supply source is available. Consider the use of higher blends of biodiesel (B20 seasonally adjusted).*

E3 supports the use of B5 biodiesel and recommends that we continue to use renewable, low carbon fuels that are available, wherever operationally practical.

Biodiesel can be used in higher blends, without issues. Biodiesel in higher blends than B5 will reduce emissions further, and contribute to the increased use of renewable fuels.

**Actions:**

During the months of April – October, Fleet is working to introduce the use of B20 diesel fuel and will continue to investigate lower carbon fuels in the future.



- E3 recommendations: Systematic reviews of all exception units in your fleet that are driving up your fuel bill (and emissions) and remedial actions, case-by-case.*

E3 Fleet Review has identified 30 units in our Fleet with higher than average fuel consumption to similar vehicles within our Fleet. These 30 vehicles burned fuel at a rate of at least 50% higher than our Fleet average.

**Actions:**

Continual use of GPS/AVL to monitor vehicle utilization and excessive idle times. Introduction of a full time Driver Trainer /Green Fleet Advisor to support Staff with monitoring and reporting idle times, driver behavior and utilization of equipment. Develop and implement training, for Staff, such as “Eco Driver Training”.

- E3 recommendations: (1) Ongoing vigilance with regard to excessive engine idling and (2) fuel-efficient, eco-driver training.*

The City currently has an anti-idle policy, (Appendix B), but lacks the Staff to enforce this policy. All drivers would benefit from Eco Driver Training which covers the negative effects (i.e., fuel costs, emissions, health impacts) of engine idling. Fuel-efficient driver training and monitoring driver’s behaviors, can lower fuel consumption by as much as 10%.

**Actions:**

Fleet to complete a Business Case for a Full Time Driver Trainer/Green Fleet Advisor. This new position will develop driver training programs, such as Eco-Driver, as well as monitor, and report on driver behaviors.

- E3 recommendation: Consider management actions toward reducing the number of low utilization units on an ongoing basis. Reducing the number of low utilization units may free up capital that could be applied to increased fleet modernization. E3 suggests a top-down directive / policy requiring user departments to regularly review their assigned units and reduce their under-utilized vehicles.*

Overall, Fleet utilization rate is 11,294 km/yr. Utilization measured by kilometers-driven is not necessarily a good measure of vehicle productivity for the City of Nanaimo Fleet. However, in the absence of more relevant measures, it is worthwhile monitoring as an indicator of Fleet productivity. E3 Fleet Review has identified 27 units within the Fleet that have utilization of at least 50% less than similar vehicles in the Fleet. If vehicles are under-utilized and redundant, then they may be an unnecessary financial drain to the organization.

**Actions:**

Fleet Services and the Departments need to evaluate the vehicles considered take-home vehicles, identify which vehicles to be eliminated and substituted with pool vehicles. Evaluate and eliminate vehicles that travel less than 300kms per month by expanding the use of pool vehicles. Departments will need to forecast third-party rental options to offset vehicle and equipment reduction. Development of a Corporate Policy on vehicle utilization, including a low utilization yearly review with minimum standards on kms driven monthly. Fleet will need to expand our vehicle pool program to eliminate low utilization vehicles.





7. *E3 recommendation: Continue to invest capital in renewing your fleet to reap the benefits and head off the negative issues associated with fleet aging.*

Aged fleets will usually have poor reliability, and high levels of costly downtime, high repair costs, decreased safety, poor fuel economy, and resultant increased costs of fuel due to old technology vehicles. There are additional benefits of a newer, more fuel-efficient fleet, and these include increased vehicle uptime, a lower risk level, and quite possibly, improved employee morale.

**Actions:**

Software update: Fleet management software upgrade (Assetworks), for 2020. This update will allow Fleet to collect data to improve the life cycle analysis, ensuring a more precise forecast for the future. Encouraging departments to not retain older units at end of life.

