

# Endicott Sustainability Plan Fiscal Years 2025-30

# Contents

Sustainable Endicott	7
Letter from the President	8
The Plan	10
Pillars of Sustainability	13
	X
Climate & Energy	14
Health & Equity	18
Campus Operations	22
Experiential Learning	28
Appendices	32
Appendices Appendix 1: Glossary	32

Appendix 3: President's Council

Appendix 4: Sources Consulted

Glossary terms are bolded throughout the plan. See the full glossary of terms beginning on page 32.





# To inspire leadership through transformational learning.

Endicott College Mission Statement



# Sustainable Endicott



Sustainable Endicott is a Collegewide effort to embrace **sustainability** in our scholarship and operations. The Office of Sustainability works to reduce the College's environmental footprint by engaging with the campus community and external audiences to increase a holistic understanding of sustainability issues.

We have a responsibility to the environment and to our students to incorporate sustainable practices on campus and to broaden student engagement and experience. In addition to focusing on reducing the College's environmental footprint, we recognize that low-income and marginalized communities often bear a disproportionate burden of environmental harm and lack access to environmental resources and benefits. By embracing sustainability, we aim to contribute positive social, economic, and environmental solutions that can address environmental injustices and create a healthier and more equitable community. Our vision is rooted in confronting the challenges of **climate change** and sustainability by working towards these triple bottom line solutions, which our students can take with them as they assume their own careers and lives beyond Endicott. Our mission is to institutionalize pragmatic, timely, and effective solutions to create organizational change with a focus on climate justice and health.

We strive to develop and implement innovative solutions that can be replicated beyond our campus. As a coastal College, we must endeavor to limit our impact on local ecosystems while working to conserve natural space and biodiversity. It is our shared responsibility to foster a healthy, inclusive, and sustainable community.



# Letter from the President

I am thrilled to introduce the Endicott College Sustainability Plan for the fiscal years 2025-2030. This plan reflects our commitment to sustainability across all facets of our institution and outlines a roadmap for creating a healthier, more equitable, and more resilient campus community.

Solving the climate dilemma is a global challenge but it starts locally. At Endicott, sustainability is not just a buzzword but a guiding principle that influences everything we do. From reducing our carbon footprint to promoting diversity and inclusion, our Sustainability Plan encompasses a wide range of initiatives designed to make our College a leader in environmental stewardship and social responsibility.

As a coastal institution, the importance of addressing climate change and preparing for its impacts is deeply felt across our campus. That's why we're committed to achieving net zero emissions by our 100th anniversary in 2039. Through decarbonization, renewable energy projects, and climate preparedness efforts, we will work towards this ambitious goal while also ensuring the resilience of our campus in the face of environmental challenges.

Endicott College was founded on the principle of education grounded in experience and, true to our roots, we will expand our sustainability-focused courses, create more opportunities for hands-on learning through living lab experiences, and foster deeper partnerships with local organizations to tackle real-world sustainability challenges.

Developing this Sustainability Plan was a collaborative effort that demonstrates the passion, commitment, and collective intelligence needed to address today's challenges and I am confident that this Sustainability Plan will serve as a guiding light for our institution in the years to come.

Together, we will build a more sustainable future for Endicott College and future Gulls.

Sincerely,

Stern R Q Salus

Steven R. DiSalvo, Ph.D. President Endicott College





# The Plan

## **A Sustainable Foundation**

The Endicott College Sustainability Plan will serve the operations of the 235-acre Beverly, Mass., campus and extend across all of its buildings and stakeholders. The plan is a living document that will provide a sustainable roadmap and guide until 2030, when the plan will be reassessed and updated to seek out new sustainability opportunities and build on existing successes. Goals may extend beyond the first version of the Sustainability Plan.

The plan was developed through an iterative and collaborative process led by the Office of Sustainability, in partnership with Endicott's Campus Sustainability Committee and President's Council. Input and feedback were incorporated from diverse subsets of faculty, students, and staff across the campus, over multiple years of planning and dialogue. The plan will establish accountability for institutionalizing sustainable action and the ability to report and benchmark against internal and external baselines. It will provide a strategic foundation to achieve Endicott's sustainability goals and vision, while aligning with the overall mission of the College.



### Engagement

The four pillars that are the focus of this plan include Climate & Energy, Health & Equity, Campus Operations, and Experiential Learning. Each core category focuses on building upon the strengths and addressing the weaknesses of the College to achieve our sustainability goals and create a more resilient, equitable, and sustainable campus community. The goals were designed to focus our operations on specific, measurable targets, and each individual goal represents an important target for the College to achieve. The objectives under each pillar outline strategic commitments to meet and exceed our goals, while actions reflect specific strategies to be taken with respect to each commitment.

