Ramapo College of New Jersey Sustainability Management Plan 2020

Prepared By:

Kyra DiFrancesco, Melissa Lambour, Christopher Reid, and Ivan Wang

Stevens Institute of Technology, Master's Program in Sustainability Management

Advisors:

Dr. Ashwani Vasishth

Ramapo College of New Jersey

Dr. Dibyendu Sarkar

Stevens Institute of Technology

Mr. Adam Freedgood

Third Partners, LLC

EXECUTIVE SUMMARY

As the world begins to emerge from a public health crisis, Ramapo College is faced with unprecedented decisions. Students, faculty, and staff have had to dramatically change the way they learn, teach, and work. Administrators, more than ever, are responsible for the health and safety of the students and employees they serve. In these challenging times, Ramapo has shown incredible capacity for change. That ability to change, and the resiliency shown by the Ramapo community, will be vital in confronting other unprecedented challenges: climate change, depletion of natural resources, and growing waste. The coronavirus crisis serves as a reminder that caring for both human and environmental health is vital for our longevity. Implementing sustainability is key to ensuring that longevity.

Ramapo already has much of the skills and experience required to implement sustainable initiatives. However, the college lacks an agreed-upon vision and system of accountability to drive sustainable change. Currently, sustainability efforts are in the hands of a limited number of dedicated faculty, staff, and students. To help create a cohesive vision and direction for sustainability, a small team of graduate students from Stevens Institute of Technology has created this Sustainability Management Plan. This plan identifies goals and strategies to help Ramapo identify gaps in sustainability performance, prioritize initiatives, and organize resources into concrete actions. These goals are organized into four focus areas, which are the four main sections of this report:

- ✓ Engagement and Community Building
- ✓ Academics
- ✓ Campus Operations
- ✓ Planning and Administration

Within each focus area, the report summarizes Ramapo's sustainability efforts, analyzes barriers to success, and lays out goals that strategically prioritize sustainability actions in that area. These goals aim to advance sustainability education, increase visibility and awareness for sustainability issues, decrease waste and emissions, preserve natural resources, and establish strong sustainability leadership. The table on the following page summarizes these goals.

For administrators, this plan can help guide strategic planning and prioritization of initiatives. For faculty and staff, the goals and strategies outlined herein form the framework from which to build action plans. And for students, the goals in this plan help to advance their education, health, campus experience, and confidence in the school's leadership. By following the goals laid out in this plan, Ramapo College will become a top-rated sustainable institution that follows best practices in sustainability, lowers its environmental impact, provides excellent sustainability exposure and education to students, and plans for a stable future.

Ramapo College Sustainability Management Plan Goals Overview

Topic Section	Goals
Engagement & Community Building	✓ Increase visibility of sustainability efforts by establishing consistent media and communications coverage. ✓ Incorporate sustainability activities into new student orientation in time for the Fall 2021 semester. ✓ Incorporate sustainability topics into employee orientation programming by Fall 2021. ✓ Post signage explaining all sustainable features on campus by Fall 2021 and establish a protocol for adding new signage with every sustainable feature added to campus. ✓ Incorporate sustainability highlights into all future literature advertising Ramapo College by Fall 2021.
Academics	✓ Restart Master of Arts in Sustainability Studies Program (MASS) by the Fall 2025 semester. ✓ Engage faculty to incorporate sustainability into undergraduate courses. Target 25% of courses by the beginning of the Fall 2021 semester, 50% by Fall 2023, and 75% by the Fall 2025.
Campus Operations	✓ Reduce Scope 1 and 2 emissions by 40% from 2021 levels by 2030. ✓ Establish a purchasing policy that works to improve campus wide sustainable procurement practices. ✓ Increase the number of students and employees that carpool or take the campus shuttle at least twice per week 20% by 2022. ✓ Sign the Cool Food Pledge by Summer 2021 and meet its goal of reducing the GHG emissions associated with food consumption at Ramapo 25% from a 2015 baseline by 2030. ✓ Continually commit to reducing single-use disposable products. ✓ Infuse sustainability and biodiversity principles into all grounds management actions.
Planning & Administration	✓ Restructure the President's Committee on Campus Sustainability (PCCS). ✓ Grow and enhance the sustainability student internship program to 3 students by the Fall 2021 semester. ✓ Hire a dedicated full-time Sustainability Officer by Fall 2025.

CONTENTS

INTRODUCTION

Sustainability requires that we change our actions today in acknowledgement that we must preserve our planet and resources for future generations. It goes far beyond ecological conservation and climate change mitigation – sustainability seeks to promote equity, human health, community engagement, and cooperation. As an institution of higher education, Ramapo bears the responsibility of creating a sustainable environment in which its students and employees can thrive and be healthy, while also preparing students to become leaders in their fields. This responsibility is highly aligned with Ramapo's strategic plan, which seeks to increase students' success and equity, advance innovation, and achieve financial stability.

While Ramapo's strategic plan has clear objectives to improve certain aspects of these goals, such as increasing student diversity and graduation rates, there are gaps that represent opportunities for cost savings, improved health of the community, reduced environmental impact, and internal and external recognition. In addition, there is a lack of visibility and awareness of current sustainability efforts in the Ramapo community, and the school lacks a cohesive **vision** of which sustainability issues should be prioritized, who is responsible for coordinating efforts, and how progress can be measured. A sustainability management plan (SMP) seeks to fill those gaps.