8. *E3 recommendation: Invest in green vehicle technologies, which have been tested, proven and verified to reduce fuel consumption.*

Driver Behaviors: Green vehicle technologies, such as idle shutdown devices, battery backup systems for DC loads and auxiliary cab heaters, will deliver fuel-efficiency increases. **Actions:**

All vehicle or equipment purchases are to be equipped at time of purchase with some form of idle shutdown device; this will ensure a reduction in excessive idling. Introduction of a full time Driver Trainer/Green Fleet Advisor could support Staff to monitor and report idle times, driver behavior and utilization of equipment. As well, develop and implement training for Staff such as eco-driver training.

9. *E3 recommendation: Consider expanding the use of natural gas in the Nanaimo fleet, possibly in light-duty units such as pickup trucks.*

Natural gas, a fossil fuel composed of mostly methane, is one of the cleanest burning alternative fuels. It can be used in the form of compressed natural gas (CNG) or liquefied natural gas (LNG) to fuel cars and trucks. Ten units in the fleet are currently powered by natural gas to support the use of this low carbon fuel.

**Actions:**

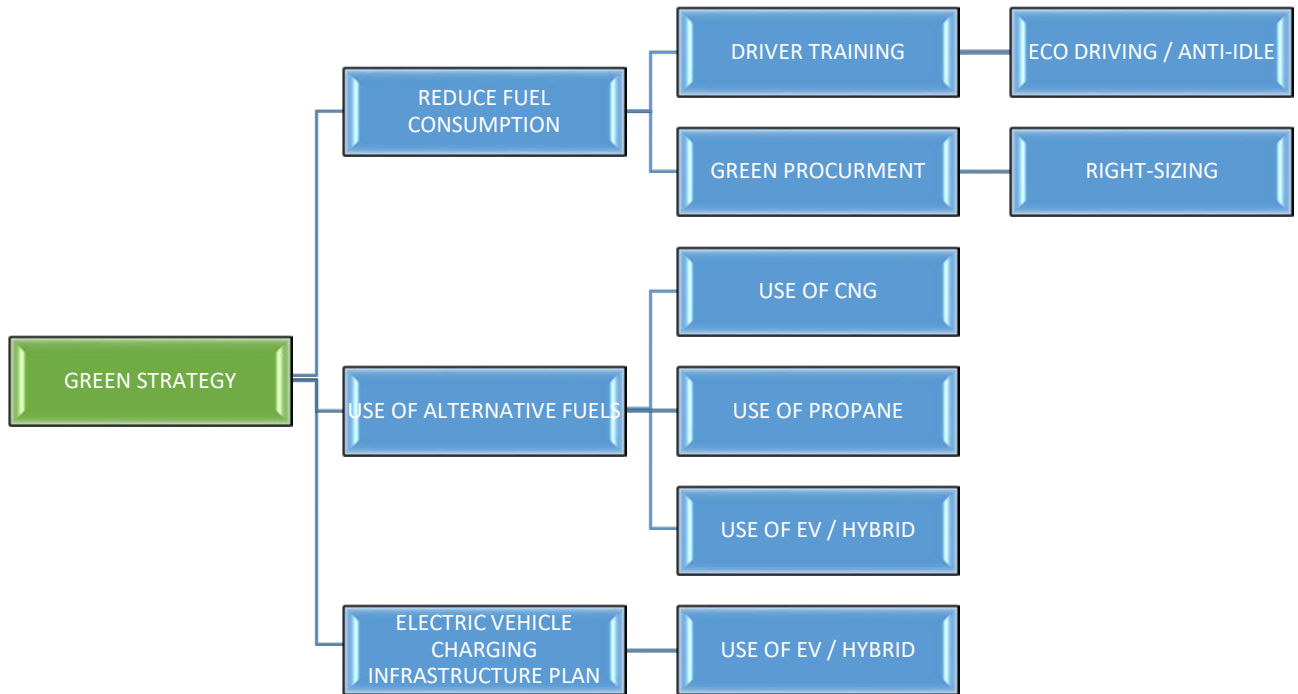
Due to the cost of CNG conversion and the fact, the City has a low yearly kilometer Fleet; the ROI of CNG is not always the first choice. Fleet has adopted propane conversions for lower kilometer vehicles; the installation cost is significantly lower Propane burns cleaner and is typically up to 40% less expensive than Diesel and up to 50% less than Gasoline.

