



ST. JOSEPH'S • ST. MICHAEL'S • PROVIDENCE

UNITY HEALTH
TORONTO

SUSTAINABILITY REPORT

2022-2023

A message from the Executive VP of Corporate Services and CFO and VP of Facilities and Planning



Dean Martin

Executive Vice President of Corporate Services and Chief Financial Officer
Sponsor of the Environmental Sustainability Advisory Committee



Michael Keen

Vice President of Facilities and Planning

Many severe climate events have affected Canada in the recent past, and they are increasing in severity and frequency. In the past year, Ontarians have experienced windstorms, extreme heat, flooding, and wildfires. As the climate continues to change, we will see impacts to our health and well-being, and in turn, our healthcare system. The strong interconnectedness between environmental and human health drives us to continue on our sustainability journey. The Unity Health Toronto 2019-24 Strategic Plan formally commits to addressing environmental issues by investing in our future, building a nimble culture that makes decisions through a value lens, and being stewards of the environment by reducing the impact we have on the planet. As a part of this commitment, we are pleased to share our first annual sustainability report highlighting some of the steps we have taken on our journey towards sustainable and net zero healthcare so far.

Unity Health was founded in 2017, bringing together St. Joseph's Health Centre, St. Michael's Hospital, and Providence Healthcare. Since then, thanks to the efforts of our staff, Unity Health has successfully implemented organizational-wide initiatives demonstrating environmental stewardship through the reduction of energy use, the conservation of natural resources, and waste diversion.

Over the past decade, Unity Health has successfully implemented major energy conservation and demand management projects. These experiences allowed Unity Health to identify additional energy conservation and demand management opportunities. The Unity Health 2020-24 Energy Conservation and Demand Management Plan will allow St. Joseph's, St. Michael's, and Providence to apply this knowledge as we continue to be a leader in energy conservation and demand management.

In recognition of our commitment to sustainability, we were honored to receive several awards in 2022-23, including the Save on Energy – Energy Manager of the Year Award, the Canadian College of Health Leaders - Energy and Environmental Stewardship Award, and the Stryker Environmental Excellence Award, Silver. Building on this momentum, Unity Health will continue to embark on our journey towards sustainable and net-zero healthcare, and contribute to our vision of providing *the best care experiences. Created together.*

In his encyclical *Laudato Si': On Care for Our Common Home*, Pope Francis observed the rising awareness of environmental issues and the imperative to safeguard the natural world. He noted a growing and distressing concern for the state of our planet. He emphasized that the objective is not merely the accumulation of information or satisfying curiosity but, instead, to develop a profound awareness, to personally internalize the challenges the world is facing, and to empower each of us to take meaningful action.

As a Catholic healthcare organization, these profound words resonate deeply with our mission, vision, and values. Unity Health is dedicated to caring for all in need, transcending the boundaries of our walls to encompass our communities and the environment. Our actions focus on the broader impact of our decisions and we recognize the integral role of the environment in our advocacy of - and response to - the social determinants of health.

Unity Health actively works to protect the environment, minimize environmental hazards, and reduce our contribution to climate change. We stand by those who are affected by environmental issues and uphold practices that ensure environmental safety within our organization. Furthermore, we actively advocate for sustainable solutions and work to broaden the understanding of the interconnectedness between environmental issues and public health.

The purpose of this Sustainability Report is not merely to accumulate information or satisfy curiosity, but to heed Pope Francis's call to be painfully aware, to empathize with the suffering of our planet, and to discover our individual and collective roles in addressing these challenges.

By embracing this purpose, we renew our commitment to serve the greater good, caring for both the health and well-being of those we serve and the health of our planet. We aim to create a more sustainable, compassionate, and environmentally responsible future for generations to come. Together, we can address the challenges of our time, safeguarding both the health of those we serve and the health of our planet.

A handwritten signature in white ink on a dark blue background, reading "DMartin".

Dean Martin
Executive Vice President of Corporate Services & Chief Financial Officer
Sponsor of the Environmental Sustainability Advisory Committee

A handwritten signature in white ink on a dark blue background, consisting of two stylized, connected 'Z' or '2' shapes.

Michael Keen
Vice President of Facilities and Planning

OUR SUSTAINABILITY JOURNEY

While this is Unity Health's first annual sustainability report, sustainability has been an integral part of our organization for years. Unity Health has a rich history of engaging in sustainability, and here are just a few of our major milestones on our sustainability journey over the years.

1995-2005

- Two major energy projects were started at St. Michael's.

