2023 PSO Climate Change Accountability Report

Provincial Health Services Authority

BC Children's Hospital and BC Women's Hospital + Health Centre, located at 4500 Oak St, Vancouver, BC.

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Provincial Health Services Authority

Executive Summary

David Byres, President & Chief Executive Officer

I am pleased to present the 14th annual Climate Change Accountability Report[1] which highlights the actions that Provincial Health Services Authority (PHSA) has taken to reduce its carbon emissions, enhance low-carbon resilience and environmental sustainability, and the plans underway to reach our climate goals. Through a blend of innovation and sustained efforts, we have continued to make great progress in our climate mitigation, adaptation, and environmental sustainability journey.

Knowledge Keeper Sulksun, Shane Pointe, gifted six Coast Salish teachings to PHSA, these teachings have become core principles of the work we do at PHSA and guide us in the process of updating our organizational priorities. In the spirit of these teachings, protecting future generations by supporting planetary health has become one of PHSA's North Star priorities.

In 2023, PHSA had a carbon emission offset of 18,754 tonnes of carbon dioxide equivalent (tCO2e), which was offset at a total cost of $510,851[2]. This represents a decrease of almost 22 per cent from the carbon emissions reported in 2007, the base year for the legislated Climate Change Accountability Act. This reduction in our carbon emissions is noteworthy as PHSA has grown significantly in the past 16 years, in terms of programs, services and staff. In 2023, we progressed towards the completion of a large energy system upgrade at BC Cancer – Vancouver, which is anticipated to result in significant carbon emissions reduction for the site once completed and fully commissioned. We also started two projects to upgrade lighting at BC Children's Hospital and BC Women's Hospital + Health Centre, while also working on several engineering studies across our portfolio of buildings to find feasible and viable solutions to reduce our carbon emissions while enhancing resilience to climate hazards (e.g., extreme heat, wildfire smoke) and improving the comfort and experience of patients and staff. Throughout 2023, we continued in our efforts to enhance staff engagement, raise awareness, and foster knowledge sharing through our daily activities with an emphasis on topics like waste management, environmentally preferred materials, the healing power of food, active and clean transportation, and more.

As we work towards our planetary health goals, we will develop a strategic plan, guided by our Coast Salish teachings and in alignment with B.C.'s Declaration on the Rights of Indigenous Peoples Act (DRIPA) and the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). This plan will expand on our strategies to reduce emissions by including a reduction of scope three emissions (including looking at our purchased goods and services within supply chain, food, end-of-life disposal of the products we use, and other areas of our work).

I want to recognize PHSA's Energy and Carbon Management team who, as part of the regional Energy and Environmental Sustainability team, has worked closely with various groups across the organization to reduce emissions. The opportunity before us is immense, but so too is our collective will. With passion, commitment, and ingenuity, we will continue working with our partners and making bold steps in reducing our environmental impacts and contributing to the health and well-being of our staff and the communities we serve. I would like to recognize and thank all our staff who support these continued efforts across the province.

Date: May 30, 2024

David Byres
President & Chief Executive Officer
Provincial Health Services Authority

[1] Formerly known as Carbon Neutral Action Report
[2] This amount is calculated by PHSA's 2023 carbon emissions offset of 18,754 tCO2e plus 707 tCO2e resulting from the prior year's (2022) adjustments in emissions inventory, at $25/ tonne CO2e plus GST.

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Our Emissions Profile

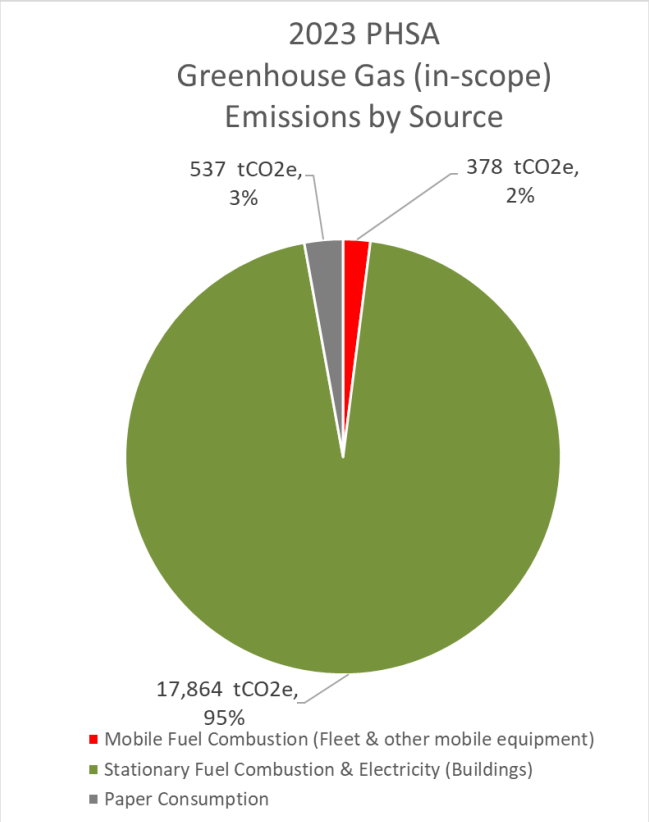
2023 GREENHOUSE GAS (GHG) EMISSIONS BREAKDOWN AND OFFSETS APPLIED TO BECOME CARBON NEUTRAL

PHSA reports its organizational carbon emissions based on guidance provided by B.C.'s Climate Change Accountability Act (CCAA), Carbon Neutral Government Regulation (CNGR), and the Climate Action Secretariat (CAS).

The CAS developed reporting guidance based on the Greenhouse Gas Protocol Corporate Standard. According to these guidelines, PHSA's carbon emissions are comprised of six different greenhouse gases, which are converted into a common metric of tonnes of carbon dioxide equivalent (tCO_2e). In-scope carbon emissions are grouped into three main categories:

1. Stationary Fuel Combustion
2. Mobile Fuel Combustion
3. Paper Consumption

In 2023, PHSA's carbon emissions offset was 18,754 tonnes of carbon dioxide equivalent (tCO2e)[3]. That represents an almost 22 per cent decrease in PHSA's carbon emissions offset since 2007, the base year for the legislated Climate Change Accountability Act (CCAA).



