



# SUSTAINABILITY AT EMORY HEALTHCARE

2024 UPDATE

## Sustainability and Emory Healthcare: 2024 Update

As the Sustainability Visioning Committee hones goals for the 2025-2036 Sustainability Vision and Strategic Plan, it seeks to understand the goals and past progress of Emory Healthcare (EHC). This report, prepared by the Office of Sustainability Initiatives, updates a 2018 summary of sustainability goals and progress within Emory Healthcare. It also summarizes the goals and accomplishments of peer healthcare institutions to allow for benchmarking.

Emory University and Emory Healthcare share a long legacy of action in sustainability. The Sustainability in Health Sciences Task Force was established in September 2009 by Executive Vice President Michael Johns, in coordination with the Office of Sustainability Initiatives, to develop a set of recommendations to guide senior administrators in setting goals and year-to-year strategies that will improve or implement best practices in sustainability for the Woodruff Health Sciences Center. Currently renamed the Emory Healthcare Sustainability Council, this group includes clinicians, faculty, and administrators and meets quarterly with a charge to address a variety of topics. Below is a compilation of:

- Issues addressed by the Emory Healthcare Sustainability Council
- A summary of the relevant goals from the 2015-2025 Sustainability Vision and Strategic Plan
- A list of accomplishments by Emory Healthcare within each of these issue areas.

In addition to informing the Visioning Committee, this document is meant to educate and inspire members of the Emory Healthcare community to contribute to Emory's 2025-2036 Sustainability Vision and Strategic Plan to inform sustainable action over the next decade. [Learn more about how to contribute here.](#)

### **A. Food: Recommend steps to further sustainable food goals.**

#### **1. Emory's 2015-2025 Sustainability Vision Goals:**

- 75% of University food served on campus and 25% of Healthcare food in cafeterias and hospitals will be either locally grown or sustainably grown by 2025.
- Establish a tracking system for Healthcare food purchases to document future gains, building on University best practices.

#### **2. Emory Healthcare Accomplishments:**

- Emory Healthcare purchases local grass-fed beef and local antibiotic-free chicken.
- Emory Healthcare signed onto Healthcare Without Harm's [Healthy Food in Healthcare Pledge](#) to "demonstrate commitment to 'first, do no harm' and treat food and its production and distribution as preventive medicine."

- Several produce gardens are cultivated for use in patient meals, including a ¼-acre garden at EUOSH, muscadine vines at Emory University Hospital (EUH) and a rooftop garden at Emory University Hospital Midtown (EUHM).
- Emory University Hospital [has piloted plant-based menus in its cafes.](#)
- Emory University Hospital consistently purchases local produce from the Oxford Organic Farm.
- Grady Memorial Hospital works with the Atlanta Community Food Bank and Open Hand Atlanta to offer a [Food Prescription Program.](#)

**B. Climate, Energy & Water: Recommend steps to assess savings in energy and water use throughout Emory Healthcare and foster ecological citizenship and intergenerational equity through climate change education and action.**

**1. Emory’s 2015-2025 Sustainability Vision Goals:**

- By 2025, reduce energy use in University buildings by 50% per square foot and Healthcare buildings by 25% from a 2015 baseline, and use half the amount of water used in 2015.
- Implement Emory’s 2023 Climate Action Plan to meet goals to reduce greenhouse gas emissions by 50% by 2030 and achieve net zero by 2050.
- Improve air quality through enforcement of No Idling policy and other pollution prevention actions.
- Shift Emory University and Emory Healthcare vehicle fleets to meet national sustainable fleet certification standards.
- Increase awareness of alternative transportation options among Emory Healthcare patients and university visitors.

**2. Emory Healthcare Accomplishments:**

- Emory joined the Atlanta Better Buildings Challenge (ABBC), which is no longer active, with EUHM as the inaugural building in 2012. By 2016 all University and Healthcare buildings on Clifton Road had joined the Challenge. The goal of the ABBC is to reduce energy and water consumption 20% by 2020 from a 2009 baseline. Through the ABBC, EUHM enjoyed an annual savings of approximately \$345,000 from projects like re-commissioning mechanical equipment, retrofitting parking deck lighting with LED fixtures, and installing water-saving fixtures.
- Several EHC facilities implemented a linen reduction initiative.
- The EUH Tower is designed to use 30% less water than a typical hospital through water-saving fixtures and will recover approximately 2.5 million gallons of water annually through condensate recovery.
- Emory School of Medicine faculty and students collaborated to offer a [virtual elective on the climate crisis and clinical medicine.](#)

- Emory School of Medicine faculty and students also created [a required course on climate change](#) for all medical students.
- Annually, Emory School of Medicine students evaluate Emory’s practices and [submit a planetary scorecard](#). Emory received an A grading, the highest out of participating US schools, for the [2021-2022 and 2022-2023 Planetary Health Report Cards](#) based on submissions completed by Emory University School of Medicine students and faculty.

