

2023 Vancouver Coastal Health Environmental Performance Accountability Report

Environmental sustainability is everyone's story.

Vancouver
CoastalHealth

GreenCare™



Recognizing Indigenous Nations and Communities

We respectfully acknowledge that Vancouver Coastal Health (VCH) facilities are located on the traditional and unceded territories of the Coast Salish Peoples, including the Musqueam, Squamish, and Tsleil-Waututh Nations. VCH is committed to delivering exceptional care to the people we serve, including the First Nations, Métis and Inuit within the traditional territories of the Heiltsuk, Kitasoo-Xai'xais, Lil'wat, Musqueam, N'Quatqua, Nuxalk, Samahquam, shíshálh, Skatin, Squamish, Tla'amin, Tsleil-Waututh, Wuikinuxv, and Xa'xtsa.

Indigenous Peoples have served as the original stewards of the land since time immemorial, protecting land and water as sources of sustainable food systems, traditional medicines and community identity.

Today, Indigenous Peoples in B.C. are often uniquely and disproportionately impacted by the effects of climate change. Destruction of the land can affect personal and community identity, disrupt cultural practices and ceremony, and affect food sovereignty and security; all of which are integral to physical, mental, emotional and spiritual health and well-being.

We know there is much to be learned about environmental stewardship from these nations and communities, and VCH is committed to being collaborative partners in stewardship to build a better future for our patients, residents and clients, and our planet.

2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

- ▶ **Table of Contents**
- Executive Message
- Our Story
- Our Progress: Setting Targets and Measuring Results
- Our Actions: Finding Solutions Together
- Writing the Story We Want, Now and in the Future
- Appendices
- References

RELATED REPORTS

- VCH Climate Change Accountability Report
- Green+Leaders Annual Report
- 2024 Chief Medical Health Officer Report

Table of Contents

1.0 Executive Message	4
▶ 1.1 Milestones and Achievements	6
2.0 Our Story	7
▶ 2.1 Vancouver Coastal Health’s Commitment to Planetary Health.....	8
▶ 2.2 Building and Operating for Low Carbon Resilience and Environmental Sustainability.....	9
3.0 Our Progress: Setting Targets and Measuring Results	10
▶ 3.1 The 2023 Dashboard	11
4.0 Our Actions: Finding Solutions Together	16
▶ 4.1 Collaborative and Integrated Action.....	17
▶ Leadership and Innovation	18
▶ Climate Change	20
▶ Energy and Carbon.....	22
▶ Food	25
▶ Materials	27
▶ Transportation	29
▶ Water	31
5.0 Writing the Story We Want, Now and in the Future	33
Appendices	34
▶ Appendix A: Our Partners.....	35
▶ Appendix B: Graphs of Our Progress.....	36
References	44

AUTHORS

This report was written by Energy and Environmental Sustainability (EES), a regional collaboration team of four health organizations that works to drive change for environmentally sustainable and climate resilient care across planning, design, construction and operations. Housed within the Facilities Management department, the EES team cannot do this work alone, and works with diverse teams, departments, and health-care staff and medical staff across VCH.

PURPOSE

The purpose of this report is to communicate commitments and progress, and to celebrate the good work that has been accomplished thus far, both independent of and in cross-disciplinary collaboration and partnership with EES. With a focus on actions and achievements in relation to low carbon resilience and environmental sustainability, we acknowledge that it does not include all of our partners’ actions and achievements undertaken in the shared journey toward planetary health.

COLLABORATORS

In particular, we’d like to acknowledge the contributions of the Healthy Environments and Climate Change team, the Sustainable Clinical Services team, Communications, Transformation, Food Services, the Contracts Management office, Transportation Services, Green+Leaders and many others named throughout this report.



This is an interactive report. Easily navigate to different sections by **clicking** on the text headings.

To view a related report, select it from the navigation bar to the left.

**2023
Environmental
Performance
Accountability
Report (EPAR)**

NAVIGATION

Table of Contents

► **Executive Message**

Milestones and Achievements

Our Story

Our Progress: Setting
Targets and Measuring
Results

Our Actions: Finding
Solutions Together

Writing the Story We Want,
Now and in the Future

Appendices

References

RELATED REPORTS

VCH Climate Change
Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health
Officer Report

4 Vancouver Coastal Health

1.0 Executive Message



2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

Table of Contents

▶ Executive Message

Milestones and Achievements

Our Story

Our Progress: Setting Targets and Measuring Results

Our Actions: Finding Solutions Together

Writing the Story We Want, Now and in the Future

Appendices

References

RELATED REPORTS

VCH Climate Change Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health Officer Report



On behalf of Vancouver Coastal Health (VCH), I am proud to share our 12th annual Environmental Performance Accountability Report (EPAR).

Over the past year, we have been adapting to a changing world. We know climate change affects human health and our organization's ability to deliver care to 1.25 million people in the region. We are meeting these challenges head on and continue to learn and adjust to these new realities.

While extreme temperatures, wildfires, floods, storms, food and water safety have all impacted the communities we serve and how we deliver care, we are seeing the positive effect of the changes we are making every day.

We also know climate events are not always felt the same for everyone. Our work requires an equitable approach to making health care sustainable and resilient. We are demonstrating our commitment to this approach through our four pillars: Indigenous Cultural Safety; Equity, Diversity and Inclusion; Anti-Racism; and Planetary Health. These pillars support

our focus on taking an equity-led, intersectional approach to providing exceptional care and advancing health equity.

We are integrating planetary health principles and climate resilience into all aspects of our operations. Our priorities continue to be reducing energy consumption, water use, waste and emissions throughout all sites. We are also taking significant steps to retrofit older facilities and ensure new buildings are designed to be low carbon, climate resilient and environmentally sustainable. These efforts are essential to building a health-care system that not only adapts to, but also mitigates the impact of climate change.

Our 2023 sustainability-related achievements reflect our capacity for action and serve as a source of inspiration. They include:

- ▶ Advancing climate resilience throughout hospitals, care sites, corporate offices and communities
- ▶ Launching a reusables-first procurement project

- ▶ Introducing plant-based in-patient food offerings produced with reduced emissions
- ▶ Supporting sustainable transportation through electronic vehicles (EVs), bikes and transit for staff and medical staff

We are also proud to highlight that Sechelt Hospital received the Green Hospital of the Year award from the Canadian Coalition for Green Health Care.

Moving forward, we each have a role to play in planetary health, and I want to thank our staff, medical staff and volunteers for their dedication to addressing some of our biggest challenges. Through our collective commitment and effort, we can continue to provide exceptional care while also protecting our planet.



Vivian Eliopoulos

Vivian Eliopoulos

President and Chief Executive Officer
Vancouver Coastal Health

2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

Table of Contents

Executive Message

► Milestones and Achievements

Our Story

Our Progress: Setting Targets and Measuring Results

Our Actions: Finding Solutions Together

Writing the Story We Want, Now and in the Future

Appendices

References

RELATED REPORTS

VCH Climate Change Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health Officer Report

1.1 Milestones and Achievements

First ever!

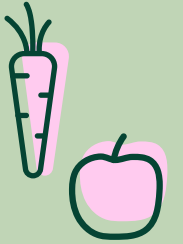
Launched a **reusables first project** to identify opportunities where single-use plastic items that generate high waste volumes can be safely switched to reusable alternatives, and to determine the processes that will support this change



Screened **47 VCH facilities** across the province for climate hazard exposure, identifying areas of vulnerability and prioritizing actions



Introduced **20+** **plant-rich menu items** as part of a low carbon and culturally diverse menu at Vancouver General Hospital (VGH), leading to a **42% reduction** in greenhouse gas emissions



2023 highlights

Received the **Canadian Coalition for Green Health Care's prestigious Green Hospital Scorecard Award**, naming Sechelt Hospital of the Year in the Community Peer Group Category for overall top performance



Achieved a **13% reduction in carbon emissions** from buildings, fleet and paper since the 2007 baseline, which is a decrease equivalent to the annual emissions from 2,000 passenger vehicles^A



Designed a **Climate Adaptation Health Promotion grant** to fund community-based initiatives, with grants open to nonprofits and First Nations across the VCH region



20 **new staff and medical staff** joined the Green+Leaders program, for a total of 200 participants



Working with cycling advocates, secured a **major victory for health promotion** in the form of a three-metre wide, **separated bike/pedestrian path** to be built along Steveston Highway in Richmond

Increased the transit incentive so that staff using TransLink now receive a 25% to 75% discount, with an average of



2,021 **staff participating monthly**

2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

Table of Contents

Executive Message

► **Our Story**

Vancouver Coastal Health's
Commitment to Planetary Health

Building and Operating for
Low Carbon Resilience and
Environmental Sustainability

**Our Progress: Setting
Targets and Measuring
Results**

**Our Actions: Finding
Solutions Together**

**Writing the Story We Want,
Now and in the Future**

Appendices

References

RELATED REPORTS

VCH Climate Change
Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health
Officer Report

7 Vancouver Coastal Health

2.0 Our Story

NAVIGATION

Table of Contents

Executive Message

Our Story

- ▶ Vancouver Coastal Health's
Commitment to Planetary Health
- Building and Operating for
Low Carbon Resilience and
Environmental Sustainability

Our Progress: Setting
Targets and Measuring
Results

Our Actions: Finding
Solutions Together

Writing the Story We Want,
Now and in the Future

Appendices

References

RELATED REPORTS

VCH Climate Change
Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health
Officer Report

2.1 Vancouver Coastal Health's Commitment to Planetary Health

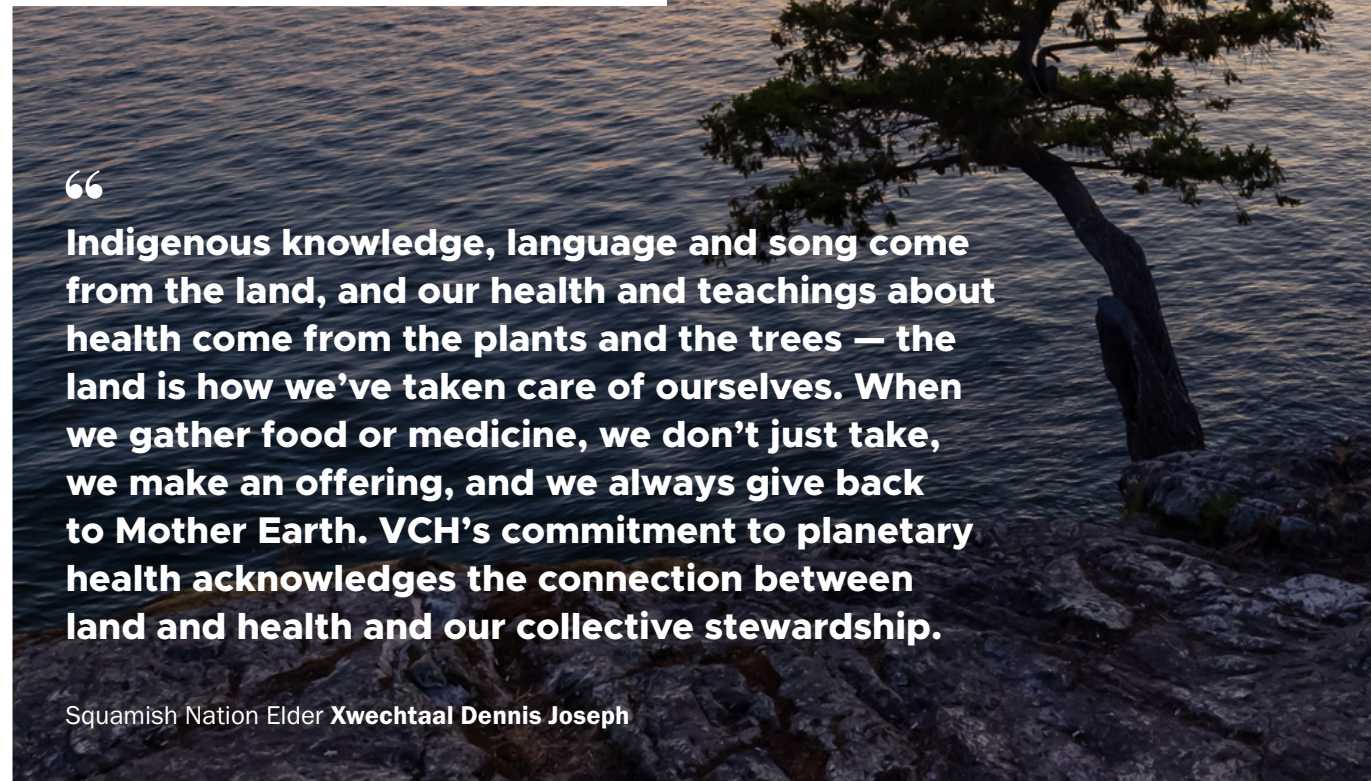
VCH is committed to embedding planetary health principles of environmental sustainability and climate resilience in all we do, from changing business practices and how we manage our facilities, to moving towards reusable medical supplies and low-carbon care delivery, to supporting opportunities for staff and medical staff to improve sustainability in their own units.

