



2023 ENVIRONMENTAL LEADERSHIP AWARD

SUBMITTED BY



APRIL 24, 2023



In the spirit of truth and reconciliation,

we acknowledge that LONDON HEALTH SCIENCES CENTRE operates within the traditional homeland territory of the Anishinaabek, Haudenosaunee, Lūnaapéewak, and Attawandaron peoples, on lands connected with the London Township and Sombra Treaties of 1796 and the Dish with One Spoon Covenant Wampum. This land continues to be home to diverse Indigenous peoples (First Nations, Métis, and Inuit) whom we recognize as contemporary stewards of the land and vital contributors to our society. Additionally, there is a growing urban Indigenous population who make the City of London home. We value the significant historical and contemporary contributions of local regional First Nations of Turtle Island (North America).

Unwavering in our commitment to Indigenous communities, we promise to deliver our work in a way that preserves the dignity, independence and equal opportunity for all people, and is focused on renewing respectful relationships through education.



London Health Sciences Centre (LHSC) is proud and delighted to be submitting our application for the Environmental Leadership Award at the London Chamber of Commerce.

Sustainability has come to a critical turning point, a watershed moment, if you will. At LHSC, we are fully immersed in our Master Plan, which charts the trajectory of the clinical and facility infrastructure at LHSC for the next 30 years, with Planetary Health at the forefront as one of our four guiding pillars. Our commitment to "saving lives and the planet" runs deep, and as LHSC, we are fully invested in the pursuit of this noble endeavor.

Our Green Teams at LHSC are an impressive and passionate group, driven by an unwavering desire for a healthier future. Comprised of staff from a wide range of departments across our hospitals, they are at the forefront of generating new and innovative synergies between health care and environmental sustainability. Their unbridled motivation and tireless efforts have already yielded positive results. The palpable energy and drive for a sustainable future in our community is a testament to their exceptional work.

We eagerly anticipate sharing more about our remarkable people, ground-breaking work, and the sustainable path that lies ahead of us.

Best regards,

Dr. Jackie Schleifer Taylor

President and CEO
London Health Sciences Centre

Abhi Mukherjee

Corporate Services Executive / CFO
London Health Sciences Centre

Dipesh Patel

Capital Redevelopment and Environmental Operations Executive
London Health Sciences Centre



TABLE OF CONTENTS

Introduction	5	Community Engagement	22
Environmental Mission	6	Indigenous Healing Garden.....	22
Environmental Policy	6	Mental Health Gardens	23
Master Plan	7	LHSC and Clintar Adopt Westminster Ponds.....	24
Building Construction and Operation.....	8	Designated birding and planting areas	25
University Hospital Windows.....	8	LHSC Green Teams	25
LED Re-lighting project	8	Green Health Care Awards	26
Minor Surgery Centre at 746 Baseline Road	10	Energy Behaviour Award	26
Green Procurement	11	Green Hospital Scorecard Award for Leadership	27
Energy	12	Staff Engagement	28
Energy Use	12	Upcoming Green Team Initiatives	29
Peak Shaving to Reduce Emissions	12	Metered Dose Inhalers	29
Energy Conservation Projects	13	Operating Room Planetary Health Intervention Team	29
Transportation.....	14	Conclusion	30
Virtual care.....	14		
Waste	15		
Waste Minimization	15		
Diversion program	15		
General Waste.....	16		
Back to Basics Recycling.....	16		
Furniture Recycling and Lost & Found	17		
Organics Program.....	17		
Green Health Care award for Leadership.....	21		

Introduction

As the world continues to face unprecedented environmental challenges, it is crucial that organizations take proactive steps towards sustainability and environmental responsibility.

The 2023 London Chamber of Commerce Environmental Leadership Award provides a platform to recognize those organizations that have demonstrated exceptional commitment and innovation in this area. By celebrating and sharing best practices, we can inspire others to follow suit and create a more sustainable future for all.

This submission highlights the environmental leadership initiatives of London Health Sciences Centre (LHSC), showcasing our commitment to reducing our environmental impact and contributing to a healthier planet.



LHSC: saving lives and the planet

Environmental Mission

London Health Sciences Centre's (LHSC) Ecological Stewardship Program has its origins in the hospital's energy conservation initiatives, which gained momentum in 2000 with the development of an award-winning energy awareness program. Today, the Ecological Stewardship Program uses a holistic approach to understanding and reducing the hospital's impact on the environment.

LHSC has been analyzing our hospital's carbon footprint since 2007. Armed with this analysis, we're using innovation, vendor partnerships, education and awareness initiatives, staff involvement, holistic approaches, and new technologies to reduce our impact on the environment.

Environmental Policy

At LHSC, we recognize that the built environment has a significant impact on the health and well-being of our patients, staff, and community. In this regard, we are committed to operating our organization in a way that reflects our values and promotes environmental sustainability. We understand that sustainability is not just a buzzword, but a way of life that informs everything we do. While we do not yet have a formalized environmental policy, we are currently guided by a set of overarching principles woven through all areas of our work that reflect our commitment to sustainable practices. By adhering to this philosophy, we aim to create a built environment that is not only functional and beautiful but also promotes the health and well-being of our community and protects the environment for future generations. We believe that every action we take towards sustainability is an investment in the future of our community.

