

Sustainability is of the utmost importance to EHS, and we are committed to ensuring that all of our properties are on track to meet the highest sustainability standards. Given the acceleration of climate change and its implications, many institutions and governments are taking action to combat such climate change. Furthermore, these entities are realizing that sustainability initiatives often present opportunities to achieve significant future cost reductions while also helping to preserve infrastructure. At EHS, we understand how critical these sustainability initiatives are – not only as ways to reduce costs and bolster infrastructure, but also, and more importantly, as the correct course of action in an effort to foster social responsibility.

Social responsibility is at the core of EHS – our mission is to provide safe, affordable, and quality housing to students and student interns living in New York City. Beyond this, we continually look to incorporate environmentally friendly practices into every aspect of our services, working to ensure that the ecological footprints of our properties are minimized. From green building specifications and designs to partners dedicated to sustainable practices to resident education, EHS places a strong emphasis on sustainability. However, there is more we can do. As EHS continues to expand its portfolio of properties, we will continue to look to implement strategies and ideas employed by leading universities, to the extent it is possible. Additionally, we can draw significant inspiration from Amsterdam (one of the most sustainable cities in the world) and Equity Residential (a large publicly traded REIT) as we look to implement new ideas and strategies across our growing portfolio. Our ambition is to become one of the most sustainable organizations in New York City – both through our properties and at a corporate level.

Though Universities have more avenues than EHS by which they can pursue sustainability initiatives--e.g. University owned transportation, research departments— EHS can look to the cutting-edge building structure and design implemented by these leading Universities for inspiration when renovating its own properties. Further, and outlined in greater detail subsequently, these Universities do not only focus on building design. Initiatives range from tracking greenhouse gas emissions associated with campus operations to creating a more sustainable procurement process. Many of these initiatives can be adopted by EHS in one form or another.

EHS's Student Life department enables the organization to directly influence the lives of its residents. So, though EHS is not a university and thus cannot claim its residents as its own students, universities trust EHS to create a vibrant community for their students. Through this channel, EHS engages directly with students, and is able to both encourage sustainable habits and incentivize behaviors in residents.

A commitment to social responsibility on all levels is the nucleus of our organization – at its core EHS seeks to provide a service that makes the lives of thousands of individuals better (even if only just slightly reassured). And central to this is sustainability. With a steadfast devotion to sustainable practices, we are able to implement – integral to all aspects of our business – solutions that not only benefit the environment but also our residents. Detailed below in this document are sustainability initiatives that EHS can look to implement at 55 John, details on measures EHS will take to pursue sustainable habits among its residents at 55 John, the initiatives pursued by various universities, the City of Amsterdam's sustainability plan Equity Residential's 2019 ESG Report, and finally, details on the LightView dormitory on Northeastern's campus (opened in September 2019).



Appendix A: 55 John Sustainability Initiatives

In EHS's "Sustainability" document, we have outlined many ways in which the organization adheres to the mission of operating in a sustainable manner. To bolster these guidelines, we have researched sustainability initiatives from five leading universities in New York City and Boston – NYU, Columbia University, Hunter College, Harvard University, and MIT – as well as from the City of Amsterdam, one of the most sustainable cities in the world, and Equity Residential, a publicly traded REIT. Presented immediately below is a compilation of initiatives drawn from all of the aforementioned sources. While it is our goal to one day implement each of these items, certain initiatives are more challenging than others – with regard to both implementation and monetary consideration. As such, it will be important to analyze the cost of each initiative in order to identify those that are more actionable in the near term. The below initiatives also apply directly to 55 John Street, but should also be extended to future properties (as applicable on a case-by-case basis).

Energy Audit and Retrofit

EHS is currently conducting an RFP process for a property manager at 55 John Street, and the chosen firm will be responsible for conducting an energy audit of the property. The firm will employ an energy consultant to walk through 55 John and make recommendations on initiatives that could assist EHS in making 55 John a more efficient building. This is an important step in establishing a concrete, affordable plan for how to enhance the sustainability of the building. Recommendations from property management firm candidates have included LED lighting installation, smart sensor implementation, mechanical systems insulation improvement, and various Energy Service Company solutions.

Energy Consumption

- Participate in Peak Load Management programs
- Submeter by floor, and if possible, by room (currently no submetering at 55 John)
 - Submeter all major common areas in such a way that all major pumps, fans, amenities, heating, and cooling equipment can be isolated; circuit level monitoring
- Ensure that any electricity purchased, to the greatest extent possible, comes from clean, renewable energy sources
 - Explore the possibility of leveraging a co-generation plant for energy and practice demand-side management strategies
- To the extent possible, install solar panels on the roof of 55 John
- Work toward LEED certification leverage third-party energy consultant to provide advice
- Reduce air leakage around windows, doors, and mechanical systems by renovating these areas with airtight designs (when possible) and using special tapes and sealants
- Repair insulation in steam room and other mechanical areas in basement to reduce energy loss
- Replace windows with electrochromic glass
- LL 84 & 87 compliance: by following LL 84 and 87 benchmarking and retrofitting requirements, respectively, EHS will be able to more effectively track energy consumption and use this data to inform subsequent sustainability measures

Transportation

• NJ Transit's University Partnership Program – full-time students receive a 25% discount on monthly NJ Transit Passes



- Install bicycle racks at the main entrance to 55 John
- Encourage employees working at 55 John to use public transportation, ride sharing, and nonmotorized transport whenever possible (currently select summer interns at EHS residents receive unlimited subway cards as a marketing initiative)

<u>Waste</u>

- Develop a program that enables 55 John residents to give all personal electronic devices to EHS for proper disposal (i.e. prevent e-waste dumping in landfills)
- Install collection tubes on each floor in which residents may deposit old batteries
- On each floor place specific receptacles for metal, glass, plastic, and paper products
- Maintain a tobacco-free campus policy, including e-cigarettes

Machines and Equipment

- Upgrade HVAC system including timers on AC units, digital air controls, retrofitted steam traps, and modernized boilers
- Install smart appliances in rooms (refrigerators, microwaves, smart locks, thermostats, etc.)
- Install LED bulbs in all light fixtures
- Upgrade to high-efficiency air compressors
- Install occupancy sensors to control overhead lighting in both individual rooms and common areas (kitchens, laundry room, exercise room, etc.)
- Add water bottle filling stations on each floor (currently in amenity spaces only)
- Install low flow showerheads, low flow toilets, and faucet aerators in individual rooms and common areas, in conjunction with training program for students elaborating on the benefits
- Install foam soap dispensers in all common areas (including common area restrooms)
- Eliminating gasoline powered maintenance tools, and require all vendors comply
- Switch laundry machines provider and ensure new contractor installs low-water laundry machines