## **Implementation & Reporting**

The implementation of Endicott's Sustainability Plan is the responsibility of each member of our community. Institutional action will be the result of numerous partnerships and collaborations that address each sustainability pillar accordingly from the top-down or bottom-up. Universal support will be necessary to achieve the goals put forth. Data collection and benchmarking will be continual, using verified mechanisms such as the Association for Advancement of Sustainability in Higher Education's (AASHE) Sustainability Tracking, Assessment, and the Rating System (STARS). The Office of Sustainability will issue an annual Sustainability Report updating the community on the College's progress toward implementing the objectives detailed in this plan and the overall status of our goals.

# Pillars of Sustainability



13

# **Climate & Energy**

Understanding and combating climate change is integral to our coastal institution. Adaptation and **resilience** are important considerations as temperatures increase, sea levels rise, and precipitation events become more frequent and intense. Endicott has already felt these impacts, as increasingly intense storms have caused costly damages to the Endicott Beach seawall, and repeated flooding in some sections of campus. Mitigating the effects of climate change by reducing campus energy use and greenhouse gas emissions is a top priority.



Achieve **net zero emissions** across campus by the College's 100th Anniversary in **2039**.

- Achieve 50% reduction (compared to FY2022 baseline) by 2032.
- Achieve 75% reduction (compared to FY2022 baseline) by 2035.

### Decarbonization



#### OBJECTIVE

Actively decarbonize emissions from Scope 1 and Scope 2 campus operations through regular emissions monitoring, accounting, and source reduction.

- Establish a **Green Revolving Fund** to provide financial support for energy and **decarbonization** projects by 2030.
- Complete annual greenhouse gas inventory and expand **Scope 3 emissions** tracking, starting with completing a comprehensive inventory for FY2022 to act as a baseline for emission reductions goals.

### **Renewable Energy**



#### **OBJECTIVE**

Develop new onsite renewables and energy infrastructure to support 25% of campus power by 2030, while continuing to monitor and maintain existing solar photovoltaic (PV) arrays.

- Incorporate **battery storage** with existing onsite renewables and explore potential for pairing with future projects.
- Purchase **Renewable Energy Credits (RECs)** to match our solar generation in order to claim greenhouse gas emission reductions from our renewables.
- Explore opportunities to support off-site renewable energy development locally and beyond through avenues such as **virtual power purchase agreements (VPPAs)** to support 50% of campus power sourced from renewables.
- Research, review, and understand opportunities to purchase **carbon offsets** to achieve remaining 25% of emissions reductions to help achieve net zero emissions across campus.



## **Green Building**



#### **OBJECTIVE**

Expand energy conservation measures (ECM) in existing spaces, establish more robust systems for monitoring and tracking energy use on campus, and pilot innovative new technologies that reduce energy use on campus.

#### **ACTIONS**

- Achieve 100% LED lighting in all interior and exterior spaces, including athletic fields by 2030.
- **Electrify** campus buildings to reduce on campus **fossil fuel** usage and greenhouse gas emissions. Electrify all remaining fuel oil buildings by 2039.
- Incorporate occupant engagement and behavior change programs such as Demand Response event notifications that target student, staff, and faculty energy use reduction.

#### **OBJECTIVE**

Develop and implement Green Building Standards for all new construction and renovations.

#### **ACTION**

 Achieve one or more of the following building certifications on new construction and renovation projects: LEED, Passive House, Net-Zero Energy Building (NZEB), Living Building Challenge, and/or WELL by 2030.

#### **OBJECTIVE**

Incorporate green infrastructure methods (permeable pavement, rainwater capture, etc.) in new construction to reduce impact of buildings on the natural environment.

#### **ACTION**

 Explore feasibility of green roof opportunities on campus buildings to reduce urban heat island effect and cooling needs of campus infrastructure. This will also provide opportunities for increased pollinator habitat and healthy green space.

### **Climate Preparedness & Campus Resilience**



#### OBJECTIVE

Develop a campus resiliency plan that incorporates the City of Beverly's Coastal Resiliency Plan by 2030.

- Conduct a campus vulnerability assessment by 2026.
- Identify and pursue sustainable building-level resiliency and energy backup for emergency situations such as microgrid technology, fuel cells, and/or battery storage.



Endicott College Sustainability Plan

# **Health & Equity**

Each day students, faculty, and staff interact with the campus and local surroundings. Whether it is the opportunity to recharge and explore the campus through our hiking trails or beaches, offering sustainable and healthy food options, or incorporating healthier materials into indoor spaces, helping to create a healthy community is vital. Endicott has a key role in ensuring personal well-being and health while supporting diversity, equity, inclusion, and belonging. We must work to make our campus more representative of the world in which we live.

### **Diversity, Equity, Inclusion, & Belonging**

#### OBJECTIVE

Support the Office of Diversity, Equity, Inclusion, & Belonging as they review hiring and recruitment practices and campuswide academic and social issues, and develop educational forums to confront systemic and environmental racism on campus and in our society.

