

2021 Climate Change Accountability Report

Providence Health Care



Main Entrance
St. Vincent's: Brock Fahrni



Declaration Statement

This Climate Change Accountability Report for the period January 1, 2021 to December 31, 2021 summarizes our greenhouse gas (GHG) emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2021 to reduce our greenhouse gas emissions and our plans to continue reducing emissions in 2022 and beyond.

By June 30, 2022 Providence Health Care's final 2021 Climate Change Accountability Report will be posted to our website at bcgreencare.ca. Final Climate Change Accountability Reports will also be posted on the BC Government CNG [website](#) by June 30, 2022 to meet legislative requirements.

Retirement of Offsets

In accordance with the requirements of the Climate Change Accountability Act and Carbon Neutral Government Regulation, Providence Health Care (**the Organization**) is responsible for arranging for the retirement of the offsets obligation reported above for the 2021 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.

Cover photo: St. Vincent's: Brock Fahrni Long Term Care home located at 4650 Oak St, Vancouver

Executive Summary



Executive Summary: Providence Health Care, CCAR 2021

Fiona Dalton, President & Chief Executive Officer

It gives me great pleasure to present Providence Health Care's (PHC) twelfth annual Climate Change Accountability Report (CCAR) for 2021. For twelve consecutive years, Providence has been proud to be carbon neutral, through our purchasing of carbon offsets. As an organization driven by innovation and social justice, we believe that our role as health care providers goes beyond caring for individuals and to caring for the environment, too.

Stewardship is one of our key organizational values and throughout our long history of providing compassionate and innovative care, teaching and research, we have been responsible and accountable stewards. For us, that includes taking personal responsibility for the carbon footprint produced by our operations and facilities.

In 2021, Providence had a carbon footprint of 11,838 tons of carbon dioxide equivalent (tCO₂e), which was offset at a total cost of \$295,950. This represents a 2.7% per cent increase in carbon emissions relative to the 2007 baseline year.

In 2021, Providence reached substantial completion of several energy efficiency and GHG reduction projects at our core sites such as Mount Saint Joseph Hospital, Holy Family Hospital, St. Vincent's: Langara, St. Vincent's: Brock Fahrni and Youville Residence which collectively received an incentive of \$2,575,077 from FortisBC in recognition of the significant carbon reduction achieved. It is worth highlighting the project at Brock Fahrni which added cooling and reduced carbon emissions by 80%. Also, Langara project utilized Carbon Neutral Capital Program funding and took advantage of a \$365,388 incentive from FortisBC, thus minimized the investment required by Providence.

PHC's Energy Manager played a key role in initiation of a new project on waste-to-energy in partnership with UBC. This project will develop a new innovative technology for handling our food and organic wastes in our health facilities and convert those waste to useful energy and soil amendments. Thus, it can give us an opportunity to move towards a zero food waste health care.

In 2022, we will continue to improve our environmental performance through energy efficiency initiatives, educations and coordinated efforts with our health care partners. We look forward to the positive impacts that this work will bring, including saving energy, decreasing air pollution, and ultimately adding to the health and wellness of the people, workplaces and the communities we serve.



Date: May 27, 2022

Fiona Dalton
President & Chief Executive Officer
Providence Health Care



Our CO₂ Footprint

2021 GREENHOUSE GAS (GHG) EMISSIONS BREAKDOWN AND OFFSETS APPLIED TO BECOME CARBON NEUTRAL

PHC reports its organizational carbon footprint 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, PHC's carbon footprint is comprised of six different greenhouse gases, which are converted into a common metric of tonnes of carbon dioxide equivalent (tCO₂e). In scope carbon emissions are grouped in three main categories:

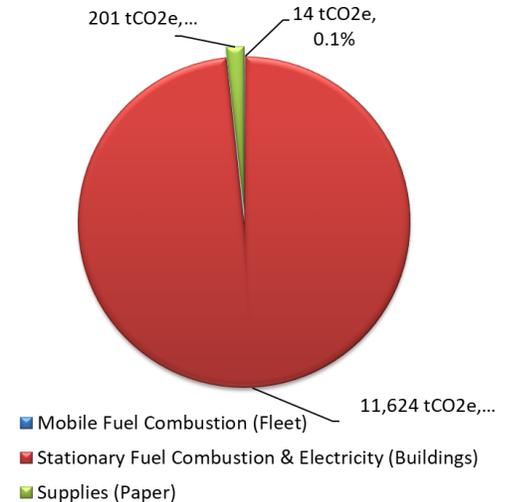
1. Stationary Fuel Combustion
2. Mobile Fuel Combustion
3. Supplies (Paper)

In 2021, PHC's carbon footprint offset was 11,838 tonnes of carbon dioxide equivalent (tCO₂e). That represents a 2.7% per cent increase in PHC's carbon footprint offset since 2007.

