

ICBC's 2018 Carbon Neutral Action Report

For ICBC, two of our largest sources of greenhouse gas (GHG) emissions are building energy and paper consumption. In 2018 we made significant reductions in both emission streams, which enabled us to achieve a 17% reduction in overall GHG emissions compared with 2017.

Our progress in 2018 was especially welcome after two consecutive winters of colder than normal temperatures had led to increased consumption of natural gas for heating. Our corporate goal is to reduce our GHG emissions by 33% from our 2007 baseline by 2020 — a target we achieved in 2015. However, that bump in natural gas consumption pushed us back behind schedule. I'm pleased to say that the setback was temporary, and our good results this past year have us once again ahead of schedule, at 42% below the 2007 baseline.

Still, this experience showed us how vulnerable we are to weather impacting our total emissions, and pointed to a need to renew our focus on natural gas usage in our buildings. We have already upgraded most of our boilers over the past 10 years, which — although it helped us achieve significant reductions in natural gas consumption to date — now limits our opportunities for future retrofits. So to find further reductions we have focused on improving our building automation systems to increase the efficiency of both natural gas and electricity use.

The result was a reduction in building energy emissions of 21% for natural gas and 9% for electricity in 2018 compared with 2017. We should note that although 2018 was a warmer year overall, the decrease in natural gas usage was still proportionately greater thanks largely to improved automated controls.

Emissions related to paper consumption was another area where we achieved real gains in 2018 — a reduction of 12% from 2017. Our output of printed forms decreased by 12%, and internally we reduced our consumption of office paper by 11%. Part of that improvement is the result of upgrading our office copiers to enable increased use of double-sided printing and a pull printing system that requires staff to scan their ID to print a document. Other factors in the improvement include our continuing transition to digital documents, and increased awareness among ICBC employees of the need to print only when a hard copy is really needed. In 2019 we will continue to work for reduced paper consumption, focused especially on our use of printed forms



Other priorities for 2019 include continuing our efforts to reduce fuel consumption by our vehicle fleet, which in 2018 was up by 4% from 2017. We also plan to enhance the functionality of our online recycled auto parts locator, an app that enables recyclers to bid for used auto parts from our salvage operations — ensuring fewer salvaged parts end up in landfill.

One major bright spot of ICBC's environmental program continues to be the involvement of employees throughout the company. With our Green Team volunteers playing a leadership role, ICBC employees in every office are contributing to our GHG reduction efforts by recycling, avoiding non-essential electrical usage, and participating in various awareness-raising campaigns throughout the year.

I thank all leaders and employees across the company for their ongoing support as we work to make ICBC a greener and more energy-efficient enterprise.

A handwritten signature in black ink, appearing to read 'N. Jimenez', enclosed within a circular scribble.

Nicolas Jimenez
President & CEO

Declaration

This Carbon Neutral Action Report for the period January 1st, 2018 to December 31st, 2018 summarizes:

- Our emissions profile;
- The total offsets needed to reach net-zero emissions;
- The actions we have taken in 2018 to reduce our greenhouse gas emissions;
- Our plans to continue reducing emissions in 2019 and beyond.

This report will be posted to our website at icbc.com by June 30, 2019.

Overview

The Insurance Corporation of British Columbia (ICBC) is a Crown Corporation that was established in 1973 to provide affordable compulsory auto insurance to British Columbians, with rates regulated by the British Columbia Utilities Commission (BCUC). We also:

- Provide driver licensing
- Provide vehicle registration and licensing
- Sell optional auto insurance

2018 Greenhouse Gas Emissions Profile

ICBC's 2018 greenhouse gas (GHG) emissions incorporate our paper, fleet, and building electricity and natural gas consumption. Combined, our operational emissions totaled 3,829 tonnes of carbon-dioxide equivalent (tCO₂e)¹. Fifteen tonnes of carbon dioxide emissions from the combustion of biomass and biomass-based fuels are reported within this number as part of our GHG emissions profile. However, as stated in 2018 B.C. Methodological Guidance for Quantifying Greenhouse Gas Emissions, the emissions resulting from the combustion of biogenic fuel sources must be reported but do not require offsets and are therefore not included in the following breakdown.