Materials

- Continue to use non-toxic paint
- To the extent practical, use greener solvents, cleaning supplies, etc.
- For future projects: Identify and track high-risk chemicals in targeted building materials
- Purchase materials that are less toxic and made from renewable resources, e.g. recycled content materials like wall and floor insulation with post-consumer recycled glass and drywall containing recycled gypsum
- To the extent possible, source materials as locally as possible

Procurement

- Require that externally provided services (vendors, etc.) minimize their use of fossil fuels
- Ensure that in each RFP process vendors comply with EHS's sustainability goals
- Purchase materials in bulk, and to the extent possible, leverage the same provider for multiple types of supplies

General Building Renovations

• Common area expansion: renovate the basement lounge into a fitness center and connect this with the current fitness center or improve the condition of the basement lounge to create a more





viable study and lounge space



Appendix B: Student Sustainability Program

Student Life is the lynchpin to EHS's position as one of leading student housing providers in New York City. EHS plans events in each residence, provides discounted tickets to NYC's most iconic places, and the Student Life staff is always available to share advice and experience. The deep connection between residents and EHS Student Life staff provides a great opportunity to influence sustainable practices. Below are representative, illustrative programs we would look implement when possible (given that there are instances in which EHS is only responsible for summer programing, as is the case in 55 John) to foster both engagement among residents and sustainable practices, as well as a list of suggestions we will share with all residents to encourage sustainability.

Student Programs

Surplus Elimination Program

• EHS creates a marketplace in which residents and the local community can exchange unwanted items to each other (this also enables residents to trade amongst themselves rather than throw items away)

Student Sustainability Initiative Challenge

• Residents develop innovative and actionable ideas on how to make their residence more sustainable. The top 3 ideas will present to the ESG Committee, and winning project will receive a \$50 Amazon gift card (per person) and the chance to work on implementing their project

Day of Service

• EHS currently runs (and will continue) a day of service program that changes location each year Canned Food Drive

• EHS will hold food drives once a semester in order to provide food to fellow EHS residents who may need some assistance. The drive will last roughly a month, and the goal is to raise at least 100lbs of food

Bring Your Own Bowl/Cup/Utensils

• During food related events, EHS asks that residents bring their own plates and utensils, so that EHS does not have to use paper or plastic

Sustainability Suggestions for Residents

- Use LED bulbs for personal lamps
- Unplug electronic items from the wall when items are not in use
- Using sunlight over lamps whenever possible
- Turn off lights when leaving a room
- Spend more time in common rooms when reading, studying, relaxing, etc.
- Turn off water when brushing teeth
- Shower for 10 minutes or less
- Drink tap water and use a reusable water bottle to minimize plastic use
- Use reusable shopping bags
- Donate unneeded items to local organizations and charities
- Dispose batteries and electronics in designated bins
- Buy e-books when possible
- Eat vegetarian at least three days a week



- Cook meals together to reduce packaging waste and water consumption
- Wash clothes in cold water
- Only do full loads of laundry
- Take the stairs when possible
- Exercise at least 30 minutes every day (all EHS residences have a health and fitness center)
- Bike or use mass transit whenever possible
- Shop for secondhand clothing over new
- Decorate dorm rooms using homemade or used items
- Print on both sides of a piece of paper

EHS will continue to include a 'sustainability tip' in its monthly newsletter to students, and will also post additional tips on its EBoards.



Appendix C: New York City Universities – Sustainability Initiatives

Hunter College

General Goals

- General purpose cleaning products are Green Seal or LU Ecologo certified (when possible)
- Computers are rated Electronic Product Environmental Assessment Tool (EPEAT) Silver or better
- Paper supplies (including copy and janitorial paper) should be 100% post-consumer recycled content; if not possible, non-recycled content should be derived from a sustainably managed renewable resource

Energy Efficiency

- Ongoing initiatives:
 - Continually look to upgrade HVAC system:
 - Timers on AC units
 - Digital air controls
 - Retrofitted steam traps
 - Modernized boilers
 - Participate in Peak Load Management programs to reduce share of NYC's power grid
 - Power down certain escalators & elevators during off-peak season and on evenings and weekends
- Successful implementations:
 - Upgrade to high-efficiency air compressors
 - Install occupancy sensors to control overhead lighting in 90% of rooms on campus (turn lights of if no motion detected for 15 continuous minutes)
 - Restore black, tar-coated roofs on campus's East and West Buildings to paint specifically designed to deflect solar heat

Water

- Successful implementations:
 - Added water bottle filling stations on campus
 - o Installed low flow showerheads and faucet aerators at all campus facilities
 - Installed foam soap dispensers in all restrooms
 - o Installed Quench dispensers in many offices & shared kitchen areas

Transportation

- Ongoing initiatives:
 - Hunter College's Office of Public Safety of college uses bikes to visit other satellite campuses when making security rounds
 - NJ Transit's University Partnership Program full-time students receive a 25% discount on monthly NJ Transit Passes
 - o Enforce a no-idling policy for vehicles on campus
- Successful implementations:
 - Repurposed an older van for alternative use rather than sending it to landfill
 - Installed bicycle racks at the main entrance to all buildings on campus



Universal and E-Waste Collection

- Ongoing initiatives:
 - Hunter accepts all College-owned electronic devices to prevent e-waste dumping in landfills, and uses a private collection hauler to ensure responsible recycling
 - \circ ~ Install collection tubes around campus for students to deposit old batteries in

Columbia University

General Goals

- Reduce absolute Scope 1 & 2 greenhouse gas (GHG) emissions by 35% by 2020
- Set goals that Work toward NYC's long-term goal of reducing all GHG emissions by 50%
- Set goals for reducing absolute GHG emissions for the complete GHG inventory that align with the long-term NYC goal of reducing all GHG emissions by 50%
- Set a waste diversion and waste-to-landfill reduction goal, and work toward aligning with NYC's plan to send zero waste to landfill by 2030
 - Develop baseline metrics for waste streams and calculate the first waste diversion rate

Ongoing Initiatives

- Develop baseline measures of use and efficiency for energy, water, and other resources, and adopt periodic monitoring and reporting
- Adopt and periodically update campus-specific goals that reflect the following areas:
 - Reduction of greenhouse gas emissions (campus ops), electricity, and fuel purchases
 - Conservation of resources and minimization of waste through efficiency, reuse, recycling, source reduction, and composting
 - Use of renewable resources (including energy)
 - \circ ~ Use of water resources efficiently and minimization of total water demand
 - Construction, maintenance, and renovation of buildings focused on providing safe and healthy spaces, as well as environments that use natural resources efficiently
 - o Expansion of alternative mobility options including bicycling, shuttles, and mass transit
 - Reduction of travel need (e.g. by leveraging electronic communications)
- Factor projections on future climate conditions into capital and operational planning
- Organize an inclusive sustainability governance model that centralizes sustainability reporting
- Develop publicly available sustainability indicators and planning tools, to enable monitoring, reporting, and continuous improvement
- Foster a culture of sustainability among staff and students

Transportation Specific Initiatives

- Strategy 1
 - Calculate transportation-related GHG emissions from University-operated vehicles and generate efficiency-related purchasing guidelines
 - Ensure ridership matches vehicle capacity regarding University shuttles, and replace regular shuttle service with transit subsidies where possible
- Strategy 2
 - Improve access to and engagement regarding bicycling



- Strategy 3
 - Develop programs and infrastructure that supports cleaner fuel types/transportation modes (e.g. walking, biking, public transit subsidies, ferry services, etc.)