Our four pillars, Indigenous Cultural Safety; Anti-Racism; Equity, Diversity and Inclusion; and Planetary Health, uphold our commitment to delivering safe, quality care and guide our focus on taking an equity-led, intersectional approach to caring for our people and our planet.

Incorporating these pillars across VCH requires both organizational policy and process changes to change the system, and strong leadership and support to help staff and medical staff take action and make individual-level behaviour change.

Our work must incorporate equity and justice lenses, and we are committed to leading our planetary health work in an equity-informed way, and working closely with the teams who lead our anti-racism, equity, diversity and inclusion, and Indigenous cultural safety pillars to integrate these perspectives into all planetary health initiatives.

Together, we are all committed to transforming our systems and services to decrease our environmental footprint and build sustainable, low carbon and resilient health systems that support the health of people and planet.



“
Indigenous knowledge, language and song come from the land, and our health and teachings about health come from the plants and the trees — the land is how we've taken care of ourselves. When we gather food or medicine, we don't just take, we make an offering, and we always give back to Mother Earth. VCH's commitment to planetary health acknowledges the connection between land and health and our collective stewardship.

Squamish Nation Elder **Xwechtaal Dennis Joseph**

2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

Table of Contents

Executive Message

Our Story

Vancouver Coastal Health's Commitment to Planetary Health

► Building and Operating for Low Carbon Resilience and Environmental Sustainability

Our Progress: Setting Targets and Measuring Results

Our Actions: Finding Solutions Together

Writing the Story We Want, Now and in the Future

Appendices

References

RELATED REPORTS

VCH Climate Change Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health Officer Report

2.2 Building and Operating for Low Carbon Resilience and Environmental Sustainability

In operating our current facilities, and in the design and construction of new facilities, VCH is working towards the highest level of human and environmental health and well-being by:

- ▶ Evaluating and reducing the impacts of climate change on a facility and the surrounding community (e.g. wildfires, extreme heat, floods and storms)
- ▶ Assessing how the design, construction and operation strategies of a facility will impact the environment and human health
- ▶ Drawing on credible evidence that links health outcomes to planning and design of the built environment
- ▶ Collaborating with project compliance teams to ensure energy and carbon performance targets are embedded into design and construction agreements
- ▶ Implementing low carbon resilience and environmental-sustainability strategies
- ▶ Achieving a recommended green building standard such as LEED certification (a globally recognized green-building rating system administered by the Canadian Green Building Council)
- ▶ Meeting and exceeding environmental and climate change legislation

Our buildings

771,016 m²

usable facility space^B

192

distinct buildings^B

20,727

full-time equivalent staff^C

26,356 m²

LEED Gold-certified facility space^D

Our LEED projects

LEED certification is a globally recognized symbol of sustainability achievement and leadership.

To learn more about VCH'S LEED projects, click [here](#).



Joseph & Rosalie Segal & Family Health Centre in Vancouver, B.C. Photo credit

2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

Table of Contents

Executive Message

Our Story

► **Our Progress: Setting
Targets and Measuring
Results**

The 2023 Dashboard

Our Actions: Finding
Solutions Together

Writing the Story We Want,
Now and in the Future

Appendices

References

RELATED REPORTS

VCH Climate Change
Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health
Officer Report

10 Vancouver Coastal Health



3.0 Our Progress: Setting Targets and Measuring Results

NAVIGATION

Table of Contents

Executive Message

Our Story

Our Progress: Setting
Targets and Measuring
Results

► The 2023 Dashboard

Our Actions: Finding
Solutions Together

Writing the Story We Want,
Now and in the Future

Appendices

References

RELATED REPORTS

VCH Climate Change
Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health
Officer Report

3.1 The 2023 Dashboard

Setting targets helps us all to recognize achievements and act to transform our health-care system toward environmentally sustainable and climate resilient care. A target may be provincially mandated, or be VCH-developed and based on past trends and current resourcing.

Measuring results

The 2023 dashboard captures 11 key performance indicators (KPIs). It is a snapshot in time of our progress and, this year, includes links to trends in previous years and how we plan to meet our targets.

However, the dashboard alone doesn't tell the entire story. Environmental sustainability is a journey, and there are many process-related KPIs and qualitative efforts that are not included in this dashboard. In addition, active work continues to take place to identify the current situation and collaborate on the development of performance targets. To learn more, see [4.0 Our Actions: Finding Solutions Together](#).

Regulatory guidance

The [Climate Change Accountability Act](#) (CCAA) has set ambitious greenhouse gas (GHG) emissions reduction targets for public sector organizations:

40% by 2030
(from the 2007 baseline)

60% by 2040
(from the 2007 baseline)

80% by 2050
(from the 2007 baseline)

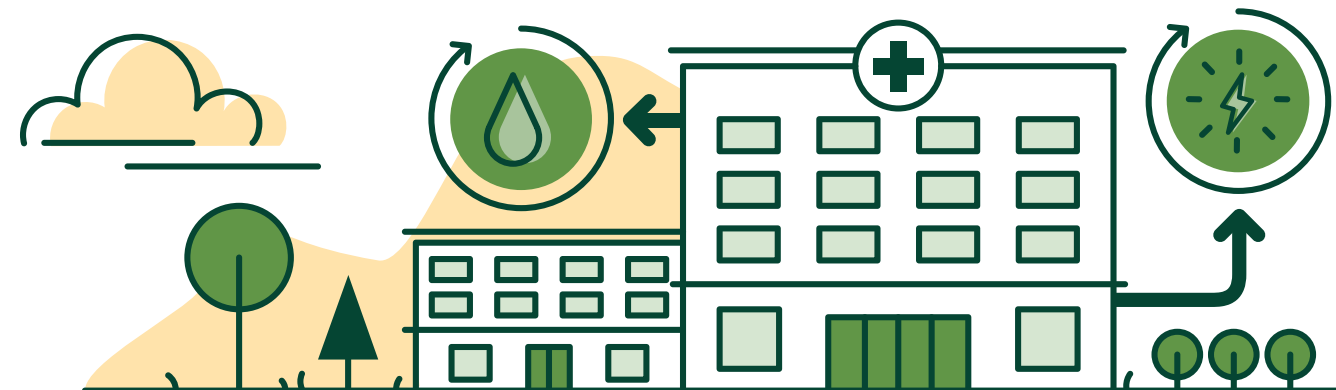
These targets include emissions from owned and leased buildings, and from the use of fleet vehicles and paper consumption. For reference, in 2023, 98% of VCH's emissions come from buildings, while the rest come from fleet and paper.

The government's [CleanBC plan and Roadmap](#) is the pathway to achieve these targets and has set even more aggressive targets:

50% reduction in emissions for public sector buildings **by 2030**
(from the 2010 baseline)

40% reduction in fleet vehicle emissions **by 2030**

+ Visit the Methodology and Context for Calculating KPIs



2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

Table of Contents

Executive Message

Our Story

Our Progress: Setting Targets and Measuring Results

► The 2023 Dashboard

Our Actions: Finding Solutions Together

Writing the Story We Want, Now and in the Future

Appendices

References

RELATED REPORTS

VCH Climate Change Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health Officer Report



Energy and Carbon

Goal: Reduce our carbon footprint by increasing energy efficiency and reducing reliance on fossil fuels.

	Key Performance Indicator (Metric)	2023 Results	2025 Target	2030 Target
Regulatory guidance	To meet the CCAA target, decrease total GHG emissions from owned and leased buildings, fleet vehicles and paper use from 2007 levels (% change of tCO ₂ e/year)	13%	16%	40%
	To meet the CleanBC target, decrease total GHG emissions from owned and leased buildings from 2010 levels (% change of tCO ₂ e/year)	5%	16%	50%
	Decrease the amount of GHG emissions generated per floor area of owned and leased buildings from 2010 levels (% change of tCO ₂ e/m ² /year)	21%	40%	50%
	Decrease the amount of energy used per floor area of owned buildings ^E from 2007 levels (% change of ekWh/m ² /year)	10%	15%	25%

GO TO GRAPHS

- On track to meet target
- Minimal or slow progress towards target
- Behind schedule to meet target, and requires attention

How we will reach our targets

- ▶ Partnering with Facilities Maintenance & Operations teams presents an opportunity to identify ways to integrate energy and emissions reduction strategies and support optimization of infrastructure and equipment.
- ▶ In collaboration with internal and external partners, we are seeking and implementing a combination of low emission designs for new construction and aggressive energy retrofits to existing facilities.
- ▶ As we renew our energy infrastructure and assets, we have the opportunity to make system-level changes and shift to lower-impact facilities.
- ▶ Developing a low carbon resilience roadmap will inform decision-making processes for lowering carbon emissions while enhancing resilience to climate risks and the quality of indoor environment for staff and patients.

2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

Table of Contents

Executive Message

Our Story

Our Progress: Setting Targets and Measuring Results

► The 2023 Dashboard

Our Actions: Finding Solutions Together

Writing the Story We Want, Now and in the Future

Appendices

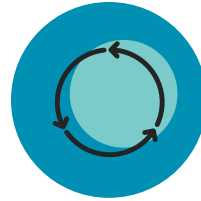
References

RELATED REPORTS

VCH Climate Change Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health Officer Report



Materials

Goal: Choose materials and products that contribute to human and environmental health, while avoiding waste and unnecessary chemicals.

Key Performance Indicator (Metric)*	2023 Results	2025 Target	2030 Target
Increase waste recycled or composted in acute care owned sites ^F (% recycled, annual average)	37%	33%	40%
Increase waste recycled or composted in non-acute care owned sites ^G (% recycled, annual average)	46%	45%	60%
Decrease waste generated per floor area in acute care owned sites (kg/m ² /year)	11.5	9.3	8.4
Decrease waste generated per floor area in non-acute care owned sites (kg/m ² /year)	13.7	11.9	10.7

GO TO GRAPHS

- On track to meet target
- Minimal or slow progress towards target
- Behind schedule to meet target, and requires attention

* Does not apply to leased buildings because waste management is the responsibility of the property manager and out of the hands of VCH.



Recycling has not yet reached pre-2020 service levels at all facilities, and the numbers and traffic lights here are based on staff-sorting of recyclables only.

How we will reach our targets

- Prioritizing zero unnecessary waste is one of three goals in the 2024 to 2029 Planetary Health Strategy.
- Identifying pathways to get the few remaining sites back to full recycling services is actively underway, including prioritizing staff and visitor education, waste composition audits and exploration of waste management innovations.
- Collaborating with waste haulers and contract managers to review metrics and reporting will ensure quality and transparency.
- A shift away from recycling alone and toward overall waste reduction, including choosing reusables over disposables and exploring ways to share or donate usable items to prevent them from going into landfill, is required. Collaboration and close partnership with clinical and procurement staff will be key ingredients in this journey.

NAVIGATION

- Table of Contents
- Executive Message
- Our Story
- Our Progress: Setting Targets and Measuring Results
 - ▶ The 2023 Dashboard
- Our Actions: Finding Solutions Together
- Writing the Story We Want, Now and in the Future
- Appendices
- References

RELATED REPORTS

- VCH Climate Change Accountability Report
- Green+Leaders Annual Report
- 2024 Chief Medical Health Officer Report



Transportation

Goal: Increase access to and use of transportation modes that reduce negative environmental impacts and benefit human health and wellness.