ICBC owns investment properties that are also included in our overall carbon footprint. The GHG emissions from our investment properties in 2018 amounted to 22,205 tCO₂e.

2018 Performance: Operational Properties

In 2018, we reduced our consumption of building energy and paper. While our fleet fuel use increased slightly, overall we achieved a 17% reduction in GHG emissions compared with 2017 (see next page).

In 2011, to align with the Provincial GHG targets, ICBC established a corporate GHG reduction target of 33% below our 2007 baseline by 2020. ICBC originally met this target in 2015. However in 2017 this target was missed as we only achieved a 30% reduction that year. ICBC is proud to report that in 2018 we significantly reduced our year-over-year emissions, achieving a 42% decrease compared with 2007.

¹ Greenhouse gas (GHG) emissions are expressed in tonnes of equivalent carbon dioxide by multiplying each greenhouse gas emission by its global warming potential (GWP).

The following table compares our 2018 operational emissions with both 2017 and our 2007 base year:

	2018 GHG Emissions (tCO ₂ e)	2018 and 2017 GHG Comparison (%)	2018 and 2007 GHG Comparison (%)
Buildings: Natural Gas (stationary combustion)	2,365	-21%	-30%
Buildings: Electricity (stationary combustion)	159	-9%	-76%
Paper (supplies)	823	-12%	-39%
Fleet (mobile combustion)	466	+4%	-61%
Total	3814	-17%	-42%

Emissions Reduction Targets

Over the last couple of years colder winters negatively impacted our efforts to reduce our emissions. This vulnerability to weather emphasized our need to renew our focus on energy used to heat our buildings, specifically natural gas. The majority of our boilers have been upgraded over the past ten years, achieving significant reductions in natural gas use, but limiting opportunities for future retrofits. Therefore, we looked to our building automation system for continued energy reductions. This effort not only achieved significant year-over-year savings, the cost to make these changes was much less compared with replacing equipment. These improvements formed the most significant impacts to our GHG emissions, pushing us beyond our 33% reduction target.

Buildings: 2018 Energy Results

Building energy emissions decreased by 21% for natural gas, and by 9% for electricity in 2018 as compared to 2017. While 2018 was overall a warmer year, the drop in natural gas consumption was still proportionately greater. Increased efficiency for both natural gas and electricity use was largely achieved through improvements to our building automation systems. The reductions also enabled savings of more than \$230,000 compared with 2017.

In 2009, ICBC became part of BC Hydro and Fortis' energy management program. Since then we have avoided over \$7.3 million in energy related costs.

Electricity

In 2018, ICBC continued to focus on lighting projects to achieve electricity savings. A large lighting retrofit at one of our call centres replaced aging fluorescent lights with an LED lighting system that included automation allowing for remote programming, daylight harvesting and occupancy sensing. This project will reduce consumption by 85% at this location, equal to a reduction of 200,000 kWh annually. In addition, 24 smaller retrofit projects were completed that will provide more than 67,000 kWh in annual energy savings. Finally, timers on exterior lighting at eight of our buildings were reprogrammed, realizing almost 50,000 kWh in annual energy savings. All of these projects add up to just under 320,000 kWh of annual energy savings.

ICBC also leases space in two Canadian data centres. Since 2012, the electricity consumed at the Alberta facility has been offset through the purchase of Bullfrog Power renewable energy credits (RECs). Since we began to purchase RECs, we have offset 2,861 tCO₂e, including 274 tCO₂e in 2018.