Over 98 per cent of PHC's in-scope emissions are attributed to the building portfolio, and over 60 per cent of those emissions are associated with steam consumption.

To become carbon neutral in 2021, PHC purchased carbon offsets at a total cost of \$295,950 from the Ministry of Environment and Climate Change Strategy. This amount is calculated based on PHC's 2021 carbon footprint offset of 11,838 tCO₂e at \$25/ tonne CO₂e plus GST.

2021 Providence Health Care's Greenhouse Gas (In-Scope) Emissions by Source



Providence Health Care 2021 GHG Emissions and Offsets Summary	
GHG Emissions created in Calendar Year 2021	
Total Emissions (tCO ₂ e)	11,843
Total BioCO ₂	4.47
Total Offsets (tCO ₂ e)	11,838
Adjustments to Offset Required GHG Emissions Reported in Prior Years	
Total Offsets Adjustment (tCO ₂ e)	0.0
Grand Total Offsets for the 2021 Reporting Year	
Grand Total Offsets (tCO ₂ e) to be Retired for 2021 Reporting Year	11,838
Offset Investment (\$25 per tCO ₂ e)	\$ 295,950
[Total Purchased Carbon Offset +GST]	\$ 301,747.50

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 will 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).]

CHANGES TO PROVIDENCE HEALTH CARE'S PORTFOLIO

PHC's usable facility space has increased by 5.1 per cent since the 2007 base reporting year, which is largely due to the additions such as Honoria Conway, and an increase in leased spaces. PHC 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	2017	2018	2019	2020	2021
Distinct PHC buildings	n/a	39	39	45	44	45
% Owned	n/a	91%	90%	89%	89%	89%
% Leased	n/a	9%	10%	11%	11%	11%
Usable square meters ¹	174,002	178,302	181,751	182,713	182,914	182,550
Full-time employee equivalents ²	4,038	4,816	4,914	5,062	5,188	5,443
Weather (summarized in Heating Degree Days) ³	2,870	2,922	2,720	2,844	2,759	2,875

Notes for above table:

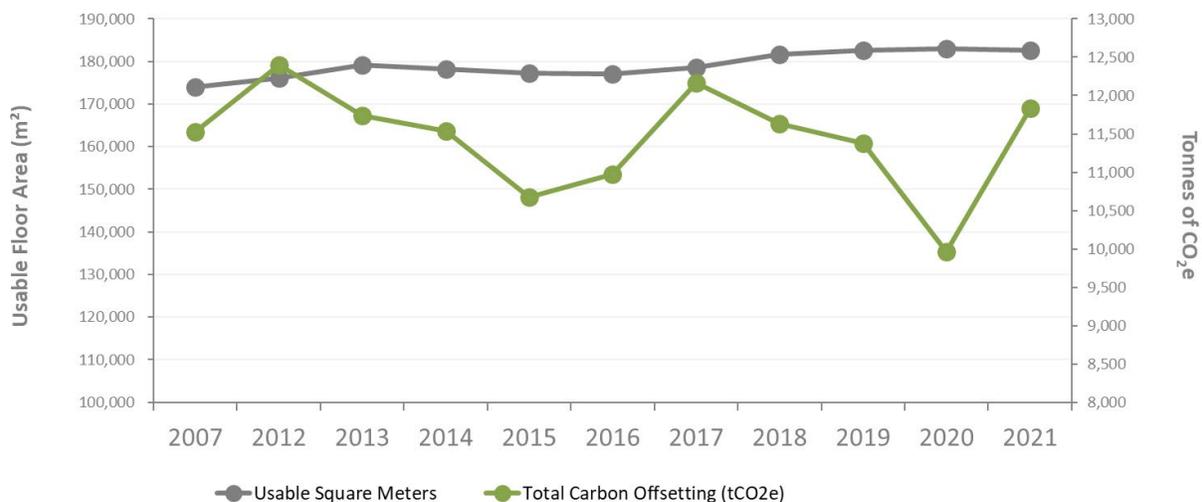
¹ Usable area excludes roof tops, interstitial spaces, and parking areas.