Key Performance Indicator (Metric)	2023 Results	2025 Target	2030 Target
Increase the proportion of self-reported ^H commutes staff make by cycling, walking and rolling* (% commutes, annual average)	22%	25% 	30%
Increase the proportion of self-reported commutes staff make by hybrid and electric vehicles, public transit, carshare, carpool and hospital shuttle (% commutes, annual average)	36%	40% 	45%

GO TO GRAPHS

How we will reach our targets

- ▶ Continuing to work collaboratively across the health system with internal and external partners will enable us to strategically develop and prioritize efforts that increase cycling and electric vehicle (EV) infrastructure, including bicycle storage, showers and change rooms, and EV charging stations.
- ▶ Promoting and facilitating staff commutes and work travel by walking, cycling, public transit, car share and carpooling will engage and empower staff to choose active and clean transportation to commute for work travel.
- ▶ Working to increase sustainable commuting also supports greenhouse gas emissions reduction targets.

On track to meet target
 Minimal or slow progress towards target
 Behind schedule to meet target, and requires attention

* E.g. wheelchair, seated electric scooter

2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

Table of Contents

Executive Message

Our Story

Our Progress: Setting Targets and Measuring Results

► The 2023 Dashboard

Our Actions: Finding Solutions Together

Writing the Story We Want, Now and in the Future

Appendices

References

RELATED REPORTS

VCH Climate Change Accountability Report



Green+Leaders Annual Report

2024 Chief Medical Health Officer Report



Water




Goal: Minimize water consumption to reduce demand on natural resources and impact on our living environments.

Key Performance Indicator (Metric)	2023 Results	2025 Target	2030 Target
Decrease the amount of water used per floor area in owned ¹ buildings from 2010 levels (% change of m ³ /m ² /year)	20%	25% 	35% 

 [GO TO GRAPHS](#)

How we will reach our targets

- ▶ Working collaboratively across health-system departments to study baseline water consumption and water scarcity risks across VCH facilities will support our strategy to prioritize water management planning efforts and allocation of resources.
- ▶ A new regional resource starting in summer 2024 will support actions focusing on water conservation and acknowledge synergies with strategies for climate resilience and energy conservation.

-  On track to meet target
-  Minimal or slow progress towards target
-  Behind schedule to meet target, and requires attention

**2023
Environmental
Performance
Accountability
Report (EPAR)**

NAVIGATION

Table of Contents

Executive Message

Our Story

Our Progress: Setting
Targets and Measuring
Results

► **Our Actions: Finding
Solutions Together**

Collaborative and
Integrated Action

Leadership and Innovation

Climate Change

Energy and Carbon

Food

Materials

Transportation

Water

Writing the Story We Want,
Now and in the Future

Appendices

References

RELATED REPORTS

VCH Climate Change
Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health
Officer Report

4.0 Our Actions: Finding Solutions Together



NAVIGATION

Table of Contents

Executive Message

Our Story

Our Progress: Setting
Targets and Measuring
Results

Our Actions: Finding
Solutions Together

- ▶ Collaborative and Integrated Action
- Leadership and Innovation
- Climate Change
- Energy and Carbon
- Food
- Materials
- Transportation
- Water

Writing the Story We Want,
Now and in the Future

Appendices

References

RELATED REPORTS

VCH Climate Change
Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health
Officer Report

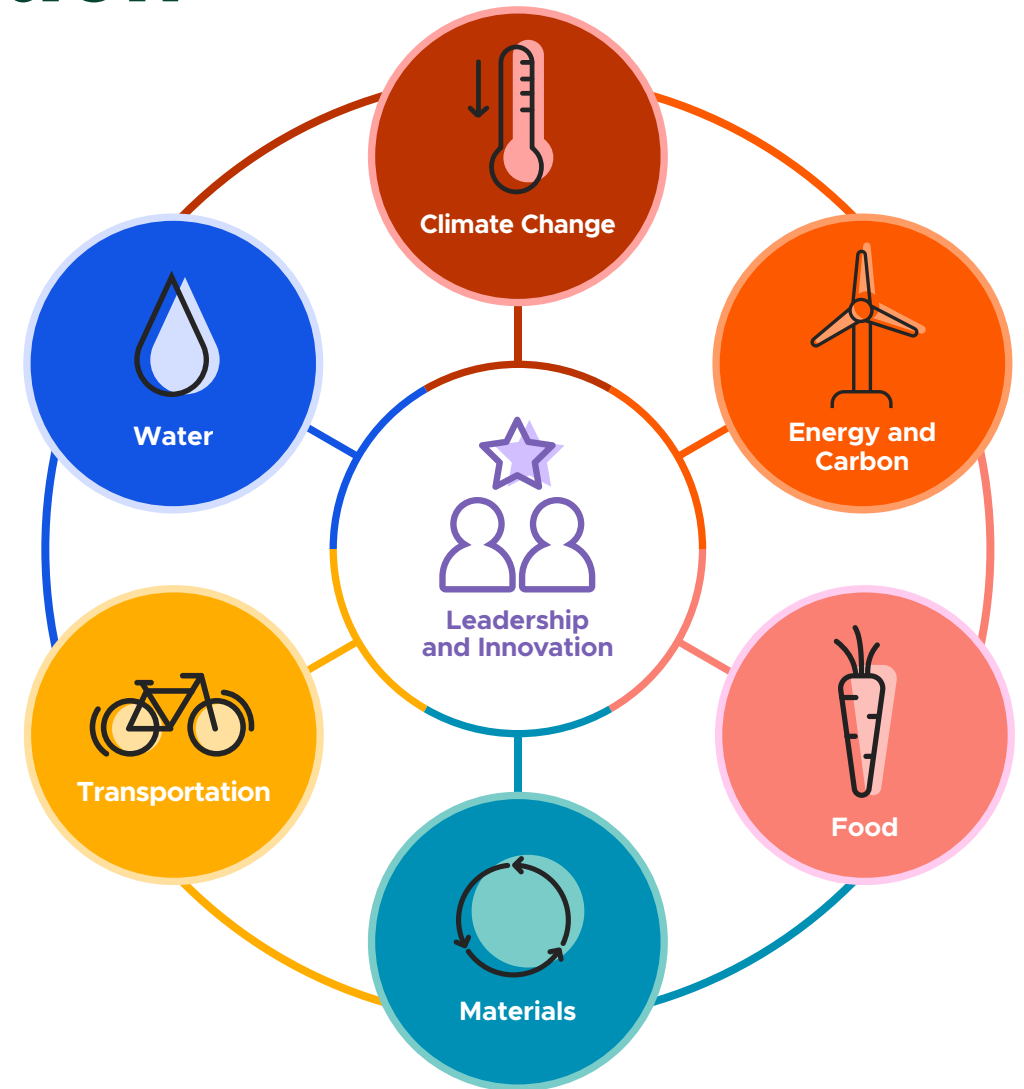
4.1 Collaborative and Integrated Action

Efforts to advance environmentally sustainable and climate resilient health care can be categorized into six Focus Areas, which, just like the connections between human and environmental health, are interrelated in that efforts and progress made in one will impact the others.

In working together to find solutions that restore and regenerate planetary health, it is important to note that leadership and innovation are essential elements for meaningful transformation of the health-care system, particularly in driving engagement, education and action at the departmental and team level. As we all move along our low carbon resilience and environmental sustainability journey, Leadership and Innovation efforts will intersect with and impact all of the Focus Areas.

The selection of actions, achievements and stories in each Focus Area on the right represents the work of multiple departments and diverse teams. For a full list of partners working towards planetary health at VCH, see [Appendix A](#).

Want to read stories or find information and resources related to these Focus Areas?
Visit [here](#).



2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

Table of Contents

Executive Message

Our Story

Our Progress: Setting Targets and Measuring Results

Our Actions: Finding Solutions Together

Collaborative and Integrated Action

- ▶ Leadership and Innovation
- Climate Change
- Energy and Carbon
- Food
- Materials
- Transportation
- Water

Writing the Story We Want, Now and in the Future

Appendices

References

RELATED REPORTS

VCH Climate Change Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health Officer Report



Leadership and Innovation

Our goal: Collaboratively foster a culture of transformative leadership and innovation for environmental sustainability in health care.

Select 2023 actions and achievements



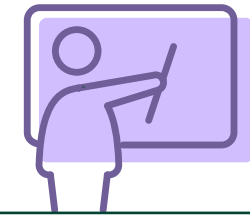
Strategy and awards

- ▶ Continued development of the Planetary Health Strategy, released in April 2024, which outlines three goals for VCH: zero unnecessary waste; a low carbon health system that is climate resilient and able to withstand impacts of acute climate shocks and chronic stressors; and support for communities as they mitigate climate change and adapt to climate change impacts
- ▶ Created the Sustainable Clinical Services team to advance low carbon, high-quality care at VCH and beyond, with two new positions hired: regional leader and sustainable administrative assistant/data analyst
- ▶ Received the Canadian Coalition for Green Health Care's prestigious Green Hospital Scorecard Award, naming Sechelt 'Hospital of the Year' in the Community Peer Group Category for overall top performance in leadership, energy, water, waste and pollution prevention
- ▶ Received a oneVCH Award for the Planetary Health Menu based on cross-departmental work to develop meals that improve patient experience, facilitate the healing process and reduce environmental impact



Planning, design and procurement

- ▶ Added low carbon resilience and environmental sustainability planning and design strategies to major capital projects for acute and long-term care facilities
- ▶ Added environmental and social impact questions for suppliers to our procurement process, which help to identify products and services that meet our planetary health objectives
- ▶ Launched physician-led projects such as reducing the climate impact of in-patient inhalers, prescribing these inhalers in community clinic settings and exploring Green Emergency Medicine at VGH



Education and engagement

- ▶ Hosted a speaker series for physicians in Metro Vancouver, focusing on topics such as the connection between plant-based food and human and planetary health, nature prescribing, and climate-conscious medication management
- ▶ 208 staff and medical staff were members of the GreenCare Network,^J receiving quarterly environmental sustainability news, education, resources and engagement opportunities
- ▶ Co-created the new GreenCare Lunch & Learn working group, which plans events that inform, educate and spread innovative ideas related to climate resilient and environmentally sustainable care across B.C. health-care organizations
- ▶ 20 new staff and medical staff joined the Green+Leaders program,^K for a total of 200
- ▶ Co-hosted 100+ sustainability advocates from B.C. health organizations at the Green+Leaders Recognition Event, which featured workshops on change management and the circular economy, networking opportunities and success stories

The 2023 Green+Leaders Annual Report recognizes all staff and medical staff working to decrease the environmental footprint of their workplaces and health systems.

2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

Table of Contents

Executive Message

Our Story

Our Progress: Setting Targets and Measuring Results

Our Actions: Finding Solutions Together

Collaborative and Integrated Action

► Leadership and Innovation

Climate Change

Energy and Carbon

Food

Materials

Transportation

Water

Writing the Story We Want, Now and in the Future

Appendices

References

RELATED REPORTS

VCH Climate Change Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health Officer Report

OUR STORY

Ripple effect

With climate change causing drought and resulting in water restrictions on the Sunshine Coast, Monique Roy-Michaeli, a nurse at Sunshine Coast Home Care Services, collaborated with others to save water on site by replacing six outdated 13-litre flush toilets with water-saving alternatives.

[Read more ►](#)

“
Climate change and the impacts it is having on our lives is scary and overwhelming sometimes [but] the success of this initiative shows that anyone can instigate change with a bit of effort.

Monique Roy-Michaeli

Nurse, Green+Leader

Sunshine Coast Home Care Services



Monique Roy-Michaeli

NAVIGATION

Table of Contents

Executive Message

Our Story

Our Progress: Setting
Targets and Measuring
Results

Our Actions: Finding
Solutions Together

Collaborative and
Integrated Action

Leadership and Innovation

► Climate Change

Energy and Carbon

Food

Materials

Transportation

Water

Writing the Story We Want,
Now and in the Future

Appendices

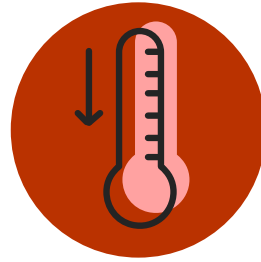
References

RELATED REPORTS

VCH Climate Change
Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health
Officer Report



1. Climate Change

Our goal: Move toward a climate resilient health system in facility design and operations.