#### **ACTION**

 Introduce dedicated Sustainability Staff, in addition to the Office of Sustainability Diversity, Equity, Inclusion, & Belonging Student Fellow, to serve as a resource for environmental and social justice initiatives and advocacy groups on campus to develop solutions for positive change.



#### **ACTIONS CONT.**

- Organize a minimum of four educational events annually focused on **environmental** justice topics. These events should aim to raise awareness and generate support for environmental justice initiatives, while also addressing issues related to affordability and access to sustainability.
- Encourage elevation of diverse voices on campus by supporting integration and collaboration of different groups on campus, such as the Endicott Environmental Society (EES) and Showing Up for Racial Justice (SURJ) clubs, and encourage the creation of new organizations supporting environmental justice (e.g. Sunrise Movement).

### Food & Dining



#### OBJECTIVE

Ensure equitable access to nutritious and sustainable food for the entire campus community that is affordable and meets various dietary needs.

- Work closely with food service providers to increase purchase percentage of local food and third party verified products, such as Non-GMO Project, Fair Trade Certified, and/or USDA Organic, to 30% by 2030 compared to a FY2025 baseline.
- Track all food purchases and pursue the Real Food Challenge, Green Restaurant Certification, or similar dining services commitment.
- Incrementally increase vegetarian and vegan options at all mealtimes, in addition to other alternatives with third-party environmental certifications that verify lower environmental impact, at all dining venues on campus.
- Implement Meatless Mondays at all campus venues once a month by 2025, accompanied by educational campaigns to demonstrate the program's environmental value.
- Expand campus gardens to increase access to produce onsite that can be utilized at all dining venues.
- Enhance student access to sustainable food options and education by organizing a minimum of one sustainable cooking event per year. Additionally, explore opportunities to provide students with more locations for food preparation to empower students to cook their own food and make sustainable choices.
- Foster social and academic connections between members of the campus community and local food networks, such as Community-Supported Agriculture (CSA) programs, to promote the consumption of healthy, locally-sourced food options and support the livelihoods of local farmers.

### **Healthier Materials**



#### **OBJECTIVE**

Endeavor to improve indoor air quality, occupant health, and comfort by making conscious decisions regarding healthy material compositions.

#### ACTIONS

- All new furniture purchases will be chemical flame retardant free and strive to comply with the **Healthier Hospitals Initiative** (HHI).
- Expand healthier material requirements to flooring, baseboards, window blinds, and other materials common in shared spaces by 2030.
- Target replacement of materials where healthier options exist such as the turf at the College's athletic fields.
- Increase education and awareness on campus regarding healthier materials and chemicals of concern by holding at least two events focused on the topic per year.

## Wellness

	A.
	$\propto$
	(തി)
Υ.	$\sim$

#### **OBJECTIVE**

Promote and develop staff, faculty, and student wellness programs that are accessible to the entire Endicott Community.

- Work with the Human Resources Department's Gull Wellbeing Program to engage the campus community via at least one sustainability wellness challenge per year.
- Encourage the use of campus spaces, such as hiking trails and athletic facilities, for health and fitness programs by improving signage and awareness of spaces for student, faculty, and staff use.



# **Campus Operations**

The responsible operation of our facilities is fundamental to our financial soundness, conserving resources and reducing waste as the College continues to expand and grow. Institutionalizing sustainable operations will improve our community's health while reducing our impact on the environment.



Reduce **solid waste generation** by **3% annually** as compared to FY2019 baseline with the ambition to become a **zero-waste campus**.

Achieve **75% diversion rate for all waste generated** on campus by 2030.

**Reduce water use by 25%** by 2030 from 2016 baseline.

### Water

#### **OBJECTIVE**

Decrease water consumption and elevate reclamation strategies on campus to decrease impact on surrounding North Coastal and Ipswich Watersheds.

- Measure and track campus water usage quarterly from all sources in order to assess areas to target for usage reduction.
- Continuously improve on and formalize existing stormwater management plan.
- Incorporate water-efficient fixtures such as low-flow sinks and toilets in all buildings by 2035.
- Expand water bottle filling stations so that all campus buildings have at least one fill station by 2030.



## Waste Reduction & Recycling

#### **OBJECTIVE**

Track waste data through invoice and dumpster monitoring, volume reporting, waste audits, and online tools to ensure appropriate levels of waste service, identify opportunities for improvement, and accurately measure environmental impact.

#### **ACTIONS**

- Promote reuse and donation opportunities on campus and in partnership with outside organizations by incrementally establishing space for campus "ReStore" to support material needs of students, including international and disadvantaged students by 2030.
- Increase **single stream recycling rate** to 25% by 2030, and increase quality while monitoring changes to the global industry.
- Expand alternative solutions for items that can be diverted from the waste stream in addition to electronic waste, plastic film, disposable masks, textiles, oil, tires, yard waste, and construction debris.
- Standardize campus waste infrastructure signage and bins across all buildings on campus by 2037.
- Minimize hazardous waste and continue to improve on existing responsible environmental, health, and safety (EHS) protocols.