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 PHC's facilities are located across B.C., the majority of buildings are in the metro Vancouver area, so HDD's for Vancouver were used.

Since 2007, PHC's carbon footprint has increased along with increase in usable floor area and staff. As of 2021, emissions per full-time employee (2.17 tCO_{2e}/FTE) have decreased by 24 per cent since 2007, and emissions per unit of floor area (0.06 tCO_{2e}/m²) have decreased 2 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. PHC's 2021 emissions per HDD (4.12 tCO_{2e}/HDD) is increased by 2.48% than the baseline year. This change is mostly because of the increased energy required for delivering 100% fresh air due to the COVID-19 pandemic.

PHC Useable Floor Area and Emissions (2007-2021)



Our Carbon Footprint (tCO₂e)	2007	2017	2018	2019	2020	2021
Mobile fuel combustion (fleet & other mobile equipment)	15	38	26	50	22	14
Stationary fuel combustion & Electricity (Buildings)	11,448	10,679	11,266	11,007	10,340	11,628
Supplies (Paper)	70	356	346	324	202	201
Total carbon footprint (tCO₂e)	11,533	11,074	11,638	11,380	10,570	11,842
Total BioCO ₂ emissions (no offsets required) ^{1,2}	-1	-5	-4	N/A	-6	-4
Total carbon footprint for offsetting (tCO ₂ e)	11,532	11,069	11,634	11,380	10,564	11,838
Adjustments / Corrections	0	0	0	0	-606	0
Total Carbon Footprint - for offsetting after adjustments (tCO₂e)	24,002	18,549	19,342	18,861	18,173	11,838

\$	Purchased Carbon Offsets	\$ -	\$ 304,100	\$ 290,850	\$ 284,500	\$ 248,950	\$ 295,950
	Purchased Carbon Offsets +GST	\$ -	\$ 319,305	\$ 305,393	\$ 298,725	\$ 261,398	\$ 310,748

KPI's	Emissions per full-time employee (tCO ₂ e/FTE)	2.86	2.53	2.37	2.25	1.92	2.17
	Emissions per facility space (tCO ₂ e/m ²)	0.066	0.068	0.064	0.062	0.054	0.065
	Emissions per heating degree day (tCO ₂ e/HDD)	4.02	3.95	4.24	4.05	4.18	4.12

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 PHC'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.

Actions to Reduce Our CO₂ Footprint

2021 LIST OF ACTIONS TAKEN TO REDUCE CO₂ FOOTPRINT

Stationary Sources (Buildings)

- **Continuous optimization:** PHC completed the implementation phase of BC Hydro's Continuous Optimization Program at St. Paul's Hospital, and progressed with the implementation phase at Mount Saint Joseph. Also, we are looking into implementing control and optimization for other core sites for 2022.
- **Waste heat recovery and energy upgrades:** PHC completed major heat recovery projects at several sites including St. Paul's Hospital, Mount Saint Joseph, Langara, Holy Family, Youville and Brock Fahrni. The heat recovery project at Brock Fahrni is one of the most successful projects and could expect to lower the site's emissions by about 80%. We expect the same success story at other sites, such as Langara and Holy Family when implemented in 2022. A few energy retrofit studies were conducted for St. Paul's Hospital and Honoria Conway, which will be implemented in 2022. Four lighting upgrades were also implemented in 2021, which included St. Paul's Hospital, Mount Saint Joseph, Holy Family and Youville. Multiple energy studies also started and progressed towards completion for various buildings in the PHC 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.
- **Facilities Maintenance and Operations staff engagement:** The PHC Energy and Carbon Management team has continued to build an engagement strategy with Facilities Maintenance and Operations (FMO) departments under the Energy Wise Program funded by BC Hydro and FortisBC. The outreach focuses on reviewing energy use in buildings, identification of energy and carbon reduction opportunities and optimization of existing equipment/plants.
- **Guidelines for Low Carbon Resilience and Environmental Sustainability in new construction projects:** PHC's energy and carbon management team has been actively contributing to the Energy & Environmental Sustainability team's Guidelines for Low Carbon Resilience and Environmental Sustainability for new construction and major renovation projects in health care, with the intent of ensuring these projects are built to the highest standard of energy efficiency and carbon management within financial constraints. These guidelines are aligned with the provincial mandates and policies with regards to environmental sustainability.
- **Behaviour change:** The Energy and Environmental Sustainability team continues to promote energy conservation, GHG emissions reduction and other aspects of environmental sustainability through awareness and behaviour change in two main ways: The GreenCare¹ network and the Green+Leaders community. Providence also participated in the 2021 Energy Wise Program, sponsored by BC Hydro and FortisBC, to carry out training webinars, staff engagement activities and advertising programs in energy and environmental sustainability. This program is ongoing and