Select 2023 actions and achievements

Policies and guidelines

- Updated the Climate Resilience Guidelines for BC Health Facility Planning & Design to Version 2.0, aligning with new standards for public sector buildings and incorporating four years of lessons learned
- Participated in the Canadian Standards Association (CSA) committee to embed climate risk into the CSA Z8000 Canadian Healthcare Standard
- Advocated for policies that ensure safer indoor temperatures, such as updates to the Vancouver Building By-law that require cooling in new buildings and promotion of denser tree canopies in urban areas

Capital projects and studies

- Screened 47 facilities across VCH communities of care for climate hazard exposure, identifying areas of vulnerability and prioritizing actions
- Embedded climate resilience planning and design strategies into the Richmond Hospital Redevelopment and several long-term care facilities
- Initiated analysis of UBC Hospital's electrical system capacity and metering to better understand energy demand and improve resilience to power outages

New resource

- Property manager role created with a lens for improving building resilience towards climate change by optimizing existing equipment and building systems via site-level resilience assessments for existing facilities

Education and engagement

- Designed a Climate Adaptation Health Promotion grant to fund community-based initiatives, with grants open to nonprofits and First Nations across the VCH region and typically ranging from \$100 to \$15,000
- Coordinated seasonal readiness planning activities for communications and actions before, during and after extreme weather events
- Developed the Inter- and Intra-Health Authority Relocation toolkit to enhance the resilience and responsiveness of health services in B.C. during climate-related emergencies by facilitating complex evacuations and ensuring continuity of care
- Expanded community air-quality monitoring by distributing free air-quality monitors, and provided support for analysis, thereby enabling communities to better understand and adapt to their local air quality

- Participated in the BC Health Effects of Anomalous Temperatures (BC HEAT) Coordinating Committee to support planning and response efforts related to the public health impacts of significant heat events in B.C.

What do VCH staff have to say about the impact of extreme climate events on their job duties?

In the GreenCare Survey,^H 553 responses indicated **the most common impacts on job duties were:**

- Inability to physically get to the place of work
- Impacts to physical health or mental well-being of staff and/or family members
- Interruption to care or patient surges due to the weather events
- Supply chain disruptions

2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

Table of Contents

Executive Message

Our Story

Our Progress: Setting
Targets and Measuring
Results

Our Actions: Finding
Solutions Together

- Collaborative and
Integrated Action
- Leadership and Innovation
- Climate Change
- Energy and Carbon
- Food
- Materials
- Transportation
- Water

Writing the Story We Want,
Now and in the Future

Appendices

References

RELATED REPORTS

VCH Climate Change
Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health
Officer Report

OUR STORY

Protecting population health in a climate emergency

Dr. Patricia Daly, Chief Medical Health Officer for VCH, raised concerns about the pressing health threats posed by climate change in a new report, *Protecting Population Health in a Climate Emergency*. The report presents 17 evidence-based recommendations that will guide collaborative action in the VCH health region.

[Read more ►](#)

“
**No single agency can
address the challenges
of climate change —
everyone has a role. We
hope that the report will
spark partnerships and
collective action.**

Craig Brown

Senior Scientist
Climate Change and Health

Cover art on the Report of the Vancouver Coastal Health Chief Medical Health Officer, 2023



NAVIGATION

Table of Contents

Executive Message

Our Story

**Our Progress: Setting
Targets and Measuring
Results**

**Our Actions: Finding
Solutions Together**

Collaborative and
Integrated Action

Leadership and Innovation
Climate Change

► Energy and Carbon

Food

Materials

Transportation

Water

**Writing the Story We Want,
Now and in the Future**

Appendices

References

RELATED REPORTS

VCH Climate Change
Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health
Officer Report



2. Energy and Carbon

Our goal: Reduce our carbon footprint by increasing energy efficiency and reducing reliance on fossil fuels.

Select 2023 actions and achievements

2025 target on track

- Achieved a 13% reduction in carbon emissions from buildings, fleet and paper since the 2007 baseline, which is a decrease equivalent to the annual emissions from 2,000 passenger vehicles

26+ energy and emissions reduction projects completed, initiated or continued

- Completed efficient lighting retrofit projects at Richmond Hospital and Pemberton Health Care Centre
- Completed Carbon Neutral Capital Program (CNCP) funded projects, including:
 - Electric vehicle charger installation project at Richmond Hospital, expected to reduce annual transportation emissions by 325 tonnes CO₂e
 - Absorption chiller replacement project at VGH, expected to reduce annual emissions by 530 tonnes of CO₂e
- Initiated 2 controls optimization projects at Richmond Hospital and Minoru Residence, expected to result in annual energy savings of 7,150 GJ and 280 MWh, and reduce emissions annually by 356 tonnes of CO₂e

- Initiated 1 new CNCP valve optimization project at VGH, expected to reduce annual building emissions by 74 tonnes of CO₂e
- Initiated 2 lighting and lighting control audits at Bella Coola Hospital and Sechelt Hospital
- Continued using the advanced controls system fault detection and diagnosis system at VGH, and identified 7 energy and maintenance opportunities with potential to achieve 6,000 GJ and 800 MWh in annual energy savings and reduce emissions annually by over 300 tonnes of CO₂e
- Continued implementation of the ISO 50001 Energy Information Management Systems process and structure at VGH

Strategies and studies completed and continued

- Completed 5 investment grade energy audits at UBC Hospital, Sechelt Hospital, VGH and Richmond Hospital
- Completed 2 option analyses at VGH to identify low carbon and cost-effective heating ventilation and cooling (HVAC) systems
- Completed research on indoor air quality and energy in HVAC systems in 3 health-care facilities

- Continued implementation of the Vancouver Acute Cooling Strategy in partnership with Facilities Maintenance and Operations leadership by developing a VGH Community of Practice to enable collective action

Funding and investments

- \$1.2 million invested in energy efficiency initiatives from the Green Revolving Fund
- \$3.8 million invested in carbon-reduction projects from CNCP funding
- \$526,000 received in incentives from utility partners and federal grants

The VCH Climate Change Accountability Report

Each year, along with all public sector organizations, B.C.'s health organizations submit a Climate Change Accountability Report (CCAR) to the Climate Action Secretariat of the provincial government. This is a mandated reporting of greenhouse gas (GHG) emissions and other data, and current and planned actions to reduce GHG emissions.

[Download the VCH Climate Change
Accountability Report](#)

2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

Table of Contents

Executive Message

Our Story

Our Progress: Setting
Targets and Measuring
Results

Our Actions: Finding
Solutions Together

- Collaborative and
Integrated Action
- Leadership and Innovation
- Climate Change
- ▶ Energy and Carbon
- Food
- Materials
- Transportation
- Water

Writing the Story We Want,
Now and in the Future

Appendices

References

RELATED REPORTS

VCH Climate Change
Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health
Officer Report

OUR STORY

From Blue Whale to Green Future

In 2023, Vancouver General Hospital replaced its outdated steam-driven chiller, known as the "blue whale", with a new low-carbon electric chiller, significantly reducing the hospital's annual energy consumption and carbon emissions. This upgrade, part of Vancouver Coastal Health's cooling strategy, highlights VCH's commitment to reliable, energy-efficient systems to ensure comfort and reduce the carbon footprint, exemplifying successful collaboration and innovation in health-care infrastructure.

[Read more ▶](#)

“
**Our old steam chiller
was not just enormous
but also an energy drain.
As it aged, it became
increasingly costly to
operate and challenging
to repair.**

Eric Sutton

Sr. Facilities and Maintenance Manager
Vancouver General Hospital



New chiller installed in May 2023 at Vancouver General Hospital

2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

Table of Contents

Executive Message

Our Story

Our Progress: Setting Targets and Measuring Results

Our Actions: Finding Solutions Together

Collaborative and Integrated Action

Leadership and Innovation
Climate Change

- ▶ Energy and Carbon
- Food
- Materials
- Transportation
- Water

Writing the Story We Want, Now and in the Future

Appendices

References

RELATED REPORTS

VCH Climate Change Accountability Report

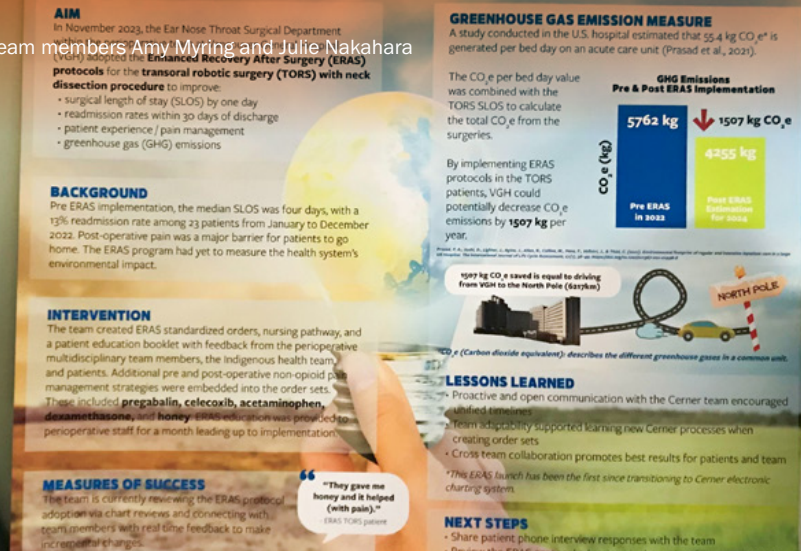
Green+Leaders Annual Report

2024 Chief Medical Health Officer Report

Reducing carbon emissions through collaborative care

While the health-care sector is dedicated to promoting health and well-being, globally it contributes up to five per cent of GHG emissions. Recognizing the urgent need to reduce this, B.C.'s Low-Carbon, High-Quality Care Collaborative is tackling emissions with a focus on perioperative care and respiratory medicine. Led by Health Quality BC (HQBC), in partnership with CASCADES Canada, Vancouver Coastal Health's Planetary Health Department and several B.C. health organizations, this initiative aims to lower the carbon impact of health care while improving patient care. [Learn more.](#)

Enhanced Recovery After Surgery team members Amy Myring and Julie Nakahara



At VCH, two teams are rethinking and reshaping routine medical practices to reduce emissions and effectively enhance the quality of patient care.

Our Enhanced Recovery After Surgery (ERAS) Coordinators are **driving down emissions by implementing evidence-based guidelines that shorten the length of hospital stays.**

This reduction is better for patient recovery and decreases the energy consumed and waste generated in longer stays. By meticulously reviewing patient charts, collecting data on outcomes and sharing their findings, this team reduced their annual carbon emissions by an estimated 1,507 kg CO₂e. Their data-driven approach to integrating environmental sustainability into clinical care processes is already a resounding success.

Meanwhile, another VCH team is **tackling the environmental impact of asthma and chronic obstructive pulmonary disease treatments by focusing on the carbon emissions from metered-dose inhalers.**

Composed of internal medicine physicians, pharmacists and respiratory therapists, this team undertook a detailed analysis of inhaler usage and dispensing patterns. They also rolled out an education campaign aimed at promoting the prescription of lower-carbon alternatives, and are developing strategies to use electronic medical records to prevent over-prescription of traditional high-carbon inhalers.

Regional Planetary Health Medical Director Andrea MacNeill emphasizes the broader implications: "Participating in the collaborative is a meaningful and effective way to spread clinical practice changes that improve the quality of care, with a lower-carbon footprint."

As the project heads towards its conclusion in November 2024, the focus will shift to the tangible results and future possibilities of this climate-conscious approach to health care. This initiative will serve as a blueprint for sustainable clinical practices across Canada and beyond.

2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

Table of Contents

Executive Message

Our Story

Our Progress: Setting Targets and Measuring Results

Our Actions: Finding Solutions Together

Collaborative and Integrated Action

Leadership and Innovation

Climate Change

Energy and Carbon

▶ Food

Materials

Transportation

Water

Writing the Story We Want, Now and in the Future

Appendices

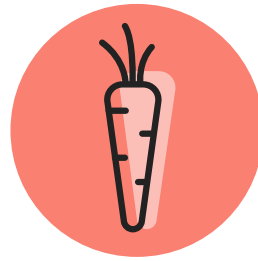
References

RELATED REPORTS

VCH Climate Change Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health Officer Report



3. Food

Our goal: Develop plant-rich, local, culturally relevant and equitable food service to advance food as medicine.