Our holistic approach to sustainability will incorporate the following areas:

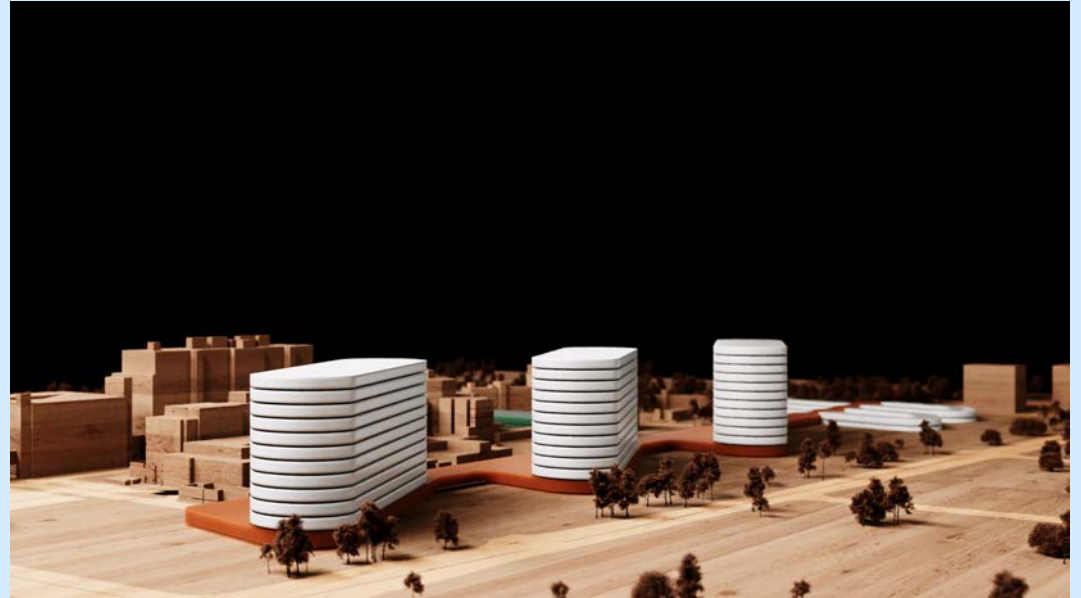
1. Environmental goals and targets: We will define specific goals and targets that LHSC aims to achieve, such as reducing energy consumption, minimizing waste generation, and improving the efficiency of transportation.
2. Environmental responsibilities: We will define the roles and responsibilities of different departments or individuals within LHSC in relation to environmental sustainability. This includes responsibilities for waste management, energy efficiency, water conservation, and other areas.
3. Environmental regulations and laws: We will outline how LHSC intends to comply with relevant environmental laws and regulations. This will include guidelines for reporting and monitoring environmental impacts, as well as strategies for mitigating environmental risks.
4. Environmental management systems: We will outline our approach to environmental management systems, including processes and procedures used at LHSC.
5. Environmental education and training: We will educate and train employees on environmental sustainability. This will include training on energy conservation, waste reduction, and other sustainability practices.
6. Performance indicators and monitoring: We will include performance indicators and monitoring mechanisms in our policy to help us track our progress towards achieving our environmental goals. This will include metrics such as greenhouse gas emissions, energy usage, and waste generation and diversion.
7. Communication and reporting: We will outline how we will communicate our environmental performance to stakeholders, including employees, patients, visitors, and the public. This could include annual sustainability reports, environmental impact assessments, and more.

Master Plan

LHSC has embarked on its Master Plan for 2025, proposing a concrete vision of health care services and infrastructure in 10, 20 and 30 years. The Master Plan is guided by four overarching pillars in alignment with LHSC's guiding principles, included consultation with more than 1,200 community members through interviews, focus groups and surveys, and was reviewed and approved by LHSC's Board of Directors.

Pillar 4 in our Master Plan refers to Planetary Health, and is guided by these principles:

1. Creates the opportunity to lead innovations in energy efficient and sustainable designs, aligned with LEED, WELL, and beyond
2. Makes the best use of existing infrastructure and owned land
3. Minimizes negative impacts on surrounding residents and businesses, protecting vulnerable communities
4. Minimizes disruption and negative impacts on the environment, including land, water, habitat, and nature
5. Promotes the ability to reduce gas emissions, use green energy, recycle and reuse materials, and build resilience to climate change impacts, aligned with the City of London's Climate Action Plan



The Option 2 "A New Wayfinding Promenade" received the highest score from the LHSC Options Evaluation Committee to establish the preliminary facility design concept for LHSC's Master Plan at Victoria Hospital.



Building Construction and Operation

Sustainable construction practices have become imperative in today's world, as we seek to reduce our environmental impact and construct structures that are resilient to changing conditions. The healthcare sector, particularly hospitals, have a critical role in this effort, given their 24/7 operations and specialized equipment requirements, resulting in a considerable energy and resource footprint. As LHSC embarks on new construction or renovation projects, it is crucial that we prioritize sustainability and incorporate eco-friendly design elements that emphasize energy efficiency, water conservation, and waste reduction. By embracing sustainable construction practices, hospitals can not only reduce their carbon footprint but also enhance the health and well-being of patients, staff, and the wider community.

UNIVERSITY HOSPITAL WINDOWS

Severe rain and wind storms in June of 2015 caused flooding and electrical damage throughout both main campuses. Much of the damage was due to poor building envelope conditions, as water penetrated through window seals and other points of vulnerability. LHSC identified the need to be ready for current and future changes to the climate and its impacts, taking measures and preparing for more extreme weather events and a generally warmer climate.

Facilities Management expedited plans to improve our aged building envelopes. Over the course of five years, we replaced over 3,000 windows at University Hospital with energy efficient glass and upgraded seals to better protect against future severe weather events.

LED RE-LIGHTING PROJECT

Energy-efficient LED lighting technology has come a long way from old incandescent and mercury-based fluorescent lights. They now seamlessly integrate with existing systems and offer an eco-friendly solution that lasts longer and consumes less energy.

In 2022, LHSC replaced 32,000+ fluorescent tube (T8) lights at Victoria Hospital and University Hospital, targeting round-the-clock areas like bustling corridors and waiting rooms to maximize the impact of the switch.