- 2019-2020 Fleet has added two propane powered F150 trucks
- 2019 ordered one CNG powered Sanitation truck
- 2020 devolving specifications to purchase two F550 propane powered trucks



The review and recommendations of E3 Fleet Program have resulted in the development of a framework for the City of Nanaimo, which includes achieving the objective of reductions in GHG emissions by implementing initiatives from three guiding principles: reduce fuel consumption, use of alternative fuels, and the development of an Electric Vehicle Charging Infrastructure Plan.

### Guiding principles chart



### Guiding principles and framework

- REDUCE FUEL CONSUMPTION** - Implement policies and training to increase operational efficiencies, reduce idle time, and improve driver behavior. The introduction of a full time Driver Trainer/Green Fleet Advisor will reduce fuel consumption and GHG emissions.

**Driver Trainer** - require full time Driver Trainer/Green Fleet Advisor

In 2009, a Driver Trainer Policy was adopted by Council, (Appendix C), to ensure all employees operating City vehicles, mobile equipment and/or auxiliary equipment would be properly qualified and trained for safe operation. This is not a full-time position; the candidate is required to continue working in their present capacity with time allotted to coordinate this function. The incumbent receives \$116/month, in addition to their regular earnings. Over the last decade, the City has increased the level of training and accurate driver training documentation required. As well with council declaring a climate emergency, the expectation, and Staff time that is required to be successful, has greatly increased. The combining **Driver Trainer/Green Fleet Advisor** into a full time position, will ensure a successful future in driver safety, compliance, and GHG reduction. The Fleet Manager is to complete a Business Case for this position in 2020.



**Eco Driving and Driver Training** - require full time Corporate Driver Trainer/Green Fleet Advisor

Training operators is the single most important part in our road to success. Municipalities and large privately owned fleets have proven this theory many times in the past. Investing in Staff Eco Driver Training, followed with regular reporting has rewarded municipalities with lower fuel cost, GHG reduction, lower number of vehicle accidents and overall changing the culture positively.

- **Green Procurement** – Right sizing vehicles

**Right sizing** - A right-sizing study will identify if the Fleet’s makeup adequately supports operations as efficiently as possible.

Right sizing occurs at both the Fleet and Department level. At the Fleet level, there should be enough vehicles to provide services at a sufficient and acceptable level, without having an excess of vehicles not often used, but still maintained. At the unit level, right sizing ensures that units are meeting operational requirements, without being oversized. When considering replacement or new purchase of a fleet unit, the Fleet Manager will consult with departments to define operational requirements of the vehicle and recommend appropriate vehicle types and specifications. Fleet to work with Procurement to build a Green Fleet Procurement Policy.

**Multi-year contracts to standardize fleet** – Use of purchasing methods

The use of Sourcewell and multi-year contracts will allow for fleet standardization, this will greatly reduce the different type of oils and parts in stock. The use of these purchasing methods have shown cost savings in operator training, technician training and Staff hours in document preparation for the tender process. Fleet is to work with Procurement to build a Green Fleet Procurement Policy.

- **USE OF ALTERNATIVE FUELS** - Continuously investigate and implement all cost effective alternative fuel sources where operational need allows.

Increasing the use of CNG, Propane, Electric and Hybrid vehicles. Make all (based on operational needs) fleet vehicle purchases, EV or alternative fuels, using a green vehicle selection process for new or vehicle replacements. Continually work with industry leaders to explore and implement alternative fuel vehicles where operational needs allow.

- **ELECTRIC VEHICLE CHARGING INFRASTRUCTURE PLAN** - Collaborate with Senior Management to develop a City of Nanaimo charging infrastructure plan/strategy.

Working corporately to develop an EV Charging Station Strategy for Nanaimo. Collaborate with other municipalities; take full advantage of provincial buyer’s groups and grants offered to GHG emission reduction.

**2020 KEY PERFORMANCE INDICATORS**



Identified below are Key Performance Indicators (KPI) that provide a snapshot summary of the Fleets operating parameters. These KPIs reflect in our operating costs and levels of GHG emissions produced. If supported, the GFS will show improvements to each of these factors and will assist with the cost and emission reductions while lowering operating and capital budgets. Reported yearly, these KPI's will show the Fleets progress towards targets.