Natural Gas

Over the last decade, most of our claim centres have been retrofitted with condensing boilers. During this same time period, building automation was installed in the majority of our buildings. We have been experimenting with running these boilers for a longer period of time at their optimal condensing temperatures, instead of running at higher temperatures for shorter periods. We hoped to increase the efficiency of energy use within these boilers, while also taking advantage of the impact on occupant comfort due to warm air being circulated through our buildings for longer periods. Having previously piloted this idea at two locations in 2015 and 2016, this past year we expanded the programming to 14 locations. This change was among the reasons we achieved an impressive 21% drop in natural gas use compared with 2017, preventing 647 tonnes of GHGs from entering the atmosphere and realizing \$125,000 in operating cost savings.

The chart below compares our emissions and consumption from buildings to 2017 data as well as 2007, the baseline year:

Building Energy Metric	2018 Total	2018 compared to 2017	2018 compared to 2007 baseline
Electricity Consumption (GWh)	15	-9%	-49%
Electricity GHG Emissions (tCO ₂ e)	159	-9%	-76%
Electricity GHG Emissions (tCO ₂ e/m ²)	.0012	-9%	-77%
Natural Gas Consumption (GJs)	47,425	-21%	-29%
Natural Gas GHG Emissions (tCO ₂ e)	2,365	-21%	-30%
Natural Gas GHG Emissions (tCO ₂ e/m ²)	.017	-21%	-31%

Buildings—Energy 2019–2020 Plans

In 2019 ICBC will be moving into two new office spaces. As part of the renovations, older fluorescent lighting will be replaced with LED lights incorporating a sensor based digital lighting control system. We will also be replacing the uninterruptible power supply system at our Guildford Corporate Centre with an updated system using 75% less energy. The new system will also create less heat, reducing energy demand for air conditioning by 16,425 kWh annually.

ICBC's head office has a robust building automation system that has grown incrementally over the last decade. In 2018, we employed a fault detection system that helped us reduce our GHG emission by 85 tonnes compared with 2017. The project also highlighted an opportunity to make broader improvements to the system. As a result, recommissioning of the system will take place in 2019.

Each of these initiatives will feed into our energy reduction target of 300,000 kWh annually — equal to about 3 tCO₂e — as part of our commitments to BC Hydro.

Investment Properties

ICBC has a variety of investment properties throughout Canada. While these properties are not included in our operational footprint, two of these buildings are LEED (Leadership in Energy and Environmental Design) Existing Building Gold certified. This certification indicates that the buildings are run more efficiently than similar buildings. This is important, as building operations determine associated emissions.

In addition to these properties, ICBC purchases zero emission electricity for our investment properties in Alberta as well as one building in Nova Scotia. In 2018 we avoided 15,500 tonnes of GHG emissions. Cumulatively we have saved over 122,928 tCO₂e since beginning the program in 2010.

Supplies Office Paper

2018 performance

In 2018, our emissions related to paper decreased by 12% compared to 2017, and by 39% compared to our 2007 baseline. Our printed form use decreased by 12% and our office paper decreased by 11%. This success is due to our ongoing efforts to digitize our records, increase double-sided printing, reduce abandoned print jobs, and ongoing behaviour change programs.

Projects and actions in 2018

In 2016 we upgraded our printing equipment, which allowed us to maximize use of double-sided printing. We continue to work with specific departments and our Information Systems team to maximize default double-sided printing. In 2018 we saw a 5% increase in double-sided printing, resulting in an annual average of 18.5% of ICBC's print jobs being double-sided.

In 2018, a pull printing system was rolled out to a selection of printers. This system requires staff to scan their ID to print a document. The data from 2018 shows that of the printers that had the pull printing system installed, 96% of jobs were printed. The 4% that were not printed were either manually deleted or purged by the system, saving 86,056 sheets of single-sided paper in abandoned prints, which is equivalent to 1.5 metric tons of CO₂². We will continue to expand the pull printing program in 2019.

²Determined using the Paper Calculator and EPA Greenhouse Gas Equivalencies Calculator.