2012

- Providence started to work with an energy consulting company under the Greening Health Care Program.

2013

- St. Michael's won the Greenbelt Local Food Challenge Award.

2016

- PVC Recycling Program started at St. Joseph's in the Operating Room and Surgical Ward, and expanded to St. Michael's in 2021.
- Li Ka Shing Knowledge Institute variable air volume retrofit.

2018

- The Environmental Sustainability Advisory Committee (ESAC) was established, merging committees across three sites.
- Stryker Sustainability Program was implemented at St. Joseph's in the Operating Room and later at St. Michael's in 2021.
- Chiller replacement and installation of central chiller plant optimization at St. Joseph's.

2019

- Sustainability was incorporated into the 2019-26 Strategic Plan as *"investing in our future"*.
- The Energy Team was established, consisting of two Energy Project Managers and an Energy and Sustainability Project Assistant.

2021

- A Sustainability Project Coordinator was hired.

SUSTAINABILITY HIGHLIGHTS 2022-23

Investing in our future, we will build a more nimble culture that makes decisions through a value lens and we will be stewards of the environment by reducing the impact we have on the planet on our journey towards sustainable and net zero healthcare.

Here are some of Unity Health's sustainability highlights from the past year.

Culture and Practice

26
Environmental Sustainability Advisory Committee Members

68
Sustainability Champions

1 
2023 CCHL Energy and Environmental Stewardship Award

3
Staff engagement campaigns

DONATIONS:

30 
case carts

7
skids of supplies


3
carts of supplies

Procurement and Supply Chain


9
Top-spend suppliers engaged in a Sustainability Scan

1
Product environmental impact reviewed


1 
2022 Stryker Environmental Excellence Award, Silver

156 
Daniels reusable Sharpsmart containers installed at Providence - estimated to divert approximately 1,600 single-use containers from landfill every year.

Energy

We started to calculate scope 1 and 2 greenhouse gas (GHG) emissions. 

1 
Save on Energy 2021 Energy Manager of the Year Award

ENERGY CONSUMPTION SAVINGS: 
1,990,000 kWh
Equivalent to over 171 million smartphones charged.

Planning and Redevelopment

SHUTTER DEMOLITION WASTE RECYCLED (tonnes):

19,692
concrete and brick

491
steel

5
aluminum

4 
Projects completed with sustainability considerations.

GREENHOUSE GAS EMISSIONS

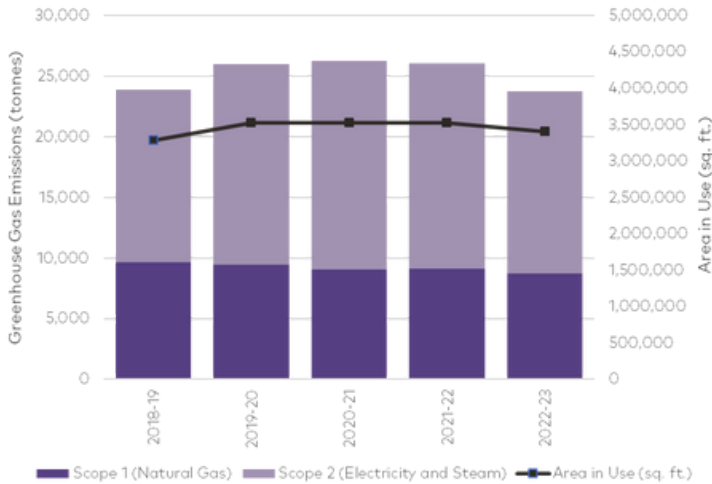
As we continue on our sustainability journey, a vital step in reducing our environmental impact is to calculate our greenhouse gas (GHG) emissions, and so this year, we started to do just that.

Scope 1 and 2 GHG Emissions

Scope 1 emissions are direct GHG emissions that occur from sources that are controlled or owned by an organization, such as emissions associated with fuel combustion in boilers, furnaces, and vehicles, as well as anesthetic gases.

Scope 2 emissions are indirect GHG emissions associated with the purchase of energy (electricity, steam, heating, or cooling).

Figure 1. Unity Health's 2018-23 Scope 1 and 2 Greenhouse Gas Emissions in Relation to Area in Use.