GFS KPIs	Value	Measurement
Fleet Equipment Reviewed	151	Units
Fleet Average Age of Expectancy	7.9	Years
Total Annual Distance Travelled 2019	1,269,069	Kilometers
Fleet Annual Fuel Usage	633,511	Liters/yr.
Annual GHG Emissions	2,010	Tonnes CO2
Corporate Average Utilization	11,294	Kilometers
Fleet Median Fuel Efficiency	23.7	l/100 km

**STRATEGY SUMMARY**

The goal for the City of Nanaimo is to be recognized as a leader in the community for environmental stewardship; this was proven by declaring a climate emergency in 2019. The GFS, if supported, can be a tool for the City to assist in meeting this goal, while meeting operational needs in the most economical and environmentally responsible manner. Fleet Staff has been working on greening the fleet for many years and have shown measurable results, which have led to cost savings and GHG reduction. During the creation of the Strategy, Fleet has realized particular areas of weakness in policies, training, continuous monitoring and reporting of data.

You can't manage what you don't measure. The Green Fleet Plan has associated performance indicators to measure progress of the GFS; some activities within the strategies present a challenge to make reasonable assumptions of the potential emission reductions until the activities have been implemented. GFS 2020 is the first report of its kind for the City, it will help the City benchmark where we are, and help develop where we go from here. By compiling all initiatives together, and providing a framework to allow best practices, we can achieve our goals to make appropriate decisions for the future. This action has shown that new measures need to be in place by Staff to meet expectations. Yearly revision and updating of the GFS is essential to ensure that Fleet and the City are working towards meeting targets.

**Actions 2020**



	Strategies & Actions 2020	Targets
<b>REDUCE FUEL CONSUMPTION</b>	<p><b>Driver Trainer /Green Fleet Advisor</b> business case for this position.</p> <p>Yearly/Quarterly reporting to departments for the following</p> <ul style="list-style-type: none"> <li>Fuel Efficiency ( identifying vehicles that operate out of normal MPG efficiency)</li> <li>Idle times</li> <li>Driver behavior</li> <li>Utilization</li> </ul> <p>Fleets management software update</p> <ul style="list-style-type: none"> <li>In progress ( budget approved 2020)</li> </ul> <p>Develop corporate policy for the following</p> <ul style="list-style-type: none"> <li>Vehicle utilization</li> <li>Vehicle purchasing (rightsizing /alternative fuel)</li> </ul> <p>Introduce the use of B20 diesel fuel during the months of April – Oct</p> <ul style="list-style-type: none"> <li>continuing to investigate lower carbon fuels</li> </ul> <p><b>Green Procurement</b></p> <p>Right sizing all replacement or new purchases</p> <p>Multi-year contracts to standardize fleet</p> <p>Complete E3 rating</p>	<p>Fleet 2020</p> <p>Fleet 2020</p> <p>IT / Fleet 2020</p> <p>Corporate / lead Fleet 2020</p> <p>Fleet 2020</p> <p>Fleet 2020 (Ongoing)</p> <p>Fleet 2020</p>
<b>USE OF ALTERNATIVE FUELS</b>	<p><b>CNG / propane / EV</b> Continuously investigate and implement all cost effective alternative fuel sources where operational need allows.</p> <ul style="list-style-type: none"> <li>Multi-year contract for electric vehicle cars (adding 5 in 2020)</li> <li>Forecast 10 year replacement plan to switch replacement un it to alternative fuel</li> </ul>	<p>Fleet 2020</p> <p>Fleet 2020</p>
<b>ELECTRIC VEHICLE CHARGING INFRASTRUCTURE PLAN</b>	<p><b>CHARGING INFRASTRUCTURE</b> Collaborate with senior management to develop a City of Nanaimo charging infrastructure plan/strategy.</p> <ul style="list-style-type: none"> <li>Installation of four charging stations ( budget approved 2020)</li> </ul>	<p>Corporate / Fleet 2020</p> <p>Fleet 2020</p>