¹ <https://bcgreencare.ca/>

will be completed in 2022. GreenCare 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+Leaders² are staff volunteers from the health authority who help create healthy workplaces and a healthy planet. Every year, they make a significant contribution to the improvement

of the environmental performance. In 2021, the PHC Projects, Planning & Facilities Management team accepted the Energy Efficiency Award from FortisBC for its efforts and projects in energy efficiency and GHG reduction in its health care facilities.



Figure 1- PHC F Projects, Planning & Facilities Management Team. From right: David Marier, Randy Poirier, Tony Munster (ED), Bobbie Bee, Mehrdad Gharibnavaz, Lawrence Penkar, Gaurav Shah

Mobile Sources (Fleet and other vehicles)

- An electric vehicle baseline and feasibility study at PHC was carried out in 2021, which included fleet vehicle electrification. This study provided the ground work for the development of a potential electric vehicle strategy, to increase and improve access to electric vehicle charging infrastructure and continue to decrease emissions from mobile sources.
- Providence continues to partner with Provincial Health Services Authority and Vancouver Coastal Health to provide a shuttle service between sites.
- Providence sites offer bike parking stalls to encourage and enable active transportation by bike.



Supplies (Paper)

- In partnership with other B.C. health organizations, PHC identified the benefits of purchasing post-consumer recycled (PCR) paper as opposed to virgin paper with the aim of reducing environmental impacts such as carbon

² <https://bcgreencare.ca/our-progress/>

emissions, water consumption and air pollution associated with paper supplies. PHC continues to work with suppliers and vendors to identify PCR paper options at reasonable prices and identify ways to formally increase the volume of PCR paper in inventory. Engaging relevant departments across the health organization is one of the identified ways to act toward formally increasing the volume of PCR paper in inventory.

- As part of the Green+Leaders program, PHC provides Paperless Meeting Toolkits³ to encourage and support eliminating the practice of printing documents to hand out at meetings.

Public Sector Leadership

Climate Risk Management

- In 2021, the Energy and Environmental Sustainability team supported planning and project teams to incorporate climate mitigation and resilience strategies into capital project design and construction, in line with the Climate Resilience Guidelines for BC Health Facility Planning & Design⁴ (released December 2020).
- Energy and Emission Study including climate risk assessment was conducted for the business planning process for the new St. Vincent Heather Long Term Care (SVHLTC) facility.
- Two climate risk and adaptation related research projects were completed and published in peer-reviewed scientific journals in 2021. One was focused on examining the impacts of wild fire smoke on indoor air quality at healthcare facilities⁵. The other research project was focused on identifying climate change impacts on occupants on long-term care facilities⁶.
- The Energy and Environmental Sustainability team contributed to policy updates in relation to climate change (e.g. Ministry of Health's Capital Policy 12 - Carbon Neutral and Climate Resilient Health Facilities).