Select 2023 actions and achievements

Projects, commitments and action

- ▶ Introduced more than 20 new plant-rich menu items as part of a low carbon and culturally diverse menu at VGH. The Planetary Health Menu Pilot Project was the first project to be awarded the VCH Boehringer Ingelheim Collaboration Innovation Fund. Also supported by Greener By Default and Nourish, this project resulted in a 42% reduction in greenhouse gas emissions and was awarded a oneVCH Award for commitment to embedding planetary health principles of environmental sustainability and climate resilience into everyday work. This initiative is now being expanded across VCH sites, beginning with Richmond Hospital.
- ▶ Initiated the Salish Soils Regenerative Farm at Sechelt Hospital to foster community health and well-being through sustainable agriculture practices, including using produce grown right beside the hospital. In the first year, over 3,780 kilograms of fresh vegetables were provided to the hospital kitchen for use in patient meals.
- ▶ Aligned with the single-use-plastics ban by replacing styrofoam and plastic cups, bowls, containers, straws and stir sticks with wood, paper, bamboo or stainless steel alternatives.
- ▶ Included two plant-based food options and compostable and reusable containers to minimize waste at Vancouver Acute and Vancouver Community Physician monthly networking lunches
- ▶ Signed the Cool Food Pledge, an organizational commitment to reduce the GHG emissions associated with the food served at VGH. VGH set a goal of reducing emissions associated with the food served by 25% by 2030, relative to the 2022/23 baseline.
- ▶ Certified 100% of the seafood on the in-patient food service menus as sustainable by either the Marine Stewardship Council, the Best Aquaculture Practices organization, and/or recommended by Ocean Wise
- ▶ 28% of our food purchases were produced or processed within B.C., as per the Feed BC Program

Education and engagement

- ▶ Launched a plant-based food communication campaign for physicians showcasing medical staff who have a plant-based diet, sharing their recipes and framing benefits to their discipline and patient population
- ▶ Developed a [CASCADES](#) playbook on Food Infrastructures for Planetary Health, which aims to support informed decision-making throughout the planning, design, construction and ongoing operation of health-care facilities. Find the playbook [here](#).

The GreenCare Survey^H results show that

67% of 503 staff surveyed are “**extremely willing**” or “**very willing**” to try sustainable plant-based food at health-care cafeterias.

2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

Table of Contents

Executive Message

Our Story

Our Progress: Setting
Targets and Measuring
Results

Our Actions: Finding
Solutions Together

- Collaborative and
Integrated Action
- Leadership and Innovation
- Climate Change
- Energy and Carbon
- ▶ Food
- Materials
- Transportation
- Water

Writing the Story We Want,
Now and in the Future

Appendices

References

RELATED REPORTS

VCH Climate Change
Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health
Officer Report

OUR STORY

Food is medicine: Pilot menu supports patients' recovery and the planet

Thanks to a Planetary Health Menu Pilot project at VGH, inpatients fuelled their healing with a diverse selection of new delicious, nutritious and environmentally sustainable menu items. Although the project has concluded, feedback and information about which items were most popular will be used to inform new menus going forward.

[Read more ▶](#)

“
The new Planetary Health Menu offered meals that are rich in protein and other essential nutrients, all vital to prevent and treat malnutrition, and facilitate the healing process. The menu also had a smaller carbon footprint.

Elaine Eppler

Registered Dietitian, Green+Leader
Vancouver General Hospital



Planetary Health Menu – Korean Gochujang bowl. Credit: Leila Kwok

NAVIGATION

Table of Contents

Executive Message

Our Story

Our Progress: Setting
Targets and Measuring
Results

Our Actions: Finding
Solutions Together

- Collaborative and Integrated Action
- Leadership and Innovation
- Climate Change
- Energy and Carbon
- Food
- ▶ Materials
- Transportation
- Water

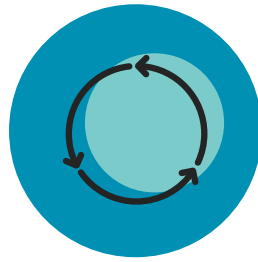
Writing the Story We Want,
Now and in the Future

Appendices

References

RELATED REPORTS

- VCH Climate Change
Accountability Report
- Green+Leaders Annual Report
- 2024 Chief Medical Health
Officer Report



4. Materials

Our goal: Choose materials and products that contribute to human and environmental health while avoiding waste and unnecessary chemicals.

Select 2023 actions and achievements

Environmentally preferable purchasing

- ▶ Launched a Reusables-First project to identify opportunities and processes that would make it possible to safely switch from single-use plastic items that generate high waste volumes to reusable alternatives – opportunities are currently being reviewed and a roadmap for implementation is underway with participation from PHSA Procurement
- ▶ Participated in the provincial Sustainable Procurement Innovation Group, which aims to identify new opportunities to reduce the environmental impact of B.C. health care and to improve social and reconciliation efforts with Indigenous peoples

Waste reduction and recycling

- ▶ Implemented a new digital clinical information system that reduces paper use and laboratory tests
- ▶ Initiated a surgical instrument tray optimization project at VGH to reduce the volume of instruments being ordered from different suppliers, which will decrease waste, reprocessing, transportation emissions and cost, with the desired outcome of standardizing procedure instrument trays across surgical teams
- ▶ Participated in a provincial Waste Management Services Technical team to undertake a collaborative approach to monitor and evaluate Waste Management Services, with the vision of providing industry leadership in the provision and promotion of high-quality waste management at all health-care facilities across B.C.

Education

- ▶ 1,175 staff and medical staff increased their knowledge on workplace recycling practices, an increase of 5% from 2022

2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

Table of Contents

Executive Message

Our Story

Our Progress: Setting Targets and Measuring Results

Our Actions: Finding Solutions Together

- Collaborative and Integrated Action
- Leadership and Innovation
- Climate Change
- Energy and Carbon
- Food
- ▶ Materials
- Transportation
- Water

Writing the Story We Want, Now and in the Future

Appendices

References

RELATED REPORTS

VCH Climate Change Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health Officer Report



Reprocessed sleeves of the sequential compression device product

OUR STORY

Circulating change

While it can seem challenging to alter health-care procurement processes, a waste-reduction initiative started by Albert Csapo, regional clinical utilization director for perioperative services at VCH, led the PHSA Procurement team to change the type of sleeves used for sequential compression device products at B.C health organizations. Albert flagged the potential to purchase reprocessed products, instead of the existing single-use disposable sleeve, and was closely involved in making the case for the switch. Now, the new devices save nurses time, divert sleeves from landfill, and result in significant cost savings.

[Read more ▶](#)

“
The need for champions and the willingness to challenge assumptions around what vendors tell you is critical.”

Team member
Procurement

2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

Table of Contents

Executive Message

Our Story

Our Progress: Setting Targets and Measuring Results

Our Actions: Finding Solutions Together

- Collaborative and Integrated Action
- Leadership and Innovation
- Climate Change
- Energy and Carbon
- Food
- Materials
- ▶ Transportation
- Water

Writing the Story We Want, Now and in the Future

Appendices

References

RELATED REPORTS

VCH Climate Change Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health Officer Report



5. Transportation

Our goal: Increase access to and use of transportation modes that reduce negative environmental impacts and benefit human health and wellness.

Select 2023 actions and achievements

Award and incentives

- ▶ Won the Go By Bike Week Champion Award as part of HUB Cycling's 11th Annual Bike Awards
- ▶ Increased the transit incentive so that staff using TransLink now receive a 25% to 75% discount, with an average of 2,021 staff participating monthly

Commuting

- ▶ Extended fall shuttle operation hours between VGH and UBC Hospital
- ▶ Staff took 50,973 shuttle rides between health-care sites and transit hubs in 2023, a 19% increase over 2022
- ▶ Hosted GoByBike Celebration stations in the spring at Lions Gate Hospital and in the fall at Richmond Hospital and VGH, which received 460 visitors

Infrastructure and resources

- ▶ Influenced the Richmond City Council to approve investment in a three-metre wide, separated bike/pedestrian path along Steveston Highway, promoting well-being and a culture of healthy, active living
- ▶ Developed the Transportation Implementation Plan for UBC Hospital with the purpose

of identifying actions to improve staff commuting, including options supporting staff use of the hospital shuttle and e-bikes

- ▶ Enhanced the VGH Cycling Centre's environment, provided route information and displayed Vancouver bike maps and cyclist photos for the benefit of 249 members
- ▶ Added 55 new publicly accessible bike racks at VGH
- ▶ Increased support for e-bikes by updating bike infrastructure guidelines for new and existing health-care facilities
- ▶ Collaborated on a framework to support everything from requests for electric vehicles to feasibility studies, infrastructure specifications and operations

What do VCH staff and medical staff have to say about EVs?

Based on GreenCare Survey^H results:

▶ **13%** of 503 staff surveyed currently own an EV.

▶ **29%** of 435 staff surveyed plan to own an EV in the next five years.



Vancouver seawall

2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

Table of Contents

Executive Message

Our Story

Our Progress: Setting Targets and Measuring Results

Our Actions: Finding Solutions Together

- Collaborative and Integrated Action
- Leadership and Innovation
- Climate Change
- Energy and Carbon
- Food
- Materials
- ▶ Transportation
- Water

Writing the Story We Want, Now and in the Future

Appendices

References

RELATED REPORTS

VCH Climate Change Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health Officer Report

OUR STORY

Charged up

As part of a comprehensive plan to weave sustainable transportation into business practices at VCH, 15 EV chargers were installed across several sites. Nav Nijjar, manager of VCH Transportation Services; Ashok Mishra, director of Planning and Projects; Sakshi Khanna; and Kori Jones, Kelly Lim, and Jennifer Chapman collaborated on this project to make EV ownership easier for staff and patients, enabling them to reduce their greenhouse gas emissions and exposure to local air pollution.

[Read more ▶](#)

“**Electrifying on-road transportation is one of the fastest ways we can make a significant impact on the health of our communities and the health of our planet.**”

Ashok Mishra
Director
Planning and Projects



Pictured left to right: Jen Chapman, Ashok Mishra and Baljit Bassi with a Richmond Hospital EV charger

2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

Table of Contents

Executive Message

Our Story

Our Progress: Setting Targets and Measuring Results

Our Actions: Finding Solutions Together

- Collaborative and Integrated Action
- Leadership and Innovation
- Climate Change
- Energy and Carbon
- Food
- Materials
- Transportation
- ▶ Water

Writing the Story We Want, Now and in the Future

Appendices

References

RELATED REPORTS

- VCH Climate Change Accountability Report
- Green+Leaders Annual Report
- 2024 Chief Medical Health Officer Report



6. Water

Our goal: Minimize water consumption to reduce demand on natural resources and impact on our living environments.

Select 2023 actions and achievements

- ▶ Completed a water audit at Sechelt Hospital to identify opportunities to improve water efficiencies
- ▶ Initiated design of a water reservoir at Sechelt Hospital to start preparing the site for water resilience during droughts
- ▶ Installed a non-chemical water treatment plant designed to reduce water consumption at UBC Hospital, reducing the need for 240 litres of corrosion inhibitor chemicals added to the water system annually
- ▶ 7 LEED water efficiency points embedded in long-term care facility business plans, incorporating low-flow plumbing fixtures and other water efficiency design features
- ▶ 4 acute sites working towards a five-year Pollution Prevention Plan to improve and reduce wastewater effluent, in compliance with Metro Vancouver bylaws



Sechelt Hospital

2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

Table of Contents

Executive Message

Our Story

Our Progress: Setting Targets and Measuring Results

Our Actions: Finding Solutions Together

- Collaborative and Integrated Action
- Leadership and Innovation
- Climate Change
- Energy and Carbon
- Food
- Materials
- Transportation
- ▶ Water

Writing the Story We Want, Now and in the Future

Appendices

References

RELATED REPORTS

VCH Climate Change Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health Officer Report

OUR STORY

Making waves with 'new' technology

Managing water treatment equipment can involve adding chemicals into the water, such as corrosion inhibitors, oxygen scavengers and scale pro. Mohammad Tayebi, chief engineer at the University of British Columbia Hospital; his team; and the hospital's Facilities Maintenance and Operations department have worked to change this by installing 11 Protector tanks in 2017 and adding eight more in 2024.

[Read more ▶](#)

“
The closed loop systems are working very well. Since 2017, there are no chemicals in the water, no corrosion on pipes and no scale build-up.