Successful Implementations

- In collaboration with the New York Department of Sanitation, Columbia recycles all metal, glass, plastic, and paper products in specific receptacles throughout campus
- The Environmental Health and Safety Department ensures that electronic waste and batteries are reclaimed and diverted from landfill

Additional Campus Initiatives

- "Reduce, reuse, and recycle"
 - Clean + Go Green events: twice per year, Columbia makes dumpsters and papershedders available across campus
 - Give + Go Green events: donate items to local charities
 - Surplus re-use program: network that enables both people affiliated with the University and locals to exchange office furniture and other items
- "Walk, bike, or use alternative transportation"
 - o Citi bike
 - Intercampus and Evening Shuttles
- "Volunteer to lead sustainable change"
 - o 12 sustainability focused clubs
 - o Sustainability Leaders Network
- Encourage students to report drips and window leaks and use reusable bottles
- "Reduce energy and electricity use"
 - Turn off lights, and power down and unplug electronics when not in use

New York University

General Goals

- Reduce greenhouse gas emissions by 50% by 2050, and reach carbon neutrality by 2040
 - NYU has already reduced greenhouse gas emissions by 30%

Degree/Course-Related Efforts

- 900+ sustainability-related courses
- 12+ groups on campus dedicated to sustainability
- The College for Global Public Health offers a concentration in environmental public health sciences, teaching ways to develop scalable and sustainable solutions to ecological problems
- Cogeneration Plant (online in 2010)
 - Provides heating and/or cooling and electricity to 44 and 26 NYU buildings, respectively

Campus-wide Initiatives

- Food waste composting program in dining facilities coupled with tray-less dining
- Removal of bottled water from student meal plans



- Expansion of collection stations for recycling
- Pairing landfill with recycling bins
- Transition to all-electric public safety vehicles and shuttles
- Require all purchasers of K-Cup products to be enrolled in the Grounds to Grow On program (composts and recycles the components of single-use coffee pods)

Landscaping Operations Initiatives

- Introduction of native plant species
- Eliminating chemical fertilizers
- Integrated pest management
- Water conservation
- Reduction of lawn areas
- Sustainable soil management with double digging, composting and mulching
- Eliminating gasoline powered maintenance tools

Student Challenges

- Zero Waste Challenge: students put all non-recyclable trash in a plastic bag they carry around for an entire week
- Green Apple Move Out: campus-wide spring cleanup in which students donate unwanted items to Goodwill

Student-Focused Initiatives

- Using LED bulbs
- Unplugging electronic items from the wall when not using them
- Using sunlight over lamps whenever possible
- Turning off lights when leaving a room
- Turning off water when brushing teeth
- Showering for 10 minutes or less
- Drinking tap water to minimize plastic use
- Using reusable shopping bags
- Donating unneeded items to local organizations and charities
- Disposing of batteries and electronics in technoscrap bins
- Buying e-books when possible
- Carrying a reusable water bottle
- Composting food waste
- Eating vegetarian at least three days a week
- Washing clothes in cold water
- Doing only full loads of laundry
- Taking the stairs when possible
- Biking or using mass transit over cars
- Shopping for secondhand clothing over new
- Decorating dorm rooms using homemade or used items
- Printing on both sides of a piece of paper



- EcoReps: Sustainability advocates in resident halls, dedicated to inspiring their residence hall communities to be more environmentally conscious and sustainable; example projects include:
 - Assist the Office of Sustainability in the development and implementation of awareness campaigns on campus such as Waste Week, NYUnplugged, and Earth Month festivities.
 - Raise awareness about waste reduction practices
 - \circ $\;$ Conduct audits of the recycling bins in buildings $\;$
 - o Swap incandescent or CFL bulbs for LEDs
 - Set up and/or design tabling events in residence halls



Appendix D: Boston Universities – Sustainability Initiatives

Harvard

Harvard is dedicated to creating a healthier, more sustainable campus community, and has set numerous goals and initiatives to realize this goal. The University has also already achieved considerable success in various sustainability initiatives. Harvard's sustainability roadmap focuses on five key areas – emissions and energy, campus operations, nature and ecosystems, health and well-being, and culture and learning – which are outlined in further detail below.

Emissions and Energy

Greenhouse Gas Emissions

- Reduce emissions 80% by 2050 (aligned with the UN's Intergovernmental Panel on Climate Change)
- Become fossil fuel-neutral by 2026, and fossil fuel-free by 2050
 - o Electricity purchased will come from clean, renewable energy sources
 - Harvard's district energy system and vehicles owned will operate sans fossil fuels
 - Externally provided services will rely on fossil fuels as little as possible
- Track and report Scope 3 greenhouse gas emissions
- Success to date:
 - Achieved a net 21% reduction (including growth in square footage) in emissions through 2014

Energy Reduction

- Assess energy use by building and space type to inform goal setting
- Success to date
 - Since 2008, all energy intensive space in the University has been audited and 1,300+ energy efficiency measures have been implemented (saving ~\$9M per year)

Renewable Energy

- Continually upgrade to renewable energy sources where applicable
- Success to date:
 - In 2018, began installation of a 450 KW solar project to power a 45,000 square foot science laboratory and teaching facility
 - The faculty of Arts and Sciences is establishing a 100 KW solar array on the conjoined roofs of two halls
 - Harvard University Housing has begun 425 KW installation of on-site renewables in Allston (neighborhood adjacent to Cambridge)
 - The University's District Energy Facility in Allston uses a more efficient lowertemperature hot-water distribution system, and includes the largest thermal storage tank in Massachusetts
 - Harvard has installed 21 solar installations with a total capacity of 2.088 MW

Campus Operations

New Construction

 Maintain compliance with Green Building Standards, reviewed annually and revised every four years



