

Memorandum

To Rowan Sustainability Executive Committee Date Wednesday, April 8th, 2020
From Buro Happold Project Rowan Sustainability Master Plan
Subject Sustainability: Where we are now

Sustainability at Rowan: Where we are now

In developing any kind of sustainability effort, Buro Happold looks through three lenses: Strategy and Leadership, Facilities and Operations, and Education and Engagement. Taken together, these three lenses provide a holistic approach to sustainability that goes beyond the typical elements of operations and resource consumption. Institutions that demonstrate balanced success across these three lenses achieve environmental, social and financial sustainability in the long-term, as opposed to those that focus on only one or two categories, which may achieve results in the short-term, but eventually slide back to non-sustainable practices.

Using this perspective, we can assess where Rowan University sustainability efforts are now. **Strategy and Leadership** covers items related to governance structure, budget integration, change management, and transparent reporting that set the direction for sustainability action on the campus. **Facilities and Operations** includes initiatives related to the built and natural environment, health and quality of place, climate and resilience, and the University's supply chain to ensure that actions taken on campus achieve sustainability goals. **Education and Engagement** encompasses outreach and training, partnerships and community-building, public relations, and credibility that bring in the campus community and beyond, as part of broader sustainability efforts and share resources with stakeholders.

Organization-wide Sustainability



The existing conditions assessment is organized into two parts: a qualitative assessment and a quantitative assessment. Each of the three sustainability elements is used to organize information in these assessments to identify where there are gaps and where Rowan is the most successful currently.

Qualitative Assessment

The qualitative assessment looks to existing initiatives, programs and other successes on campus as well as wishlist items the University would like to enact. Existing and wishlist items were identified by Buro Happold during a March 4th workshop on campus, reviewing documents provided by the University and reviewing publicly available online information. The following existing and wishlist items were identified.

Existing Items	Strategy & Leadership	Facilities & Operations	Education & Engagement
Cogeneration Facility (steam heat; steam turbines; steam absorption and electric chillers)		X	
Draft Carbon Neutrality Report (2009)	X		
Sustainability Report Card (2011)	X	X	
Sustainable Facilities Center (Engineering School)	X		X
Holly Pointe Commons LEED Silver		X	X
Cooper Medical School building LEED Gold		X	X
Sustainability-related curriculum			X
Wind Power Purchase Agreement (national and local wind power sources)		X	
Low speed electric vehicles (27 purchased in Dec 2019 by Facilities that reduced operation GHG emissions by 34,000 lbs/yr)		X	
New waste/recycling company (RTS)		X	
Tables with solar canopies near Chamberlain Student Center		X	
Rowan Environmental Action League (REAL)			X
Environmental and Sustainability Studies program			X
School of Earth and Environment with a Dean that is passionate and active on sustainability			X
Campus clean-up day to pick-up garbage around campus			X
Composting program with two Rowan-owned composting bins behind the Central Plant; take food scraps from dining halls; compost is not used now but will be used in gardens and landscaping		X	
Campus pepper farm that produces hot sauce for scholarships	X	X	
Sustainable landscaping practices like native plantings, green infrastructure, outdoor study spaces, etc.		X	

Wishlist Items	Strategy & Leadership	Facilities & Operations	Education & Engagement
Dedicated faculty and staff for sustainability at Rowan	X		
Identify grants that can support the development of a campus-wide Sustainability Master Plan	X		
Campus dashboard for public view and real-time decision making	X	X	X
New buildings to be LEED certified		X	X
Establish a green fund to pay for energy savings technologies on campus	X		
Prioritize deferred maintenance that will save energy		X	
Conduct a long-term energy master plan (to optimize energy-reduction on campus e.g., geothermal HVAC as used as Stockton)	X	X	
Solar array for all new buildings and on West Campus		X	
Cool roofing		X	
Behavior change campaign for sustainability issues (turn off lights, close windows, take the stairs, carpool)			X
Provide additional campus EV charging stations (for e-scooters, e-bikes and EVs)		X	X
Expand bike paths		X	
Provide bike storage locations		X	
Provide showers and changing areas for people who bike to campus		X	
Improve and expand composting program		X	
Install irrigation controllers		X	
Order more sustainable materials and supplies		X	
Switch from single-use containers to reusable and reduce overall plastic use (straws, packaging, utensils, bags, etc.)		X	
Behavior change campaign for waste disposal (need to decrease the amount of contamination in recycling bins)			X
Survey multiple campus audiences / stakeholders on their awareness and opinions of, challenges and pain points, etc. regarding sustainability	X		X

Quantitative Assessment

The quantitative component collects sustainability-related metrics and data to allow Rowan to share information to the community on the current state and to begin setting goals for the campus. Additionally, these metrics can be used to track progress into the future.

The metrics provided below are based on data that is already collected by the University as well as metrics that the University would like to start collecting and monitoring.

Metrics	Currently collected?	Strategy & Leadership	Facilities & Operations	Education & Engagement
Campus energy consumption	Yes		X	
Off-site renewable procurement	Yes		X	
Campus water consumption	Yes		X	
Campus waste generated	Yes		X	
Campus waste recycled	Estimated		X	
Campus waste composted	No		X	
Campus waste donated	No	X	X	X
Campus waste diversion rate	Estimated		X	
Food waste diverted	No		X	
Electric vehicles in campus fleet	No		X	
Volunteer hours committed by Rowan community	Yes	X		X
Landscaping-related metric (open space, tree canopy, habitats, etc.)	TBD		X	
Average distance traveled to campus (as % who live on campus or commute changes)	No		X	
Method used to commute to Rowan (bus, carpool, single occupancy vehicle, bike, etc.)	No		X	
Campus GHG emissions	No	X	X	

The Database

An excel spreadsheet is appended to this memorandum to provide additional detail on the assessments such as what data is already collected, the units for metrics, etc. The database can be used as a tool moving forward to catalog sustainability efforts on campus.

In addition to data on the qualitative and quantitative assessments, the database includes historical data and trends for energy, water, and waste at Rowan University.

Next Steps

The next phase of this deliverable will be to review the existing conditions assessments (qualitative and quantitative) and make recommendations for additional wishlist items that will help Rowan achieve more holistic sustainability outcomes in the future. Buro Happold will take a first pass at providing short and long-term recommendations, to be discussed and finalized with Rowan assistance.