Other Sustainability Initiatives

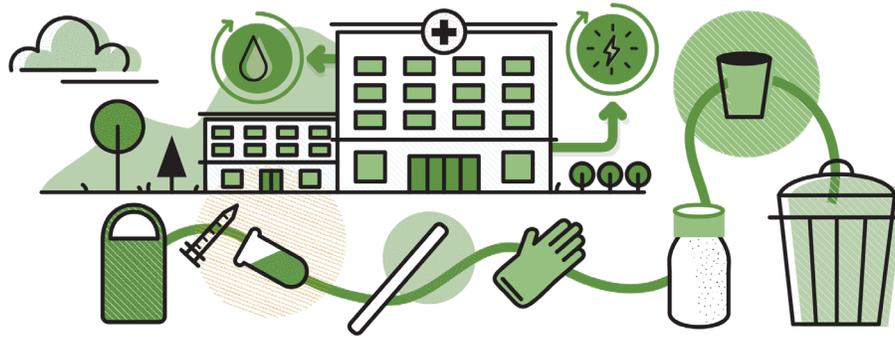
- The Green+Leaders is a network of health-care staff volunteers who are engaged in advancing sustainability practices at PHC. In 2021, PHC continued to provide training, resources, toolkits and recognition to support the Green+Leaders program and various green teams within PHC. In 2021, five new Green+Leaders were added to the program, for a total of 24 active staff volunteers across PHC and a total of 39 PHC staff joined since 2009.
- PHC staff can also become a part of the GreenCare network, and sign up to receive updates from the network, including invites to lunch and learn events, webinars and dialogue sessions. In addition, resources on the GreenCare website equip PHC staff with the necessary tools and tactics to make environmental improvements at their worksite and contribute to health and wellness in areas of energy conservation, reducing paper and material waste, active and clean transportation.
- In alignment and active collaboration with the PHC Communications team, education and awareness communication on the GreenCare network is also shared via PHC's internal communication channels such as newsletters and intranet. These efforts continue to advance sustainability practices and celebrate PHC staff successes.
- In 2021, three grants were sponsored by the PHC Workplace Initiative Fund for environmental sustainability projects, and approximately \$2850 in total was distributed to recipients of the grant. Projects that qualified for the fund were required to coordinate a healthy living project in the workplace, and promoted themes of waste reduction, with several co-benefits including improvements to staff well-being.

³ https://greencareenv.wpengine.com/wp-content/uploads/2021/09/GLToolkit_PaperlessMeetings.pdf

⁴ <https://bcgreencare.ca/resource/climate-resilience-guidelines-for-bc-health-facility-planning-design-2/>

⁵ [ijerph-18-09811-v2 \(1\).pdf](https://www.ijerph-18-09811-v2(1).pdf)

⁶ <https://www.sciencedirect.com/science/article/pii/S2590252021000222>



- PHC continues to support workplace leadership opportunities that support behaviour change and staff engagement through informative educational opportunities. In 2021, the Green+Leaders program created and facilitated six learning sessions, two training sessions for new staff, and 10 newsletters and bulletins were distributed to staff.
- The 2021 GreenCare Survey, which aims to gain knowledge on staff thoughts and opinions about sustainability, revealed that 95% of PHC staff agree or strongly agree that health care organizations should demonstrate leadership when it comes to environmental health and wellness in the workplace and our communities. The same survey revealed that 94% of PHC staff agree that health care organizations should work to support health public policies that support action on climate change and biodiversity loss.
- The 2021 GreenCare Survey results show that 10% of PHC staff own electric vehicles, commuting by electric vehicle has increased from 2% to 5% percent of commutes (compared to 2020), and that in total 42% of PHC staff are planning to own an electric vehicle in the next five years; this is a 7% increase compared to 2020 survey results.
- PHC staff reported increased use of sustainable modes of transportation in 2021 compared to last year. Commuting by internal combustion engines (gas/diesel) single occupancy vehicle decreased by 7% in 2021 (compared to 2020), and commuting by public transit increased by 9% in 2021 (compared to 2020).
- PHC staff have access to sustainable transportation education and resources opportunities, through the Sustainable Transportation Series, and through transportation resources available on the GreenCare Website.
- PHC facilities comply with a standardized recycling program⁷ which includes mixed containers, mixed 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. Each facility has a target of reaching 50 per cent waste diversion by 2030.
- From January 1, 2021 to December 31, 2021, a total of 657 PHC staff completed the online Waste Management Basics Learning Module⁸ available on the Learning Hub.
- In August 2021, St. Paul's Hospital began participating in a mask recycling pilot project, contributing to a Ministry of Health business case for province-wide mask recycling in health-care facilities.
- In 2021, the draft Circular Health Care resource document was created, intended to provide tangible actions for PHC to avoid and reduce waste.