Plans for 2019

ICBC will continue to work on decreasing our paper emissions in 2019. We will be working with various departments on decreasing print numbers, particularly within our legal departments. One department has determined that they can print everything double-sided, while others see opportunities to change their processes to minimize the need to print at all. The Environment and Sustainability team will be working with these departments to help them facilitate these changes.

Since the majority of our paper emissions come from forms, in 2019 we aim to look at how our forms are used and distributed so we can determine how to use them more efficiently.

Fleet Fuel

Performance against 2018

Fleet emissions increased by 4% in 2018 compared to 2017. However, compared with 2007 our fleet emissions have dropped by 61%.

Projects and actions in 2018

In 2018 we continued to examine the efficiency and use of our vehicles, to ensure that we are using the right vehicle for the job. We paid particular attention to fuel efficiency in an effort to not only reduce our fleet emissions going forward, but also in recognition of the life-cycle cost benefits of employing higher efficiency vehicles, even in the face of slightly higher capital costs. As a result, in the past year we reallocated one underutilized vehicle and replaced 13 aging vehicles, six of them replaced by hybrids.

Plans for 2019

ICBC will continue to look at fleet make-up as well as how we can use fuel more efficiently. We will be exploring opportunities such as a pool car reservation system to maximize utilisation.

Another aspect we are exploring is alternatives to our fleet freightliners. These two vehicles account for 20% of our total fuel usage. We are working with the salvage department and our vehicle managers to determine alternatives including more fuel efficient vehicle options.

Awareness and Behaviour Change

Our Executive Environment, Health and Safety Committee (formerly the Executive Corporate Social Responsibility Committee), chaired by our Chief Human Resource Officer, continues to meet quarterly. In 2018, our electricity targets were included as tracked objectives, bringing increased oversight to our energy saving goals. Particular attention was also made to changes to the updated Climate Change Accountability Act.

ICBC's volunteer employee Green Team ran multiple events in 2018. Workplace campaigns are designed to improve employee awareness about specific issues as well as contribute to decreasing ICBC's carbon footprint. The Green Team is divided into three Squadrons that compete for the highest level of engagement. The Squadron with the highest engagement becomes the winner of the Green Hub Award, which is presented to the winning squadron's most engaged location.

Our campaigns and events began with Earth Day. We held a lunch-and-learn session with staff participating online from multiple locations to understand why climate change is an important issue for us to address. Following this event, many employees also participated in a lunch-and-learn about bike safety in advance of Bike-to-Work Week and the Commuter Challenge.

Our first big environmental campaign occurred in September, when we ran a double-sided printing campaign to address the predominance of single-sided printing. We are attempting to reduce single-sided printing where it is not a business requirement. This campaign prompted one of our driver licensing offices to determine that most printed material could be double sided. We are now in the process of rolling this change out to all our driver licensing facilities.

In December we ran a Holiday Shutdown Campaign, encouraging employees to turn off their equipment while on holiday. In January we started gathering input on a Green Team restructure that is being rolled out in 2019. This new structure will create a more collaborative model that strengthens the capacity of our Green Team members. We hope this helps them to become more engaged in the planning of campaigns, and more empowered to develop pragmatic location-specific initiatives.



Various departments are taking initiatives to decrease their impacts without involvement by the environment team. We continue to work with our brokers by reminding them to ask customers if they would like the Autoplan Optional Policy booklet prior to giving them out to make sure that only those interested in a hard copy receive one, while encouraging customers to alternatively access the booklet online. This also ensures customers have access to the latest and most relevant information available. While the number of printed booklets remained the same as last year, the volume of printed booklets is levelling off. It is also important to acknowledge that we have decreased this booklet's distribution by 65% compared with our 2013 baseline.

Finally, hard copy forms are slowly being decommissioned in favour of digitised versions. We're also making increased use of e-post and electronic file systems, which not only decrease paper use but also improves document security.

Actions to reduce provincial emissions and improve sustainability

Pollution Prevention

ICBC has an environmental management system (EMS) in place that focuses on minimizing risks due to both our own activities and those of a third party. Our EMS is in line with international ISO standard ISO 14001: 2015, which details the process for developing a robust environmental management system through a focus on continuous improvement.