### Ŕ

#### OBJECTIVE

Strengthen operational programs to reduce campus food waste, with preference given to minimization, then diversion strategies.

- Expand programs and technologies in partnership with dining services providers to reduce **food waste** on campus such as LeanPath.
- Implement front of house **composting** at all dining venues on campus by 2025.
- Achieve 50% participation by 2027 in the staff composting program in academic buildings. Achieve 100% participation by 2030.
- Achieve 50% participation by 2030 in a student composting program in the residence halls. Achieve 100% participation by 2039.

#### **OBJECTIVE**

Standardize low- and zero-waste practices for campus programming and events.

- Transition towards the use of compostable serviceware and composting infrastructure instead of plastic disposables at all events by 2030 as to reduce landfill waste from College events.
- Increase the use of reusable serviceware to 50% of all campus events by 2030.
- Develop and implement **zero waste** event guidelines by 2025.
- Establish student waste ambassador program for athletic and campuswide events.



## **Transportation**

#### **OBJECTIVE**

Reduce the number of cars onsite and incentivize the use of alternative modes of transportation such as bike riding and public transportation.

#### ACTIONS

- Implement a bike sharing program that helps advance regional alternative transportation systems.
- Improve walkability of campus by building sidewalk infrastructure on all campus roadways by 2039.
- Electrify campus fleet (Facilities Management, campus safety and administrative vehicles, golf carts, and lawn equipment) by replacing gas fossil-fuel powered equipment at the end of their useful lives.
- Expand electric vehicle (EV) charging infrastructure to the Wylie Center & Tupper Manor at Endicott College, College Hall, Misselwood, and the Callahan Center to enable easy, accessible EV charging across campus by 2035.
- Enhance the reliability and accessibility of the shuttle service program to increase viable sustainable transportation options for the campus community.

### Landscaping & Grounds

## Ì

#### **OBJECTIVE**

Expand and manage green space on campus to increase biodiversity and promote responsible interaction for students, faculty, and staff.

- Increase organic landscaping across campus and eliminate pesticide use by continuing to improve on and formalize existing integrated pest management plan (IPM) by 2030.
- Incorporate native and/or perennial plant species and **xeriscaping** in new and existing green spaces.
- Ensure consistent support/maintenance of campus beehives as an effort to support local pollinator populations.
- Establish best management practices, in line with standards from federal and state regulatory bodies, to protect and conserve sensitive coastal and marine habitat encompassed by campus beaches.

### Procurement



#### **OBJECTIVE**

Incorporate sustainable purchasing language into request for proposals (RFPs) and vendor contracts.

- Implement and follow Sustainable Procurement Guidelines by 2030.
- Review new contracts to ensure alignment with Sustainable Procurement Guidelines and request information from vendors regarding their corporate responsibility and sustainability practices.



# **Experiential Learning**

Following the mission of the College, this plan will help to develop and support firsthand opportunities for student involvement. It will drive student engagement that utilizes the campus and surrounding community as a living lab. Living lab opportunities will create replicable solutions that students can take with them as they assume their own careers and lives beyond Endicott.

### **Courses & Curriculum**



#### **OBJECTIVE**

Develop new and expand existing sustainability-focused courses to be integrated into general education core curriculum.

- Work to establish a microcredential, minor, or concentration focused on sustainability, such as Sustainability in Business, to formally introduce sustainability into the curriculum offerings by 2025.
- Provide more focused experiential learning experiences such as tours and field trips, as well as academic support for the Go Green! Living and Learning Community.
- Design attribute structure to designate courses that incorporate sustainability as a core theme by 2030.
- Codify sustainability-attributed coursework as a general education requirement by 2030.



## **Living Lab**

#### **OBJECTIVE**

Establish a conceptual Sustainability Center to house sustainability efforts on campus, enhance engagement across the College, and cultivate sustainability research and solutions for our community and beyond.

- Maintain and expand Fellowship program through the Office of Sustainability to provide opportunities for students to develop skills and expertise in paid sustainability roles.
- Provide support to expand and maintain student clubs and organizations that align with the Collegewide sustainability mission.
- Identify living lab opportunities for students to be able to inform sustainability decisions on campus via various courses, projects, and theses.
- Highlight and increase the visibility of student, faculty, and staff sustainability research and projects via annual Sustainability Expo.
- Offer opportunities for students to develop the skills necessary to enter into a sustainability field after graduation, such as certification courses like LEED, OSHA, DOT, RCRA, etc.
- Establish a sustainability grant to provide funding for student projects and research on campus by 2027.
- Develop a Green Office Certification for faculty/staff offices, student residences, and campus events by 2025.
- Create a student Eco-Reps program in partnership with Residence Life.