⁷ Recycling program was paused for the majority of 2021 due to the COVID-19 pandemic, but restarted again in November 2021.

⁸ <https://learninghub.phsa.ca/Courses/9114/waste-management-basics-learning-module-online>

- The GreenCare⁹ website underwent a full refresh and relaunched in October 2021. Since then, we have averaged 1,300 users per month and have observed increased engagement and actions taken by the users once on the site. Our Resources¹⁰ section of the website that presents a variety of reports, case studies and toolkits is the most visited section of the website. The GreenCare website also provides a hub for environmental sustainability-related resources and opportunities and is centered on engaging PHC and other B.C. health care staff with environmental sustainability and resilience in the workplace.
- According to the GreenCare website analytics, since the relaunch in October 2021, the number of Green+Leaders¹¹ monthly registrations have doubled.
- PHC supports professional development through workshops and educational sessions sponsored by BC Hydro and FortisBC.
- PHSA Supply Chain internal working group initiated to develop a Sustainable Procurement Policy (currently under development). PHSA Supply Chain provides all elements of supply chain management including contracting and materials management on behalf of all six B.C. health authorities. An initiative called Environmentally Preferable Purchasing has been in action since late 2019 within PHC and in partnership with the other B.C. health authorities. The goal of this initiative is implementing formal processes in supply chain to weigh products and services against environmental criteria.
- Environmental questions were added to Facilities Management pre-qualification of 19 consulting categories such as: Architectural Services, Professional Engineers, Functional Program, Clinical Health Services, and Asset Management Services.
- The Energy and Environmental Sustainability team engaged Health Authority furniture vendors in conversations about environmental sustainability of their products.
- In 2021, the Energy and Environmental Sustainability team completed a research project focused on identifying water saving opportunities at the healthcare facilities in the Lower Mainland. Acting on the recommendations of this study will be discussed in the coming year.
- In 2021, the Energy and Environmental Sustainability team worked toward updating the design guidelines for health care new construction and major retrofits. The new guidelines are called Low Carbon Resilience and Environmental Sustainability Guidelines for Health-care New Construction¹² and aims to:
 - 1) Provide a set of recommendations to inform the detailed design phase of new and replacement construction for acute and long-term care facilities
 - 2) Inform all members of a project team in the development of project components specific to the Statement of Requirements and the Low Carbon Resilience and Environmental Sustainability Scope of Work
 - 3) Enable the highest standard of human and environmental health within health-care facilities
- In 2021, the PHC Energy Management team has launched an innovative Waste-to-Energy (WtE) project in partnership with the UBC bioenergy department. The objective of this project is to collect all the organic and food wastes of all the facilities and convert them into fuel (biogas) and fertilizer, thus not only preventing waste addition to land field, but also making use of the byproduct of this conversion.



⁹ <https://bcgreencare.ca/>

¹⁰ <https://bcgreencare.ca/resources/>

¹¹ Green+Leaders are staff volunteers from the health authority who help create healthy workplaces and a healthy planet. Each year, they make a significant contribution to the improvement of the environmental performance.

¹² <https://bcgreencare.ca/resource/guidelines/>

- In 2021, the Energy and Environmental Sustainability team completed the process of updating its Sustainability Strategic Framework. The updated framework reflects recent events in the context of B.C. and the health organizations. These events include: Changes in legislation, increased public interest in environmental sustainability and climate change, health authority executive mandates relating to a low carbon economy/climate change, and staff interest/engagement with regards to environmental sustainability. The refreshed framework ensures relevance, alignment and accountability. Under the refreshed strategic framework, the Energy and Environmental Sustainability team continues to drive the push for environmentally sustainable and climate resilient health care through seven inter-related focus areas: climate change, energy and carbon, food, leadership and innovation, materials, transportation, and water.