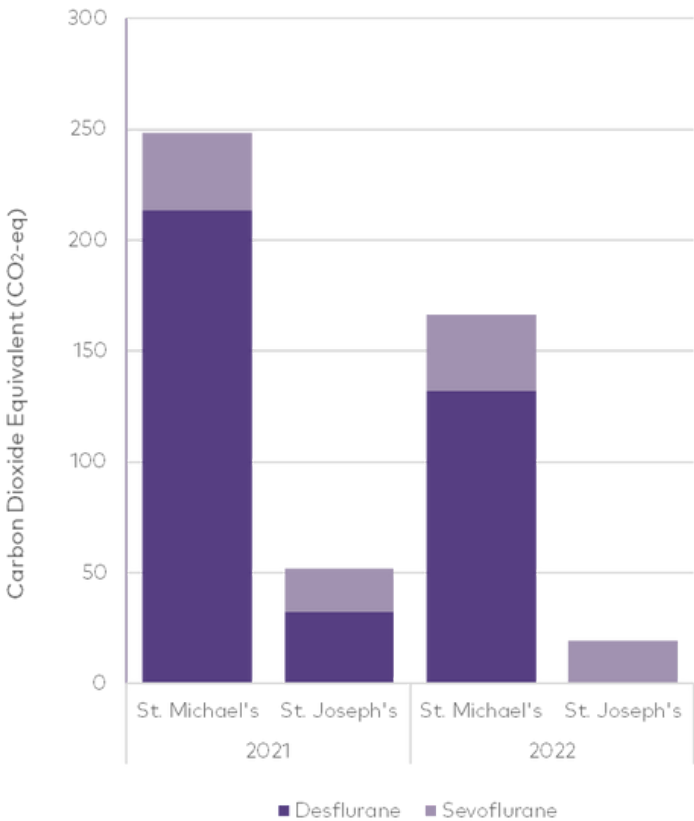
Carbon Footprint of Anesthetic Gases Purchased

Anesthetic gases are potent Scope 1 GHG emissions, with hundreds to thousands of times the global warming potential of carbon dioxide.

With desflurane being the most potent of the four widely used anesthetic gases, we are proud to share that as of 2021, St. Joseph's removed desflurane from their stock and therefore, practice, and St. Michael's followed as of 2023.

Nitrous oxide is the third most potent of the four widely used anesthetic gases. This year, St. Michael's did maintenance on the central distribution system to eliminate any leakages and is assessing other strategies to reduce unnecessary nitrous oxide related emissions.

Figure 2. Unity Health's 2021-22 Carbon Footprint of Anesthetic Gases Purchased.



CULTURE AND PRACTICE

Canadian College of Health Leaders 2023 Energy and Environmental Stewardship Award

Unity Health was recognized as a progressive healthcare organization that has implemented organizational-wide initiatives demonstrating environmental responsibility through the reduction of energy usage, the preservation of natural resources, and effective waste diversion solutions.

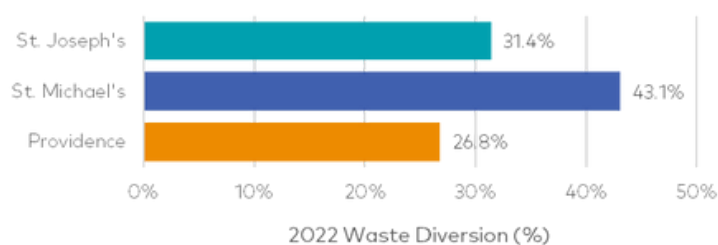
Photograph 1. Canadian College of Health Leaders Honouring Health Leadership Event.



Waste Diversion

Waste is diverted from the landfill through various recycling and composting programs.

Figure 3. Unity Health's 2022 Waste Diversion Per Site.

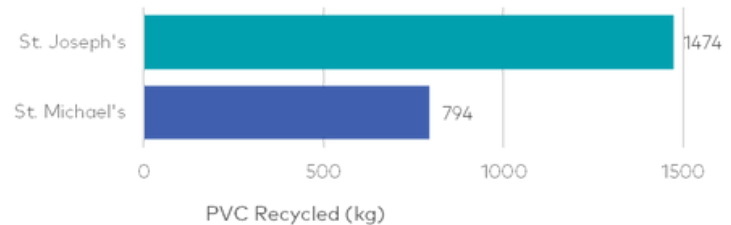


PVC 123 Recycling Program

Starting back in 2016 under the leadership of Dr. Ali Abbass, Staff Anesthesiologist, Chief Environmental Stewardship and Sustainability, and ESAC Member, St. Joseph's was the pioneer of PVC recycling.