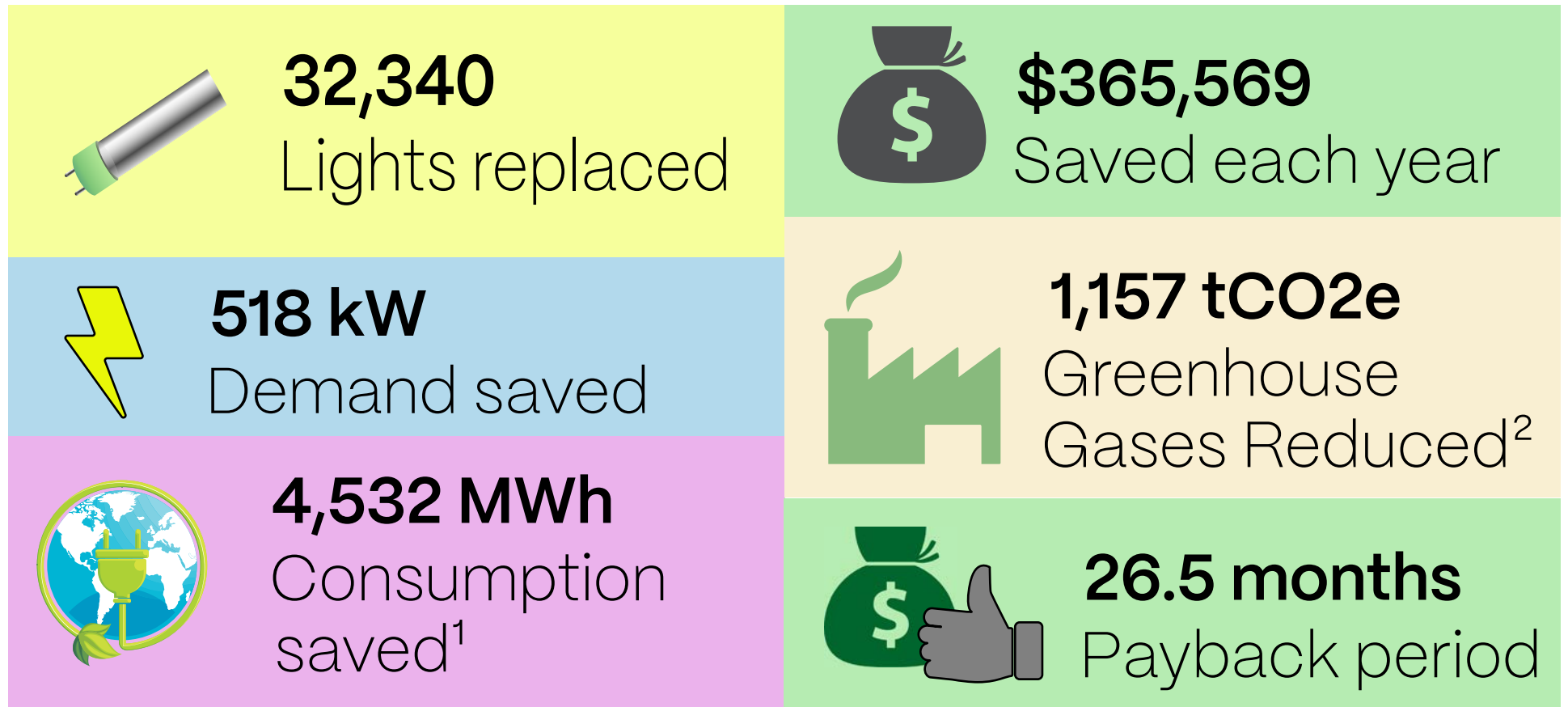


Protection against climate events at University Hospital also included new lightweight and waterproof cladding panels (below), providing protection for 24/7 operating rooms from future severe weather events.



Installing the lights was quick and efficient, thanks to the compatible ballast types. But here's the real environmental win: while a traditional fluorescent light burns out after about 15,000 hours, LED lights keep shining for up to 100,000 hours! LED lights are the clear winner in terms of maintenance, waste, and costs.

LHSC also took advantage of the province's Independent Electricity System Operator Retrofit Program, which covered \$3 per light of our capital cost.



¹ Equal to the electricity consumption of 475 Ontario homes in one year

² Equal to taking 354 passenger vehicles off the road for one year, or 492,638 litres of gasoline consumption



MINOR SURGERY CENTRE AT 746 BASELINE ROAD

The new Minor Surgical Centre at 746 Baseline Road is a forward-thinking innovation at LHSC. The facility and service are quickly becoming the example of alternate means of functional programming in Ontario. By off-loading minor surgeries away from traditional Operating Rooms at Victoria Hospital, the Minor Surgical Centre does the same work at a far lower cost. The same surgery performed in a traditional Operating Room costs approximately double what it does at the Minor Surgical Centre. In addition, surgical instrument trays are smaller with fewer items to ship and sterilize. The facilities are not required to operate 24/7 like a traditional Operating Room, potentially saving on electricity and other utilities.

Green Procurement

LHSC has a goal to developing a strategy to foster the procurement of goods and services that are less harmful to human health and the environment, i.e., less toxic, minimally polluting, and energy efficient.

- We have established a green procurement team that will introduce green procurement measures into all purchasing choices in London's hospitals.
- We have defined our objectives: to generate internal awareness, research best practices, survey the vendor community, establish quantifiable eco-metrics for vendors and processes, introduce green procurement into sourcing processes, and measure, monitor and revise results.
- We have determined the top ten most consumed items in the hospital, and are developing strategies to reduce their environmental impact.
- We have included environmental criteria in Request for Proposal documents for hospital contracts.
- We have conducted a Green Procurement Survey to identify LHSC vendors that have demonstrated strong environmental policies and practices, and that can participate as partners and leaders in the Ecological Stewardship Program.
- We have developed and are implementing a process to review the products and supplies used in hospital departments to identify eco-friendly alternatives and opportunities for waste minimization.

LHSC's procurement service, Healthcare Materials Management Services (HMMS), is working actively with PEACH Ontario (Partnerships for Environmental Action by Clinicians and Communities for Healthcare Facilities). The HMMS team delivers customizable and innovative procurement practices that are well suited to the inclusion of sustainability criteria.

In 2023, HMMS will launch an Environmental, Social and Governance sustainability section to all of their open competitive procurements, with the goal of increasing supplier action and accountability in these important areas.



Victoria Hospital's Power Plant

Energy

Energy Use

PEAK SHAVING TO REDUCE EMISSIONS

At the Victoria Hospital Power Plant, we use natural gas to generate 70% of our electricity and 100% of our steam needs with two co-generation turbines and four boilers. Using natural gas for electricity generation allows us to save a significant amount of money throughout the year on electricity costs, with a short-term increase in CO₂e emissions.