## **Partnerships**



#### OBJECTIVE

Collaborate with local nonprofits, municipalities, and private sector companies to create a more sustainable North Shore.

- Develop consortium of local peer institutions to promote collaboration and streamlined communication while working on equitable and sustainable climate change solutions by 2030.
- Annually track alumni involvement and careers within sustainability-centric disciplines for potential partnerships, networking, and student mentorship opportunities.
- Develop new sustainability-focused internship and co-op opportunities and expand collaboration with past organizations.
- Regularly provide access to and advertise sustainability internship opportunities, as well as advanced degree programs relating to sustainability via Sustainability Newsletter, Sustainability website, annual Sustainability Career Fair, and other opportunities to increase student awareness of sustainability-related career paths.



#### **APPENDIX 1: GLOSSARY**

#### **Battery storage**

Devices that enable energy from renewable resources, such as solar or wind, to be stored and then released when that power is needed.<sup>1</sup>

#### **Carbon Offsets**

Purchased or sold reductions in greenhouse gas emissions made to compensate for emissions generated on site or elsewhere.<sup>2</sup>

#### **Climate Change**

Long-term shifts in temperatures and weather patterns, largely caused by human activities since the industrial revolution that generate greenhouse gas emissions.<sup>3</sup>

#### **Climate Resilience**

The ability to anticipate, prepare for, and respond to events that threaten our climate.

#### **Climate Vulnerability**

The susceptibility of a system to the negative effects of climate change and other environmental stressors.<sup>4</sup>

#### Composting

The process of converting organic materials, such as food or plant waste, into a fertilizer to improve soil properties.<sup>5</sup>

#### **Decarbonization**

The reduction or elimination of carbon dioxide emissions from operational processes, such as manufacturing, energy production, or facilities management.<sup>6</sup>

#### **Demand response**

Voluntary, incentivized reductions, increases, or shifts in electricity consumption by utility customers in response to energy demand.<sup>7</sup>

#### **Diversion Rate**

Refers to the amount of municipal solid waste recycled, composted, or otherwise diverted from landfill or incineration divided by the total amount of municipal solid waste recycled, composted, landfilled, or incinerated; an effective way to track the impact of reuse, recycling, and organic composting programs.<sup>8</sup>

#### **APPENDIX 1: GLOSSARY**

#### Electrification

The replacement of technologies and services that consume fossil fuels, such as oil, coal, or natural gas, with solutions that run on electricity.<sup>9</sup>

#### **Energy Infrastructure**

In the United States, infrastructure used to create, transfer, and distribute electricity, often divided by electricity, oil, and natural gas.

#### **Environmental Racism**

Discrimination in environmental policy and the regulation of laws that disproportionately affect people of color.<sup>10</sup>

#### **Environmental Justice**

Movement in response to environmental racism. The fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.<sup>11</sup>

#### **Food Waste**

Unconsumed food that is sent to landfill or incineration, or is otherwise disposed of.

#### **Fossil Fuels**

Fuels derived from decomposing plants and animals, such as coal or oil. Fossil fuels are burned to produce energy, releasing greenhouse gas emissions as a byproduct.<sup>12</sup>

#### **Green Infrastructure**

Refers to a network of tools and resources for solving urban and climatic challenges by including biophilic elements and existing nature into built infrastructure.<sup>13</sup>

#### **Green Revolving Funds**

An investment fund that finances energy efficiency, renewable energy, and other sustainability projects through cost savings from existing sustainability projects. Any cost savings from existing sustainability projects are allocated into this fund to be spent on future sustainability projects.<sup>14</sup>

#### **APPENDIX 1: GLOSSARY**

#### **Healthier Hospitals Initiative**

An initiative that aims to reduce the environmental footprint of healthcare facilities, promote indoor environmental quality, and elevate public and environmental health.<sup>15</sup>

#### **LEED** Certification

The most widely used green building rating system in the world. This certification provides a framework for healthy, efficient, and cost-saving green buildings.<sup>16</sup>

#### **Living Building Challenge**

A rigorous sustainable building certification program that defines the most advanced measure of green building design. Operational performance requirements include net zero energy consumption, water and waste, measured only after a full year of operation.<sup>17</sup>

#### **Net Zero Emissions**

Refers to the balance of the amount of greenhouse gasses produced and the amount of greenhouse gasses removed from the environment.<sup>18</sup>

#### Net Zero Energy Buildings (NZEB)

Buildings designed and built to consume as little energy as possible. Renewable energy sources added to these buildings are capable of producing enough energy to meet, or exceed, their operational requirements.<sup>19, 20</sup>

#### **Organic Landscaping**

Landscaping without the use of synthetic pesticides, synthetic fertilizers, and synthetic soil amendments.<sup>21</sup>

#### **Passive House Certification**

A performance-based certification that focuses on the dramatic reduction of energy use for building heating and cooling.<sup>22</sup>