Mohammad Tayebi
Chief Engineer
University of British Columbia Hospital



Mohammad Tayebi, Chief Engineer, UBC Hospital

NAVIGATION

Table of Contents

Executive Message

Our Story

Our Progress: Setting
Targets and Measuring
Results

Our Actions: Finding
Solutions Together

► **Writing the Story We Want,
Now and in the Future**

Appendices

References

RELATED REPORTS

VCH Climate Change
Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health
Officer Report

5.0 Writing the Story We Want, Now and in the Future

Thank you for your ongoing support.

Given our climate reality and the urgency of restoring planetary health, it's clear that environmental sustainability is everyone's story. If we are to continue to offer staff and medical staff, volunteers and patients the very best quality of life and care possible, and support the health and well-being of our families and communities, we must all take responsibility for the environment.

As the many achievements at Vancouver Coastal Health demonstrate, much is already being done by so many. But as this report also shows, much more remains to be done. VCH invites the whole health-care community to take actions that will restore and regenerate the interdependent health of people, place and planet — now and for future generations.

MAKE A DIFFERENCE.

Learn more about climate change and sustainability in B.C. health care:

Subscribe to the [GreenCare Network](#) for updates and newsletters, or visit bcgreencare.ca for more information.

Get involved in sustainability activities in your health organization:

Join the [Green+Leaders](#) community and make a difference in your workplace.

Transform our processes and health system away from business as usual:

Access [toolkits and resources](#) to engage your team in discussion and action toward environmentally sustainable practices for your department.

Inspire:

Share your environmental sustainability story [here](#).



Dr. Rashmi Chadha
Planetary Health Clinical Engagement Lead and Green+Leader

**2023
Environmental
Performance
Accountability
Report (EPAR)**

NAVIGATION

Table of Contents

Executive Message

Our Story

Our Progress: Setting
Targets and Measuring
Results

Our Actions: Finding
Solutions Together

Writing the Story We Want,
Now and in the Future

► Appendices

Appendix A: Our Partners

Appendix B: Graphs of Our
Progress

References

RELATED REPORTS

VCH Climate Change
Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health
Officer Report

Appendix A: Our Partners



2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

Table of Contents

Executive Message

Our Story

Our Progress: Setting
Targets and Measuring
Results

Our Actions: Finding
Solutions Together

Writing the Story We Want,
Now and in the Future

Appendices

► Appendix A: Our Partners

Appendix B: Graphs of Our
Progress

References

RELATED REPORTS

VCH Climate Change
Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health
Officer Report

B

BC Centre for Disease Control
BC Emergency Health Services
BC Housing
BC Ministry of Energy, Mines and Low Carbon
Innovation
BC Ministry of Environment and Climate Change
Strategy
BC Ministry of Health
BC Ministry of Health Capital Services Branch
BC Hydro
BC Patient Safety & Quality Council
Business Initiatives Support Services

C

Canadian Coalition for Green Health Care
CASCADES Canada
Clinical and non-clinical direct-care staff
Clinical dietitians
Communications

E

Environment and Climate Change Canada
Environmental Vendor Services

F

Facilities Maintenance & Operations
Facilities Management Procurement
Finance
First Nations Health Authority
Food Services
FortisBC

H

Health Canada
Health Emergency Management BC
Healthy Environments and Climate Change
Health Quality BC

I

Indigenous Health
Infection Prevention and Control
Infrastructure and Risk team
Integrated Protection Services, Commuter Services
Interior Health
Island Health

L

Local and regional governments

N

National Research Council of Canada
Northern Health
Nourish Leadership

P

Pacific Climate Impacts Consortium
People and Culture
PHSA Procurement
PHSA Supply Chain
Population and Public Health
Projects & Planning teams
Provincial Nursing Skin and Wound Committee

Q

Quality Improvement

S

Simon Fraser University
Strategy and Innovation

T

Transportation Services

U

University of British Columbia

**2023
Environmental
Performance
Accountability
Report (EPAR)**

NAVIGATION

Table of Contents

Executive Message

Our Story

Our Progress: Setting
Targets and Measuring
Results

Our Actions: Finding
Solutions Together

Writing the Story We Want,
Now and in the Future

Appendices

Appendix A: Our Partners

▶ Appendix B: Graphs of Our
Progress

References

RELATED REPORTS

VCH Climate Change
Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health
Officer Report

Appendix B: Graphs of Our Progress



Visit the Methodology and
Context for Calculating KPIs



2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

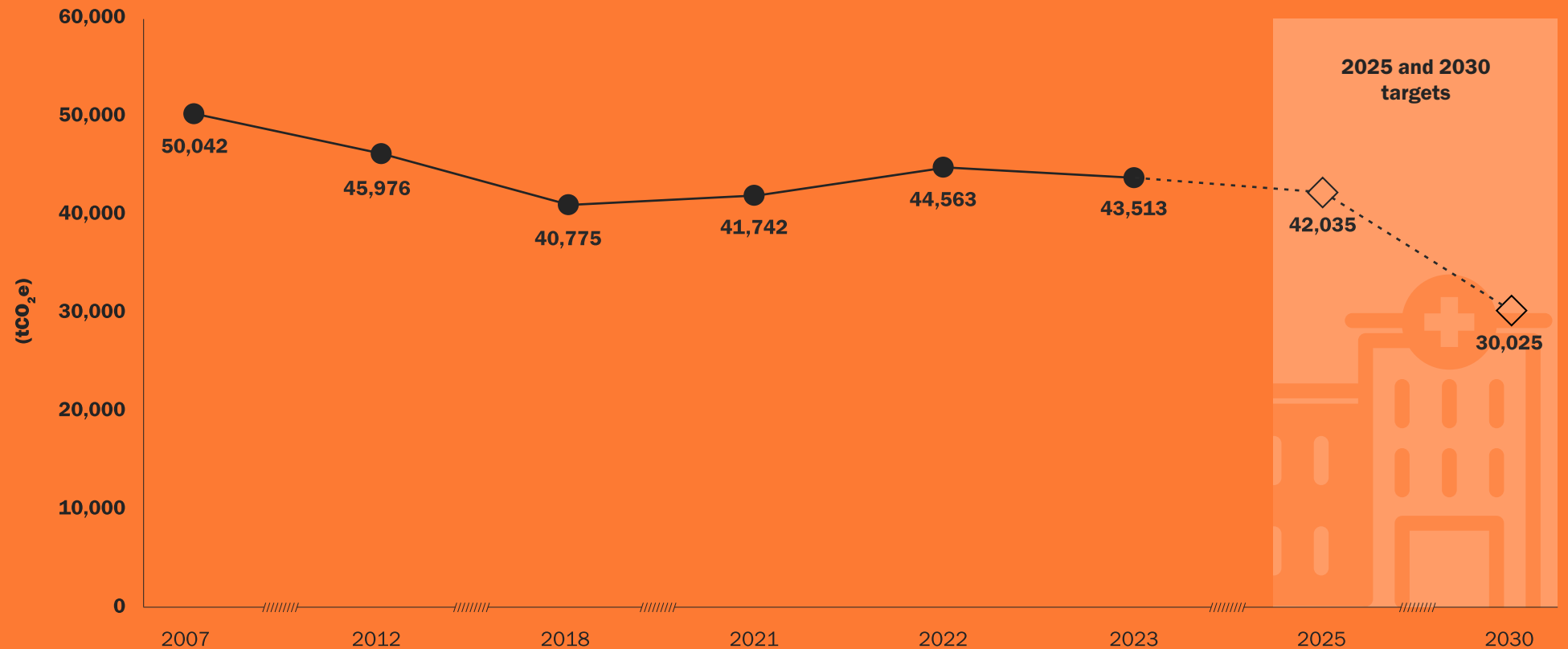
- Table of Contents
- Executive Message
- Our Story
- Our Progress: Setting Targets and Measuring Results
- Our Actions: Finding Solutions Together
- Writing the Story We Want, Now and in the Future
- Appendices
 - Appendix A: Our Partners
 - Appendix B: Graphs of Our Progress
- References

RELATED REPORTS

- VCH Climate Change Accountability Report
- Green+Leaders Annual Report
- 2024 Chief Medical Health Officer Report

Greenhouse Gas Emissions (Owned and Leased Buildings, Fleet, and Paper)

GHG emissions have **decreased by 13%** since 2007.



[NEXT GRAPH](#)

[GO BACK TO DASHBOARD](#)

2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

[Table of Contents](#)

[Executive Message](#)

[Our Story](#)

[Our Progress: Setting Targets and Measuring Results](#)

[Our Actions: Finding Solutions Together](#)

[Writing the Story We Want, Now and in the Future](#)

Appendices

[Appendix A: Our Partners](#)

[Appendix B: Graphs of Our Progress](#)

References

RELATED REPORTS

[VCH Climate Change Accountability Report](#)

[Green+Leaders Annual Report](#)

[2024 Chief Medical Health Officer Report](#)

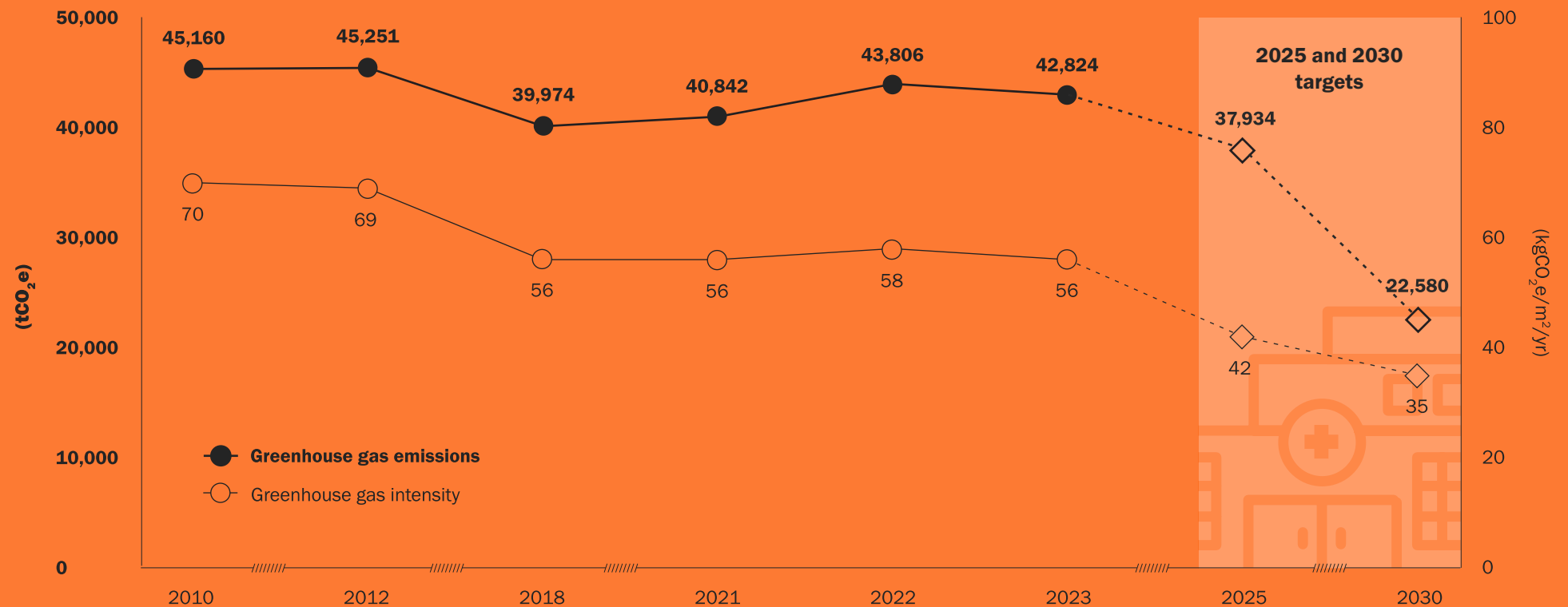
Greenhouse Gas Emissions and Intensity (Owned and Leased Buildings Only)

GHG emissions from buildings have **decreased by**

5% since 2010.

GHG emissions generated per floor area have **decreased by**

21% since 2010.