With the investment into six steam absorption chillers in 2018 and three large backup diesel generators in 2022, we now have the capability to become a Class A customer in the Independent Electricity System Operator Peak Shaving program at Victoria Hospital. By successfully peak shaving, we will greatly reduce the cost of electricity from the grid by nearly eliminating the global adjustment portion.

Becoming a Class-A customer with London Hydro will enable LHSC to reduce our CO₂ emissions by 20,000 tons.



Steam Absorption Chillers at Victoria Hospital are powered by steam produced by our Power Plant, using inexpensive natural gas instead of the local power grid.

With the elimination of the Global Adjustment electricity costs, we expect to eventually get 100% of our electricity from the grid and turn off our co-generation turbines. This will reduce our greenhouse gas emissions by around 20,000 tCO₂e. Without the co-generation turbines, steam production efficiency will also increase as all the steam will be produced from our dedicated boilers which are more efficient for steam production than our co-generation turbines.

ENERGY CONSERVATION PROJECTS

Facilities Management has also seen additional benefits to executing energy conservation projects. For example, an LED lighting upgrade at the Victoria Hospital Power Plant also resulted in improved safety and efficiency of the Maintenance & Repair Team, and better maintained equipment at the Power Plant. Indeed, energy savings projects can also effect the morale of staff and their continued investment in positive energy behaviour. Other projects have included:

- Linear Ambient LED Fixtures at VH (resulting in Greenhouse Gas Emission reductions equivalent to removing one gas powered car from the road)
- Replacement of a Condensate Return at the Thames Valley Children's Centre
- Windows and doors replaced at Victoria Hospital Building 14
- Air Handling Unit upgrades including new pumps and controls (resulting in Greenhouse Gas Emission reductions equivalent to removing 18 gas powered cars from the road)
- Over 3,000 windows replaced at University Hospital with high-efficiency windows and seals

Business Intelligence is also playing a large role in engagement with both staff and leaders. Robust data collection coupled with user-friendly online dashboards makes everyone feels more connected and interested in energy use. The trends and data points revealed also give leaders the evidence they need to initiate larger and more sophisticated projects. Ultimately, the transparency of data helps build trust and support for energy initiatives across LHSC.

Looking forward, LHSC's Energy Specialists are facing new challenges in reducing the hospital's environmental footprint while also minimizing the financial impacts. With a growing robust data collection and a culture of trust, they are confident in finding economical and environmentally conscious solutions for the future.



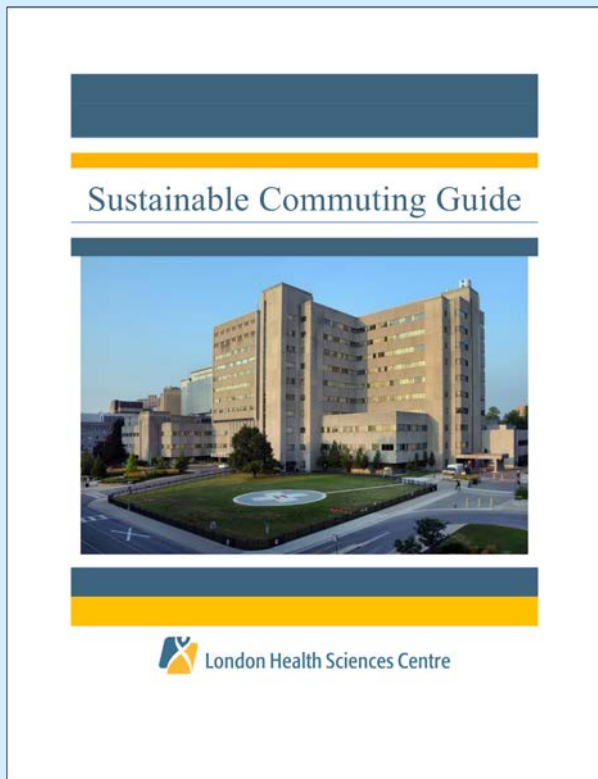
LHSC uses Data Tracking and Business Intelligence to support evidence-based decisions with respect to optimizing energy use in our facilities.



Transportation

We are dedicated to providing innovative patient care that aligns with our values of economic and environmental sustainability. We recognize that sustainable transportation plays a crucial role in our holistic approach to environmental responsibility. Not only do active forms of commuting like walking and cycling help reduce harmful CO2 emissions, they also offer numerous health benefits in support of healthy communities while saving money. Additionally, sustainable transportation can make the daily commute a more enjoyable experience for all.

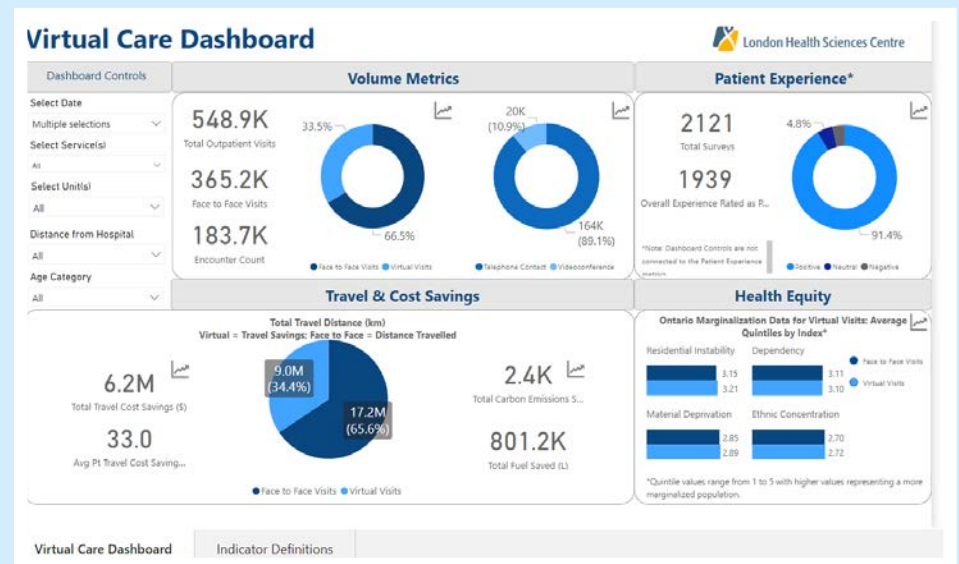
LHSC has provided a Sustainable Commuting Guide for both staff and the public, which provides information on getting to LHSC by walking, cycling, public transit, and carpooling.



