

2019 Carbon Neutral Action Report

May 7, 2020

Table of Contents

| Declaration Statement | 1 |
|---|---|
| Overview | 1 |
| Greenhouse Gas Emission Reduction Activities Undertaken in 2019 | 2 |
| Plans to Further Reduce Greenhouse Gas Emissions in 2020 and Beyond | 2 |
| Emissions and Offset Summary Table | 3 |
| Retirement of Offsets | 4 |
| Executive Sign-off | 4 |

Declaration Statement

This Carbon Neutral Action Report for the period January 1st, 2019 to December 31st, 2019 summarizes the Justice Institute of British Columbia's (JIBC) emissions profile, total offsets to reach net-zero emissions, actions undertaken in 2019 to reduce greenhouse gas (GHG) emissions and plans to continue reducing emissions in 2020 and beyond.

By June 30, 2020, JIBC's final 2018 Carbon Neutral Action Report will be posted to the Institute's website at <u>www.jibc.ca</u>

Overview

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 in British Columbia, 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.

In 2019, JIBC joined BC Hydro's Energy Manager Associate Program. The program assisted JIBC with the development of a strategic energy management plan to support the Institute's commitment to energy efficiency and conservation by providing a framework for reducing energy consumption and its associated environmental impact.

2019 CARBON NEUTRAL ACTION REPORT - MAY 7, 2020

Greenhouse Gas Emission Reduction Activities Undertaken in 2019

In 2019 the following projects were undertaken to reduce greenhouse gas emissions:

- Retrofitted fixtures and lamps to LED types at the New Westminster campus;
- Retrofitted fixtures and lamps to LED types at the Maple Ridge campus;
- Conducted an energy audit and implemented recommended energy savings strategies at the Maple Ridge campus;
- Conducted retro-commissioning study and implemented recommended energy savings adjustments to building system components at the Maple Ridge campus;
- Installed new direct digital controls for heating/cooling plants and lighting systems at the Chilliwack campus; and
- Installed new direct digital controls for heating/cooling plants and lighting systems at the Pitt Meadows campus.

Plans to Further Reduce Greenhouse Gas Emissions in 2020 and Beyond

Potential projects to further reduce greenhouse gas emissions in 2020 and beyond include:

- Retrofit remaining lighting to LED, including fixture replacement, and addition of motion sensors;
- Replace original circulation pumps in the water treatment plant system with high-efficiency types of equipment with variable speed drives;
- Add destratification fans to the atrium and gym areas;
- Add variable speed drives to chilled water pumps;
- Add power misers to vending machines;
- Replace older fleet vehicles with more fuel-efficient and/or electric vehicles;
- Install charging stations for fleet electric vehicle charging;
- Implement additional virtual servers to replace physical servers;
- Upgrade network switches to energy-efficient types;
- Refresh desktops to remove older less energy efficient computers;

2019 CARBON NEUTRAL ACTION REPORT - MAY 7, 2020

- Engage with travel booking agency to receive GHG emission reporting for flight bookings;
- Review administrative processes using Lean methodology to reduce unnecessary paperbased filing and forms;
- Implement personal printing account program to raise individual staff awareness of printing and copying habits; and
- Participate in the STARS program Sustainability Tracking and Assessment Rating System administered by the Association for the Advancement of Sustainability in Higher Education.
- Participate in BC Hydro's Energy Manager Program to support the strategic approach to energy management and organizational change to reduce energy waste, costs, and improve energy efficiency.

Emissions and Offset Summary Table

In accordance with the Carbon Neutral Government Regulation, JIBC activities generating direct and indirect greenhouse gas emissions were recorded throughout the calendar year. In 2019, JIBC realized direct and indirect greenhouse gas emissions measured in tonnes per carbon dioxide equivalent (tCO2e) in the categories of mobile fuel combustion, stationary fuel combustion, purchased energy and office paper.

| JIBC GHG Emissions and Offset for 2019 | | |
|--|----------|--|
| As per the <u>Directive</u> issued March 31, 2020, each PSO will use their 2018 GHG Emission as a placeholder for the purposes of their 2019 CNAR. | | |
| Total Emissions (tCO2e) | 628 | |
| Total BioCO ₂ | 3 | |
| Total Offsets (tCO₂e) | 625 | |
| Offset Investments (\$25 per tCO2e) | \$15,625 | |

Retirement of Offsets

In accordance with the requirements of the Climate Change Accountability 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 2019 calendar year, together with any adjustments reported for past calendar years (if applicable). The Organization hereby agrees that, in exchange for the Ministry of Environment and Climate Change Strategy (the Ministry) 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

INK.

May 8, 2020

Signature

Date

Mike Proud

Name (please print)

Vice President – Finance and Operations

Title

2019 CARBON NEUTRAL ACTION REPORT - MAY 7, 2020