We regularly monitor the soil and groundwater on our sites and provide necessary equipment and training to appropriate staff to deal with spills. ICBC also requires that all locations complete an internal annual environmental verification. Site managers are required to review the state of spill management equipment and procedures with employees at their facility. This verification also reinforces general sustainability expectations as outlined in our environmental policy. For the second year running we achieved almost 100% compliance, with only two locations out of 85 not submitting verification records due to staffing changes.

In addition, our environmental team conducts site inspections. In 2018, a new format was rolled out that also incorporated health and safety matters. This led to a streamlining of the inspection process. The new format is more efficient and ensures site managers have a clear understanding of requirements and issues that need to be addressed.

The requirements, policies and procedures are available through an online collaboration site, which acts as a repository of information for our site managers. It ensures that they are viewing the latest version of documents and has the additional benefit that documents are only printed as needed.

Waste Reduction

ICBC has various initiatives to minimize landfill waste. Annually, site managers are required to confirm that they have appropriate and up-to-date signage. The effectiveness of these signs can be seen in our organic diversion numbers at Head Office. When we launched the organics program in 2014, our diversion rate was 23%, and in 2018 it was 58%.

Battery waste is particularly toxic. Each of our offices is equipped with a battery collection box, and in 2018 we collected 160 kg of batteries. Once collected, the batteries are responsibly processed to extract usable chemicals and metals that can be used in the manufacturing of new products.



⁶As calculated internally using data sourced from <http://aluminium.org.au/climate-change>.

In addition to our in-house waste programs we also have initiatives that divert customer waste from landfill:

- In 2018 we recycled 129,539 kg of aluminium from license plates, keeping it out of the landfill and avoiding the equivalent production of virgin aluminium. This translates to 185 tCO₂e of avoided emissions. In addition to the impact on carbon emissions, aluminium in landfills often reacts with other garbage to produce heat, liquid leachate and noxious fumes, and can take 400–500 years to break down. Recycled aluminium can be reused many times without degradation for a variety of purposes.
- ICBC maintains a recycled auto parts locator application that allows a network of authorized recyclers to bid for parts. There are 70 of these recyclers province-wide who sell these parts to body shops so they can be reused. Each of the recyclers must be compliant with our policies to remain a part of this system. In 2018, the functionality of the system was enhanced to give body shops the ability to search for more items and add these items to a repair estimate. Plans for 2019 include giving recyclers data on which parts are in demand by body shops. This will allow them to better understand which salvage vehicles are more commercially valuable.
- Our Driver Licensing division collects and recycles the magnetic Learners and Novice (L and N) decals from drivers who successfully pass the Learner or Novice licensing program. The recycled decals are given to customers who need replacement or additional decals. In 2018 we collected 14,248 decals, a 24% increase over 2017.
- ICBC's windshield chip repair program was launched in 2017 for customers who purchase optional comprehensive coverage. Windshields that are repaired typically have their life extended and are kept out of landfill, which then impacts the number of windshield replacements that need to be produced. Customers get a fast restoration and ICBC saves money by repairing rather than replacing. In 2018, ICBC repaired 51,516 windshields, an increase of 32% over 2017 repairs. This prevented 291 tCO₂e from being released into the atmosphere.
- Total loss vehicles often have unclaimed personal items like clothing. We have partnered with Diabetes Canada since 2016 to recycle these items. In 2018 we donated 639 kg of clothing.

Business Travel and Commuting

There are a variety of methods that staff use to get to work at ICBC. We encourage staff to walk, bicycle, take public transportation and carpool through annual events such as Bike to Work Week and the Commuter Challenge. Many of our locations have bicycle storage options. We have also situated our locations near transit routes and have set up the ProPass system for Victoria staff. Approximately 13% of our Victoria-based staff take advantage of this. There are also preferential parking spots at our head office for carpoolers.