#### **Pollinator**

Insects that play an important role in plant reproduction which is vital to maintain a healthy ecosystem.<sup>23</sup>

#### **APPENDIX 1: GLOSSARY**

#### **Renewable Energy**

Energy that is produced by wind, solar, or otherwise renewable resources, rather than nonrenewable sources such as fossil fuels.<sup>24</sup>

#### **Renewable Energy Credits (RECs)**

Intangible accounting or tracking commodities for renewable energy sources or other green energies as they flow into the power grid. Credit ownership represents the property rights to the environmental and social benefits of renewable energy as it is generated.<sup>25</sup>

#### **Scope 1 Emissions**

All direct greenhouse gas emissions generated on-site.<sup>26</sup>

#### **Scope 2 Emissions**

Indirect greenhouse gas emissions from consumption of purchased electricity, heat, or steam.<sup>26</sup>

#### **Scope 3 Emissions**

Indirect greenhouse gas emissions, such as the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities (e.g. T&D losses) not covered in Scope 2, outsourced activities, waste disposal, etc.<sup>26</sup>

#### **Single Stream Recycling Rate**

Single stream recycling (or "mixed" recycling) is a system in which recyclable materials such as cardboard, paper, and plastic, metal, and glass containers are collected together for processing; the rate refers to what portion of waste diverted from the landfill is composed of Single Stream materials versus total waste generated.<sup>27</sup>

#### **Solid Waste Generation**

The consequence of all processes where materials are used and spent, which includes any garbage, refuse, or discarded material from industrial, commercial, or agricultural operations and community activities. Nearly everything we do generates some kind of waste.<sup>28</sup>

#### **APPENDIX 1: GLOSSARY**

#### **Sustainability**

The ability to meet the needs of the present without compromising the ability of future generations to meet their own needs.<sup>29</sup>

#### **Urban Heat Island Effect**

Urbanized areas that experience higher temperatures than outlying areas due to human activities.<sup>30</sup>

#### Virtual Power Purchase Agreement (VPPA)

A flexible, customizable, multi-year bilateral renewable energy contract that does not involve the physical delivery of energy from the vendor to the customer; essentially a financial transaction under which the energy supplier and the client agree on a price for the electricity to be supplied. Being long-term, these agreements protect businesses from volatility in energy markets while facilitating access to renewable energy supplies.<sup>31</sup>

#### **Water Reclamation**

The process of converting municipal wastewater or industrial wastewater into potable or otherwise usable water.<sup>32</sup>

#### **WELL Certification**

A performance-based certification for measuring, certifying, and monitoring features of the built environment that impact human health and wellbeing, through air, water, nourishment, light, fitness, comfort, and mind.<sup>33, 34</sup>

#### Xeriscaping

The practice of designing landscapes to reduce or eliminate the need for irrigation.<sup>35</sup>

#### Zero Waste

The conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health.<sup>34</sup> Essentially, this means sending nothing to landfills or incinerators. Given that current societal structures prohibit true zero waste at this time, this is quantified by Endicott College as a diversion rate of 90% or higher.<sup>36</sup>



#### **APPENDIX 2**

#### Campus Sustainability Committee Membership, 2020–24 2020–21 Committee

CHAIR: Anthony Michetti, Director, Office of Sustainability Paul Belski, Director, Dining Services, Sodexo Todd Comen, Dean, School of Hospitality Management Adeline Fullaway, Endicott College Class of 2022 Rick Gagnon, Director, Physical Plant Jennifer Hilton, Director and Assistant Professor, **Applied Behavior Analysis Programs** Jessica Kaufman, Associate Professor, Biotechnology & Bioengineering, School of Arts & Sciences Christopher Kinkade, Area Director, Residence Life Mark Kulakowski, Assistant Athletic Director of Facilities & Recreation, Athletics & Recreation Josh Lynch, Environmental Health & Safety Manager, **Physical Plant** Anna McAlister, Associate Professor, Marketing Lauri Rawls, Director of Community Service Kevin Renz. Associate Dean of Interior Design & Interior Architecture, School of Visual & Performing Arts Andrea Rhoades, Adjunct Faculty, School of Social Sciences, Communication, & Humanities Abigail Robinson, Endicott College Class of 2021 Caitlyn Sievers, Endicott College Class of 2023 Mariah Slocum. Administrative Assistant Olivia Virgin, Endicott College Class of 2022 Gabrielle Watling, Professor, School of Arts & Sciences Anna Wetterhorn. Assistant Director of Admission. Office of Admission Meghan Wrenn, Sustainability Coordinator, Office of Sustainability

#### **APPENDIX 2**

#### 2021–22 Committee

 CHAIR: Carly Thibodeau, Associate Director, Office of Sustainability
Paul Belski, Director, Dining Services, Sodexo
Anna McAllister, Faculty Department Lead and Professor, School of Business
Kelly McKaig, Endicott College Class of 2023
Lauri Rawls, Director, Community Service
Mariah Slocum, Administrative Assistant
Noelle Sweder, Residence Director, Residence Life