VIRTUAL CARE

Virtual visits have become a welcomed and regular part of many patients' care at LHSC, even after COVID-19 measures have eased. As much as virtual visits save time and money, the environmental benefits of virtual care are also noteworthy. In 2022, over one-third of LHSC outpatient visits were virtual (phone or video conference), and they saved:

- 9 million kilometres of travel
- 2,400 cubic metric tons of carbon dioxide
- 801,200 litres of gasoline



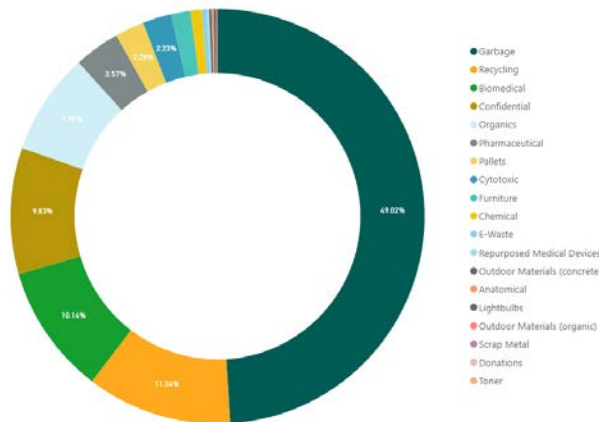
Waste

Waste Minimization

DIVERSION PROGRAM

At LHSC, we have a crucial responsibility to protect public health and the environment by handling and disposing of various waste streams in a safe and proper manner, as directed by Ontario Regulation 347 and the Canadian Environmental Protection Act, 1999 (CEPA). This responsibility is of utmost importance, and we are committed to fulfilling it with unwavering dedication. LHSC manages a range of waste streams, including General Waste (landfill), Recycling, Organics, Confidential, Chemical, and Biomedical. Our ongoing mission is to discover new ways to recycle and increase our diversion rate from landfills, as we work tirelessly to fulfill our mandate.

As champions of sustainability, we take pride in sharing our waste distribution data for the year 2022, as illustrated in the chart below. Our relentless efforts to reduce waste have led to a commendable 34% diversion from landfill through various recycling programs, including our flagship single-stream recycling initiative. A breakthrough achievement for 2022 was the successful inclusion of paper cups (a.k.a. coffee cups) in our single-stream recycling program, representing a significant step towards building a circular economy.



A break-down of our waste distribution

LHSC's waste diversion programs have diverted a commendable 34% of waste from going to landfill.



LHSC's Waste Management Specialists with our dedicated garbage and single-stream recycling bins

LHSC Waste Management Specialists have developed many resources for LHSC staff. These resources are readily available on LHSC's intranet website:

- Waste Management Policy
- Waste Management Manual
- Waste Reduction Work Plan
- Waste Segregation Poster
- "What Goes Where" online database of common items and if they should be disposed of in the garbage, recycled, or go into other disposal streams

GENERAL WASTE

As proponents of sustainable waste management practices, we recognize that "General Waste" is synonymous with landfill-bound garbage. To comply with Ontario Regulation 102/94, we conduct annual waste audits of our General Waste, as mandated by the Ministry of the Environment. The insights gleaned from these audits are then used to shape LHSC's Waste Reduction Work Plan, a crucial document that guides our efforts to minimize waste generation and maximize recycling efficiency. With the help of our Work Plan, we aim to optimize our waste management processes and capture every possible recyclable material, thereby reducing our environmental footprint.

Our external service provider for general waste is:



[Waste Management](#) diverts our garbage to landfill, processes our clean organics, and takes our recycling to their specialized single-stream recycling facility.

BACK TO BASICS RECYCLING

As we strive to foster sustainable waste management practices, we are pleased to share that LHSC successfully diverted 1,531 tons of recyclable waste from ending up in landfills in 2022. It is imperative that we uphold Recycling Rights, which entails the exclusion of food and liquids, paper towels, and plastic bags from LHSC's recycling bins, as these items are the most prevalent contaminants in our recycling stream. By adhering to these responsible waste disposal practices, we can all contribute towards maintaining a clean and efficient recycling system and safeguarding our environment.

Waste Management Specialists at LHSC have developed and provided Recycling and Garbage posters for staff to use in their areas, readily available on the LHSC intranet.



FURNITURE RECYCLING AND LOST & FOUND

Unwanted furniture items at LHSC are now recycled with our partners [Clean Slate Recycling](#). In 2022 we diverted over 81 tons of furniture waste from landfill.

In addition, unclaimed items from LHSC Lost & Found (after 6 months) such as wheelchairs, clothing, glasses, and baby strollers are donated to local London not-for-profit organizations.

ORGANICS PROGRAM

As stewards of the environment, we recognize that food and organic waste represents a staggering one-third of Ontario's waste stream. It is with great pride that we share LHSC's efforts to tackle this issue head-on through our steadfast commitment to organics recycling. Since the inception of our new Organics Program in January 2018, we are proud to report that our endeavors have yielded remarkable success. Our organics recycling efforts are a significant contribution towards our goal of creating a more sustainable LHSC, and we remain committed to exploring innovative ways to reduce our environmental impact.

What is organic waste?

Organic waste consists of biodegradable materials such as food, paper, cardboard, garden and lawn clippings, fats oils and greases, and animal wastes. As organic waste decomposes, it releases methane gas which negatively impacts Earth's atmosphere. If composted, the decomposed waste can be used as fertilizer and the methane gas can be harnessed and converted into clean energy.

