JUSTICE INSTITUTE of BRITISH COLUMBIA

2017 Carbon Neutral Action Report

May 31, 2018

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Declaration Statement

This Carbon Neutral Action Report for the period January 1st, 2017 to December 31st, 2017 summarizes Justice Institute of British Columbia's emissions profile, total offsets to reach net-zero emissions, actions undertaken in 2017 to reduce greenhouse gas (GHG) emissions and plans to continue reducing emissions in 2018 and beyond.

By June 30, 2018, JIBC's final 2017 Carbon Neutral Action Report will be posted to the Institute's website at www.jibc.ca

Overview

Justice Institute of British Columbia (JIBC) is Canada's leading public safety educator, a dynamic post-secondary institution recognized nationally and internationally for innovative education in the areas of justice and public safety. JIBC offers a range of applied and academic programs (certificates, diplomas, and degrees) that span the spectrum of safety, from prevention to response and recovery. JIBC has six campuses located in New Westminster, Maple Ridge, Pitt Meadows, Chilliwack, Victoria and Kelowna.

JIBC is committed to reducing its carbon footprint and improve sustainability through environmentally responsible practices. Since 2008 the Institute has implemented operational changes resulting in significant reductions in energy consumption. Energy consumption is monitored at all campuses to identify trends in usage and to ensure buildings operate at optimal conditions for the season. Tracking energy usage allows JIBC to gauge the effectiveness of implemented energy-efficiency strategies designed to achieve carbon neutrality through the reduction of greenhouse gas emissions.

Greenhouse Gas Emission Reduction Activities undertaken in 2017

In 2017 the following projects were undertaken to reduce greenhouse gas emissions:

- Installation of power factor meters at the New Westminster and Maple Ridge campuses
- Replacement of two gas-fired hot water heating boilers at the New Westminster campus
- Retrofit of fluorescent tubes to LED tubes at the New Westminster campus
- Retrofit of CFL pot lights to LED lights at the New Westminster campus

Plans to Further Reduce Greenhouse Gas Emissions in 2018 and Beyond

Potential projects to further reduce greenhouse gas emissions in 2018 and beyond include:

- Add hybrid electric vehicle to fleet
- Install charging stations for fleet electric vehicle charging
- Replace older fleet vehicles with more fuel efficient and/or electric vehicles
- Upgrade web-based video-conferencing systems to reduce travel needs
- Implement virtual servers to replace physical servers
- Upgrade network switches to energy efficient types
- Refresh desktops to remove older less energy efficient computers
- Retrofit lighting, including fixture replacement, and addition of motion sensors
- Upgrade and install new direct digital controls for heating/cooling plants and lighting systems
- Engage with travel booking agency to receive GHG emission reporting for flight bookings
- Review administrative processes using lean methodology to reduce unnecessary paper-based filing and forms
- Implement personal printing account program to raise individual staff awareness of printing and copying habits
- Conduct energy assessments and implement recommended energy savings strategies and upgrades
- Participate in the STARS program – Sustainability Tracking and Assessment Rating System administered by the Association for the Advancement of Sustainability in Higher Education

Greenhouse Gas Emissions in 2017

In accordance with Carbon Neutral Government Regulation, JIBC activities generating direct and indirect greenhouse gas emissions were recorded throughout the calendar year. In 2017, JIBC realized direct and indirect greenhouse gas emissions measured in tonnes per carbon dioxide equivalent (tCO2e) in the following categories:

GHG Emission Category	GHG Emissions tCO_2e
Mobile Fuel Combustion	84.38
Stationary Fuel Combustion	547.42
Purchased Energy	24.85
Office Paper	53.46
Total Emissions (rounded)	**710**

Retirement of Offsets for 2017

In accordance with the requirements of the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, Justice Institute of British Columbia (the Organization) is responsible for arranging for the retirement of the offsets obligation reported above for the 2017 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 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.