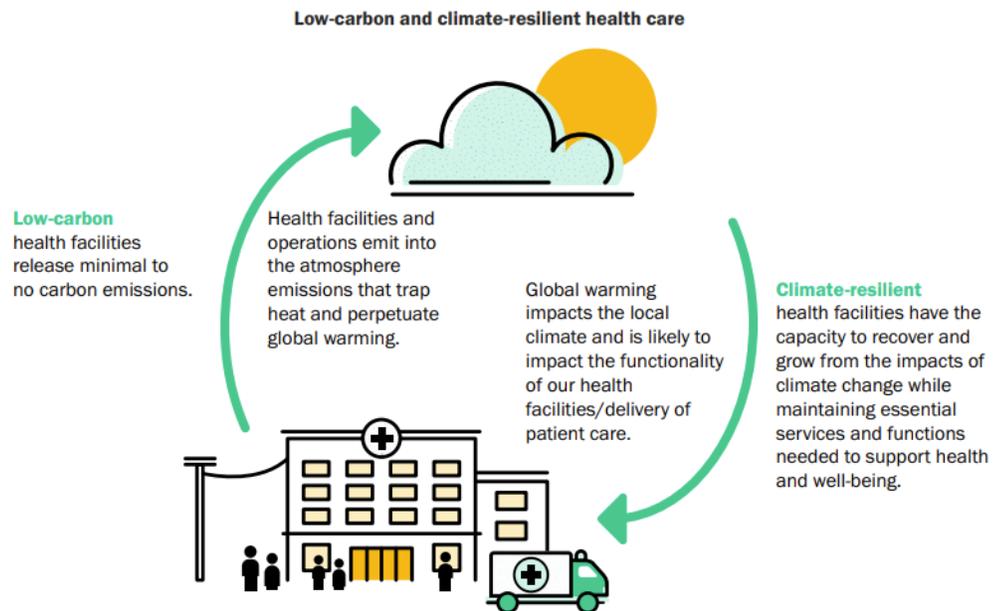


PHC's Energy and Environmental Sustainability team focus areas

FUTURE ACTIONS TO REDUCE CO₂ FOOTPRINT

PHC plans to continue reducing GHG emissions and energy in the following ways:

- **Optimize our existing buildings:** Planning and implementing energy efficiency and carbon emissions reduction projects in our existing building portfolio by utilizing the Carbon Neutral Capital Program (CNCP) as our primary funding source.
- **Efficient new construction:** Implementing project-specific energy and carbon performance targets to ensure that our new buildings are as energy and carbon efficient as possible.
- **Managing climate risks:** In partnership with key stakeholders, conducting assessments and implementing necessary measures to move toward a low carbon climate-resilient health system, manage climate risks to our facilities, and break the chain of cascading impacts on the services we provide in our health care facilities and our broader communities of care.
- **Systemic change:** Implementing standards, guidelines and processes to embed energy and carbon management principles further into standard operations.
- **Behavior change and staff engagement:** Engaging and educating our staff, via the existing Green+Leaders program, GreenCare Network and through collaboration with PHC's Health Promotions Initiative team and Communications team as well as participation in the Energy Wise Network Program.
- **Innovation and demonstration:** Leveraging the innovative Green Revolving Fund approach that has been initiated for PHC to support.
- Ongoing **investment in energy conservation** through utility cost avoidance achieved through conservation. In addition, investment on low carbon electrification for all the building utilizing Clean BC incentives will be our main focus in upcoming years.
- **Align with our core mandate:** Striving to advance health care practices that respect environment stewardship by working with the Energy and Environmental Sustainability team's refreshed Strategic Framework, noting that the environmental impact from health care facilities, operations and services influences the health of populations and patients we serve. PHC will engage in a collaborative approach to create a sustainable and environmentally responsible health care system, which continues to advance health and wellness in its broadest sense.



Feature Projects

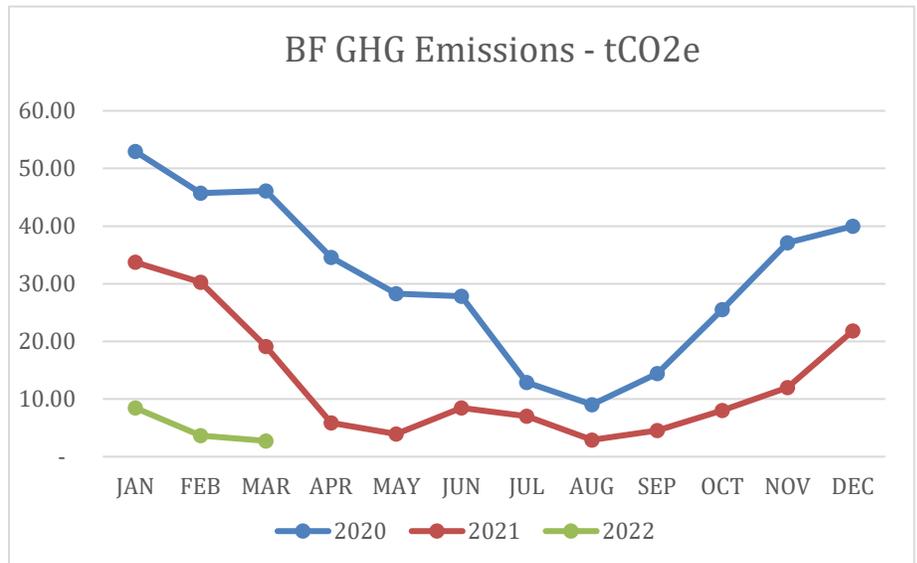
Energy Efficiency and Carbon Emissions Reduction