Almost 95 per cent of PHSA's in-scope emissions are attributed to the building portfolio, and about 93 per cent of those emissions are associated with fossil fuel consumption.

To become carbon neutral in 2023, PHSA will purchase carbon offsets at a total cost of $510,851 from the Ministry of Environment and Climate Change Strategy. This amount is calculated based on PHSA's 2023 carbon emissions offset of 18,754 tCO_2e plus 707 tCO2e resulting from the prior year (2022) adjustments[4] in emissions inventory, at $25/ tonne CO_2e plus GST.

3 This figure excludes total BioCO2 Emissions (no offset required). PHSA's total BioCO2 Emissions in 2023 was 24 tCO2e.

4 The 707 tCO2e adjustments applied to 2022 emissions inventory is related to buildings and paper categories. For the buildings category, the amount of steam produced at the energy center located on the BC Children's Hospital and BC Women's Hospital + Health Centre campus and sold to a non-BC public sector organization in 2022 was added to PHSA's profile. Also, adjustments were made to the amount of fuel oil purchased in 2022 for the BC Children's Hospital and BC Women's Hospital + Health Centre and the amount of electricity consumed at BC Cancer – Victoria. In the paper category, some orders placed in 2022 (previously counted in our 2022 emissions profile) were returned to the vendor later on. Therefore, adjustment needed to be made in the paper category accordingly.

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CHANGES TO PROVINCIAL HEALTH SERVICES AUTHORITY'S PORTFOLIO

PHSA's usable facility space has increased 27.3 per cent since 2007 which is largely due to the construction of the Teck Acute Care Centre, Red Fish Healing Centre, and an increase in leased spaces. PHSA has controlled increases in facility space to accommodate increased staff by seeking opportunities to optimize existing space use while maintaining safety and efficiency.

BUILDINGS, FTE AND WEATHER	2007	2010	2019	2020	2021	2022	2023
Distinct PHSA buildings	n/a	78	76	76	78	80	87
% Owned	n/a	57%	72%	72%	70%	66%	66%
% Leased	n/a	43%	28%	28%	30%	34%	34%
Usable square meters[1]	388,990	389,883	425,344	425,344	467,587	491,754	495,281
Full-time employee equivalents[2]	5,491	6,442	11,928	12,119	12,977	13,459	14,796
Weather (summarized in Heating Degree Days)[3]	2,870	2,621	2,844	2,759	2,875	2,936	2,636

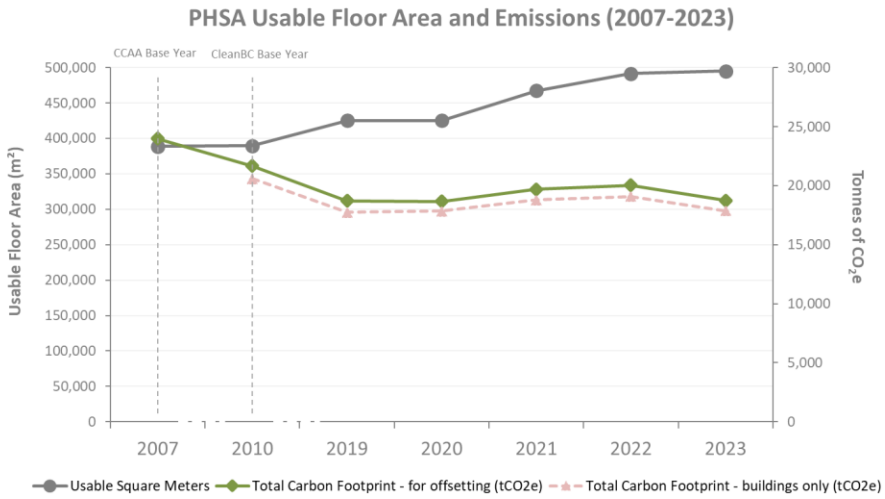
Notes for above table:

[1] Usable area excludes roof tops, interstitial spaces, and parking areas.

[2] Full-Time Employee data was provided by Health Employers Association of B.C. Full-Time Employee data include all designated groups reported in HSCIS and exclude affiliate employers and BCEHS employees. Full-Time Employee calculations are based on 1950 annual hours.

[3] Heating Degree Days (HDD's) are based on YVR Airport data from Environment Canada and are intended to reflect the demand for heating. Although PHSA's facilities are located across B.C., most buildings are in the metro Vancouver area, so HDDs for Vancouver were used.

Since 2007, PHSA's carbon emissions has decreased while usable floor area and staff have increased. The graph below indicates the changes in buildings floor area since 2007 (the base year for CCAA) and 2010 (the base year for CleanBC).



As of 2023, PHSA's buildings emissions per full-time equivalent (1,207 kgCO2e/FTE) has decreased by 71.1 per cent since 2007, and PHSA's buildings emissions per unit of floor area (36.07 kgCO2e/m²) have decreased 38.8 per cent since 2007. The carbon emissions reported are not adjusted for changes in weather. Heating Degree Days (HDDs) is a metric designed to reflect the demand for energy required to heat a building. Emissions per HDD is a metric intended to

summarize overall efficiency of delivering heating. PHSA's 2023 buildings emissions per HDD (6,777 kgCO2e/HDD) are 15.2 per cent lower than 2007. This speaks to the improved efficiency of providing heat in our buildings.

As this report is prepared in response to CCAA, 2007 (the base year for CCAA) has been used as the base year in our progress calculations (for example when presenting percentage of decrease in buildings emissions per HDD).
Please note that for measuring our progress towards CleanBC targets applicable to public sector buildings emissions reduction, 2010 shall be used as the base year[5].