Building Operations

- Reduce waste per capita 50% by 2020, and eventually become a zero-waste campus
- Reduce University-wide water use 30% by 2020
- Dispose of hazardous and electronic materials in a responsible manner
- Develop best standards for managing and operating buildings in a sustainable manner
- Success to date:
 - 134 LEED certified buildings (more than any other higher education institution), which includes the first LEED commercial interiors v4 in Massachusetts
 - IT Information Security Department has collected 9,000+ pounds of personal and institutional electronics for sustainable recycling
 - Water use is down 24% from 2006 (equivalent to 170M gallons)
 - \circ $\;$ Trash and total discards are down 40% and 33%, respectively, since 2006

Transportation

- Reduce campus fleet and shuttle emissions, and continually improve sustainable transportation opportunities
- Increase 'bikeability' and safety of streets in and around Harvard's campuses
- Success to date:
 - Of 327 of Harvard's vehicles, 93 are fueled with biofuel, 18 are hybrids, and two are 100% electric
 - Harvard Parking Services is promoting the use of bikes when its parking monitors make rounds

Climate Preparedness and Campus Resilience

- Develop University-wide climate preparedness and campus resilience plan by 2020 *Procurement*
 - Develop standards for targeted environmentally preferred products
 - Require all vendors to comply with applicable Harvard sustainability goals
 - Success to date:
 - Have developed a set of sustainability-related questions for vendors, which focus on commitments to climate and health

Nature and Ecosystems

Landscape Operations

• Maintain 75%+ of landscaped areas with an organic landscaping program by 2020

Campus Design

- Continuously incorporate sustainability goals into campus planning
- Design landscapes and choose plan species that are likely to be robust to future environmental change
- Success to date:
 - 14 vegetated green roofs across campus
 - Harvard scientists are looking at how to increase crop yields by enriching soil with sustainable fertilizer
 - HBS implemented a tree inventory and maintenance program called "Arboscope"
 - Renovated Smith Campus center includes an open-air vitrine garden and 8 green walls with 12,000 plants (that collect water from the roof)



Health and Well-Being

Personal Well-Being

- Reduce exposure to toxic chemicals
- Identify and track high-risk chemicals in targeted building materials
- Increase participation in wellness programs by 2020
- Continue to implement tobacco-free campus policies
- Success to date:
 - Since 201, the Office for Sustainability has transformed over 30 major capital projects (3M sf on campus)
 - In one initiative, 3,000 pieces of furniture avoided specific chemical classes of concern
 - Klarman Hall does not hold furniture and other building materials that contain specific chemical classes of concern
 - Nine out of twelve Schools at Harvard are smoke—or tobacco-free

Food

- Develop sustainable and healthful food standards that include Green Restaurant association certification by 2020
- Success to date:
 - Sustainable Food Standards, developed in April 2019, are designed to increase access for students and faculty to sustainable and healthful food offerings
 - o HBS has committed to switching from conventional eggs to higher welfare eggs

Culture and Learning

Research and Teaching

- Translate research into practice by facilitating collaboration to launch innovative solutions
- Provide mentoring, networking, and professional development
- Support the creation of new sustainability-related curricula and programing
- Success to date:
 - \circ Seven multidisciplinary projected received support in fifth round grants awarded by the Climate change Solutions Fund
 - Launched Climate Leaders Program for professional students
 - o In 2018, several new sustainability groups formed on campus

Governance

- Facilitate strong governance structure to ensure full integration of sustainability into all business practices
- Success to date:
- Harvard currently has 229 recognized Green Offices (through its Green Office Program) *External Partnerships*
 - Cultivate and lead external partnerships
 - Success to date:
 - Harvard has chaired the Boston Green Ribbon Commission Higher Education Working Group for the past 10 years, leading the development of reports on lab energy use benchmarking and renewable energy impacts
 - Harvard is Vice-Chair of the Executive Committee for the Cambridge Compact for a Sustainable Future and leads the Net Zero Lab Working Group



Communications

• Engage senior leaders to communicate to students on an annual basis about Harvard's commitment to sustainability

Community Action

- Increase staff participation in the Harvard Green Office program by at least 30% by 2020
- Recognize and reward sustainability accomplishments University-wide

ΜΙΤ

The Office of Sustainability at MIT (MITOS) is committed to solving global sustainability issues at a local issues – leveraging the MIT campus as a test bed an incubator, the University hopes to transform MIT into a powerful model that generates innovated ways of responding to the sustainability-related challenges presented by an ever-changing planet. MITOS's sustainability efforts are centered on five key areas: (1) building a low-carbon campus, (2) advancing resilient ecosystems, (3) optimizing use and disposal of materials, (4) living healthier, and (5) creating a network dedicated to advancing sustainability. Across each area, MITOS is engaged in numerous initiatives, from innovative strategies to key partnerships with leading organizations to summits – this memo outlines MITOS's areas of focus, but a full listing can be found on the MIT Office of Sustainability's website (MITOS).

Low-Carbon Campus

Climate

- MITOS Focus Areas:
 - o Tracking and reducing greenhouse gas emissions associated with the campus operations
 - Goal: achieve a 32% reduction in campus emissions by 2030
 - Strategy:
 - Scale campus-wide investments in energy efficiency in new and existing buildings
 - Renew Central Utilities Plan (including replacement of current combined heat and power system)
 - Invest in renewable energy by deploying additional renewable energy systems
 - Success to date: since 2014, MIT has reduced emission by 20%
 - Collaborate with research and operational partners to advance resiliency planning against sea level rise during storm surges, heat stress, and inland flooding
 - MIT's Climate Plan key highlights:
 - Strive for carbon neutrality
 - Test carbon efficient technologies on campus
 - Eliminate use of fuel oil in campus power generation by 2019
 - Deploy an open data platform for campus energy use
 - Enact "carbon shadow pricing"

Buildings

- Key strategies
 - $\circ~$ Achieve LEED v4 Gold certification for all new construction and major renovation projects



- Meet the energy efficiency goals outlined in the Stretch Energy Code outlined by the City of Cambridge
- Create greener labs that optimize energy and water use, reduce waste, and minimize hazardous materials
- MITOS Focus Areas:
 - o Continually employ sustainable design and construction
 - Green Labs program that encourages lab groups to propose innovative solutions
 - On-site renewable energy systems
 - Interactive map of MIT's sustainable buildings
 - Sustainability Working Group that address topics including building design/construction, stormwater and land management, materials management, and green labs

Energy

- Key strategies
 - Scale up campus-wide investments in energy efficiency across existing buildings and new construction
 - Reduce baseline emissions by 10 percent by replacing our combined heat and power system and making upgrades to the utility distribution systems
 - Invest in renewable energy systems the purchase of solar energy equivalent to 40 percent of present electricity use will neutralize emissions by 17 percent
 - Create living labs that leverage faculty and student research, improve operations, identify new energy strategies, and promote community adoption
- MITOS Focus Areas
 - Off-site solar farm (25-year power purchase agreement w/ a large new solar power installation)
 - On-site renewable energy (both wind and solar)
 - o Energy efficiency via co-generation plant and demand-side management