**City of Nanaimo**  
**(Appendix A) 2019 Fuel and Gas Summary**

	<b>2019</b>
Fuel and Gas Expenditure	\$ 820,887.89
Fire's Fuel Costs	83,085.56
Total Fuel/Propane/Natural Gas excluding Fire	<u>\$ 737,802.33</u>

	<b>2019</b>
City of Nanaimo's Operating Budget	\$144,975,229.00
Fire & Emergency Services Operating Budget	<u>17,019,067.00</u>
City of Nanaimo's Operating Budget excluding Fire	<u>\$127,956,162.00</u>

Total Fuel and Gas as a % of Operating Budget excluding Fire & Emergency Services 0.58%

(Appendix B)



<b>Section:</b>	<b>Engineering and Public Works</b>	<b>11</b>
<b>Subsection:</b>	<b>Environmental Management – General</b>	<b>5280</b>
<b>Title:</b>	<b>Anti-Idling Policy</b>	<b>02</b>

**POLICY:**

This policy applies to all staff operating vehicles and equipment owned, rented or leased by the City of Nanaimo.

**REASON FOR POLICY:**

To establish guidelines for unnecessary idling of municipal vehicles and equipment. Limiting idling times reduces air pollution and greenhouse gas emissions and contributes to healthier work environments and the efficient use of city resources.

**Definitions:**

Idling means the operation of a vehicle or equipment while they are not in motion and not being used to operate auxiliary equipment that is essential to the operation of the vehicle or equipment.

Fuels For the purpose of this policy this includes all vehicles or equipment that run on fossil fuels which include gasoline, ethanol, diesel, bio-diesel, propane, hydrogen and natural gas.

Vehicles For the purpose of this policy, vehicles or equipment refers to cars, light trucks, vans, heavy trucks, snow equipment, buses, loaders, backhoes, street sweepers and any other equipment operated by staff and utilizing fossil fuels.

**AUTHORITY TO ACT:**

**Delegated to Staff.**

**PROCEDURE:**

1. Manufacturer’s guidelines (recommendations).  
Always follow the manufacturer’s guidelines and recommendations for idling unless otherwise advised by fleet services.
  
2. Gasoline and alternative fuel vehicles.  
Idle times up to one (1) minute are allowed for vehicles during their initial shift warm up and at subsequent times when the vehicle is being restarted after a prolonged period of shut down that results in vehicle conditions similar to those prior to initial shift warm up.
  
3. Diesel fuel vehicles/equipment.



Idle times up to three (3) minutes are allowed for diesel fuel vehicles/equipment during their initial shift warm up and at subsequent times when the vehicle/equipment is being restarted after a prolonged period of shut down that results in vehicle/equipment conditions similar to those prior to initial shift warm up.

4. Operation of equipment in the field.

a. *Gasoline and alternative fuel vehicles.*

No operator shall idle the engine of an unleaded fueled vehicle in excess of one (1) minute, if the vehicle is stopped for a foreseeable period of time.

b. *Diesel fueled vehicles/equipment.*

No operator shall idle the engine of a diesel fuel vehicle in excess of three (3) minutes if the vehicle is stopped for a foreseeable period of time.

Diesel fuel vehicles/equipment should only be turned off after enough time has passed to allow the proper circulation and cooling of engine oil, coolant, and turbo chargers, not to exceed three (3) minutes.

c. *When engines must be left running for any reason, the operator must remain with the vehicle.*

**Exceptions:**

**This policy does not apply to the following vehicles, equipment or situations. Operators must use their own discretion in certain situations.**

1. Emergency vehicles and equipment are exempt while engaged in operational activities where engine power is necessary for an associated power need.
2. Vehicles may idle for purposes of defogging, defrosting or de-icing windows. Idling must end when the windows have cleared enough for the vehicle to be safe to drive. In addition to using the vehicle defrosters operators must manually clear glass of snow, ice or frost.
3. During times of extreme cold, idling periods may be necessary for the well-being of the operator and passengers.
4. As part of routine maintenance, this policy does not apply to vehicles being serviced or repaired while running the engine is required.
5. A diesel engine while in an active regeneration cycle on its diesel particulate filter (DPF).