JIBC GHG Emissions and Offset for 2017 (tCO_2e)	
GHG Emissions created in Calendar Year 2017 :	
Total Emissions (tCO_2e)	710
Total Offsets (tCO_2e)	707
Adjustments to GHG Emissions Reported in Prior Years :	
Total Emissions (tCO_2e)	0
Total Offsets (tCO_2e)	0
Grand Total Offsets for the 2017 Reporting Year :	
Grand Total Offsets (tCO_2e)	707

Executive Sign-off

	June 4, 2018
Signature	Date
Kayoko Takeuchi	Vice President – Finance and Operations
Name (please print)	Title

Part 1: CNAR Survey

1. General Information

Name: Julie Brown

Contact Email: jbrown@jibc.ca

Organization Name: Justice Institute of British Columbia

Sector: Post Secondary

2. Stationary Sources (eg. Buildings, Power Generators): Fuel Combustion, Electricity use, Fugitive Emissions.

During 2017, did your organization take any of the following actions to support emissions reductions from buildings? (please select all that apply)

Performed energy retrofits of the organization's building(s)

2. Stationary Sources - Other? Please specify:: Installed power factor meters at New Westminster and Maple Ridge campuses.
Replaced two gas fired hot water boilers at New Westminster campus.

If you selected "*Performed energy retrofits of the organization's building(s)*":

How many buildings were retrofitted?: 1

If you selected "*Built, or are building new LEED Gold or other "Green" buildings*":

How many new "Green" buildings?:

Did your Organization perform any retrofits during 2017? Please describe briefly:

Retrofit of fluorescent tubes to LED tubes at the New Westminster campus.
Retrofit of CFL pot lights to LED lights at the New Westminster campus.

2a. Stationary Sources (eg. Buildings, Power Generators): Fuel Combustion, Electricity use, Fugitive Emissions.

Please briefly describe your organization's plans to continue reducing emmissions from its stationary sources:

a) Over the next 1-5 years

Implement virtual servers to replace physical servers.
Upgrade network switches to energy efficient types.
Refresh desktops to remove older less energy efficient computers.
Retrofit lighting, including fixture replacement, and addition of motion sensors.
Upgrade and install new direct digital controls for heating/cooling plants and lighting systems.
Conduct energy assessments and implement recommended energy savings strategies and upgrades.

b) Over the following 6-10 years

Conduct energy assessments and implement recommended energy savings strategies and upgrades.

3. Mobile Sources (Vehicles, Off-road/portable Equipment): Fuel Combustion:

During 2017, did your organization take any of the following actions to support emission reductions from its mobile sources? (please select all that apply)

None of the above

If you selected "*Replaced existing vehicles with more fuel efficient vehicles (gas/diesel)*":

How many vehicles?:

If you selected "*Replaced existing vehicles with hybrid or electric vehicles*":

How many vehicles?:

3a. Mobile Sources (Vehicles, Off-road/portable Equipment): Fuel Combustion:

Please briefly describe your organization's plans to continue reducing emissions from its mobile sources:

a) Over the next 1-5 years

Add hybrid electric vehicle to fleet
Install charging stations for fleet electric vehicle charging
Replace older fleet vehicles with more fuel efficient and/or electric vehicles

b) Over the following 6-10 years

Install charging stations for fleet electric vehicle charging
Replace older fleet vehicles with more fuel efficient and/or electric vehicles

4. Supplies (Paper): Indicate which actions your PSO took in 2017:

During 2017, did your organization take any of the following actions to support emissions reductions from paper supplies? (please select all the apply)

None of the above

If you selected "*Had a policy requiring the purchase of recycled content paper*":

State the required recycled content here (30%, 50%, 100%):

If you selected "*Had a policy requiring the purchase of alternate source paper (bamboo, hemp, wheat, etc)*", which type of alternate source paper did you use?

Please briefly describe your organization's plans to continue reducing emissions associated with its office paper use in future years.

Review administrative processes using lean methodology to reduce unnecessary paper-based filing and forms.
Implement personal printing account program to raise individual staff awareness of printing and copying habits.

5. Other Sustainability Actions

a) Business Travel

During 2017, did your organization take any of the following actions to support emissions reductions from business travel? (please select all that apply)

None of the above

b) Education/Awareness

During 2017, did your organization have any of the following programs or initiatives to support sustainability education and awareness? (please select all that apply)

None of the above

c) Other Sustainability Actions

During 2017, did your organization have any of the following programs or initiatives to support sustainability? (please select all that apply)

An operations policy or program to facilitate the reduction and diversion of building occupant waste (e.g., composting, collection of plastics, batteries) from landfills or incineration facilities