	Our Carbon Footprint (tCO2e)	2007	2010	2019	2020	2021	2022	2023
	Mobile fuel combustion (Fleet & other mobile equipment)	189	189	170	197	202	347	378
	Stationary fuel combustion & electricity (Buildings)	22,930	20,597	17,751	17,859	18,790	19,079	17,864
	Paper Consumption	891	891	791	617	726	638	537
	Total carbon footprint (tCO2e)	24,010	21,677	18,712	18,673	19,718	20,064	18,778
	Total $BioCO_2$ emissions (no offsets required) [1, 2]	-9	-9	-7	-8	-29	-22	-24
	Total carbon footprint for offsetting (tCO2e)	**24,002**	**21,668**	**18,705**	**18,665**	**19,689**	**20,042**	**18,754**

$	Purchased Carbon Offsets	$ -	$ 628,000	$ 483,550	$454,325	$488,150	$480,050	$486,525
	Purchased Carbon Offsets +GST[3]	**$ -**	**$ 703,360**	**$ 507,728**	**$477,041**	**$512,558**	**$504,053**	**$510,851**

KPI's	**Buildings** emissions per full-time employee ($kgCO_2e$/FTE)	4,176	3,197	1,488	1,474	1,448	1,418	1,207
	Buildings emissions per facility space ($kgCO_2e/m^2$)	58.95	52.83	41.73	41.99	40.18	38.80	36.07
	Buildings emissions per heating degree day ($kgCO_2e$/HDD)	7,990	7,859	6,242	6,473	6,536	6,498	6,777

Notes for above table:

[1] As outlined in the Carbon Neutral Government Regulation of the Climate Change Accountability Act, some emissions do not require offsets.

[2] It was estimated that Fugitive Emissions from cooling equipment comprise less than 0.01 per cent of PHSA's total emissions and for this reason, emissions from this source have been deemed out-of-scope and have not been included in our total greenhouse gas emissions profile.

[3]Please note that the amount of Purchased Carbon Offsets presented in this table includes the offset for each reporting year plus any prior year adjustment when applicable. For example, the total of $510,851 listed under 2023 is calculated based on PHSA 2023 carbon emissions offset of 18,754 tCO2e plus 707 tCO2e resulted from the prior year (2022) adjustments in emissions inventory, using $25 per tCO2e plus 5 per cent GST.

5 As of 2023, PHSA's buildings emissions has decreased 13.3% since 2010, the base year for CleanBC.

PART 1. Legislative Reporting Requirements

Declaration Statement

This PSO Climate Change Accountability Report for the period January 1, 2023, to December 31, 2023, summarizes our greenhouse gas (GHG) emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2023 to minimize our GHG emissions and our plans to continue reducing emissions in 2024 and beyond.

By June 30, 2024, Provincial Health Services Authority's final 2023 Climate Change Accountability Report will be posted to our website at bcgreencare.ca. Final Climate Change Accountability Reports will be also posted on the BC Government CNG website by June 30, 2024 to meet legislative requirements.

Emissions Reductions: Actions & Plans

A. Stationary Sources (buildings) - actions

- **Optimizing performance and enhancing low-carbon resilience and environmental sustainability in our existing buildings:** In 2023, PHSA completed the investigation phase of the Continuous Optimization Program[6] for three buildings at the BC Children's Hospital and BC Women's Hospital + Health Centre. These investigations resulted in the identification of multiple energy conservation measures that help reduce electricity consumption as well as fuel use at the site, leading to carbon emissions reduction.
  We also progressed towards the completion of a large energy system upgrades project at BC Cancer – Vancouver, which is anticipated to result in more than 660 tCO2e per year carbon emissions reduction for the site once completed and fully commissioned. This equals to more than one-third of historical annual emissions for this site.
  Two lighting system upgrades and insulation enhancement of the steam infrastructure started and progressed in implementation at the BC Children's Hospital and BC Women's Hospital + Health Centre. Multiple energy studies have also commenced and progressed towards completion for various buildings in the PHSA portfolio, with the goal of identifying further opportunities for reducing energy use and carbon emissions in our buildings, while enhancing occupants' comfort and satisfaction with the indoor environmental quality. Moreover, studies were initiated to assess the feasibility, environmental and economic benefits of producing on-site renewable energy

6 This program is funded by BC Hydro and Fortis BC and is administered by BC Hydro.

with the use of solar technologies at three sites. Another example of innovative studies commenced in 2023 is exploring the viability of energy storage solutions at our sites. If found to be applicable, these technologies could help us lower energy demand during peak hours, as well as shift away from fossil fuel when feasible (for example using stored energy instead of diesel used in backup generators).

***Moving forward**, we plan to continue reducing GHG emissions and improving energy efficiency in our existing buildings portfolio by developing strategic plans and implementing energy efficiency and carbon emissions reduction retrofit projects by utilizing the Carbon Neutral Capital Program (CNCP) as our primary funding source.*

We will also continue engaging partners and interest holders in the process of identifying climate change hazards and their cascading impacts on the health system and developing effective measures to manage climate risks to our facilities and our broader communities of care.

- **Staff and clinical staff engagement:** PHSA's Energy and Carbon Management team has continued to work closely and in collaboration with staff and clinical staff in the organization, including the Facilities Maintenance and Operations (FMO) groups across PHSA sites. These cross-departmental engagement efforts lead to identifying opportunities for energy use and carbon emissions reduction while tackling operational challenges on-site and finding synergies between asset renewal and energy systems upgrade needs. Through these engagements, unique insights are gained regarding the performance and operational procedure of clinical and non-clinical equipment present in our health-care facilities and potential changes that can be adopted to reduce our environmental impacts.

