The Robert E. and Holly D. Miller Building, which opened in June 2019, uses about 50 percent of the energy used by typical hospitals.
The Sustainability Council continued its work building upon The University of Vermont Medical Center’s long tradition of environmental responsibility.

The Sustainability Work Plan goals, objectives and tactics focused on the ten areas identified on its Mission Statement. These focus areas guided efforts to mitigate the impacts of climate change on health and to enhance our role as stewards of the environment within the communities we serve.

**LEADERSHIP**

Engage and educate our staff and community while implementing policies that promote sustainable practices and mitigate the health impacts of climate change.

**Highlights**

- Membership in the Healthcare Climate Council was renewed.
- The Employee Engagement Committee sponsored the following events to increase employee awareness and participation in sustainability activities:
  - Sustainability Awareness table at the May 2019 Knowledge Fair
  - Presentation at all New Employee Orientations
- Green Funds were used to provide scholarships for seven employees to attend the CleanMed Conference in May 2019. CleanMed is the premier national conference for leaders in health care sustainability.
- The University of Vermont Health Network leaders were invited to participate in bi-monthly meetings of the Sustainability Council.
- UVM Medical Center Supply Chain continued to increase green products that enforce the Environmental Purchasing Policy (EPP). Other environmentally friendly products added to inventory in 2019 were biodegradable patient belonging bags which replaced plastic, and for patients undergoing breast surgery, an undergarment made from bamboo.

**CLIMATE**

Mitigate the impact of climate change by reducing our carbon footprint.

**Highlights**

- UVM Medical Center has reduced greenhouse gas emissions by 8.80% since the baseline was established in 2015. This represents a decrease in CO₂ emissions of 2,240.7 metric tons.
- A pilot program began for vehicle charging stations. Ten level-1 chargers were installed at the Main Campus. Further expansion will be based on staff/patient need.
WATER
Reduce water consumption.

Highlights
- At the Main Campus water use was reduced 9% from 2018.
- Fanny Allen Campus’ reduced water use was 17% from 2018.

LEANER ENERGY
Reduce overall Energy Use Intensity (EUI) and explore alternative energy sources, where feasible.

Highlights
- The Main Campus reduced its EUI 15.2% year over year - dramatically exceeding the goal of a 1% reduction.
- 100% of new and renovation building projects exceeding $3M were designed to meet or exceed the Energy Star score of 75 and meet requirements for LEED Certification.
- Eight of UVM Medical Center’s off-site locations have been converted to 50% renewable natural gas (RNG).
- Every sustainable alternative energy source, — solar and renewable natural gas — was pursued for new construction or appropriate projects.

CHEMICALS
Reduce/limit the use of products that contain chemicals of concern.

Highlights
- 100% of furnishings purchased for UVM Medical Center are free of chemicals of concern.
- 6% of the Main Campus’ overall chemical spending was for green cleaning products.
- 7% of the Fanny Allen Campus’ overall chemical spending was for green cleaning products.

WASTE
Reduce toxicity and volume, conserve natural resources and lower costs through upstream purchasing practices, recycling and re-use.

Highlights
- CSR eliminated the use of Ethylene Oxide.
- 36% of total waste at the Main Campus is recycled.
- 63% of total waste at the Fanny Allen Campus is recycled.
HEALTHIER FOOD
Purchase and offer locally and/or sustainably produced food.

Highlights
- UVM Medical Center’s Main and Fanny Allen Campuses exceeded the national benchmark on percent of food spend on sustainable by 13% (45% versus 32%).
- The percent of food spend on local for both Main and Fanny Allen Campuses met the national benchmark of 36%.
- Healthy beverages spend at Main and Fanny Allen Campuses was 83%.
- At Main and Fanny Allen Campuses the percent of meat raised without antibiotics was 81%.
- The percent of greenhouse gas reduction from meat was –0.04% at Main Campus and –21.1% at Fanny Allen Campus.

GREENING THE OR
Reduce environmental impact and cost and improve health and safety by focusing sustainability efforts in the operating room.