In 2020, in collaboration with The Vinyl Institute of Canada and Environment and Climate Change Canada, the PVC 123 Recycling Program was launched with almost 30 participating hospitals. While this pilot program ended in 2021, St. Joseph's and St. Michael's still continue to recycle oxygen masks, oxygen tubing, and intravenous bags.

Figure 4. Unity Health's PVC Recycled Per Site Since Program Launch.



Photograph 2. Dr. Ali Abbass, Staff Anesthesiologist, Chief Environmental Stewardship and Sustainability, and ESAC member, giving a demonstration of the PVC Recycling Program.



Supplies and Equipment Donations

The Partners in Project Green Material Exchange Program facilitates the exchange of material within the community to divert waste from the landfill. Through this program, St. Joseph's received a donation of 45 waste (recycling, compost, and garbage) bins from Sheridan College.

St. Joseph's also donated 5 skids and 3 carts of supplies and St. Michael's donated 30 case carts and 2 skids of supplies to Not Just Tourists, a not-for-profit organization, which diverts medical supplies from the landfill to those in need worldwide.

CULTURE AND PRACTICE

Nourish Leadership's Planetary Health Menus Program

Unity Health is working to reduce the environmental impact of our food offerings, while supporting healthy eating at the same time - improving our menus to be less wasteful, sustainably sourced, seasonal, plant-forward, and culturally mindful.

Food Waste

Providence uses the EnviroPure food waste disposal system to hyper-accelerate the natural aerobic decomposition process of food waste onsite. This technology reduces the environmental impact of food waste as it eliminates the need for the food waste to be transported and processed at landfill or composting facilities.

St. Joseph's collects coffee grounds and eggshells for onsite composting in the community gardens.

Community Gardens

Used by in- and out-patients of the Unity Health Mental Health and Addiction Programs, staff, and 13 community members, the gardens at St. Joseph's not only support health and well-being, but also food security for community members who would not otherwise have access to land to grow food.

Photograph 3. Community members at the St. Joseph's Community Gardens.



Climate Conscious Prescriptions

Climate change and health go hand in hand. Plant-rich diets and time spent in nature can provide health benefits, while climate change can worsen existing health inequities. With this in mind, Unity Health's Family Health Teams (FHTs) have been working on climate conscious prescriptions.

- Nature prescriptions - the St. Michael's FHT created a customized prescription in the electronic medical record (EMR) to enable providers to prescribe a free Parks Canada Discovery Pass through the PaRx program.
- Inhaler prescriptions - the St. Joseph's and St. Michael's FHTs have been working on climate conscious inhaler prescriptions through staff and patient education and EMR tools.

Photograph 4. Sharon Au, Sustainability Project Coordinator and Indraneel Bhattacharjee, Sustainability Project Assistant at the St. Joseph's People Appreciation BBQ.



Project Highlights

- University Health Network Waste Reduction Week Inter-Hospital Challenge
- Earth Hour Turn Off Your Computer Campaign
- Lights Off Campaign
- Daniels reusable Sharpsmart containers installed at Providence
- Organic bin implemented in the dining room at St. Michael's Psychiatry
- Recycling bins implemented in the dining room at the Houses of Providence

PROCUREMENT AND SUPPLY CHAIN

Supply chains are the largest contributors to GHG emissions in healthcare, estimated to be over 60% of total GHG emissions from healthcare in Canada.

Sustainable Procurement Working Group

Unity Health has been participating in Partnerships for Environmental Action by Clinicians and Communities for Healthcare Facilities' (PEACH) cross-sector working group with the aim to transform Canadian healthcare supply chains with a shared vision of a resilient and environmentally sustainable healthcare system. The working group will act as a catalyst for joint action of hospital purchasing departments, group purchasing organizations, their members, and other stakeholders, to challenge suppliers to champion low carbon product innovations and develop new business models that minimize waste and harm to the environment. The working group will also provide guidance for the development of more sustainable procurement policies and identify actions for the most carbon intensive products and suppliers.

Engagement with Suppliers

We approached our valued partners to better understand their sustainability commitments. We asked 11 of our top-spend suppliers whether their company made a public commitment to sustainability and if they have set any measurable goals or targets related to sustainability.

Figure 5. Unity Health's Top-Spend Suppliers' Public Commitment to Sustainability.