ICBC installed 4 electric vehicle chargers at head office in early 2018. This is in addition to our two existing stations at our Port Coquitlam driver licensing office. In 2018, ICBC provided 29 MWh of energy to electric vehicles, helping to prevent more than 12 tonnes of GHGs from entering the atmosphere.

Meetings are commonly held online at ICBC. This allows teams to meet virtually when staff are based out of different locations, including staff that are working from home. Time and emissions are saved by incorporating this technology into every day practices.

ICBC also supports Natural Resources Canada’s FleetSmart testing. The program is designed to teach commercial drivers best practices to decrease fuel consumption and thereby emissions from poor practices such as speeding, idling and sudden stops. These practices also have the double benefit of decreasing wear and tear on the vehicles. Since the FleetSmart’s inception there have been a total of 92,103 drivers that have successfully passes this test which has resulted in 305,431 tonnes of avoided Carbon Dioxide.

Planning for Climate Change

The last couple of years has highlighted the increasing risk climate change is posing to our employees and our building. Extreme heat, forest fires and floods are increasing in frequency and severity in BC. While in past years much of our attention has been on business continuity issues relating to severe weather, and increased focus on health and safety and security has emerged for ICBC. As a result, proactive programs and procedure were expanded on in 2018, and are being deployed across high risk regions. These programs are preparing our employees for the likelihood of respiratory impacts due to air quality impacts, prevention of heat exhaustion, protection of property in the event of flood or fire, etc. Further work is planned in 2019 to fully review all risks to the corporation and ensure we have the appropriate measures in place to mitigate these impacts as they progress over the coming years.

Emissions and offsets tables

ICBC’s GHG Emissions and Offset for 2018 (tCO ₂ e)	
GHG Emissions created in Calendar Year 2018	
Total Emissions (tCO ₂ e)	26,034
Total Offsets (tCO ₂ e)	26,019
Adjustments to GHG Emissions Reported in Prior Years	
Total Emissions (tCO ₂ e)	0
Total Offsets (tCO ₂ e)	0
Grand Total Offsets for the 2017 Reporting Year	
Grand Total Offsets (tCO ₂ e)	26,019

Retirement of offsets

In accordance with the requirements of the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, ICBC (the Organization) is responsible for arranging for the retirement of the offsets obligation reported above for the 2018 calendar year, together with any adjustments reported for past calendar years. The Organization hereby agrees that, in exchange for the Ministry of Environment ensuring that these offsets are retired on the Organization's behalf, the Organization will pay, within 30 days, the associated invoice to be issued by the Ministry in an amount equal to \$25 per tonne of offsets retired on its behalf plus GST.

Executive sign-off



Leslie Mitton

May 27, 2019

Date



Part 1: CNAR Survey

1. General Information

Name: Joshua Caplan

Contact Email: joshua.caplan@icbc.com

Organization Name: ICBC

Sector: Crown

Role - Please select your role(s) below.

If more than one individual completed the survey, multiple categories may be selected:

Energy Manager: Yes

Sustainability Coordinator: No

Administrative Assistant: No

Facilities/Operations Manager/Coordinator: No

CEO/President/Exec Director: No

Treasurer/Accounting: No

Superintendent: No

Other - Please Specify: Manager, Safety & Environmental Sustainability

A. Stationary Sources (e.g. Buildings, Power Generators): Fuel Combustion, Electricity use, Fugitive Emissions.

1. Actions taken by your organization in 2018 to support emissions reductions from buildings.

a) Do you have a strategy to reduce emissions from stationary sources?

Yes

If yes above, what are the main goals?: ICBC has applied a 33% reduction target from 2007 baseline levels to our operations carbon footprint. This includes emissions from building energy, fuel used in company vehicles and paper consumption.

ICBC has a Strategic Energy Management Plan (SEMP) that includes energy targets.