#### 2022–23 Committee

 CHAIR: Carly Thibodeau, Associate Director, Office of Sustainability
George Anderson, Sustainability Coordinator, Office of Sustainability
Paul Belski, Director, Dining Services, Sodexo
Andy Brody, Professor, Interior Design, School of Visual & Performing Arts
Charlotte Colella, Endicott College Class of 2024
Maren Found, Endicott College Class of 2026
Angela Gulino, Art Director, Communications & Marketing
Kelly McKaig, Endicott College Class of 2024
Lauri Rawls, Director, Community Service
Mariah Slocum, Administrative Coordinator, Admissions
Noelle Sweder, Residence Director, Residence Life

#### 2023–24 Committee

 CHAIR: Carly Thibodeau, Associate Director, Office of Sustainability
Emma Lacey, Sustainability Coordinator, Office of Sustainability
Paul Belski, Director, Dining Services, Sodexo
Andy Brody, Professor, Interior Design, School of Visual & Performing Arts
Charlotte Colella, Endicott College Class of 2024
Maren Found, Endicott College Class of 2026
Angela Gulino, Art Director, Communications & Marketing Lauri Rawls, Director, Community Service
Mariah Slocum, Administrative Coordinator, Admissions

#### **APPENDIX 3**

#### **President's Council**

Steven R. DiSalvo, Ph.D., President

**Bryan Cain**, Ph.D., Senior Vice President for Student & External Engagement

Andrew Coole, Associate Vice President of Finance

**Anthony Donaldson**, Assistant Vice President of Communications & Marketing

Amy Donovan, Chief Information Officer

Donny Femino, Assistant Vice President of Research and Planning

**Anthony Ferullo**, Vice President of Finance & Chief Operating Officer

Richard Gagnon, Director of Facilities

Patrick Hewett, Vice President for Institutional Advancement

Thomas Hurley, Director of Graduate Admission

Michael Iorio, Assistant Vice President & Dean of Admission

Brandi Johnson, Vice President & Chief Diversity Officer

Meghan Monaco, Vice President of Undergraduate Admissions

Marlin Nabors, Assistant Vice President & Dean of Students

Sara Quay, Ph.D., Provost

Kerry Ramsdell, Director of Public Safety and Police

Dana Tobey, Dean of Enrollment Operations/Retention

Kate White, Vice President of Human Resources

Brian Wylie, Ph.D., Assistant Vice President, Athletics

#### **APPENDIX 4**

#### **Sources Consulted**

- 1. What is battery storage? (n.d.). National Grid. https://www.nationalgrid.com/stories/ energy-explained/what-is-battery-storage#:~:text=Battery%20storage%2C%20 or%20battery%20energy,when%20customers%20need%20power%20most.
- 2. What is a Carbon Offset? (n.d.). Carbon Offset Guide. https://www.nationalgrid. com/stories/energy-explained/what-is-battery-storage#:~:text=Battery%20 storage%2C%20or%20battery%20energy,when%20customers%20need%20 power%20most.
- 3. What Is Climate Change? (n.d.). United Nations. https://www.un.org/en/ climatechange/what-is-climate-change
- 4. Climate Change Vulnerability Assessments. (n.d.). Massachusetts Wildlife Climate Action Tool. https://www.un.org/en/climatechange/what-is-climate-change
- 5. Reducing the Impact of Wasted Food by Feeding the Soil and Composting. (4 April, 2023). United States Environmental Protection Agency. https://www.epa.gov/sustainable-management-food/reducing-impact-wasted-food-feeding-soil-and-composting
- 6. Industrial Decarbonization Roadmap. (n.d.). United States Department of Energy, Office of Energy Efficiency & Renewable Energy. https://www.energy.gov/eere/ doe-industrial-decarbonization-roadmap
- 7. Demand Response. (n.d.). United States Department of Energy, Office of Electricity. https://www.energy.gov/oe/demand-response
- 8. What is the Difference Between Diversion Rate and Recycling Rate? (n.d.). Busch Systems. https://www.buschsystems.com/resource-center/knowledgeBase/glossary/what-is-the-difference-between-diversion-rate-and-recycling-rate
- 9. Holowka, Taryn. (29 July, 2022). Building electrification: Why it matters. United States Green Building Council. https://www.usgbc.org/articles/building-electrification-why-it-matters
- 10. Beech, Peter. (31 July, 2020). What is environmental racism and how can we fight it? World Economic Forum. https://www.weforum.org/agenda/2020/07/what-is-environmental-racism-pollution-covid-systemic/
- 11. Environmental Justice (29 March, 2023). United States Environmental Protection Agency. https://www.weforum.org/agenda/2020/07/what-is-environmental-racism-pollution-covid-systemic/
- 12. Fossil Fuels. (n.d.). National Geographic. https://www.weforum.org/ agenda/2020/07/what-is-environmental-racism-pollution-covid-systemic/
- 13. What is Green Infrastructure? (n.d.). United States Environmental Protection Agency. https://www.epa.gov/green-infrastructure/what-green-infrastructure