Highlights
- The number of desflurane vaporizers was reduced 50% from 2018.
- Main Campus saved $431,083 through the medical device reprocessing program.
- The total OR savings on reprocessed devices per OR procedure was $175,028.
- Avoided waste disposal costs were $3,550

GREEN BUILDINGS
Apply environmentally sustainable and health-focused planning, design and construction principles for building and renovation projects.

Highlight
- The June 2019 opening of the Robert E. and Holly D. Miller Building was the culmination of many years of planning. Beyond the healing environment for patients, which included design details that focused on patient- and family-centered care, minimizing energy impacts within each of the building’s functions was a significant part of the design process. An Energy Use Intensity (EUI) equivalent to a score of 75 was achieved and it is tracking toward a LEED Silver Certification. The building will also use about 50% of the energy used by typical hospitals.
AWARDS AND RECOGNITION

PRACTICE GREENHEALTH AWARDS

- Top 25 Environmental Excellence Award: for the tenth consecutive year UVM Medical Center ranked in the top 25 hospitals nationwide for leading the industry with innovation in sustainability, demonstrating superior programs, and illustrating how sustainability is entrenched in our culture.

- Circles of Excellence Awards:
  - Less Waste Circle: for excelling in waste prevention and material handling, demonstrated through high recycling rates, low regulated medical waste generation and a focus on minimizing the total volume of waste generated by the facility.
  - Healthy Food Circle: for leaders in sustainable food services, capturing leadership in meat reduction, procurement of better meat, local and sustainable sourcing, improving access to tap water and healthy beverages, supporting healthy food access, and preventing food waste.

- Greenhealth Emerald Award – Fanny Allen Campus: recognizes outstanding hospitals from within the Partner for Change applicants. This competitive award recognizes the top 20 percent of applicants and is focused on advanced sustainability programs and exemplary scores in a range of categories.

- Greening the OR Recognition Award – Main Campus: honors facilities that have made substantial progress in reducing the impact of the surgical environment.

2019 BEST WORKPLACES FOR COMMUTERS

Hospitals featured on this list have made community stewardship at the environmental level a top priority, incorporated green building efforts into expansions, and embraced projects to reduce waste and energy consumption.

ASHE ENERGY TO CARE 2019 AWARD – FANNY ALLEN CAMPUS

The Energy to Care Award honors health care facilities that reduce energy consumption by 10% in a single year or 15% over two years. The UVM Medical Center also received this award in 2018.
OTHER ACTIVITIES

- Dr. Megan Malgeri participated in the following activities that centered on the impact of climate change on health:
  - Gave the lecture “Climate Change, a 21st Century Public Health Crisis” with a UVM research professor through the Larner College of Medicine Community Medical School.
  - Visited the State House as a representative of the Vermont Climate Health Alliance (VTCHA) to educate legislators on health care professionals’ interest in the mitigation of climate change.
  - Speaker at the Burlington Climate Rally on the health impacts of climate change.

- Dave Keelty, Director Facilities Planning and Development, assisted and guided Central Vermont Medical Center to set up a commissioning process and development of “Owner Operating Requirements (OPR) which specifies energy consumption requirements for the new hospital wing they are planning to build.

- Diane Imrie, Director Nutrition Services, participated in the following activities:
  - Spoke at multiple UVM events for Nutrition students and others.
  - Provided tours of our facility for fourth year UVM medical students.
  - Co-hosted the Healthy Food in Health Care Winter Retreat. This regional event focuses on climate, nutrition and sustainability.
  - Facilitated a presentation on Culinary Medicine at Family Medicine Grand Rounds.
  - With 2 first-year UVM medical students, presented “Food as Medicine-Sustainable Nutrition for You and Your Patients” at a UVM sustainability luncheon.
  - Hosted “Day in the Dirt” at the garden at Fanny Allen Campus. UVM Medical Center partners with Vermont Community Garden Network (VCGN) and this fundraiser and service day raised money to support VCGN’s Gardens for Learning program to teach and feed children at risk of summertime hunger.
  - Hosted a tour for Central Vermont Medical Center and Woodbridge Nutrition and Food Services.