Annual energy consumption targets align with commitments to the BC Hydro Energy Manager program. BC Hydro's current targets for ICBC require the implementation of projects that are forecast to reduce electricity consumption by 300,000 kWh compared with a businesses as usual scenario.

ICBC also has energy performance targets articulated in our Energy Management Manual:

Electricity: 119 kWh/m²

Natural Gas: 0.3 GJ/m²

GHG: 0.02 tCO₂e/m²

b) Whether you have a strategy or not (1.a), briefly describe your organization's plans to continue reducing emissions from stationary sources:

I. Over the medium-term term (1-5 years)

Over the next 1 - 5 years ICBC will continue to focus on lighting retrofit opportunities as well as retro-commissioning of our operations building stock.

In 2019 ICBC will be moving into two new office spaces. As part of the renovations, older fluorescent lighting will be replaced with LED lights incorporating a sensor based digital lighting control system. We will also be replacing the uninterrupted power supply system at our Guildford Corporate Centre with an updated system using 75% less energy. The new system will also create less heat, reducing energy demand for air conditioning by 16,425 kWh annually.

ICBC's head office has a robust building automation system that has grown incrementally over the last decade. In 2018, we employed a fault detection system that helped us reduce our GHG emission by 85 tonnes compared with 2017. The project also highlighted an opportunity to make broader improvements to the system. As a result, recommissioning of the system will take place in 2019.

II. Over the long term (6-10 years)

None at this time.

c) Please describe your strategy's goals (if any) related to [energy audits](#).

Our energy audits continue to focus on lighting and retro-commissioning.

I. What % on average of your building portfolio has an energy audit completed each year (if any)? : 3

d) Please describe your strategy's goals (if any) related to building retrofits.

Same as per (c).

I. What % on average of your building portfolio is retrofitted each year in the following categories (if any) - click [here](#) for further information:

Minor retrofits (e.g., low cost, easy to implement measures including caulking, lighting, adding roof insulation, etc.) (%): 50

e) Please describe your strategy's [re/retro-commissioning](#) goals (if any)?

Over the last decade, most of our claim centres have been retrofitted with condensing boilers. During this same time period, building automation was installed in the majority of our buildings. We have been experimenting with running these boilers for a longer period of time at their optimal condensing temperatures, instead of running at higher temperatures for shorter periods. We hoped to increase the efficiency of energy use within these boilers, while also taking advantage of the impact on occupant comfort due to warm air being circulated through our buildings for longer periods. Having previously piloted this idea at two locations in 2015 and 2016, this past year we expanded the programming to 14 locations. This change was among the reasons we achieved an impressive 21% drop in natural gas use compared with 2017, preventing 647 tonnes of GHGs from entering the atmosphere and realizing \$125,000 in operating cost savings.

ICBC's head office has a robust building automation system that has grown incrementally over the last decade. In 2018, we employed a fault detection system that helped us reduce our GHG emission by 85 tonnes compared with 2017. The project also highlighted an opportunity to make broader improvements to the system. As a result, recommissioning of the system will take place in 2019.

I. What % on average of your building portfolio do you recommission each year?: 14

f) Do you keep records of Refrigerant gases category and refilling volumes?

Yes

I. If yes, have you included the associated emissions in your reporting?

No

II. What, if any, mitigation approaches have been considered? Please describe.

Fugitive emission from refrigerant gasses has been determined to be less than 1% of our overall emissions and therefore falls under the definition of "Small Emissions Sources" as described by Scope Summary for B.C. Public Sector Greenhouse GAs Emissions (Updated 2019).

g) How many newly constructed buildings received at least LEED Gold certification in 2018: 0

I. How many newly constructed buildings did not receive LEED Gold certification?: 0

II. Please explain why LEED Gold certification was not obtained.

No new buildings were constructed.