The 148 residents at St. Vincent's: Brock Fahrni and 217 residents at St. Vincent's: Langara are living a little more comfortably in their homes thanks to a recently installed cooling system.

Not only does this system help keep things climate controlled inside these Vancouver long-term care residences, but it is also limiting the impact they have on climate change as a whole.

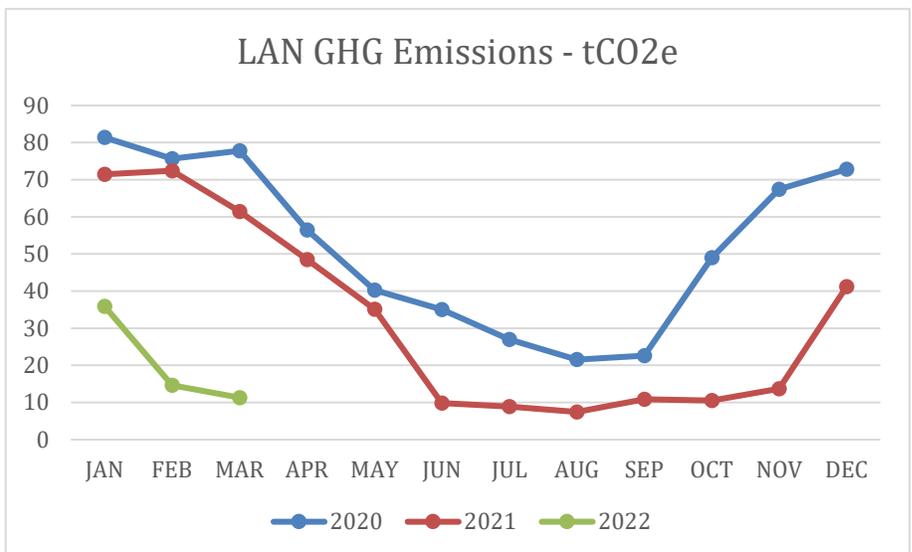
Previously, neither of these residences had a cooling system. Then in 2020, under the direction of Tony Munster, Executive Director – Projects, Planning & Facilities Management, the decision was made to make a change in order to improve resident comfort.

While a wonderful project on its own, it was made all the better when a FortisBC incentive program came to light. The program is designed to incentivize efforts to introduce heat recovery systems that reduce gas consumption and resulting Greenhouse gas (GHG) emissions. A truly serendipitous moment.



In the end, Heat Recovery Chiller systems that use Thermal Gradient Header technology, designed by Impact Engineering, Integral Group and Thermenex, were implemented in 2021. This innovative system extracts waste heat from the facilities that would otherwise be lost to atmosphere, and uses it to heat the buildings and also produce domestic hot water. So far, things are looking pretty amazing. Residents are very happy with being able to keep cool during the summer months. And as the included charts show, against the baseline year of 2020, we look on track to meet or exceed the 80% GHG emissions reduction target.

The Greenhouse Gas Emissions Reduction Project is driving both of the above initiatives, and there is more on the way.



This project is targeting an 80% reduction of GHG emissions by 2024 at 6 core PHC sites. This includes the work already underway at St. Vincent's: Brock Fahrni and St. Vincent's: Langara, as well as improvements to Mount Saint Joseph Hospital, Holy Family Hospital, Youville Residence and St. Vincent's: Honoria Conway (St. Paul's Hospital has been excluded given the planned relocation).