41

#### **APPENDIX 4**

#### Sources Consulted

- 14. Green Revolving Fund. (n.d.). Champlain College. https://www.champlain.edu/ student-life/campus-and-community-programs/sustain-champlain/programssustain-champlain/green-revolving-fund
- 15. The Legacy of Healthier Hospitals. (n.d.). Practice Greenhealth. https:// practicegreenhealth.org/healthierhospitals?utm\_source=healthierhospitals.org
- 16. What is LEED certification? (n.d.). United States Green Building https://support. usgbc.org/hc/en-us/articles/4404406912403-What-is-LEED-certification-#:~:text=LEED%20
- 17. Living Building Challenge Basics. (n.d.). International Living Future Institute. https://living-future.org/lbc/basics4-0/
- 18. What is net zero? (n.d.). National Grid. https://www.nationalgrid.com/stories/ energy-explained/what-is-net-zero
- 19. Zero Energy Buildings Resource Hub. (n.d.). United States Department of Energy, Office of Energy Efficiency & Renewable Energy. https://www.energy.gov/eere/ buildings/zero-energy-buildings-resource-hub
- 20. "Net Zero Energy Building." *Green Building Alliance*, Green Building Alliance, 2024 http://www.gba.org/resources/frameworks-and-certifications/net-zero-energybuilding/
- 21. Guiding Principles of the Organic Landscape Association. (n.d.). Organic Landscape Association. https://theola.org/guiding-principles/
- 22. What is Passive House? (n.d.) Passive House Massachusetts. https://phmass. org/what-is-passive-house/#:~:text=Passive%20House%20is%20a%20 performance,to%20design%20%26%20construct%20better%20buildings
- 23. Pollinators and Climate Change. (n.d.). National Parks Service. https://www.nps.gov/articles/000/pollinators-climateimpact.htm
- 24. "Renewable Energy." *Energy.Gov*, U.S. Department of Energy, http://www.energy.gov/eere/renewable-energy
- 25. Renewable Energy Credits (RECs). (n.d.). Second Nature. https://secondnature.org/ solutions-center/renewable-energy-credits/
- 26. "What Are Scope 1, 2 and 3 Carbon Emissions?" *National Grid*, National Grid, 13 June 2023, http://www.nationalgrid.com/stories/energy-explained/what-are-scope-1-2-3-carbon-emissions#:~:text=Definitions%20of%20scope%20 1%2C%202,owned%20or%20controlled%20by%20it

#### **APPENDIX 4**

#### Sources Consulted

- 27. "Single Stream Recycling". *Recycling Works Massachusetts*, Massachusetts Department of Environmental Protection. recyclingworksma.com/singlestream-recycling/#:~:text=Single%20stream%20recycling%20(or%20 %E2%80%9Cmixed,are%20collected%20together%20for%20processing
- 28. Criteria for the Definition of Solid Waste and Solid and Hazardous Waste Exclusions. (n.d.). United States Environmental Protection Agency. https://www. mass.gov/lists/recycling-solid-waste-data-for-massachusetts-cities-towns
- 29. Heat Island Effect. (n.d.). United States Environmental Protection Agency. https://www.epa.gov/heatislands
- 30. "Report of the World Commision on Environment and Development: Our Common Future." (1987). Brundtland Commision, https://sustainabledevelopment.un.org/ content/documents/5987our-common-future.pdf
- 31. "Virtual PPAs: Turbocharging Business Net Zero Targets." *Corporate EnelX*, EnelX, corporate.enelx.com/en/our-offer/business-solutions/power-purchaseagreement/virtual
- 32. "Basic Information about Water Reuse." *EPA.Gov*, U.S. Environmental Protection Agency, 17 May 2023, http://www.epa.gov/waterreuse/basic-information-about-water-reuse.
- 33. WELL v2. (n.d.). International WELL Building Institute. https://v2.wellcertified.com/en
- 34. Knox, Nora. (2 April, 2015). What is WELL? United States Green Building Council. https://www.usgbc.org/articles/what-well
- 35. Rutledge, Kim, et al. "Xeriscaping." *National Geographic Education*, National Geographic, 19 Oct. 2023, education.nationalgeographic.org/resource/xeriscaping/
- 36. Zero Waste Definition. (20 December 2018). Zero Waste International Alliance. https://zwia.org/zero-waste-definition/



## **GET CONNECTED**

- endicott.edu/sustainability
- **Sustainableendicott**
- Sustainability@endicott.edu