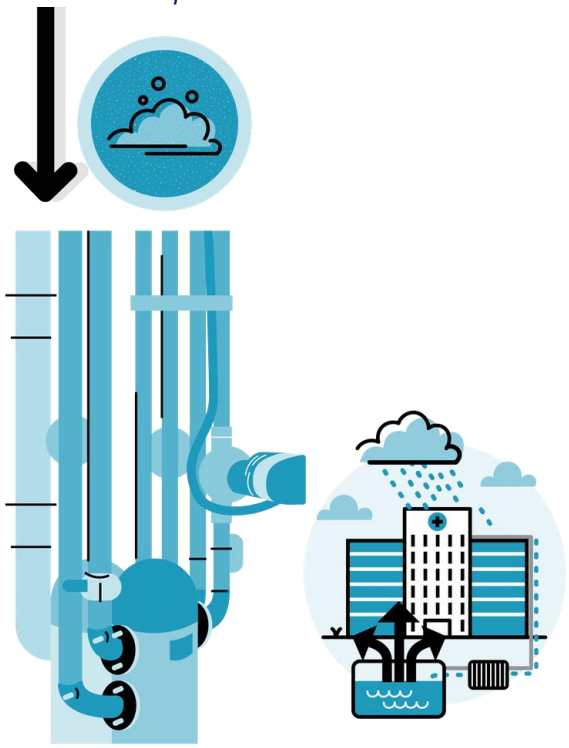
***Moving forward**, we continue to promote energy conservation, GHG emissions reduction, and other aspects of environmental sustainability and climate adaptation and resilience through raising awareness, education, staff engagement, and partnerships that lead to behavior and system change.*

- **Guidelines for low-carbon resilience and environmental sustainability in new construction and redevelopment health-care projects:** PHSA's Energy and Carbon Management team has been actively contributing to the continuous improvement of the Low carbon Resilience and Environmental Sustainability (LCRES) guidelines developed by health organizations within the Lower Mainland, for informing new health-care related construction and major renovation projects. These guidelines that are aligned with the provincial mandates and policies related to environmental sustainability, carbon emissions reduction, and climate risk management and resilience—including the Environmental, Social and Governance Framework for Capital (ESGFC)—not only help projects meet provincial requirements but also ensure health-care facilities are built to the highest standard of energy efficiency and carbon management within financial constraints. In these guidelines, close attention is also paid to identifying synergies between various aspects of building performance and how various disciplines can work together to enhance low-carbon resilience and the environmental sustainability of our health-care facilities holistically. Previous versions of these guidelines were used for PHSA's Teck Acute Care Center and Red Fish

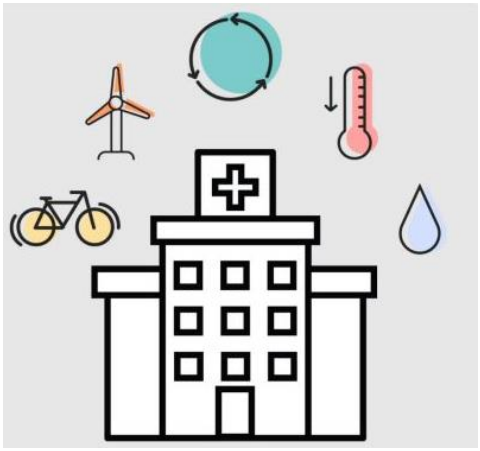
Healing Centre for Mental Health & Addiction. The most updated LCRES guidelines are being used in the Slocan Site Redevelopment[7] project and simultaneously in a few other active PHSA projects with significant importance for our communities such as the high-level master planning development of the BC Children's Hospital and BC Women's Hospital + Health Centre, among others.

***Moving forward**, we will keep working on the continuous improvement of the process through which we embed low-carbon and energy efficiency alongside climate risk management and broader aspects of environmental sustainability in health-care capital projects, new construction, and redevelopment opportunities. Developing project-specific targets and key performance indicators focused on energy use and carbon emissions will continue to ensure that our new buildings are low-carbon and energy efficient.*

We will also continue developing, refining, and improving standards, guidelines, and processes to embed low-carbon resilience and environmental sustainability principles further into standard operations at PHSA.



- **Influencing and informing polices:** In 2023, the Energy and Carbon Management team continued to work with internal and external partners including BC's Ministry of Health – Capital Services Branch and the other health organizations across the province to influence and inform upcoming policies and policy updates that have impact on low-carbon resilience and environmental sustainability in the health sector. Examples include updates on the Health Capital Policy Manual – Chapter 11, Low-Carbon Climate Resilient and Sustainable Health Facilities, and a briefing note developed by BC's health organizations, addressed to the Ministry of Health, which identifies the required funding and support needed for the health organizations to meet the provincial climate targets.



***Moving forward**, we plan to continue working alongside our internal and external partners and seek opportunities to influence and inform policies that enhance and facilitate embedding of low-carbon resilience and environmental sustainability into our capital and operating projects, initiatives, partnerships and beyond.*

- **Leadership and Innovation:** In alignment with the goal of fostering a culture of transformative leadership and innovation for environmentally sustainable health care, throughout 2023 we continued to promote energy conservation, GHG emissions reduction and other aspects of environmental sustainability and climate adaptation and resilience through raising awareness,

7 http://www.bcchildrens.ca/about/slocan

education and partnerships that lead to behavior change, system change, staff empowerment and consequently co-development of processes and opportunities across departments and teams which enable innovation adoption and implementation. Means such as the GreenCare network, Green+Leaders program, GreenCare survey, sustainability toolkits, lectures, workshops and educational sessions, and Green Teams and Planetary Health Units/Committees are among the opportunities provided to PHSA staff and clinical staff to enhance their knowledge and get involved in green initiatives.

- GreenCare[8] is a network that unites efforts across the B.C. health-care community to advance our health-care system toward environmentally sustainable and resilient care for the health of people, place, and planet.
- Green+Leaders[9] are health-care staff engaged in advancing sustainability practices within the health system. Green+Leaders encourage environmentally sustainable behaviour, improve existing processes, and help create an overall culture of environmental health and wellness. Every year, they make a significant contribution to the improvement of PHSA's environmental performance.
- Through the annual GreenCare survey, we learn about staff knowledge of sustainability and broader planetary health, and collect metrics that inform sustainability programs corresponding to the demand and capacity across the organization.
- Sustainability toolkits are provided to staff (and sometimes, co-developed with them) as practical resources to encourage behavioral change and support progress towards environmental targets. These toolkits focus on topics like waste management, creating a green workplace, making sustainable food and commuting options.
- Lectures, workshops, and educational opportunities are available on the GreenCare website and LearningHub. In addition, Grand Rounds is an innovative forum where physicians discuss topics like how medical oncology, radiation oncology and radiology intersect with energy and environmental sustainability.
- Green Teams and Planetary Health Units/Committee also create numerous opportunities for staff and community engagement in environmental sustainability.