- Monique Citro, Periop Communications Specialist, and Jennifer Bergeron, Supervisor Environmental Services, mentored Porter Medical Center on how to implement a blue wrap recycling program at their facility.

- Environmental Services began the Kick the Can campaign throughout UVM Medical Center. Right-sizing (aka, reducing) trash and recycling containers throughout UVM Medical Center supports our organizational sustainability goal to reduce waste and the amount of plastic liners going into the landfill.
• Jenifer Bergeron, Supervisor Environmental Services, invited the Waste Program Manager at Dartmouth Hitchcock Medical Center to tour UVM Medical Center’s Environmental Services, sharing information on our waste stream processes and how to implement an onsite garden.

• Monique Citro, Periop Communications Specialist, participated in the following activities:
  • Was part of a multi-hospital group that presented “Circular Solutions for Medical Plastics: International Problems and Local Fixes” at the May 2019 CleanMed Conference.
  • Spoke at the Vizient Art of Care Education Summit in September 2019 along with Elizabeth McLellan, RN, MSN, MPH, President and Founder Partners for World Health on “Making a Difference in Our World-Local Affect, Global Impact”.
  • Member of the “Switch it Up” panel at the Vermont Technical College Jam in October 2019. The discussion was about trying something new in a current job or starting a new job and knowing how or where to start something new. Monique shared her story about starting UVM Medical Center’s blue wrap recycling program in 2010 after identifying the need for mitigating waste in the OR.
  • Featured on social media campaign for UVM Medical Center #womenmakinghistory for her sustainability work.
  • Featured in a Seven Days piece about UVM Medical Center’s patient care items made from our recycled blue wrap.
  • Mentored a UVM Environmental Studies student; an OR Surgical Tech at Stanford Healthcare; a Procurement Intern for Office of Sustainability Initiatives at Emory University Atlanta; and continued support for the Ohio State University on their OR recycling programs.
MEDIA AND COMMUNICATIONS

EXTERNAL NEWS STORIES

- Feature about Monique Citro’s recycling initiatives: UVM Medical Center’s blue wrap recycling in partnership with Casella Waste Systems and our partnership with Partners for World Health that distributes our donations of medical supplies and equipment to areas of the world in need.
  
  April 24, 2019, Seven Days

- Opening of the Robert E. and Holly D. Miller Building, which uses about 50 percent of energy consumed by average hospitals.
  
  May 29, 2019: myChamplainValley.com

- UVM Medical Center’s Practice Greenhealth Awards (see details on Page 4 of this report)
  
  July 9, 2019, Vermonbiz
  July 10, 2019, VT Digger

INTERNAL NEWS STORIES

- ONE NEWSLETTERS
  
  January 2019: “Kick the Can Initiative Debuts”
  June 2019: Special Edition: Miller Building
  July 2019: “From Farm to Patient”

- Practice Greenhealth Award: UVM Medical Center Website

- MILLER BUILDING NEWS: a printed newsletter published during the months leading up to completion of the Robert E. and Holly D. Miller Building, which is designed to use only 50 percent of the energy consumed by typical hospitals around the country. Several issues highlighted various ways the building design minimizes energy impacts.
SUSTAINABILITY COUNCIL

Dawn LeBaron – Chair, Vice President Hospital Services  
Carol Hamlin – Executive Assistant  
Colin Santee – Facilities Operations and Sustainability Coordinator  
Cristal VeStrand – Manager Environmental Services Operations  
Dave Keelty - Director, Facilities Planning and Development  
Diane Imrie - Director, Nutrition Services  
George Gattullo - Director, Facilities Management  
Heather Kendrew – Manager Facilities Operations  
John Berino – Occupational/Environmental Health Program Manager  
Kathleen Trieb, RN – Shared Services Supply Chain Senior Project Manager  
Kathryn Artingstall - Director, Security/Safety/Parking  
Kim Asch – Communications Specialist  
Lori Ann Roy – Manager Radiation Oncology  
Megan Malgeri, MD – Family Medicine  
Monique Citro – PeriOp Communication Specialist  
Paul Rosenau, MD – Pediatrics

UVMHealth.org/MedCenter/Sustainability