**Unused furniture and unclaimed
Lost & Found items are recycled
or donated, diverting over 81
tons of waste from landfill.**



Above: Furniture Recycling Warehouse at Victoria Hospital

Below: Lost & Found items with an LHSC Security Coordinator





Launch of the Organics Program in 2018 with Patient Food Services

LHSC's Impact

As advocates of sustainable waste management practices, we are thrilled to share our success in implementing the Organics Program within LHSC's Patient Food Services. What started as a modest initiative has now expanded to encompass various Compass retail spaces, including cafeterias at VH and UH, Compass food prep at UH, Tim Horton's locations, and beyond.

Our commitment to responsible organics recycling extends beyond traditional food waste, as we have also developed a De-Pack program that enables patient food services to recycle unopened organic packaging materials

returned on patient food trays. By shredding this material offsite, we are able to effectively separate organics from their packaging and convert them into energy, resulting in an additional 100 tons of waste diverted from landfills!

Our success in implementing sustainable waste management practices is not limited to our main campuses. We are proud to have expanded our initiatives to 54 Riverview, one of our off-campus locations, and worked closely with the Ronald McDonald House to support the implementation of their own organics program. With all of these programs having yielded remarkable success, we remain committed to exploring innovative ways to minimize our environmental impact and inspire others to join us on this journey.

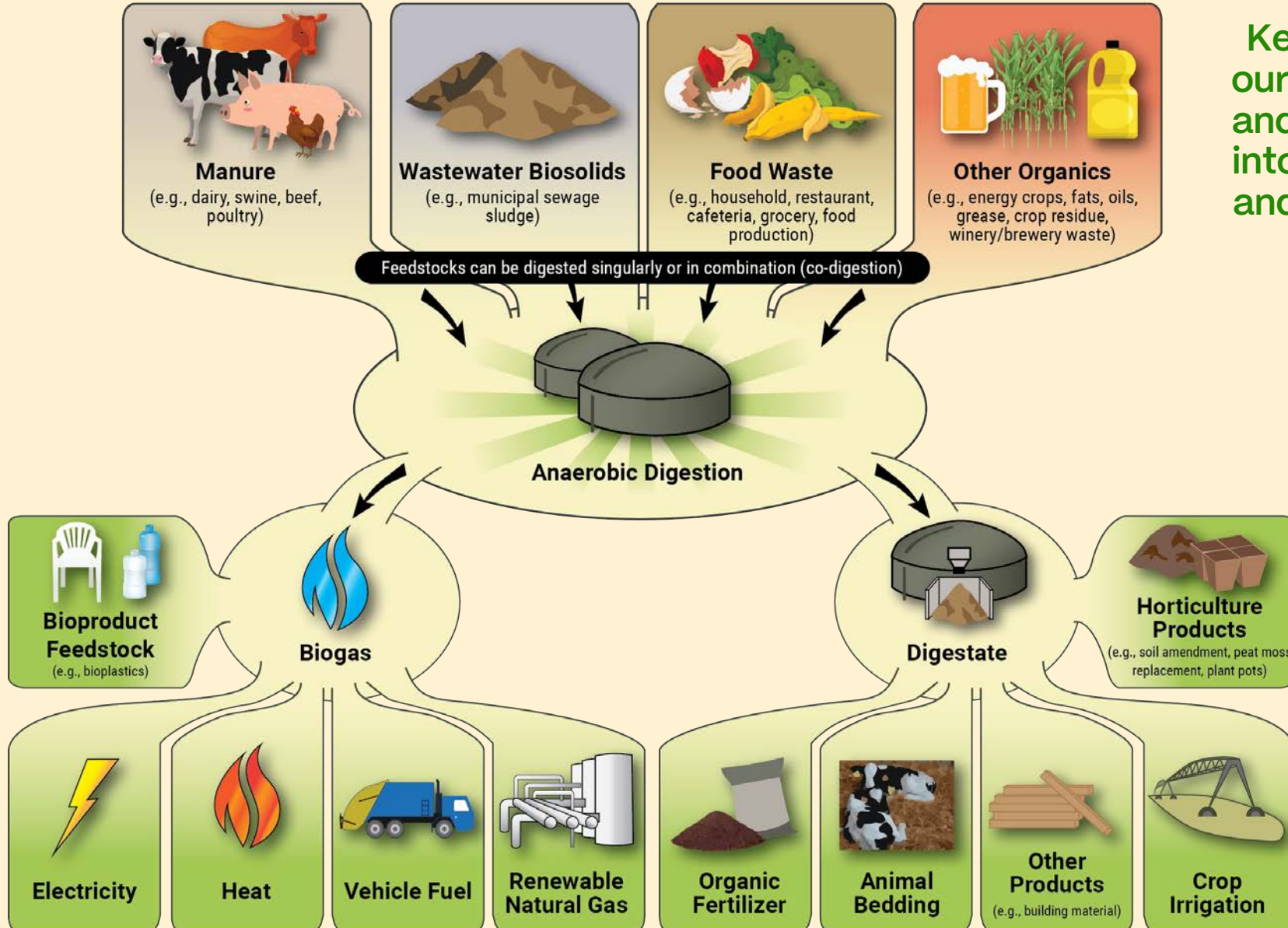


A patient food tray with unopened items for our De-Pack organics program

In 2022, LHSC diverted over 250 tons of organic waste from landfill.

This resulted in almost 160 mega-watt hours of electricity generation, enough to power 15 homes for a year.

Our service provider for the Organics De-Packing Program is [Kevron Recycling Inc.](#) Kevron uses anaerobic digesters (oxygen-free tanks with anaerobic microorganisms) to convert organic matter into an energy-rich biogas and then electricity.



Kevron takes our food waste and converts it into usable gas and electricity.