***Moving forward**, we will continue utilizing the Green Revolving Fund and incentive opportunities offered by the utilities companies to support ongoing investment in studies, investigations and operating projects focused on carbon reduction and energy efficiency. In addition, we will continue learning about new standards, guidelines, technologies and building design principles relevant to low-carbon resilience and environmental sustainability and introducing them to sites and staff; as well as identifying opportunities for implementing and demonstrating innovations that bring value to the organization.*

Overall, we will continue striving for low-carbon resilience and making innovations in environmental sustainability that result in tangible outcomes. PHSA will continue to work collaboratively by building and seeking partnerships that support our goal of restoring and regenerating the interdependent health of people, place and planet — now and for future generations.

8 https://bcgreencare.ca/

9 https://bcgreencare.ca/take-action/

B. Mobile Sources (fleet and other vehicles)

- PHSA encourages alternative modes of transportation to gas/diesel single-occupancy vehicles. Inter-hospital shuttles are offered free of charge as a transportation option among several acute care sites and transit stations. Shuttles are available to staff, patients, and visitors. In 2023, a total of 100,630 staff ridership with shuttles in between sites was recorded, a 91% increase over 2022. For the two shuttles running between the BC Children's Hospital and BC Women's Hospital + Health Centre and King Edward Skytrain station, a real-time GPS and notification shuttle tracker was deployed enabling staff to see the location of the shuttle in real-time to better understand wait times.
- PHSA also encourages active modes of transportation and has three bike rooms/cages, three showers, and capacity for the locking/storage of 510 bikes across its core[10] sites. To better monitor bike cage usage, access control was added to a bike cage at the BC Children's Hospital and BC Women's Hospital + Health Centre. This provides statistics to teams managing bike cages to support understanding usage and needs of staff.
- PHSA actively promotes *Go by Bike Week*, by hosting education stations at BC Children's Hospital and BC Women's Hospital + Health Centre (Spring and Fall 2023) and BC Cancer – Vancouver (Fall 2023).
- PHSA is developing plans to install new Level 2 charging stations for electric vehicles. Currently PHSA has seven Level 2 charging stations and 13 Level 1 charging stations available, primarily for PHSA employees.

- Highlights from PHSA's work on sustainable transport include:
    - Continued offering a 50% transit incentive for TransLink passes. A monthly average of 2,918 PHSA staff subscribers were recorded in 2023.
    - Started planning a 50% subsidy offer for staff using the West Coast Express, the commuter rail service that travels between Downtown Vancouver and Mission on weekdays during morning and evening rush hours.
- Progressed with the Regional EV Framework that has been under development by the Regional EV Steering Committee. This committee was formed to support regional collaboration to provide EV charging infrastructure across the participating health organizations in the Lower Mainland including PHSA.

***Moving forward**, we continue promoting active and green modes of transportation across our portfolio and seeking opportunities that enable and facilitate the process of moving away from the use of fossil fuel*

10 Core sites are facilities that are primarily owned and operated by the health authority and therefore, there is more ability to influence the operations, collect information and implement projects.

in the transportation sector. In the year ahead, we plan to complete the Regional EV Framework in collaboration with our partners in the Regional EV Steering Committee. One of the upcoming initiatives is focused on diving deep into the current operations of our fleet portfolio and developing a clean fleet plan. We acknowledge that the emissions associated with our fleet portfolio is a relatively small portion of our carbon footprint (e.g., 2% of our 2023 emissions offset). That said, we believe a clean fleet plan will inform purchasing and operations related decisions bringing value to the organization.

C. Paper Consumption

- In 2023, PHSA continued the process of deploying the Clinical & Systems Transformation (CST) project. This multi-year project designed to improve the safety, quality, and consistency of patient care across PHSA and supports establishing common clinical and process standards, including workflows, order sets, clinical guidelines, integrated plans of care and a common electronic health record. One benefit of CST deployment is reducing paper use which was further achieved in 2023 thanks to the completion of CST project in multiple key PHSA sites.

***Moving forward**, we continue looking for opportunities to reduce paper use and the emissions associated with our paper consumption. One initiative to highlight, which was being worked on for several years is regarding the use of Sugar Sheet. Currently most of all paper purchases are virgin paper made from trees. The health organizations in BC, including PHSA, are starting a provincial effort to switch from virgin copy paper to a more sustainable paper type called Sugar Sheet. Sugar Sheet paper is a certified carbon neutral paper made from agricultural waste. It is estimated that by switching paper purchases to Sugar Sheet, the health organizations can reduce carbon emissions from paper by 80%.*

2023 GHG Emissions and Offsets Summary Table

Provincial Health Services Authority **2023 GHG Emissions and Offsets Summary**	
GHG Emissions for the period January 1 – December 31, 2023	
Total $BioCO_2$	*24*
Total Emissions (tCO_2e)	*18,778*
Total Offsets (tCO_2e)	*18,754*
Adjustments to Offset Required GHG Emissions Reported in Prior Years	
Total Offsets Adjustment (tCO_2e)	*707*
Grand Total Offsets for the 2023 Reporting Year	
Grand Total Offsets to be Retired for 2023 Reporting Year (tCO_2e)	*19,461*
Offset Investment ($) [Total Purchased Carbon Offset +GST]	*$ 486,525* *$ 510,851*

Notes for above table (provided by the Climate Action Secretariat):

i. *[Note, BioCO2 is included in Total Emissions but not Total Offsets. For K-12 and post-secondary organizations, and BC Transit, Total Offsets might not equal Total Emissions minus Total BioCO2 because offset-exempt emissions for buses are included within Total Emissions.*
ii. *Emissions and offset investment amounts will be validated by CAS prior to distributing invoices.*
iii. *You must round "Grand Total Offsets to be Retired" to a whole number (no decimal places) before multiplying by $25 (e.g., 43.2 = 43, 43.5 = 44).]*

Retirement of Offsets

In accordance with the requirements of the Climate Change Accountability Act and Carbon Neutral Government Regulation, Provincial Health Services Authority **(the Organization)** is responsible for arranging for the retirement of the offsets obligation reported above for the 2023 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.