**Accountability:**

1. All employees who operate motorized vehicles / equipment are responsible for ensuring the vehicles / equipment are operated in accordance with this policy.
2. Supervisors in each department will be responsible for the adherence and enforcement of the vehicle / equipment idle free policy.

**Training:**

**All City staff are required to participate in the City of Nanaimo's anti-idle awareness training/information sessions.**

Date: 2015-OCT-26 Approved by: Committee of the Whole







HUMAN RESOURCES POLICIES

<b>Policy:</b> Driver Trainer	<b>Number:</b> 4.12.03
<b>Applies To:</b> All employees	
<b>Authorized by:</b> Al Kenning	<b>Effective Date:</b> Sept 4, 2012

**PURPOSE**

The purpose of this policy is to ensure all employees operating City vehicles, mobile equipment and auxiliary equipment are properly qualified and trained to operate this equipment; and to ensure all employees operate City vehicles, mobile equipment and attachments in a safe manner.

**POLICY STATEMENT**

The City of Nanaimo is committed to the Health and Safety of its employees. The expectation is that all employees will only operate City equipment for which they are trained and qualified to operate.

**SCOPE:**

This policy applies to all employees who operate vehicles, mobile equipment and auxiliary equipment. This list is inclusive but not exhaustive:

Vehicles	Mobile Equipment	Attachments
Pool cars, trucks and vans	Backhoes, front end loaders	Snow plough blades
Garbage trucks	Forklifts and similar equipment	Grinders, sweepers
Dump trucks	Riding lawnmowers	Bobcat attachments
Pickup trucks	Sidewalk sweeper	PTO equipment

**\*NOTE:** This policy excludes Fire Trucks as Nanaimo Fire Rescue has a separate comprehensive training policy and program.

**DRIVER TRAINER DEFINITION**

The Driver Trainer is an appointed position which oversees driver training for City staff. The Driver Trainer, in conjunction with department managers, is generally responsible for assessment, certification, training and orientation of City staff for operation of most City equipment as defined in this policy.



## **RESPONSIBILITIES**

### **Driver Trainer:**

- Ride check all new equipment operators for equipment listed in Schedule A prior to operation to assess driving skill and determine if training is required.
- Confirm all drivers have appropriate level of license prior to assignment to any vehicle or equipment.
- Conduct periodic ride checks with operators to evaluate competence in vehicle operation.
- Conduct periodic checks of equipment or reviews pre-trip inspections as required.
- Conduct and/or review training, evaluation, certification and standards for equipment operation as required by departments or by regulation.
- Review new equipment/vehicles to determine if operator training is required.
- Conduct periodic safety training for staff using City pool vehicles.
- Maintain and oversee updating of database of equipment and operators created for the purpose of this policy.
- In consultation with appropriate departmental staff and Occupational Health & Safety staff, the Driver Trainer will prepare and maintain a comprehensive list of all equipment that is covered by this policy and assign any recertification standards that will have the same standing as other OH&S City Standards for training and certification.
- Issue "Equipment Operator Permit".

### **Employees:**

- Ensure they are properly certified, licensed and trained for any City equipment they operate.
- Wherever required by Driver Trainer, obtain a City "Equipment Operator Permit" issued by the Driver Trainer and provide this information to supervisor.
- Ensure they have been trained in and are aware of all City safety standards and Safety Program requirements relating to relevant mobile equipment and vehicle operation.
- Ensure they maintain their certification for equipment they are assigned to use.
- Must inform the employer of any change in personal circumstance, physical condition or license restriction(s) that may impact their ability to operate City Equipment.