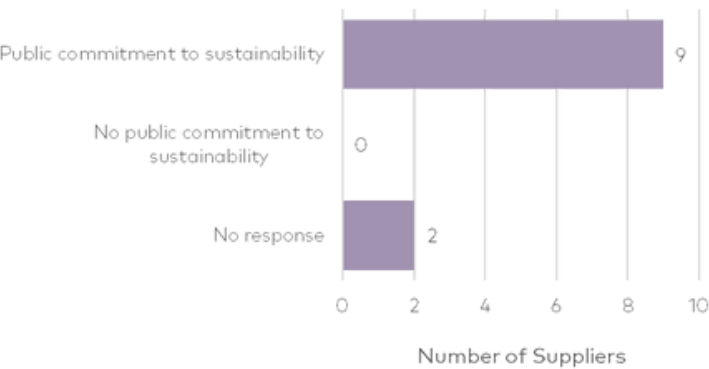
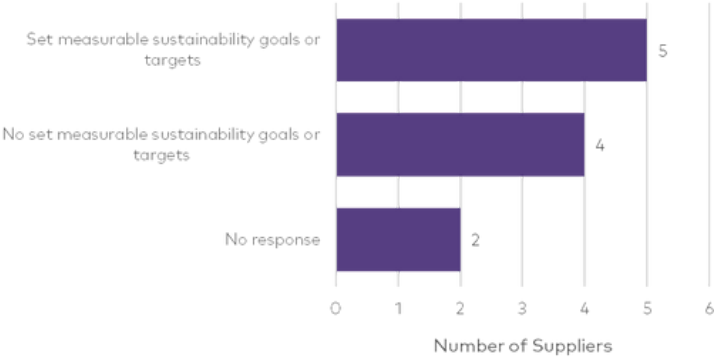


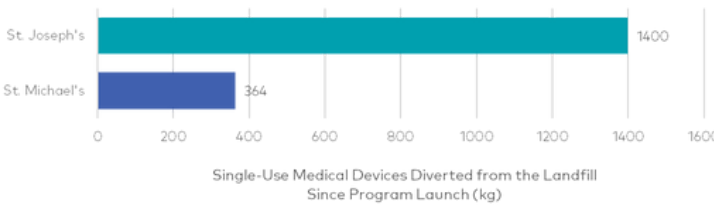
Figure 6. Unity Health's Top-Spend Suppliers' Sustainability Goals or Targets.



Stryker Sustainability Solutions

Spearheaded by the St. Joseph's Operating Room, Unity Health has been working with Stryker Sustainability Solutions at St. Joseph's since 2018 and St. Michael's since 2022 to collect single-use medical devices, then disinfect, remanufacture, and test them for resale and reuse. In 2022, Unity Health had a total of \$400,000 in savings from this program, and St. Joseph's won the Environmental Excellence Award, Silver for diverting 679 kg of single-use medical devices from the landfill.

Figure 7. Single-Use Medical Devices Diverted from the Landfill Since Program Launch (kg).



Photograph 5. St. Joseph's team accepting the 2022 Stryker Environmental Excellence Award, Silver.



ENERGY

Save on Energy 2021 Energy Managers of the Year Award

Energy Managers, Emily Huang and Shailesh Abhang were recognized as Ontario's leading energy management professionals dedicated to delivering lasting value to Unity Health through energy-efficiency best practices.

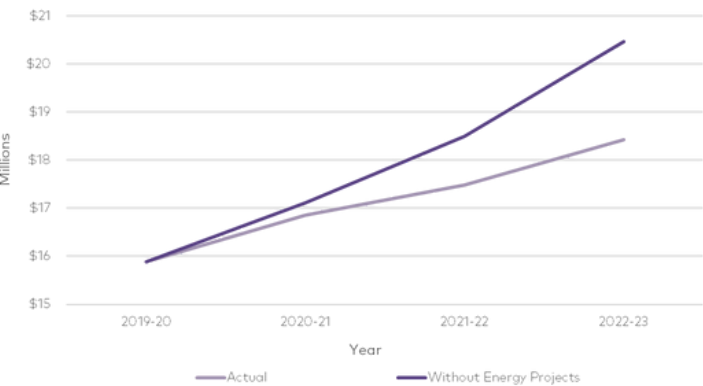
Photograph 6. Energy Managers, Emily Huang and Shailesh Abhang.



Utility Costs and Savings

Through various energy efficiency projects with the collaborative efforts from staff across Unity Health, from 2019 to 2023, there has been an accumulative savings of \$2,044,000 in utility costs.

Figure 8. Unity Health's 2019-23 Utility Costs and Savings.