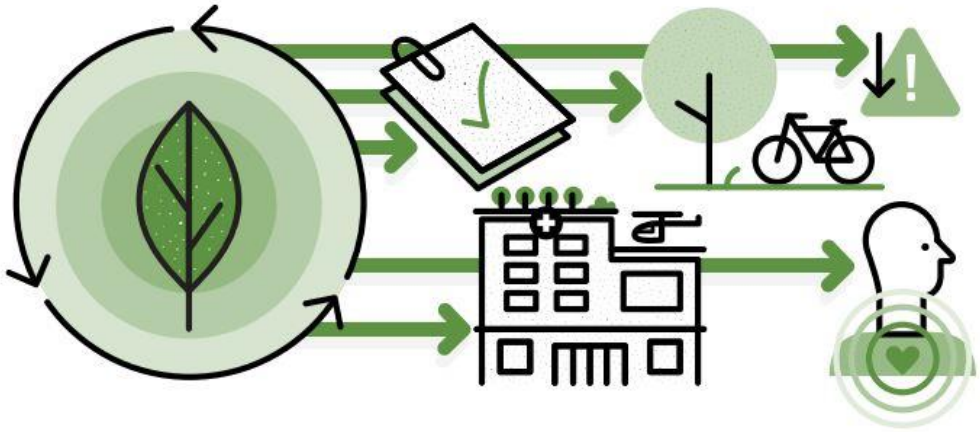
PART 2. Public Sector Climate Leadership

ACTIONS TAKEN to ENHANCE CLIMATE RESILIENCE AND SUSTAINABILITY

A. Climate Risk Management

- Updated the climate resilience guidelines for BC Health Facility Planning & Design to Version 2.0, aligning with new releases from the province and reflecting lessons learned.
- Embedded climate resilience[11] into active major capital projects by providing guidance and support to project teams and consultants, including for the Slocan Site Redevelopment Project and Children's & Women's high-level master plan.
- Completed a portfolio-level climate hazard exposure screen for 12 PHSA facilities across the province to identify areas of vulnerability and prioritize actions.
- Incorporating a resilience lens into the ongoing development of a decarbonization roadmap, aiming to embed low-carbon resilience recommendations into facility planning and renewals decision-making processes.
- Initiated energy studies for BC Cancer – Prince George, BC Cancer – Vancouver, and five buildings at the BC Children's Hospital and BC Women's Hospital & Health Centre, utilizing future climate projections to integrate a climate resilience perspective into energy and carbon management investigations.
- Advanced the implementation of energy upgrades at BC Cancer – Vancouver, effectively enhancing the site's climate resilience alongside achieving project objectives.
- Through the BC Centre for Disease Control (BCCDC), launched the Climate & Public Health Community Centre, providing technical expertise, capacity building, and coordination for climate-related public health efforts across the province.
- Through the BCCDC, developed a mapping tool to visualize public health vulnerability data and investigate the intersection between variables.
- Through Health Emergency Management BC (HEMBC), created a health facility evacuation project team and developed a toolkit focused on patient-centred, culturally safe evacuations, clarifying emergency roles, and enhancing communication across health authorities.
- Collaborated with the Canadian Standards Association (CSA) to add climate risk considerations to the CSA Z8000 Canadian Healthcare Standard.

11 The guidance provided is in alignment with the Climate Resilience Framework and Standards for Public Sector Buildings developed by the Province of BC.



B. Other Sustainability Initiatives

- **Organizational goals and commitments related to environmental sustainability**
    - Knowledge Keeper, Sulksun, Shane Pointe, has gifted six Coast Salish teachings to guide our work with partners. One teaching is Eyhh Slaxin, to be good medicine for each other, the land, water, ecosystem, and all living things. In the spirit of Eyhh Slaxin, PHSA updated its organizational priorities, identifying six North Star priorities which clarify the organization's focus areas. Protecting future generations by supporting planetary health is one of those six priorities, embedding planetary health, energy and environmental sustainability and climate resilience into the business practices, facilities management, and care delivery activities of all staff.
    - To focus, sustain and build organizational commitment to sustainability, in 2023 PHSA hired:
        - Executive Director, Planetary Health - to develop and implement a Planetary Health strategic plan, while collaborating with PHSA programs, employees, medical staff, clinical teams, Indigenous Health, elders, and knowledge keepers. PHSA Planetary Health supports a provincial response to deep decarbonization and address the socio-ecological challenge of climate change.
        - Sustainability Advisor, Supply Chain - to design and lead environmental sustainability initiatives for PHSA's supplier community, engaging with partners to ensure suppliers understand our sustainability commitments and external reporting requirements.
    - In collaboration with PHSA programs, the Planetary Health team is developing a strategic framework to support the creation of a strategic plan which will be guided by our Coast Salish Teachings, and in alignment with B.C.'s Declaration on the Rights of Indigenous Peoples Act (DRIPA) and the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). The main themes of this strategy work center on the following priorities:
        - reducing scope 1,2 and 3 greenhouse gas emissions
        - promoting sustainable practices in both operations and clinical areas
        - mitigating the organization's impacts on the climate through projects, education, and training
        - improving the social, environmental, and Indigenous determinants of health
        - Supporting climate resilience work
        - Supporting provincial planetary health initiatives
            - address sustainability in supply chain, procurement, and contracts.
            - leverage the co-benefits, connections, and resources between initiatives.

        - prioritize energy and environmental sustainability in executive and board decision-making, while building a culture of sustainability and capacity for this work across the health system.
    - The planetary health strategic plan will identify key challenges and opportunities through a comprehensive analysis of the current state of planetary health at PHSA and the good work that is underway across the organization. Engaging with partners and Indigenous Peoples is a critical component of our planning work and will bring together diverse perspectives through a planetary health stewardship committee which will be established shortly.

