2019 Carbon Neutral Action Report

BC Pavilion Corporation

DECLARATION STATEMENT:

This Carbon Neutral Action Report for the period January 1, 2019 to December 31, 2019 summarizes BC Pavilion Corporation's (PavCo) emissions profile, the total offsets to reach net-zero emissions, the actions taken in 2019 to reduce its greenhouse gas (GHG) emissions and plans to continue reducing emissions in 2020 and beyond.

By June 30, 2020, PavCo's final *Carbon Neutral Action Report* will be posted to its website at www.bcpavco.com.

BC Pavilion Corporation is a Provincial Crown Corporation with a mandate to generate economic and community benefit for the people of British Columbia through the prudent management of public facilities. PavCo owns and operates two world-class public facilities located in downtown Vancouver: BC Place and the Vancouver Convention Centre. During the calendar year 2019, PavCo reported to the Ministry of Tourism, Arts and Culture.

PAVCO'S MANDATE

To generate economic and community benefit for the people of British Columbia through prudent management of public facilities.

PAVCO'S FACILITIES

BC Place is one of the most technologically advanced stadiums in the world. It boasts a cutting-edge spectrum of customizable features, such as high definition video displays, interior temperature control, incredible acoustics, retractable seating, and a FIFA 2-Star rated playing surface.

The Vancouver Convention Centre consists of two uniquely designed buildings, the iconic East building and stunning West building, the world's first double LEED® Platinum certified convention facility. The Convention Centre is designed with the latest environmentally sustainable features and technology, including a six-acre "living roof", a marine habitat and an on-site Blackwater Treatment Plant, and is committed to operating continually in an environmentally sustainable manner.

Together, BC Place and the Vancouver Convention Centre generate in excess of \$450 million in economic benefit for the province annually. These important venues attract thousands of local and international guests every year to the province, economically supporting the tourism and hospitality industries, as well as trade development.

PAVCO'S VISION

To be the global leader in outstanding venues and events.

PAVCO'S VALUES

- Trust and Respect
- Accountability
- Innovation
- Teamwork
- Diversity and Inclusivity
- Service Excellence

OVERVIEW

PavCo has implemented a Strategic Energy Management Plan (SEMP), which outlines principals for energy conservation and investment in energy-related projects. The primary objective of this plan is to reposition energy management and the associated GHG emissions, as a broader strategic improvement to the organization, beyond solely reducing operating expenses. The plan has identified

the primary sources of GHG emissions associated with PavCo's operations and proposes strategies and projects to reduce these emissions.

Throughout 2019, the Vancouver Convention Centre continued its transition to energy efficient LED lighting systems. Substantial lighting retrofits were performed in both buildings, reducing energy consumption and the mercury content associated with existing fluorescent fixtures. Variable speed drives were installed on Air Handling Units that were previously operating at fixed speeds to enable demand control ventilation and energy savings during periods of low or intermittent occupancy. Commencing in April 2019, Renewable Natural Gas (RNG) was purchased from FortisBC to offset the emissions associated with the Convention Centre kitchen operations and lighting of the Olympic cauldron. To offset the domestic water consumption at the West building, the existing black water treatment plant was expanded to increase its overall capacity. The recycled water is used for toilet flushing and roof irrigation.

BC Place has also continued in switching several lighting systems to LED fixtures and advanced lighting control technology, building on the success of its new LED field of play lighting system, originally completed in February 2019. Several refrigeration units throughout the stadium were also upgraded with more efficient systems utilizing safer refrigerants. In order to reduce the level of steam consumption associated with DHW systems, the facility is undergoing an upgrade of its DHW steam heat exchangers with condensate heat recovery. The project is due for completion in 2020.As well, to reduce overall domestic water consumption at the facility, a pilot rain water harvesting project is underway and will be commissioned in 2020.

In 2019, Low Carbon Energy (LCE) feasibility studies were completed at each facility to identify opportunities to reduce carbon emissions. These studies have identified heat recovery projects that would recycle waste heat for space heating and DHW preheat. These projects will be implemented in the coming years as part of a larger plan to meet the organization's carbon reduction targets.

BC Pavilion Corporation GHG Emissions and Offsets for 2019		
As per the <u>Directive</u> issued March 31, 2020, each PSO will use their 2018 GHG Emissions as a placeholder for the purposes of their 2019 CNAR.		
Total Emissions (tCO₂e)	3,752	
Total BioCO ₂	1	
Total Offsets (tCO ₂ e)	3,752	
Offset Investment (\$25 per tCO ₂ e)	\$93,800	

RETIREMENT OF OFFSETS:

In accordance with the requirements of the *Climate Change Accountability Act* and Carbon Neutral Government Regulation, BC Pavilion Corporation **(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:

	May 28, 2020	
Signature	Date	
	CFO	
Name (please print)	Title	