Mobility

- Key strategies
 - Expand the use of alternative fuels in MIT vehicles, optimize vehicle sizes, and improve transit routes and scheduling
 - Apply greenhouse gas management strategies and data collections to MIT's transportation practices
 - Encourage the use of public transportation, ride sharing, and non-motorized transport
 - Promote the use of low-emission and zero-emission vehicles
 - Collaborate with local groups on infrastructure improvements and shared solutions
- MITOS Focus Areas
 - Access MIT: enables MIT commuters to choose, day-to-day, how they commute

Resilient Ecosystems

Water

- Key strategies
 - Design systems to mimic the way nature handles water
 - Reduce pollution from stormwater and the risk of flooding from storms
 - Improve the water quality of the Charles River watershed



- o Develop energy production methods that do not rely heavily on water
- MITOS Focus Areas
 - Stormwater management and landscape ecology plan (MIT has completed phase 1)
 - Sustainability Working Group

Landscape

- Key Strategies
 - Reduce water demand and energy consumption
 - o Filter and decrease the amount of stormwater runoff
 - Improve air quality and decrease noise pollution
- MITOS Focus Areas
 - Stormwater management and landscape ecology plan (MIT has completed phase 1)
 - Sustainability Working Group

Air Quality

- Key Strategies
 - Promote sustainable transportation—public transit, biking, carpooling, and walking
 - Source food and materials regionally to cut down on fossil fuels burned in the transportation of goods
 - Design all new indoor environments to meet LEED v4 standards
- MITOS Focus Areas
 - \circ $\;$ Tracking and greenhouse gas emissions associated with campus operations
 - Access MIT: enables MIT commuters to choose, day-to-day, how they commute

Material Lifecycles

Procurement

- Key Strategies
 - o Evaluate and factor in the lifecycle of materials during the purchasing process
 - Purchase materials that are less toxic and made from renewable resources, contributing to a safer workplace
 - Collaborate across departments to purchase in bulk, reducing energy use in delivery
- MITOS Focus Areas
 - Material Flow Analysis: develop a campus-based material flow analysis that maps the universe of MIT material goods and their flow from procurement through disposal
 - o Sustainability Working Group

Waste

- Key Strategies
 - Reduce or eliminate campus waste at or near the source of generation
 - Purchase materials that are made from renewable resources
 - Increase the diversion rate of campus waste through reuse, recycling, and processing of organic materials
- MITOS Focus Areas
 - Material Flow Analysis
 - Sustainability Working Group
 - Material Matters Dashboard: visualized the annual and monthly quantities of recycling and waste materials collected and removed from campus
 - Sustainable Event Certification (for event planners)



Healthy People

- Key Topics Explored
 - The ways in which built and natural environments can promote healthy lifestyles and community resilience
 - \circ $\;$ The ways MIT procures, produces, and consumes food on campus $\;$
 - The critical relationship between MIT's campus food system and climate change
 - The health-related benefits of low-carbon transportation to, from, and around campus
- Food and Sustainability Working Group
 - MIT created a working group to recommend concrete strategies for how MIT can further provide access to health, affordable food that considers the health, social, and environmental impacts of food procurement, consumption, and waste on campus

Food

- Recent initiatives:
 - Abdul Latif Jameel Water and Food Systems Lab: seeks pathways for supplying fresh water and food for the world's growing population
 - Food and Agricultural Club: hosts an annual innovation prize (in conjunction with Rabobank)
- MIT partners with Bon Appetit and Restaurant Associates as its on-campus vendors, which strive to achieve greater social responsibility and sustainability
- MIT Recycling program manages on-campus food waste collection (around 12 tons is collected each month)

Thriving Networks

Campus | MITOS Campus Events and Working Groups

- Sustainability Leadership Steering Committee: dedicated to implementing the University's Pathway to Sustainability Leadership vision by making recommendations, reviewing progress, and determining priorities as sustainability benchmarks are set and achieved
- Campus Sustainability Task Force: provides a forum to share the campus sustainability perspectives of the MIT Energy Initiative, MIT Environmental Initiative, and Climate Action at MIT, as well as engaging the MIT community
- Sustainability Connect: annual meeting for all MIT committees, groups, and people involved in MIT sustainability programs
- Sustainability Working Groups: address / make recommendations on building design &Y construction, stormwater & land management, materials management, and green labs
- Earth Day Collective: each year, sponsor small campus-based projects via small grants deigned to fuel student and staff teams

City | MITOS & City Focus Areas

- MIT's investment in off-site renewable energy
 - In 2016, MIT formed an alliance with Boston Medical Center and Post Office Square Redevelopment Corporation to purchase electricity from a new solar power installation; this has enabled the construction of a 650-acre, 60-MW solar farm in North Carolina
- Cambridge Climate Protection Action Committee (CPAC)
 - MIT services on CPAC, which is composed of community members who take an active interest in climate change issues in Cambridge



- Cambridge Compact for a Sustainable Future
 - Formed in-conjunction with the City of Cambridge and Harvard University, and designed to create a more health, livable, and sustainable Cambridge community
- Boston Green Ribbon Commission, Higher Education Working Group
 - A constituency of large campuses in Boston dedicated to leverage leading research capabilities to discover new insights into the scope of climate change issues and to uncover innovative solutions to address these problems and transition into a cleanenergy future
- Cambridge Net Zero Action Task Force
 - MIT assisted in producing the final report on a plan to put Cambridge on the trajectory toward becoming a "net zero community", with a focus on carbon emissions from building operations
- Region to Globe
 - Northeast Campus Sustainability Consortium (NECSC)
 - Supports sustainability officer in advancing education about sustainable systems on university campuses in the northeast and maritime region of the US & Canada
 - Ivy Plus Sustainability Working Group
 - Consortium of 13 universities committed to exchanging campus sustainability solutions
 - International Sustainable Campus Network (ISCN)
 - Global forum supporting leading colleges & corporate campuses in the exchange of ideas and information regarding sustainable campus operations and further sustainability integration



Appendix E: City of Amsterdam – Sustainability Initiatives

The City of Amsterdam is deeply committed to creating a sustainable future, and views sustainability as both a motor for society and a driver of the City's economy. In 2015, the City developed a Sustainability Agenda that maps out a plan to advance the 'sustainabilisation' of Amsterdam – centered on five key themes: renewable energy, clean air, a circular economy, a climate-resilient city, and a sustainable municipality. Immediately below is a summary of each area, and more detail on each area can be found at the end of this document.