- **Awards and recognitions**

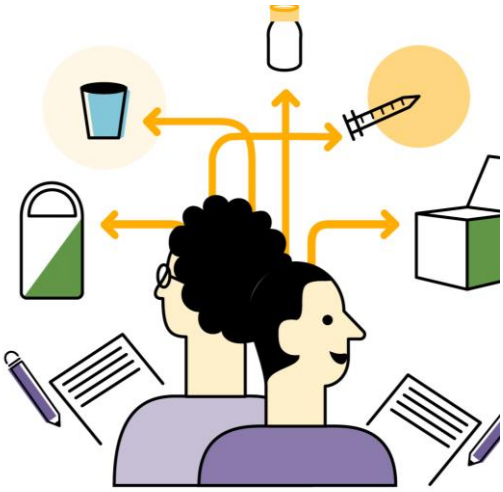
    - Efficiency in Action Award – In May 2023, PHSA was awarded the FortisBC Efficiency in Action Award in recognition of its outstanding efforts in energy efficiency and emissions reduction. This award celebrates organizations that are leading the way in saving energy, reducing carbon emissions, and promoting safety across British Columbia.

    - Transit Friendly Employer Certification – In January 2023, PHSA received a Transit-Friendly Employer certification from TransLink. This certification program recognizes leading organizations for making employee travel easy, affordable, and climate friendly. This certification was granted to PHSA thanks to the organization's transit incentive program available to staff.

    - Energy Efficiency Award for Teck Acute Care Center – In December 2023, PHSA received an Energy Efficiency award for the Teck Acute Care Center from the Canadian Coalition for Green Health Care. This award and the certificate of recognition were granted to PHSA after the review of the 2022 Green Hospital Scorecard submissions received from the 65 hospitals across Canada who participated in this process.

- **Staff engagement and empowerment**
    - In 2023, PHSA continued to provide training, resources, toolkits, recognition, and support to Green+Leaders, GreenCare network members and various green teams. In 2023, 49 new Green+Leaders joined the community, bringing the total number of Green+Leaders at PHSA to 349 that have joined the program since 2009.
    - PHSA continues to have active green committees, green teams, and planetary health groups led by staff at various sites. These committees explore and implement a broad variety of initiatives related to environmental sustainability and planetary health. New teams that started in 2023 are the Medical Staff Association's Planetary Health committee and the Green Surgical Initiative at BC Children's Hospital and BC Women's Hospital + Health Centre.
    - In 2023, eight grants, totaling approximately $8,000 were offered to PHSA staff through the Green+Leaders program, in partnership with the Health Promotion Initiatives Fund (HPIF) team. Successful projects demonstrated strategies to advance and embed sustainability in the workplace, while simultaneously improving staff well-being.

- PHSA continues to support workplace leadership opportunities that motivate and empower staff to take action. In 2023, the Green+Leaders program facilitated five orientation sessions, where 18 new PHSA Green+Leaders received education, resources and tools to start their journey in environmental sustainability & health care.
- This year, we refreshed our Going Green at Work course on Learning Hub which was designed to empower health-care staff to embark on their sustainability journey.
- A total of 549 PHSA staff engaged with sustainability by taking the annual GreenCare Survey that seeks to understand staff perspectives, familiarity with, and actions related to planetary health, climate change, and environmental sustainability. We learned that for 2023:
    - 71% of PHSA staff agree or strongly agree that they know what 'planetary health' means.
    - 93% of PHSA staff agree or strongly agree that climate change impacts their health.
    - 13% of PHSA staff own an electric vehicle (EV).
    - 33% of PHSA staff reported that they plan to own an EV within the next 5 years.
    - There was a 4% increase in public transit commuting compared to 2022 survey data.
    - There was an overall 3% increase in clean transport for commuting.
    - There was a 2% decrease in commuting by single occupancy gas or diesel vehicles compared to 2022 survey data.
- In 2023, we began a sustainability performance data visualization project using Tableau to create a public-facing dashboard to showcase PHSA's progress with regards to key performance indicators in the field of energy, emissions, and waste management.



- **Knowledge sharing and awareness building**
    - 158 PHSA staff and medical staff are registered members of the GreenCare network and receive planetary health news, and sustainability related organizational updates, opportunities to get involved, and access to resources. In 2023, our highlights included seven GreenCare newsletters and launching a GreenCare Lunch & Learn working group in partnership with PHSA staff, to guide inter-institutional learning across B.C. health organizations.
    - In 2023, four Lunch & Learns were offered by GreenCare to promote sustainability within health care.
    - In summer 2023, BC Cancer and the Energy and Environmental Sustainability (EES) Team launched a joint project to explore clinicians' commitment to sustainable health care. The collaboration with the BC Cancer Planetary Health Unit, EES team, and UBC Sustainability Program aimed to reveal frontline clinical teams' knowledge, willingness, and challenges in adopting sustainability practices.

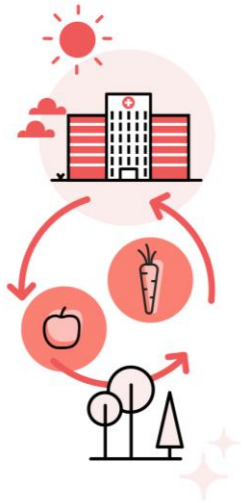
- In October 2023, the Green+ Leaders recognition event brought together over 100 sustainability advocates from B.C. health authorities, featuring workshops on change management and the circular economy, along with networking opportunities and sharing success stories, leaving participants inspired to advance their journey towards sustainable health care.
- PHSA supports professional development related to energy and carbon management through workshops and educational sessions sponsored by BC Hydro and Fortis BC.

- **Waste management and environmentally preferred materials**
  - PHSA facilities comply with a standardized recycling program which includes mixed containers and paper, organic waste, and batteries. Depending on collection logistics, some sites may also participate in recycling programs for expanded polystyrene, pallet wrap, printer cartridges, and mattresses, scrap metal, lighting, and other materials. Acute care facilities have an internally developed target of reaching 40% waste diversion by 2030 and non-acute care facilities have a target of 60% by 2023.