Energy Use Intensity (EUI)

Unity Health had a 1.3% reduction in EUI in 2022-23 compared to 2021-22.

Figure 9. Unity Health's 2018-23 Energy Use Intensity.

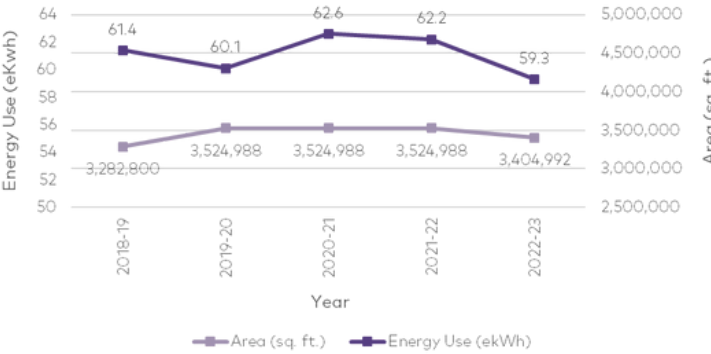
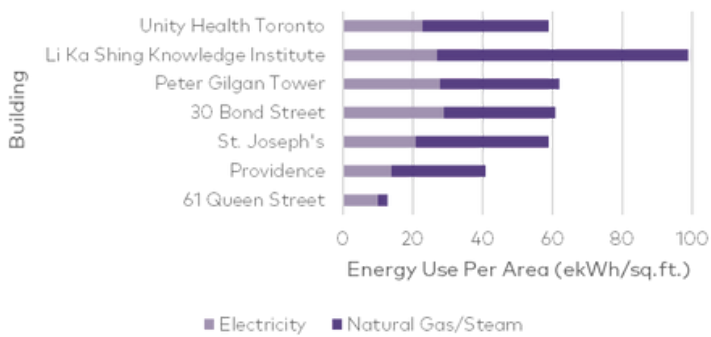


Figure 10. Unity Health's 2022-23 EUI Benchmark.



Project Highlights

- St. Joseph's HVAC fan retrofit
- St. Michael's pump replacement and variable frequency drive installation
- St. Michael's magnetic resonance imaging cooling water reduction

Photograph 7. St. Michael's Variable Frequency Drive.



PLANNING AND REDEVELOPMENT

Embedding Sustainability into Planning and Redevelopment

Embedding sustainability into planning and redevelopment not only reduces our environmental impact, and improves our operational and financial health, but also enhances the health and wellness of our staff, patients, visitors, and community.

Unity Health is exploring and evaluating ways to incorporate sustainability into our practices and determine the best recipe to inform our planning, design, and implementation specific to challenges in healthcare.

Some examples are

- Sustainable options for the construction process, completed building, and operations of the facility;
- Digital solutions to enhance efficiency (e.g. installation of real-time locating system at St. Joseph's to enhance clinical workflow);
- Sustainable design standards (e.g. developed energy construction guidelines, participate in Canadian Standards Association (CSA) working groups, developing new national guidance and standards on climate resiliency and adaptation for healthcare);
- Engage with peers and support team continuing education about the latest energy and emissions reduction strategies for plant and infrastructure design;
- Explore partnerships for sustainable design;
- Embed procurement requirements for suppliers to demonstrate their sustainable practices; and
- Engage innovative technologies for implementation such as, photovoltaics, geothermal, and heat recovery systems.

We also seek opportunities for access to nature and its proven healing and wellness benefits by

- Creating places of respite for staff, patients, and visitors, such as passive and therapeutic gardens, benches, and at St. Joseph's, a playground open to the neighbourhood;

- Using biophilic design and nature imagery for positive distraction in spaces that do not have access to daylight; and
- Encouraging more staff to cycle with plans for improved bicycle racks.

Photograph 8. Operable windows at St. Joseph's Palliative Care Unit.



Project Highlights

- Operable windows in St. Joseph's new Palliative Care Unit
- Nature imagery murals and partitions at St. Joseph's and Providence
- Outdoor pavilion at St. Joseph's

Photograph 9. Outdoor pavilion at St. Joseph's.



We are committed to serve the greater good,
caring for both the health and well-being
of those we serve and the health of our planet
to create a more sustainable, compassionate, and environmentally responsible
future for generations to come.

Thank you to our staff, learners, partners, and suppliers
for embarking on this journey with us.
We couldn't do this without you.

For more information on sustainability at Unity Health:



sustainability@unityhealth.to



<https://unityhealth.to/about-unity-health/accountability/sustainability/>