A typical Anaerobic Digestion process

Green Health Care award for Leadership

LHSC received an award from the Canadian Coalition for Green Health Care for Leadership at University Hospital in 2022. The Coalition recognized improvements in sustainability programs at the hospital from 2019 to 2020. These improvements were the result of leaders' support, outreach, and commitment to these LHSC-wide initiatives:

- Regular digital tracking and auditing of our steam, water, and electricity use
- E-waste collection programs
- De-pack organics program in patient food services, which reduced food waste by an extra three to four tonnes monthly
- Furniture recycling / donation program
- Implementation of virtual care and electronic charting
- Creation of a 5-year strategic framework for sustainability
- Dedicated energy and waste specialists in Facilities Management
- Well Power Program and the Health Menu Choices Act have resulted in targeted sourcing commitments from LHSC's retail food service provider:
 - 100% cage-free shell and liquid eggs by 2023
 - Maintain 100% certified sustainable palm oil
 - 50% reduction in food waste by 2030
 - 100% Global Animal Partnership program standards for broiler chickens by 2026
 - Maintain 50% certified sustainable seafood
- Commitment to the Single-Use Plastics Prohibition Regulations to eliminate problematic and unnecessary single use plastics in retail food services by 2024



Above: Collection of E-Waste

Below: Our Battery recycling program also includes larger lithium batteries



Community Engagement

Indigenous Healing Garden

The Indigenous Cultural Centre was built in 2020 at Victoria Hospital, in collaboration with Atlohsa Family Healing Services, a non-profit, charitable organization that provides community members with Indigenous-led programming and services. For LHSC, this initiative represents a more holistic and nature-centered approach to health, where traditional medicine and western medicine are brought together.

In 2023, the Indigenous Health Garden was built adjacent to the Cultural Centre. The Garden features a gathering space with amphitheater seating, a staff relaxation space, a medicine garden, and native plant selections.

The Ceremonial Medicine Garden is constructed as a raised wood planter made from Eastern Red Cedar wood, to provide a natural long-lasting planting area for the various medicinal crops and plants. These plants will be used by the Center for various ceremonial and medicinal uses.



Plant selections in the garden are native to Ontario, and Indigenously inspired to provide multi-seasonal interest and teaching in addition to being used for ceremonial uses. The plants include White Cedar, Serviceberry, Red Twig Dogwood, Willow, Bunchberry, Paper Birch, Silver Sage, Yarrow, Canadian Anemone, Sedge Grass, Little Blue stem, Ostrich Fern, and St. John's Wort.



Above: gathering space with amphitheater seating

Below: The new Ceremonial Medicine Garden



Mental Health Gardens

LHSC worked with our landscape partner, Clintar, to develop gardens for patients in mental health and the Prevention and Early Intervention Program for Psychoses (PEPP). The therapy has allowed patients to find connection and purpose as they navigate early psychosis episodes.

There are plans to add a green house in the garden to continue to grow this area for the programs.



A PEPP patient enjoys the therapy of growing their own vegetables



PEPP staff at the garden

LHSC and Clintar Adopt Westminster Ponds

As part of our commitment to sustainability, Facilities Management and Clintar Landscape Managements Services created a volunteer program to adopt the Westminster Ponds Environmentally Significant Area in 2018. This program includes bi-annual trail cleanups that aim to enhance the ecological value of this important natural habitat.

Covering a vast area of over 200 hectares and boasting 10 km of trails, the Westminster Ponds ESA is the largest publicly owned area in London.

The first trail cleanups were a total success! Dedicated volunteers collected over 20 bags of garbage along the paths of the ESA.



Designated birding and planting areas

LHSC has protected approximately 34 acres of the Westminster Ponds ESA by refraining to mow grass in these areas during the nesting season (approximately April to August). The wilder growth allows for birding nesting areas and the potential for native plant species.

LHSC Green Teams

LHSC's CHESTER program evolved into Green Teams in 2018, continuing to engage LHSC staff from all department in green initiatives to better our sustainability, energy efficiency, and waste reduction. In the first eight months, Green Team membership rose from 72 members to 95, and is expected to grow further. Waste and Energy Specialists are working to ensure participation and engagement with Green Team members, to make them involved with hands-on projects important to them. Members have expressed their enthusiasm and passion for sustainability:

"I find it very invigorating to meet with like-minded people and discuss things we are all passionate about. The energy of the group could power the hospital!"

"The LHSC Green Team gives me a chance to have a meaningful impact on the environment by promoting sustainable practices, raising awareness about climate change issues, and enhancing my knowledge and skills on sustainability."

"I know it's possible to deliver top-quality care and services while remaining environmentally conscious. As a person with a disability, it is crucial to demonstrate that human rights (such as meeting accessibility needs) and environmental rights can and do go hand-in-hand. Improving the health of the planet we call home can only improve the health of everyone who lives on it!"

"I'm very passionate about environmental sustainability, both as a surgeon and mom of two young boys. My current focus is on sustainability in the operating room, and it's great to collaborate with the rest of the LHSC Green Team."

Some of the Green Team's planned activities in 2023 include:

- Metered dose inhalers
- Bike tune-up clinic
- Westminster ponds clean-ups
- Tree planting



Above: Map showing the extent of the designated birding area

Below: The red-tail hawk is one of many birds nesting in the area



Green Health Care Awards

ENERGY BEHAVIOUR AWARD

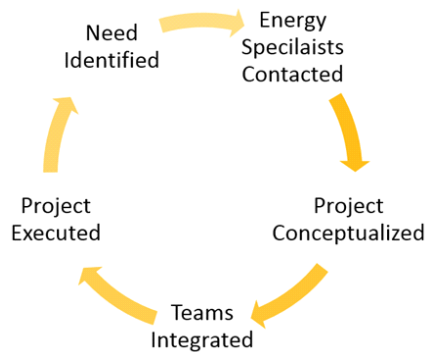
The Canadian Coalition for Green Health Care awarded London Health Sciences Centre (Victoria Hospital) with their new Energy Behaviour Award in 2019. LHSC was selected from over 100 hospitals for its dedication to the highest level of staff engagement towards minimizing the use of energy and supporting the transition to more sustainable energy development.



At LHSC, energy behavior doesn't stop with the behavior of individuals to reduce their personal energy use; it extends to corporate behavior and support for energy savings projects and energy conservation measures. This comprehensive view includes partnerships and participation with front line staff, corporate investments in energy saving projects, and direct support from senior leadership. It has resulted in significant increases in energy savings over the last five years, including electricity, natural gas, steam, and in our carbon emissions.