Amsterdam seeks to generate, by 2020, 20% more renewable energy per citizen than in 2013 (i.e. use 20% less energy per inhabitant in 2020 vs. 2013). To do so, and to accelerate this process, the City plans to focus on constructing new wind turbines, growing solar energy systems, and expanding the city's heating grid. Further options for advancing progress include enhancing the sustainability of the existing housing stock, implementing energy-saving measures within homes, businesses, and social buildings, and promoting the construction of climate-neutral developments.

The City of Amsterdam currently maintains air quality standards that comply with national and European standards. However, Amsterdam is shifting the focus from compliance with standards to implementation of healthy measures – i.e. what are the actual health effects on citizens and how can these effects be optimized. In conjunction with this new focus the City is also planning on reducing soot emissions, necessitating that by 2025 motorized traffic is as clean or emission-free as possible. To affect this change, Amsterdam will create increasingly stringent environmental zone, and increase the number of public electric charging points to 4,000.

A circular economy is one aimed at decoupling economic activity from the consumption of finite resources, designing waste out of the system, and transitioning to renewable energy sources. Amsterdam has already conducted several pilot schemes to explore a transition to this type of economy, and the City plans to significantly ramp up these efforts in the near future. To do so, Amsterdam must make significant improvements regarding waste collection systems and waste recycling; by 2020, the City aims to separate 65% of domestic waste for reuse.

In order to account for changes in climate and become more climate resilient, Amsterdam must accelerate efforts to optimize city design such that it is more resilient to changes in climate. With both the frequency and heaviness of rainfall increasing, the City understands the need to continue to adapt its urban design, taking into account underground flows and ideal groundwater levels, with the goal of making urban areas more sponge-like.

The City of Amsterdam has also recognized the importance of improving the sustainability of its own operational management. In 2025, Amsterdam plans to have reduced its own CO2 emissions by 45 percent from 2012 levels. The municipality spends approximately 1.5 billion euros annually on procurement, and through efforts to make procurement more sustainable, the municipality will drive increased sustainability in production chains. Further, the Amsterdam municipality plans to increase the proportion of separate waste collection by municipal offices from around 40% to 75% by 2025.

Key General Quantitative Targets



- 1. Increase renewable energy generation per capita 20% by 2020
- 2. Decrease energy consumption per capita 20% by 2020
- 3. Reduce the highest measured concentration of nitrogen dioxide 35% by 2025
- 4. Reduce the highest measured concentration of soot 30% by 2025
- 5. By 2020, 65% of household waste will be separated
- 6. Reduce the municipality's CO2 emissions 45% by 2025

Key General Qualitative Targets

- 1. Ensure as much traffic as possible is emission-free (or as clean as possible) by 2025
- 2. Achieve a circular economy with new forms of production, distribution and consumption
- 3. Incorporate climate adaptation by 2020 in relevant municipal policies on the basis of the declaration of intent signed by the College of Mayor and Alderpersons ('Spatial Adaptation')
- Ensure municipal procurement meets key objectives in order to create a circular economy, affect sustainable waste separation, conserve energy, and create smarter and cleaner transportation

Detailed Plan

Renewable Energy

By 2020, generate 20% more renewable energy per capita than in 2013, and decrease energy consumption per capita by 20%. The City of Amsterdam will achieve this by:

- Increasing wind power, with the objective of installing 85MW of capacity by 2020 (currently 67MW)
- Increasing solar power with the objective of installing 160MW of capacity by 2020 (currently 9MW)
- Facilitating an increase in the number of connections to district heating to 102,000 in 2020 (currently 62,000) by drawing up a Heating Action Plan for the purpose, with an emphasis on the accessibility of the network, affordability of the solution and sustainability of resources
- Achieving an average energy label of B by 2020
- Making the housing stock more sustainable by achieving an average energy label of B by 2020
- Creating the potential for at least 1,000 zero-energy homes in multi-story developments
- Prioritizing inspections and enforcement of the Environmental 70 Sustainable Amsterdam Management Act
- Creating clean indoor environments and implement other energy-saving measure for 111 schools in Amsterdam and (out of a total of 269 schools, 90 of which have already been updated)
- Improving the sustainability of 25%+ outdoor sports clubhouses and invest in new and existing buildings as applicable
- Weighting sustainability at 30% or greater (in significance) in the criteria used to select development plans and developers

<u>Clean Air</u>

Between 2015 and 2025, reduce nitrogen dioxide by 35% and soot by 30%. The City of Amsterdam will achieve this by:



- Continuing measures that facilitate compliance with nitrogen dioxide standards, and introduce new measures that accelerate this compliance
- Designing measures aimed at exceeding statutory clean-air standards (preferably emission-free, otherwise as clean as possible)
- Setting up regulatory measures for delivery vehicles, taxis, coaches, and tightening the environmental zone for goods vehicles in 2020
- Collaborating with the Municipal Transport Authority to achieve emission-free public bus transport by 2026 and to make municipal ferries cleaner
- Expanding charging infrastructure 4,000 public charging stations through tenders
- Working to create an environmental zone for two-stroke scooters
- Promoting smarter logistics by developing a proposal for the construction of two additional cargo hubs in the city

Circular Economy

Create new forms of production, distribution, and consumption that enable the recovery of more natural resources and materials. The City of Amsterdam will achieve this by:

- Gaining insight into the extent of the flows of natural resources and materials that enter, are used in, and leave the city
- Developing an urban innovation program
- Adapting existing economic tools to strengthen the circular economy (e.g. by incorporating sustainable entrepreneurship in the Amsterdam Enterprise Programme, by focusing acquisition policy on attracting sustainable companies)
- Fostering sustainability within the construction sector, including reusing building wastelocally
- Creating a Waste Implementation Plan that includes collection and processing models, proposals for collecting household organic waste in specific locations; and methods to facilitate the separate collection of bulky waste, litter from public spaces, and office and shop waste

Climate Adaptation

By 2020, incorporate climate adaptation in relevant municipal policies by measures including:

- Implementation of policies regarding 'rainproofness' of the city
- Creation of a water-resilient city program that incorporated strategies for vital infrastructure

Sustainable Municipality

- Implement the Municipality CO2 Neutral roadmap
- Create a Sustainable Procurement Intensification Plan to affect more sustainable procurement
- Prepare a testing framework for sustainable municipal investments



Appendix F: Equity Residential 2019 Environmental, Social, & Governance Report

Summary

Success To-Date

Energy Consumption

- Goal: by 2021 reduce energy consumption by 15% of 2011 levels
- Progress: currently have reduced consumption by 11.6% through the end of 2018

Water Consumption

- Goal: by 2021 reduce water consumption by 10% of 2011 levels
- Progress: currently have reduced consumption by 8.3% through the end of 2018 *Greenhouse Gas Emissions*
 - Goal: by 2021 reduce greenhouse gas emissions by 25% of 2011 levels
 - Progress: currently have reduced emissions by 23.3% through the end of 2018

ESG Materially Assessment

In 2018, EQR engaged a third-party consulting firm to conduct an ESG materiality assessment to identify, assess, and priorities the ESG topics most significant to EQR.