[NEXT GRAPH](#)

[GO BACK TO DASHBOARD](#)

2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

[Table of Contents](#)

[Executive Message](#)

[Our Story](#)

[Our Progress: Setting Targets and Measuring Results](#)

[Our Actions: Finding Solutions Together](#)

[Writing the Story We Want, Now and in the Future](#)

Appendices

[Appendix A: Our Partners](#)

[Appendix B: Graphs of Our Progress](#)

References

RELATED REPORTS

[VCH Climate Change Accountability Report](#)

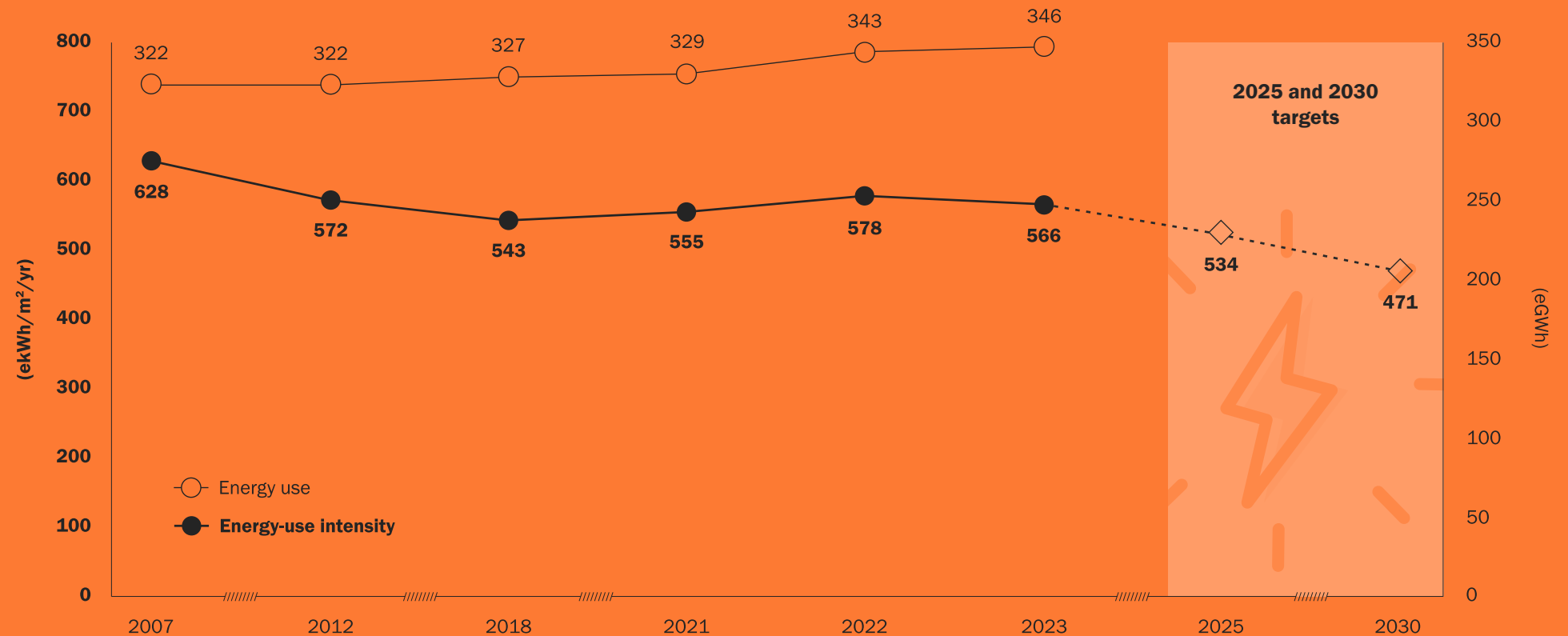
[Green+Leaders Annual Report](#)

[2024 Chief Medical Health Officer Report](#)

Energy Use and Intensity

Energy-use has **increased by 7.5%** since 2007.

Energy-use intensity per floor area has **decreased by 10%** since 2007.



[+ GO BACK TO DASHBOARD](#)

2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

[Table of Contents](#)

[Executive Message](#)

[Our Story](#)

[Our Progress: Setting Targets and Measuring Results](#)

[Our Actions: Finding Solutions Together](#)

[Writing the Story We Want, Now and in the Future](#)

Appendices

[Appendix A: Our Partners](#)

[Appendix B: Graphs of Our Progress](#)

References

RELATED REPORTS

[VCH Climate Change Accountability Report](#)

[Green+Leaders Annual Report](#)

[2024 Chief Medical Health Officer Report](#)

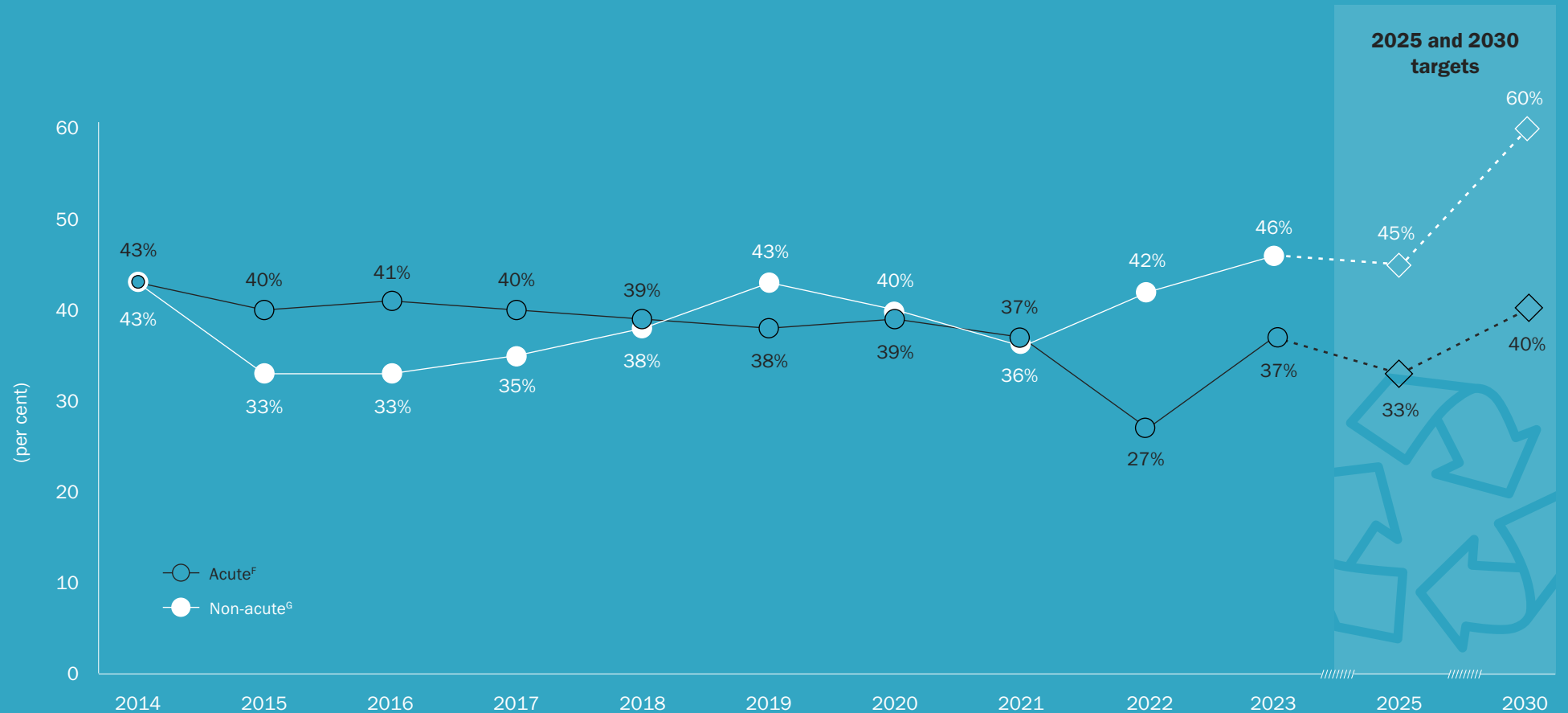
Recycling Rates

At **acute** care sites, we are

3% away from our **2030 target**.

At **non-acute** sites, we are

14% away from our **2030 target**.



[NEXT GRAPH](#)

[GO BACK TO DASHBOARD](#)

2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

- Table of Contents
- Executive Message
- Our Story
- Our Progress: Setting Targets and Measuring Results
- Our Actions: Finding Solutions Together
- Writing the Story We Want, Now and in the Future
- Appendices
 - Appendix A: Our Partners
 - Appendix B: Graphs of Our Progress
- References

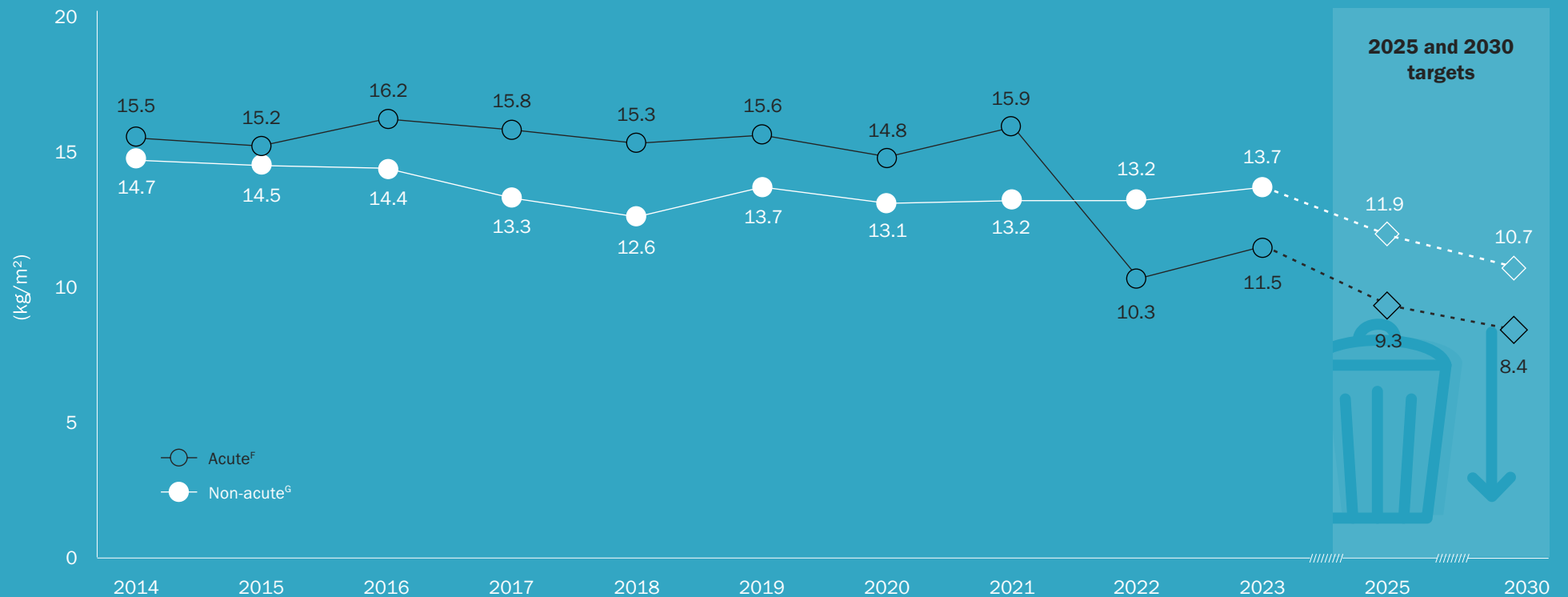
RELATED REPORTS

- VCH Climate Change Accountability Report
- Green+Leaders Annual Report
- 2024 Chief Medical Health Officer Report

Waste Generation Per Floor Area

At **acute** care sites, we are **27%** away from our **2030 target**.

At **non-acute** sites, we are **22%** away from our **2030 target**.