B. Mobile Sources (Vehicles, Off-road/portable Equipment): Fuel Combustion:**3. Actions taken by your organization in 2018 to support emissions reductions from mobile sources.****a) Do you have a strategy to reduce emissions from mobile sources?**

Yes

I. If yes, what are its goals?

Increase utilization and fuel efficiency of the organization's fleet.

b) Whether you have a strategy or not (3.a), briefly describe your organization's plans to continue reducing emissions from mobile sources:

I. Over the medium-term term (1-5 years)

When purchasing new vehicles, ICBC puts a heavy emphasis on fuel consumption, right sizing and utilization. Identifying opportunities to purchase hybrid vehicles has been a focus and will continue to be over the near term.

ICBC is also focused on ensuring that our fleet utilization is maximized before increase its size.

II. Over the long term (6-10 years)

ICBC is interested in exploring opportunities to electrify its fleet, as prices drop and options increase.

c) How many fleet vehicles did you purchase from the following categories:

Hybrid vehicle – HEV – non "Plug In"- (e.g., Toyota Highlander Hybrid): 6

Gas/diesel vehicle: 7

I. If you purchased new gas/diesel vehicles, can you briefly explain why vehicles from the other categories were not chosen?

None available in the market to meet the needs of the work being performed.

d) How many existing EV charging stations does your organization have in each category:

level 2: 6

e) How many EV charging station(s) did you install in 2018 in each category:

level 2: 4

f) Other actions, please describe briefly (e.g. charging station feasibility studies, electrical panel upgrades, etc.)

Conducted a fleet utilization study to assess the composition of our fleet with a focus on fuel efficiency, fleet size, and vehicle right-sizing. The results of the study identified ways utilization could be increased through the application of a more sophisticated reservation system.

4. Please indicate the number of the vehicles in the following vehicle classes that are in your current fleet (including any purchased in 2018):

Definitions:

- Light duty vehicles (LDVs) are designated primarily for transport of passengers <13 and GVWR<3900kg
- Light duty trucks (LDTs) are designated primarily for transport of light-weight cargo or that are equipped with special features such as four-wheel drive for off-road operation (include SUVs, vans, trucks with a GVWR<3,900kg)
- Heavy duty vehicles (HDV) includes vehicles with a GVWR>3,900 kg (e.g. ¾ tonne pick-up truck, transport trucks)

a) Light duty vehicles (LDVs)

Hybrid vehicles – HEV – (e.g., non “Plug In”- older Toyota Prius, Toyota Camry hybrid): 6

Gas/diesel: 114

b) Light duty trucks (LDTs)

Gas/diesel: 13

c) Heavy duty vehicles (HDV)

Gas/diesel: 2

5. Please indicate the number of the vehicles you plan to replace in your fleet:

How many LDVs do you plan to procure annually over the next 5 years?: 31

How many LDTs do you plan to replace annually over the next 5 years?: 3

How many HDVs do you plan to replace annually over the next 5 years?: 1

C. Office Paper: Indicate which actions your PSO took in 2018:**6. Actions taken by your organization in 2018 to support emissions reductions from paper supplies.****a) Do you have an Office Paper strategy?**

Yes

I. If yes, what are its goals?

ICBC's office paper strategy has four elements:

- 1 - Replace paper with digital formats where possible
- 2 - When printing, maximize duplex printing where possible
- 3 - Reduce orphan prints
- 4 - Use 100% PCW paper for all 8.5x11 office paper use

b) Whether you have a strategy or not (6.a), briefly describe your organization's plans to continue reducing emissions from paper use:

I. Over the medium-term (1-5 years)

Over the next 1 - 5 years ICBC plans to continue to focus on employing digital technologies to reduce the need to print, printing double sided when printing is necessary, and expanding out pull-print technology which requires employees to scan their ID to print a document.

II. Over the long term (6-10 years)

None at this time.

c) Have an awareness campaign focused on reducing office paper use

Yes

d) Purchased alternate source paper (bamboo, hemp, wheat, etc.)

No

e) Other actions, please specify.

All 8.5x11 paper used in our offices is 100% PCW. Forms sent to customers are 30% PCW.