EQR's Key ESG Topics

The firm's report focuses on 11 key ESG topics, which are delineated in the chart below.

Торіс	Description
Environmental	
Energy	Total energy use from EQR's operations and managed portfolio
	(natural gas, electricity, heating oil, etc.) includes energy use,
	sustainability capital projects, energy efficiency retrofits,
	operational efficiency, use of Energy Intelligence Software (EIS)
	and any other "smart" building controls related to ongoing
	energy management, among other energy conservation
	measures.
Emissions	Total greenhouse gas (GHG) and other air emissions from
	EQR's operations and portfolio, including directly and indirectly
	managed properties.
Portfolio Resiliency	Risk management considerations related to extreme weather
	events. Includes backup planning, business continuity plans,
	and emergency management plans for existing assets and
	development projects.
Sustainable Building	Environmental standards for new construction and renovations
	of existing assets. Also includes utilization of Building
	Management System (BMS) programming.
Trash	Total trash generated from EQR's operations. Includes total trash
	by type and disposal method and any trash reduction programs
	in place (e.g., recycling, composting, etc.).
Water	Total water use from EQR's operations and managed portfolio.
	Includes installation of efficient plumbing fixtures (e.g. low flow



toilets, showerheads, etc.), water recycling (including rainwater
harvesting, and greywater systems), xeriscaping, and any other
water management systems and/or programs in place.
Increasing diversity in leadership and employee population;
fostering a safe and inclusive environment and promoting
equality and non-discrimination; improving diversity and cultural
awareness.
Special attention paid to building design, construction
materials/finishes used, and integrated solutions to enhance
resident health and wellbeing. This includes minimizing or
eliminating the use of materials with negative health impacts
and providing tenants with amenities such as gyms/health clubs
and public transportation/ride sharing opportunities.
Ongoing monitoring of resident engagement and results of
satisfaction surveys. Includes efforts to integrate feedback into
property management, programming options, or other methods
used to improve resident satisfaction and retention.
Ability to attract and retain high quality employees. Includes
turnover information, average tenure, and employee satisfaction
surveys.
Acting as a good corporate citizen through responsible business
management, transparency, training, monitoring, and ethical
practices beyond required compliance.

Screening Strategy

- EQR's employees a rigorous screening process in which the firm analyzes climate change risks and ways to reduce risks, such as flood gates or ventilation relocation, and also look at Walk Score, transit location, density, amenities, and opportunities to improve building durability and resident comfort
- Development projects are screened for additional sustainable features, including onsite renewable energy, efficient central systems specification, and features that reduce carbon footprint
- EQR has completed lighting and water conservation projects at nearly every asset in its portfolio, and have installed clean, on-site power generation at one-third
 - Such conservation efforts have yielded reductions of 12% and 8% in energy and water use, respectively, since 2011
 - EQR's 500+ lighting projects lowered annual electricity spend by 44M kilowatt hours

Environmental

Energy

At 84 properties, EQR has made investments in solar power, cogeneration, and early forays into battery storage.

- Piloting smart building software in New York that leverages interval level data from predictive analytics to create pathways for energy efficiency and operational flexibility, demand load reduction, and lower operational expenses
- Smart meter installations track energy usage through remote monitoring, enabling data to be



analyzed for peak demand spikes, equipment run times, and usage patterns

- Smart Homes package includes installation of keyless smart locks, light switches, thermostats, water lease sensors, and an internet connection hub
- Cogeneration: 25 owned cogeneration systems
 - State-of-the-art operating platform, with a large database of utility bills, is a key tool EQR employs to monitor and measure its portfolio

Solar Power

In 2018, EQR had 16 sites powered by solar photovoltaic (PV) power with a capacity of 2 megawatt hours. Over the next year, the firm plans to install 6MW of additional solar PV. This 8MW portfolio will generate 12GWh/year and avoid emissions of 9,000 metric tons of carbon dioxide.

Better Light

Since 2014, EQR has engaged in a multi-year comprehensive LED lighting retrofit program for all common areas, and as a result, have reduced the firm's carbon footprint by 20,000 metric tons and improved the bottom line by \$8M annually.

Transportation

EQR's properties have best-in-class Walk Scores and have ~500 electric car charging stations across the portfolio.

Water Conservation

EQR has installed WaterSense plumbing fixtures and dual-flow and low flow toilets at many properties. Many of the firm's properties are self-sustaining with respect to landscape irrigation, but for properties without this quality, EQR has installed smart irrigation systems at over 40 properties (and are installing 12 more over the next 12 months).

Trash and Recycling

EQR offers recycling programs at all of its offices, and in 2019, implemented new green leasing terms on commercial leases – these aim to increase recycling efforts, encourage biodegradable materials use, and reduce overall waste. Additionally, tenants agreed to eliminate Styrofoam use and curb energy and water use.

Development

EQR pursues LEED or equivalent certifications on all new developments. *Sustainable Building Design*

- High-efficiency fixtures and Energy star appliances (including low flow toilets, HE washing machines, and efficiency shower heads)
- Divert construction waste was away from landfills and use recycled content materials such as wall and floor insulation with 40% post-consumer recycled glass, and drywall containing recycled gypsum

Resident Health and Wellbeing

- Central location with ample public transit options and bike networks
- Strong walkability
- Low volatile organic compounds, wet materials; continuous and quiet ventilation system; safe, formaldehyde-free wall insulation



<u>Renovation</u>

In all renovations, whether a total building renovation or single apartment upgrades, EQR ensures the following items are implemented:

- Energy Star kitchen appliances
- Energy-efficient lighting
- Programmable thermostats
- Low-VOC paint
- Recyclable carpet
- WaterSense faucets and showerheads
- Energy audits
- Duct and window sealing
- HVAC upgrades

Social

EQR has numerous initiatives in place to ensure that employees are continually engaged, and that the firm's workforce contains a diverse set of employees. Specifically, the firm has expanded investment in leadership development for women.

The firm also strives to stay engaged with the community, with a special focus on hunger and housing (which has impacted the emphasis of EQR's charitable activities). Approximately 2,800 affordable housing units are part of the firm's portfolio, and 35% of EQR's field employees live at an Equity Residential property (and can receive significantly discounted rents).