  - From January 1 to December 31, 2023, a total of 896 PHSA staff completed a LearningHub course in waste management resulting in an increase of 137 staff since 2022. This module familiarizes learners with the impacts of improper waste management and how to discard different types of waste appropriately.
  - In 2023, a protective personal equipment (PPE) recycling program was trailed at the BC Children's Hospital and BC Women's Hospital + Health Centre, as a first step before it gets rolled out provincially in 2024.
  - In 2023, PHSA Supply Chain established a provincial "Sustainable Procurement Innovation Group", the evolvement of the Sustainable Procurement Working Group, established for health authorities to engage with PHSA Supply Chain/Procurement on how best to embed sustainability, climate resilience and planetary health into procurement and operations. The purpose of the new group is to:
    - share sustainable procurement work happening in each health authority and PHSA Procurement,
    - identify new opportunities to reduce the environmental impact of B.C. health care, and
    - improve social and Indigenous reconciliation efforts.
  - In 2023, PHSA in collaboration with Vancouver Coastal Health and consultants undertook a "Reusables First" project. Through this project, 10 high impact procurement opportunities were identified where single-use plastic items could potentially be safely switched to reusable alternatives. Implementation strategy is currently underway.
  - In 2023, a group of nurses at the Gynecology Surgical Suites of BC Women's Hospital innovatively switched from single-use plastic bags to hold patient belongings to pillowcase. This change reduced plastic bag consumption from 800,000 in 2022 to 62,500 in 2023.

- The GreenCare website is a hub of resources, stories of success, events and inspiration centered on engaging PHSA and other B.C. health care staff with environmental sustainability and resilience in the workplace. We have observed increased engagement and actions taken by users once on the site and receive daily inquiries about environmental sustainability topics related to health-care provision. The website provides PHSA staff with tools and resources to make environmental improvements at their worksite and contribute to health and wellness in several areas. In 2023, we averaged 1,525 users a month, which is about 300 users/month more than the prior year.

- **Advancements in food**
  - Work is underway to co-create a Playbook for Food Infrastructures for Planetary Health. This Playbook provides an overview of why food infrastructures are important for health; what needs to be considered to leverage key opportunities; and key strategies for how needed shifts can be achieved. Next steps include identifying requirements and specifications for sustainable food in new construction healthcare projects.
  - Provided education opportunities and funding for staff-led projects that bring sustainable food to our sites while reducing waste and GHG emissions.
  - Established partnerships with groups like Patient Experience and Indigenous Health to increase sustainable and traditional food options for patients.
  - Reduced waste from Food Services operations
  - In collaboration with others including FeedBC, PHSA joined the 2023-2025 Nourish Leadership cohort to:
    - Bring the concept of food into healing.
    - Improve patient and staff food experience.
    - Establish planetary health menus.
    - Advance sustainable purchasing.



SUCCESS STORIES

PHSA receives 2023 Efficiency in Action Award

In May 2023, PHSA was honoured with the FortisBC Efficiency in Action Award in recognition of its outstanding efforts in energy efficiency and emissions reduction. This award celebrates organizations that are leading the way in saving energy, reducing carbon emissions, and promoting safety across British Columbia. PHSA's consistent commitment to energy efficiency, low-carbon resilience and environmental stewardship over the years has earned them this accolade.

Unlike many awards that recognize a specific project, the FortisBC Efficiency in Action Award acknowledges PHSA's sustained dedication to energy efficiency across its building portfolio. The award highlights the organization's collaborative efforts, partnerships, and innovative solutions in addressing energy consumption and carbon emissions, as well as the significant amount of incentive dollars secured for investing in low-carbon resilience infrastructure. In 2023, PHSA was one of 11 B.C. organizations, and the only health authority, to receive this esteemed award.

Collaboration is key to PHSA's success, according to Ghazal Ebrahimi, energy and carbon emissions manager at PHSA. "We're always looking for energy efficiency and carbon emission reduction opportunities across our building portfolio," she says. "Identifying those opportunities and seeking solutions in a complex setting, such as the health care sector, can only be done through collaborative efforts and making meaningful partnerships."

PHSA's ongoing energy efficiency and emissions reduction projects, in partnership with FortisBC, have been pivotal in taking bold steps towards our climate targets. Over the past five years, PHSA has secured more than $3.5 million in incentives through the Custom Efficiency Program from FortisBC alone. This funding supports low-carbon resilience related studies and capital projects across multiple facilities, such as those at BC Cancer – Vancouver, BC Cancer – Victoria, BC Children's Hospital, and BC Women's Hospital and Health Centre. These energy-efficiency and low-carbon resilience upgrades are projected to remarkably reduce fossil fuel use at our facilities contributing significantly to PHSA's energy use and carbon emissions reduction goals. For example, the ongoing infrastructure upgrade at BC Cancer – Vancouver is projected to save more than 13,000 gigajoules (GJ) of natural gas per year, resulting in more than 660 tCO2e per year which is more than one third of the emissions from this site.

Left to right: Danielle Wensink, FortisBC; Shubhkarm Sidhu, PHSA; Elizabeth Manhas, FortisBC; Ghazal Ebrahimi, PHSA; Cathy McDonald, PHSA; Mohammed Abdelaziz, formerly PHSA (currently FHA); Hana Nguyen, PHSA; Joe Mazza, FortisBC.

The FortisBC Efficiency in Action Award signifies a well-deserved recognition of PHSA's contributions towards creating a low-carbon resilient and environmentally conscious health-care system. The award's selection criteria were based on organizations that displayed exceptional efforts in reducing energy use and greenhouse gas emissions. PHSA stood out among other nominees due to its leadership, innovation, and dedication to sustainability. Ghazal notes, "With our aging infrastructure and the fact that many of our facilities need to stay open 24/7, it's not easy to do these retrofits." Elizabeth Manhas, key account manager at FortisBC, recognized PHSA's outstanding progress and nominated the health authority for the award.