Energy Behaviour at LHSC started in 2003 with the CHESTER program to inspire active involvement from staff and decrease the hospital's energy consumption. The CHESTER program was adopted by nine other hospitals across Canada.

The strong culture of energy conservation at LHSC also extends to corporate initiatives. A team of energy specialists collaborate with project teams and clinical staff to identify needs and opportunities across the hospital's operations. This holistic, cross-department approach to project management ensures each initiative has a solid business case as well as an energy reduction benefit. The process feeds back into itself to continue to identify needs and achieving continuous improvements.



LHSC now employs a variety of tools and initiatives to improve Energy Behaviour and energy use. We are now:

- Improving data collection by deepening our sub-metering
- Using advanced analytics software to better interpret and report on data, and make evidence-based decisions for better energy management
- Advancing building automation system controls through Honeywell's Enterprise Buildings Integrator
- Promoting positive Energy Behaviour with building management and trades staff, empowering them with tools, training and support
- Formalizing and standardizing energy management policies and best practices, adopting International Performance Measurement and Verification Protocols
- Integrating energy conservation goals into the LHSC Facilities Management 2025 Master Plan

GREEN HOSPITAL SCORECARD AWARD FOR LEADERSHIP

In 2022, LHSC received an award from the Canadian Coalition for Green Health Care for Leadership at University Hospital, and an Honourable Mention for Energy Behaviour across LHSC.

The awards were based on data submitted to the 2021 Green Hospital Scorecard program, which measures energy and water conservation, waste management and recycling, corporate commitment, and pollution prevention at Canadian hospitals. Participating hospitals report on their environmental and sustainability initiatives through an online questionnaire and the resulting scorecard summarizes their environmental performance relative to their peers.



LHSC's Energy and Waste Specialists at the Victoria Hospital Power Plant

Staff Engagement

Staff Engagement begins with education, and focuses on personal and departmental energy use reduction through:

- Turning off unnecessary lighting
- Turning off computer stations when not needed
- Maintaining room temperatures with energy conservation in mind
- Using window shades for temperature regulation in the summer
- Other energy conserving tools

Staff engagement is strengthened by a number of strategic measures:

- Sharing personal energy use tips during Earth Day events and through monthly poster campaigns
- Sharing organizational costs and consumption data
- Sharing information about energy management projects such as HVAC equipment replacements, operational efficiencies, and infrastructure improvements

Consistent sharing of this information with hospital staff, patients and visitors, demonstrates that LHSC is invested in positive Energy Behaviour and becoming a strong leader in the community and in the health care space. This positive attitude also empowers staff to “do more” as LHSC is leading by example.

Energy Behaviour also extends to outside of LHSC. Staff are encouraged to bring practices home, through poster campaigns and Earth Day events that share tips for energy conservation at home, and new technologies on the market. The campaigns cover areas such as home lighting, home A/C and heating, and sustainable transportation.

Focusing on improving Energy Behaviour inside and outside of the hospital ensures that LHSC is working to improve energy conservation within the region as a whole, not just inside the hospital walls.



LHSC engaged staff with a fun game to improve their sustainability practices at home.

Upcoming Green Team Initiatives

METERED DOSE INHALERS

Following a newsletter about sustainable alternatives to Metered Dose Inhalers (MDIs) from the Coalition from Green HealthCare, two physicians in the Respiriology department initiated a Quality Improvement project to examine this opportunity.

The team conducted informational sessions within their department and a journal club literature review. They also created an information poster that was posted wherever inhalers are prescribed in Respiriology (about 25 locations).

Goals for 2023 include a 25% reduction in outpatient MDI prescriptions, and an information session with the Asthma Clinic at St. Joseph's Health Care. The team is also looking to expand the program to LHSC's Family Medical Centres, Padiatrics, Intensive Care, Internal Medicine, and the Emergency Department.

OPERATING ROOM PLANETARY HEALTH INTERVENTION TEAM

New in 2022, the Operating Room – Planetary Health Intervention Team (OR-PHIT) consists of surgeons, researchers, anesthesiologists, nurses, facilities staff, and infection prevention and control staff at LHSC and St Joseph's Health Care to address the high carbon footprints of operating rooms (ORs).

The team has the following goals:

- To reduce to the use of desflurane and nitrous oxide in the ORs by 30% and encourage the use of alternative, environmentally friendly inhalation anesthetics such as sevoflurane over a one-year period;
- To reduce the amount of waste generated by the ORs that is going directly to the landfill by 50% over a two-year period;
- To promote the use of reusable items such as linens, gowns, trocars, surgical instruments, instead of single-use items;
- To reduce the amount of energy (i.e., lighting, heating/cooling) used by the ORs during off-hours by 50% over a two-year period; and
- To understand the attitudes and beliefs of hospital staff and patients/ caregivers on environmental sustainability in the OR and to see whether they impact workplace satisfaction or experience/satisfaction with surgical care.



OR-PHIT members brainstorm sustainability goals for the Operating Rooms



A patient brings in their own reusable garment bag – a first success to cut the carbon!



Conclusion

In conclusion, we understand that several groups are vying for this prestigious award. Nevertheless, we firmly believe that London Health Sciences Centre is a great choice to receive this recognition, as we are deeply committed to crafting a sustainable future through ground-breaking and influential environmental practices.

By embracing environmental leadership and leveraging our pivotal role in Southwestern Ontario, we have a unique opportunity to become a true environmental steward and create a better world for generations to come. Our dedication to reducing our carbon footprint, promoting renewable energy, and minimizing waste showcases our unwavering commitment to environmental stewardship.

We take great pride in the significant contribution we've already made towards safeguarding our planet, and we are thrilled to continue pushing boundaries and devising innovative solutions that are both environmentally responsible and forward-thinking.



London Health Sciences Centre

Victoria Hospital ▪ 800 Commissioners Road East
London, ON ▪ N6A 5W9 ▪ 519-685-8500 ▪ lhsc.on.ca