**C. Building Design/Healthy Healing Spaces: Monitor the use of sustainable design recommendations for new Healthcare buildings and renovations.**

**1. Emory's 2015-2025 Sustainability Vision Goals:**

- Certify all new buildings and all major building renovations as LEED Silver or higher.

**2. Emory Healthcare Accomplishments:**

- [Emory Tower is a LEED Silver Certified building.](#)
- [Emory Musculoskeletal Institute is a LEED Gold Certified Building with a ~500 kW solar array.](#)
- [Winship at Midtown is a LEED Silver Certified Building.](#)

**D. Waste: Recommend steps to expand recycling and composting and integrate them further into institutional practices.**

**1. Emory’s 2015-2025 Sustainability Vision Goals:**

- Divert 95% of University waste and 37% of Healthcare waste from landfills by 2025.

**2. Emory Healthcare Accomplishments:**

- Emory Healthcare began contracting with Stericycle in 2014 to manage recycling programs in EUH and EUHM, which together have diverted up to 20% of non-regulated waste from landfills.
- A Winship Cancer Institute recycling program, modeled after the University’s new zero landfill waste policy, is awaiting launch by new TEC operations leadership.
- Staff at Emory University Orthopaedics and Spine Hospital (EUOSH) partnered with Dupont to pilot a Tyvek recycling program.
- Graduate students conducted a waste audit of the neurological ICU, [which resulted in phased transition to reusable isolation gowns.](#)
- Food and Nutrition staff at EUH [led a pilot to replace and reduce single-use plastic bags offered at retail locations.](#)
- EUH and Emory Tower adopted more recycling in their cafes and continued to compost organic waste produced in their kitchens.

**E. Purchasing: Assess whether Healthcare purchasing guidelines are congruent with sustainability goals.**

**1. Emory's 2015-2025 Sustainability Vision Goals:**

- Identify priority areas for supply chain improvement and work with academic researchers, students, and vendors to identify best practices for sustainability.
- Develop scorecards for “Emory preferred” practices and decisions which encourage full-cost accounting among vendors and contractors and integrate sustainability into selection criteria when awarding contracts.

**2. Emory Healthcare Accomplishments:**

- Healthcare has worked with suppliers and contractors to:
  - standardize coffee provisions to bulk coffee in staff areas and to recycle single-use coffee dispensers in patient areas;
  - reuse sharps containers;
  - use reusable instrument cases in sterile processing units;
  - provide reusable gowns; and
  - ensure its new blue wrap vendor offers collection and recycling of pre-case blue wrap.

**F. Culture and Behavior Change: Assess the current status of understanding of sustainability goals, as well as the commitment to these goals, and recommend steps for culture change and education.**

**1. Emory's 2015-2025 Sustainability Vision Goals:**

- Create a program of sustainability champions throughout Emory Healthcare by 2025. Incorporate sustainability into first impressions of Emory's clinics and hospitals, through websites, signage, and publications.
- Ensure all new Healthcare professionals are welcomed into—and feel a personal stake in—Emory's sustainability commitments.

**2. Emory Healthcare Accomplishments:**

- EUHM established an OR Green Team to enhance recycling in operating rooms.
- The Department of Physical Therapy integrates sustainability into the curriculum, aspires to paperless coursework, and developed a website to offer resources and a community of practice for DPT students, faculty, and staff.
- The work of [EmWell](#) and the [Lifestyle Medicine Group](#) promote a culture of wellbeing and lifestyle health among staff, faculty, students, healthcare professionals, and patients.

**G. Community Benefit: Create strategic partnerships with local, national, and international institutions to build flourishing and resilient communities.**

**1. Emory's 2015-2025 Sustainability Vision Goals:**

- Expand awareness of healthy, sustainable behaviors among the populations served by Emory Healthcare through education and outreach (such as pharmaceutical take-back events, thermometer swaps, and information on proper medication disposal with prescriptions).