[+ GO BACK TO DASHBOARD](#)

2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

- Table of Contents
- Executive Message
- Our Story
- Our Progress: Setting Targets and Measuring Results
- Our Actions: Finding Solutions Together
- Writing the Story We Want, Now and in the Future
- Appendices
 - Appendix A: Our Partners
 - Appendix B: Graphs of Our Progress
- References

RELATED REPORTS

- VCH Climate Change Accountability Report
- Green+Leaders Annual Report
- 2024 Chief Medical Health Officer Report

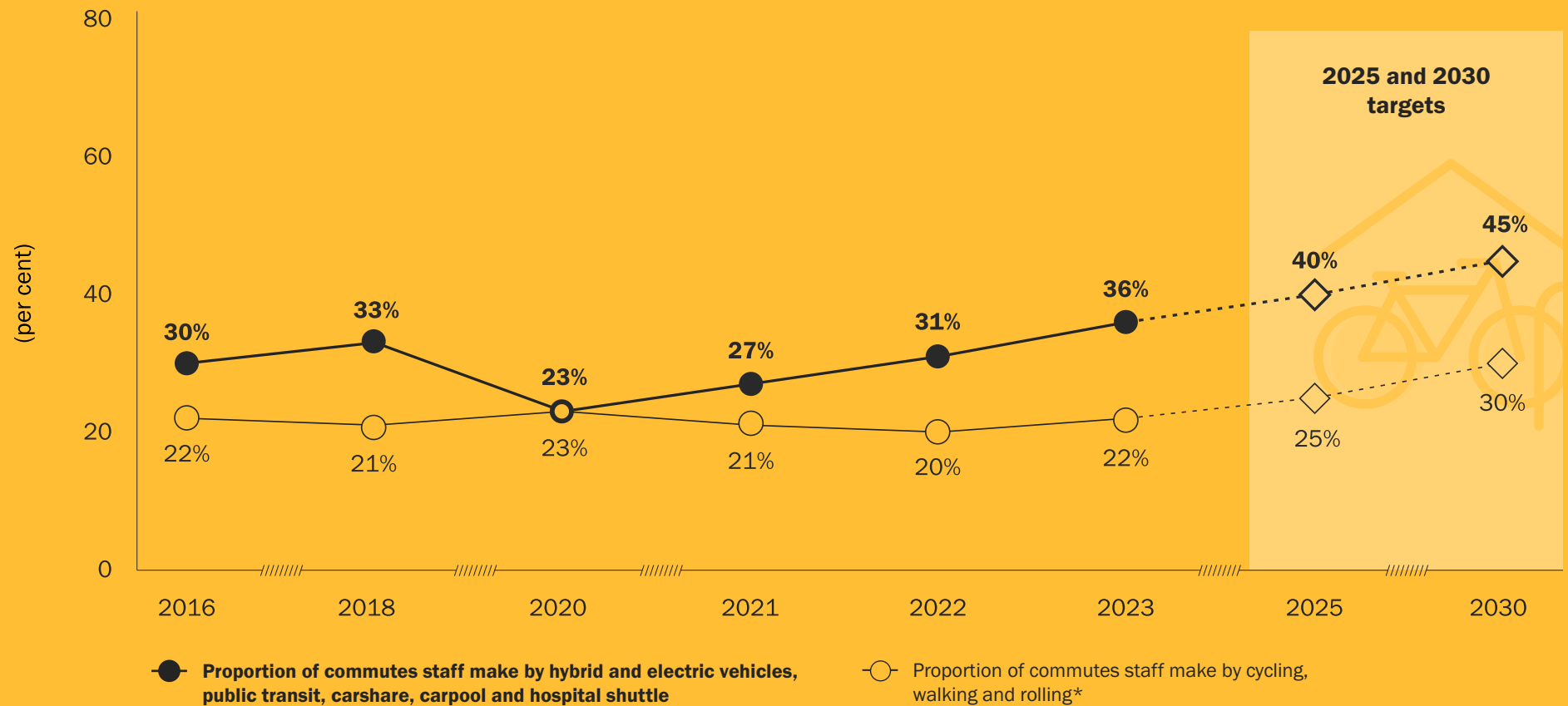
Staff Commuting

Staff commuting by cycling, walking and rolling is

8%⁰ away from the **2030 target**.

Staff commuting by hybrid and electric vehicles, public transit, car share, carpool and hospital shuttle is

9%⁰ away from the **2030 target**.



[GO BACK TO DASHBOARD](#)

* E.g. wheelchair, seated electric scooter

2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

[Table of Contents](#)

[Executive Message](#)

[Our Story](#)

[Our Progress: Setting Targets and Measuring Results](#)

[Our Actions: Finding Solutions Together](#)

[Writing the Story We Want, Now and in the Future](#)

Appendices

[Appendix A: Our Partners](#)

[Appendix B: Graphs of Our Progress](#)

References

RELATED REPORTS

[VCH Climate Change Accountability Report](#)

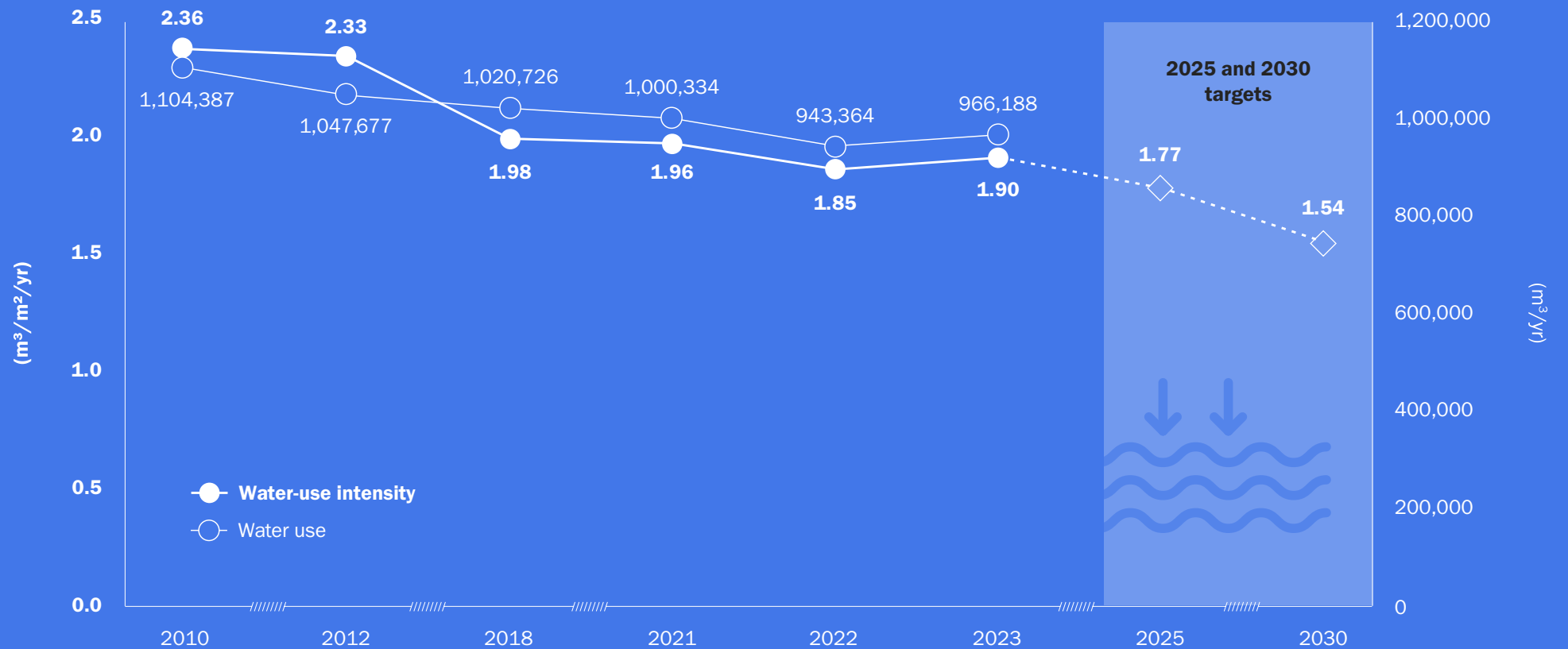
[Green+Leaders Annual Report](#)

[2024 Chief Medical Health Officer Report](#)

Water Use and Intensity

Water use has decreased by **13%** since 2010.

Water-use intensity has decreased by **20%** since 2010.*



[+ GO BACK TO DASHBOARD](#)

* Water use is not metered in all areas of facility space, which explains the difference in facility space noted in the energy and carbon metrics.

2023 Environmental Performance Accountability Report (EPAR)

NAVIGATION

Table of Contents

Executive Message

Our Story

Our Progress: Setting
Targets and Measuring
Results

Our Actions: Finding
Solutions Together

Writing the Story We Want,
Now and in the Future

Appendices

► References

RELATED REPORTS

VCH Climate Change
Accountability Report

Green+Leaders Annual Report

2024 Chief Medical Health
Officer Report

References

- A** Natural Resources Canada - Office of Energy Efficiency - Demand Policy and Analysis Division. Greenhouse gas equivalencies calculator [Internet]. Government of Canada; 2017 [cited 2024 June 8]. Available from: <https://oee.nrcan.gc.ca/corporate/statistics/neud/dpa/calculator/ghg-calculator.cfm#results>
- B** Information sources for buildings: ARCHIBUS and VCH Real Estate Team
- C** Full-time equivalent staff includes all designated groups reported in the Health Sector Compensation Information System (HSCIS). This includes physicians (doctors on staff), executive/excluded, and non-union and bargaining unit employees. It excludes affiliate employers and BC Emergency Health Services (BCEHS) employees. (Source: Health Employers Association of BC)
- D** Canadian Green Building Council
- E** In 2023, VCH-owned facilities included in energy related key performance indicator are (* denote facilities that are leased but included in energy metering):
- Vancouver General Hospital
 - Richmond Hospital
 - Lions Gate Hospital
 - Sechelt Hospital
 - qathet General Hospital
 - Squamish Hospital
 - Whistler Health Care Centre
 - GF Strong
 - Shornecliffe Intermediate Care
 - North Shore Berkley Care Centre
 - Cedarview Lodge
 - Minoru Residence
 - Diamond Health Care Centre
 - Adanac Park Lodge
 - Little Mountain Place
 - Little Mountain Court
- F** VCH acute care sites included in waste related key performance indicators are (* denotes facilities that are still working on returning to pre-2020 recycling service levels):
- Lions Gate Hospital*
 - Richmond Hospital*
 - Squamish General Hospital
 - UBC Hospital*
 - Vancouver General Hospital*
- G** VCH non-acute sites included in waste related key performance indicators are:
- Berkley Care Centre
 - Bowling Green
 - Cedarview Lodge
 - Dogwood Lodge
 - GF Strong
 - George Pearson Centre
 - Hilltop House
 - Margaret Fulton
 - Minoru Residence
 - Richmond Lions Manor
- H** The GreenCare survey is an annual survey (biennial prior to 2020) for all staff working within Fraser Health, Providence Health Care, Provincial Health Services Authority and Vancouver Coastal Health. The survey collects information on staff perspectives, familiarity with, and actions related to planetary health, climate change and environmental sustainability efforts in areas such as transportation and food. The data is used to measure trends and progress, and develop programs that will meet staff needs.
- I** In 2023, VCH-owned facilities included in water related key performance indicator are (* denotes a leased site):
- Vancouver General Hospital
 - UBC Hospital*
- J** GreenCare is a network that unites efforts across B.C. health-care organizations to advance our health-care system toward environmentally sustainable and resilient care for the health of people, place and planet.
- K** The Green+Leaders program is a community of health-care staff who are engaged in advancing sustainability practices within the health system. Green+Leaders are change agents who encourage environmentally sustainable behaviour, improve existing processes, and help to create an overall culture of environmental health and wellness inside and outside of the workplace.
- UBC Hospital*
 - Djavad Mowafaghian Centre for Brain Health*
 - George Pearson Centre*
- Richmond Hospital
 - Lions Gate Hospital
 - Sechelt Hospital
 - GF Strong
 - George Pearson Centre*
 - Cedarview Lodge
 - Minoru Residence
 - Djavad Mowafaghian Centre for Brain Health*

2024 GreenCare. All rights reserved.

This report has been compiled by
Be the Change Group for the Energy and
Environmental Sustainability team.

Unless otherwise noted, all materials may
be freely reproduced in part or in full,
provided that the source is acknowledged.

Suggested citation:

Vancouver Coastal Health Environmental
Performance Accountability Report
2023 (2024). Energy and Environmental
Sustainability, British Columbia, Canada.

For further information contact:

Sonja Janousek
Environmental Sustainability Manager
sonja.janousek@vch.ca

Vancouver 
CoastalHealth


GreenCare™