Governance

EQR's Board has implemented many best practices over the years, some of which includes:

9 of 12 Trustees are Independent

- Annual Election of Trustees
- Majority Voting for Trustees
- Independent Lead Trustee
- Independent Board Committees
- Separate Chairman & CEO
- Ongoing Board Refreshment Process
- Regular Succession Planning

EQR has also adopted a Code of Ethics and Business Conduct applicable to all employees, and places a strong emphasis on cyber security, with an annual review of key issues and future plans.



Appendix G: ACC's Northeastern University Project Aims to be First LEED Platinum Student Housing in Boston

The LightView dorm complex, which opened in September and was developed via a public-private partnership between American Campus Communities (ACC) and Northwestern University, is targeting Platinum certification from The US Green Building Council (USGBC). The property is the first LEED Platinum-targeted student housing facility in Boston.

Sustainable Initiatives

Location and proximity to amenities

"Just based on location, [LightView] achieves excellent performance within the LEED rating system"
 Mark Price, LEED consultant on the project

Intact air-barrier to separate each dwelling

• Insures better energy efficiency, air-quality, comfort and sound-attenuation from adjacent apartments

Sustainable finishes

- Low-VOC paints, adhesives, and flooring and carpets
- High-efficiency fresh air and filtration

Green features

- High-efficiency, low-water laundry
- Low-flow showerheads, lavatory faucets, and toilets
- High performance landscape irrigation
- LED and sensory lighting in units and common areas
- Walk off mats and downstairs bike storage

Sustainability-focused services

- Preventative maintenance on HVAC systems conducted every 60 days
- Monthly light audits in common areas

Construction practices

- Limited airborne dust, debris, and moisture from being trapped inside the building
- Building materials selected to limit the impact associated with greenhouse gas emissions
 - All wood is certified, and materials are high in recycled content or locally sourced as much as possible



Appendix H: JFK Community solar Initiative Enters Next Phase of Development, Accelerating Port Authority Commitment to Clean Energy

In November 2019, The New York Port Authority awarded the development of a solar energy installation – New York City's largest solar energy project – to SunPower Corporation and Goldman Sachs Renewable Power Group. This project, the JFK International Airport Solar Photovoltaic Project, will generate approximately 13 megawatts of onsite solar and 7.5 megawatts of battery storage, including a 6.1megawatt community solar generation facility. The rest of the solar energy produced will be used onsite at JFK and serve to offset the Port Authority's purchase of conventional electricity sources.

The installation is expected to lower greenhouse gas emissions from JFK by approximately 6.7 tons annually, which equates to removing 1,422 cars off the road each year. In aggregate, the installation will reduce the Port authority's greenhouse gas emissions at JFK by approximately 10%. This project is a complement of the Port Authority's goal of reducing its greenhouse gas emission by 35% by 2025 and further its long-term goal of reducing all emissions by 80% by 2050.



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55 John Street 2022 Case Study

EHS is committed to operating 55 John St in a responsible manner with sustainable use of energy and water and minimizing unnecessary waste.

Throughout 2022, we sought to consider any environmental and broader ESG concerns when handling the day-to-day business of 55 John St. From surveying residents, to benchmarking energy usage to promoting public transportation, EHS is committed to ensuring that 55 John St is as sustainable as possible. Please see below some of the ESG initiatives EHS pursued at 55 John St in 2022:

Please confirm if the activities in the list below occurred in 2022 and amend/delete as necessary.

As long as this text is published online, we can use it as evidence for GRESB.

Energy Consumption

- Participate in Peak Load Management programs
- Submeter by floor, and if possible, by room (currently no submetering at 55 John)
 - Submeter all major common areas in such a way that all major pumps, fans, amenities, heating, and cooling equipment can be isolated; circuit level monitoring
- Ensure that any electricity purchased, to the greatest extent possible, comes from clean, renewable energy sources
 - Explore the possibility of leveraging a co-generation plant for energy and practice demand-side management strategies
- To the extent possible, install solar panels on the roof of 55 John
- Work toward LEED certification leverage third-party energy consultant to provide advice
- Reduce air leakage around windows, doors, and mechanical systems by renovating these areas with airtight designs (when possible) and using special tapes and sealants
- Repair insulation in steam room and other mechanical areas in basement to reduce energy loss
- Replace windows with electrochromic glass
- LL 84 & 87 compliance: by following LL 84 and 87 benchmarking and retrofitting requirements, respectively, EHS will be able to more effectively track energy consumption and use this data to inform subsequent sustainability measures

Transportation

- NJ Transit's University Partnership Program full-time students receive a 25% discount on monthly NJ Transit Passes
- Install bicycle racks at the main entrance to 55 John
- Encourage employees working at 55 John to use public transportation, ride sharing, and nonmotorized transport whenever possible (currently select summer interns at EHS residents receive unlimited subway cards as a marketing initiative)

<u>Waste</u>

- Develop a program that enables 55 John residents to give all personal electronic devices to EHS for proper disposal (i.e. prevent e-waste dumping in landfills)
- Install collection tubes on each floor in which residents may deposit old batteries



- On each floor place specific receptacles for metal, glass, plastic, and paper products
- Maintain a tobacco-free campus policy, including e-cigarettes

Machines and Equipment

- Upgrade HVAC system including timers on AC units, digital air controls, retrofitted steam traps, and modernized boilers
- Install smart appliances in rooms (refrigerators, microwaves, smart locks, thermostats, etc.)
- Install LED bulbs in all light fixtures
- Upgrade to high-efficiency air compressors
- Install occupancy sensors to control overhead lighting in both individual rooms and common areas (kitchens, laundry room, exercise room, etc.)
- Add water bottle filling stations on each floor (currently in amenity spaces only)
- Install low flow showerheads, low flow toilets, and faucet aerators in individual rooms and common areas, in conjunction with training program for students elaborating on the benefits
- Install foam soap dispensers in all common areas (including common area restrooms)
- Eliminating gasoline powered maintenance tools, and require all vendors comply
- Switch laundry machines provider and ensure new contractor installs low-water laundry machines

<u>Materials</u>

- Continue to use non-toxic paint
- To the extent practical, use greener solvents, cleaning supplies, etc.
- For future projects: Identify and track high-risk chemicals in targeted building materials
- Purchase materials that are less toxic and made from renewable resources, e.g. recycled content materials like wall and floor insulation with post-consumer recycled glass and drywall containing recycled gypsum
- To the extent possible, source materials as locally as possible

Procurement

- Require that externally provided services (vendors, etc.) minimize their use of fossil fuels
- Ensure that in each RFP process vendors comply with EHS's sustainability goals
- Purchase materials in bulk, and to the extent possible, leverage the same provider for multiple types of supplies

General Building Renovations

Common area expansion: renovate the basement lounge into a fitness center and connect this
with the current fitness center or improve the condition of the basement lounge to create a more
viable study and lounge space