**2. Emory Healthcare Accomplishments:**

- Emory Healthcare has partnered with MedShare since 1998 when it was established by former Emory employees to donate unused and unexpired medical supplies and equipment, supporting clinics and hospitals in over 100 countries.
- During the construction of the EUH Tower, 78,000 cubic feet of soil removed to accommodate the underground parking deck was donated to the Fugees Academy in Clarkston, Georgia, and used to construct a soccer field. The Fugees Family, Inc. is a non-profit dedicated to working with child survivors of war.

## Benchmarking Against Peer Institutions

It is helpful to understand the goals and achievements of peer healthcare institutions and sustainability leaders in healthcare. Healthcare systems and hospitals may not typically explicitly engage with the United Nation's Sustainable Development Goals in their planning, goal setting, and progress tracking. However, the sustainability initiatives of most healthcare systems—climate action, sustainable food, and waste reduction, for example—align closely with the Sustainable Development Goals. The following section summarizes the goals and accomplishments of A) peer academic medical centers, B) peer clinics and specialty centers, and C) sustainability leaders in healthcare.

### A. Goals and Progress in Peer Academic Medical Centers

- 1. Johns Hopkins Hospital:** Sustainability efforts at the Johns Hopkins Hospital are led by the General Services Office of Sustainability and its Green Team. They publicize a list [of vision statements](#) across waste and procurement, planning, and fiscal sustainability. These public vision statements lack numerical targets or deadlines. Johns Hopkins Hospital Sustainability also lists their most recent successes including:
  - Removing Styrofoam cups, plates, and bowls from the facility
  - Equipping 100% of operating rooms with LED lighting
  - Removing all plastic straws from hospital cafeterias
  - Expanding collection and bio-decontamination of unused clinical supplies throughout 31 units for an estimated annual saving of more than \$200,000
  - Certifying over 80 departments with Green Office Certification
- 2. Yale-New Haven Health (YNHH):** YNHH works toward four overarching sustainability initiatives: Energy, Facilities, Transportation, and Supply Chain. Their accomplishments include:
  - Purchasing solar power for Westerly Hospital
  - Installing fuel cells for some hospitals
  - Participating in a clean energy program with the State of Connecticut Department of Energy and Environmental Protection
  - Operating a 6,000 square-ft rooftop garden at their cancer center
  - Opening a LEED Silver Certified hospital wing
  - Purchasing sustainable furnishings for facilities
  - Reprocessing medical devices
  - Discontinuing the use of desflurane (a potent greenhouse gas) as an anesthetic
  - Sourcing food sustainably in cafeteria
  - Offering sustainable transportation incentives
  - Transitioning shuttle bus fuel to compressed natural gas

3. **Stanford Health Care:** Stanford Health Care’s Board of Directors has endorsed and affirmed sustainability as a top priority. Stanford Health Care’s sustainability goals include:

- Reducing Scope 1 and 2 greenhouse gas emissions by 50% by 2030
- Reducing energy use intensity 25% by 2030
- Achieving net zero emissions (scopes 1, 2, and 3) by 2050
- Achieving zero waste by 2050

Stanford Health Care’s sustainability accomplishments include:

- Completing greenhouse gas emissions inventories
- Establishing a Sustainability Program Office
- Committing to the U.S. Department of Health and Human Service’s emissions reduction pledge
- Updating the scope of their greenhouse gas emissions inventory to include some aspects of Scope 3 emissions.

## B. **Goals and Progress in Peer Clinics and Specialty Centers**

1. **Cleveland Clinic:** Cleveland Clinic created annual sustainability and global citizenship reports until at least 2021. The clinic has the following sustainability goals:

- Achieving net neutrality in Scope 1 and 2 emissions by 2027
- Achieving an energy use intensity reduction of 40% from 2010 baseline by 2030

The clinic’s sustainability achievements include:

- Reducing emissions intensity by 35.4% and total emissions by 25.7%
- Diverting 27% of waste from landfill in 2021
- Integrating environmental, social and governance criteria into procurement process

2. **Memorial Sloan Kettering Cancer Center:** The Memorial Sloan Kettering Cancer Center has a robust sustainability program spanning the following initiatives: Climate Action and Resilience, Energy Management, Water Reduction, Waste Management and Reduction, Sustainable Procurement, Green Building and Healthy Interiors, Food and Nutrition, and Stakeholder and Staff Engagement. Their sustainability goals include:

- Achieving a 50% carbon reduction from energy use intensity by 2025
- Reducing greenhouse gas emissions associated with food purchasing and service by 25% by 2030, relative to a 2018 baseline (in alignment with the World Resources Institute Cool Food Pledge)
- Building all new construction and major renovations to LEED Silver standards



The Cancer Center's sustainability achievements include:

- Reducing climate impacts from waste anesthetic gases
- Inventorying and reducing emissions from the vehicle fleet
- Building and renovating facilities for resilience
- Completing energy efficiency projects including: LED lighting retrofits, setback and control modifications, upgraded water pumps, energy efficient freezers, computer shutdown and energy management programs, conversion of a hospital from steam to low temperature hot water, and construction of a combined heat and power generation plant
- Using water use reduction methods including: low-flow and automatic faucets, overnight setback programs and water retention tanks, and water-smart landscaping.
- Offering single-stream or source-separated recycling programs at all sites
- Composting excess organics from the hospital kitchen
- Reprocessing tens of thousands of single-use medical devices
- Offering a reusable sharps container program
- Donating materials to medical recovery organizations for humanitarian efforts
- Offering a summer farmers market

3. **Mayo Clinic:** Mayo Clinic operates under several overarching sustainability principles, including: conserving energy and reducing greenhouse gas emissions, sourcing sustainable equipment and supplies, offering nourishing and healthy foods, reducing waste, building for sustainability, and using water wisely. Their specific sustainability goals include:

- Reducing Scope 1 and 2 emissions by 50% by 2032
- Reducing energy use intensity by 20% by 2032

The Mayo Clinic's sustainability achievements include:

- Purchasing sustainable, local food
- Following a Sustainable Building Policy and Guide that includes recommendations from several green building certification programs including LEED, RELi (resilient design), WELL, and Fitwel
- Minimizing the use of hazardous substances and chemicals
- Using recycled materials when possible
- Using energy efficient equipment
- Collaborating to found the Greenhealth Exchange Purchasing Cooperative
- Operating a supplier diversity program
- Recycling over 31% of the current waste stream

## C. Goals and Progress in Peer Sustainability Leaders in Healthcare

1. **Kaiser Permanente:** Kaiser Permanente strives for sustainability through initiatives across climate action, sustainable food, waste reduction, water conservation, safer products, management and accountability, and collaboration. They have published sustainability and responsibility reports in the past and have signed onto several sustainability commitments. Some of Kaiser's sustainability goals include:
  - Increasing purchase of products and materials meeting environmental standards to 50% by 2025
  - Buying all food locally or from sustainable producers by 2025
  - Recycling, reusing, or composting 100% of nonhazardous and nonmedical waste by 2025
  - Reducing water use by 25% per square foot of buildings by 2025
  - Perusing new collaborations to decrease environmental risks by 2025

Kaiser Permanente's sustainability accomplishments include:

- Taking a leading role in supporting the national Academy of Medicine's Action Collaborative on Decarbonizing the U.S. Health Sector, a public-private partnership of health leaders committed to addressing the environmental impacts of healthcare
  - Working with Health Care Without Harm, a global movement for environmentally responsible health care
  - Joining RE100, a global corporate renewable energy initiative, and other climate leadership initiatives
  - Achieving carbon neutral status in 2020
  - Buying 43% of food from producers using sustainable practices in 2019
  - Offering an organic farmers market
  - Reducing water use intensity across facilities by more than 13% by mid-2021 compared to 2013
2. **The Joint Commission:** The Joint Commission is an enterprise that aims to set quality standards and evaluate performance in health care to improve the field. The Joint Commission offers many resources to healthcare systems seeking to improve their sustainability, including literature, tools, and guides. The Joint Commission offers a Sustainable Healthcare Certification with the following requirements:
    - The organization must be in the US, operated by the U.S. government, or operated under a charter of the U.S. Congress.
    - The organization is a hospital or critical access hospital that is compliant with applicable federal laws, including applicable Medicare conditions of participation.

- At the time of review, the org needs to have baseline emissions data for three GHG emissions sources and an action plan to reduce.
- At the time of recertification, the organization needs to have 24 months of data and demonstrate a reduction of three GHG emissions sources.

Collectively, Emory University and Emory Healthcare can remain leaders in sustainability and in creating a healthy, thriving future, through ambitious goal setting and diligent implementation of best practices. Please consider sharing your vision for a sustainable future here. Should you have any questions about the 2025-2036 Sustainability Vision and Strategic Plan or the information in this report, please contact [emorysustainability@emory.edu](mailto:emorysustainability@emory.edu).