### **Managers (or designates):**

- Ensure all staff are properly certified and trained to operate any equipment assigned to them.
- Ensure all staff complete required initial worker orientation check prior to operating any vehicle, mobile equipment or attachments, including City pool vehicles.
- Cooperate with and assist the Driver Trainer as required.
- Advise Driver Trainer of any hazards or potential dangers related to equipment use.
- Ensure job descriptions reflect the appropriate licensing requirements.
- Ensure that any worker who has not operated a particular piece of equipment or vehicle for three (3) or more years be re-certified by the Driver Trainer before operating that equipment or vehicle. (*Exemptions to this clause: pool cars, pickup trucks and vans; equipment or vehicles determined by the Driver Trainer*)

### **Human Resources & Organizational Planning Department**

- Maintain database of job descriptions containing information provided by managers regarding licensing requirements.
- Provide the Driver Trainer data regarding new employees and staffing lists as it relates to staff needing assistance or direction operating City equipment.



**RELATED DOCUMENTS:**

- City of Nanaimo Human Resources Policy Manual
  - Section 4 Standards of Conduct**
    - 4.12 Use of City Vehicles**
      - 4.12.2 Driver Abstracts**

**PAST REVISIONS**

- New document.



**CITY OF NANAIMO**

**JOB DESCRIPTION**

**DRAFT**

**TITLE:** Driver Trainer / Green Fleet Adviser  
**DEPARTMENT:** Engineering & Public Works  
**LEVEL:** See below



**Updated: 2020**

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**NOTE: This is a full-time position excluded.**

**TYPICAL DUTIES AND RESPONSIBILITIES**

1. Design, prepare and conduct training orientations, training courses and workshops to ensure staff receive appropriate training as required to ensure legislative compliance to the National Safety Code Safety Plan Guidelines
2. Confirm driver's license for appropriate level for equipment to be operated and maintain a "Corporate" Driver Abstract Log.
3. Undertake road tests and certifies employees for operation of City vehicles and equipment.
4. Investigate all vehicle and equipment accidents, incidents, and damage claims. Completes reporting on accident findings, makes corrective action recommendations, and implements approved outcomes.
5. Conduct periodic evaluations with all operators to determine if any areas of operation may require improvement i.e. identifies areas of needed improvement and/or concern and assists employees to improve through coaching and/or instruction.
6. Perform vehicle/equipment safety inspections, pre & post trip enforcement, and conducts audits on a continual basis.
7. Maintain a listing of all vehicles and equipment utilized at Public Works and all employees designated to operate vehicles/equipment.
8. Maintain log of weight limits and vehicle loading to ensure adherence to maximum limits; informs operators of maximum load limits on equipment.
9. Develop and maintain training records
10. Conducts annual Air Brake Refresher Course.
11. Develop and instruct (hands on) programs such as but not limited to, professional driver training, eco driving and snow & ice control operations
12. Conducts refresher courses on equipment / vehicle operation as required; responds to operator requests for training assistance.



13. Serve as the “Fleet” department lead on greenhouse gas reductions for all city equipment.
14. Oversee electric vehicle charging infrastructure reporting
15. Develop policy and procedures consistent with the City of Nanaimo and Green initiatives.
16. Oversee key performance indicators and performance reporting.
17. Maximize operational efficiency by leveraging the available fleet routing and reporting from GPS/AVL.
18. Participates in the Motor Vehicle Incident (MVI) Committee.

### **MINIMUM TRAINING AND EXPERIENCE REQUIRED**

Diploma in Business Administration, Project Management, Environmental Studies or related field **OR** two additional years of relevant experience.

Experience facilitating in adult learning

Experience in the operation of a variety of heavy equipment and conducting pre-trip inspections.

Experience developing procedures and instructions.

Previous driver training experience or equivalent

Experience in the operation of snow removal equipment.

Comprehensive knowledge of Motor Vehicle Act and Regulations, Work Safe BC Regulations and Worker’s Compensation Act

Valid class 3 BC driver’s license.

### **REQUIRED KNOWLEDGE, SKILLS AND ABILITIES**

Proven project management skills

Sound understanding of adult learning styles and methods

Ability to communicate effectively (written and verbal) with leaders and decision makers.

Experience working with in budgets for multi-year capital projects.

Proven written and oral presentation skills

Strong computer skills and knowledge of office and fleet management programs



## **REQUIRED LICENCES, CERTIFICATES AND REGISTRATIONS**

A valid Class 3 BC Driver's Licence with air endorsement.