An SMP is an outline of recommendations proposed to address increased social, environmental, and economic benefits for an organization through the implementation of sustainability goals. Each has its own set of measures designed to advance progress, metrics to measure progress, and plans to address potential challenges. An SMP identifies key resources, required skills, and potential incentives to advance sustainability while constructing a clear vision for the institution. It is not an extensive summary of all the sustainability initiatives and practices at Ramapo College or a list of every possible action it can take; rather, it is a broad overview of what Ramapo has accomplished so far and key areas that will benefit from additional guidance.

This SMP should be used as a foundation from which to structure sustainability initiatives on campus. Ramapo can adjust the plan and choose to implement the recommendations therein according to priorities and funding. **The target dates given for many of the goals are suggestions and can be adjusted**. Further instructions on how to deconstruct and implement this plan are given in the *Planning and Administration* section.

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METHODOLOGY

Information and data for this report were gathered through on-site and virtual discussions with Ramapo faculty, staff, administration, and student leaders. By attending the President's Committee on Campus Sustainability (PCCS) meetings, the group was able to understand the on-going sustainability efforts at Ramapo College and the challenges it faces. The group also met with student leaders from campus organizations and the student government to gain their perspectives on sustainability issues at Ramapo. A Sustainability Culture Indicator survey that was conducted in 2019 was also available to gauge attitudes at Ramapo.

After measuring the current state of sustainability at Ramapo, the group developed four focus areas to organize our sustainability recommendations:

- ✓ Engagement and Community Building
- ✓ Academics
- ✓ Campus Operations
- ✓ Planning and Administration

These focus areas form the main four sections of this report. Each topic contains two to six goals to advance sustainability in that area.

Each section also contains an analysis using the Model for Managing Complex Change (Figure 1), copyrighted by Dr. Mary Lippitt. The analysis identifies key gaps that prevent the successful implementation of sustainability initiatives in that area. According to the model, for an initiative to be successful, it must have the proper vision, skills, incentives, resources, and action plan. If any one of these are missing, then it can be difficult or impossible to enact the behavioral and organizational complex changes required by sustainability. If the vision is not clear, the initiative may be confusing. If skillful personnel are not available, anxiety over how to implement the initiative may arise. If there is no incentive for the initiative, then implementation and adoption will be delayed. If resources are lacking, then implementing an initiative is frustrating. If an action plan is unclear and unrealistic, then the initiative could have a false start and no real follow through.

Managing Complex Change

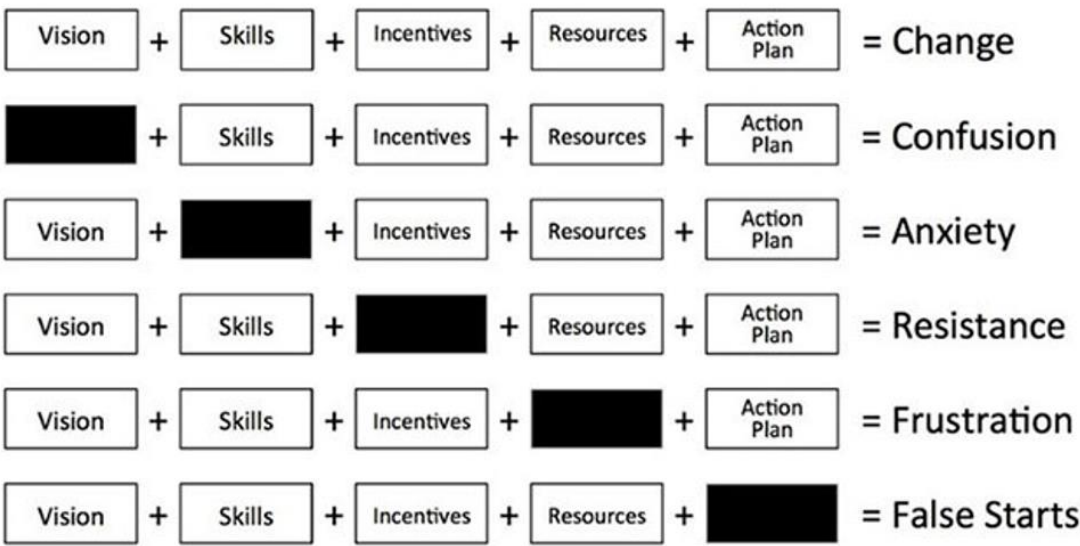|									
Vision	+	Skills	+	Incentives	+	Resources	+	Action Plan	= Change
■	+	Skills	+	Incentives	+	Resources	+	Action Plan	= Confusion
Vision	+	■	+	Incentives	+	Resources	+	Action Plan	= Anxiety
Vision	+	Skills	+	■	+	Resources	+	Action Plan	= Resistance
Vision	+	Skills	+	Incentives	+	■	+	Action Plan	= Frustration
Vision	+	Skills	+	Incentives	+	Resources	+	■	= False Starts

Figure 1. Complex Change Model [1]

The four focus areas, Engagement and Community Building, Academics, Campus Operations, and Planning & Administration, closely follow the four main credit categories of the AASHE STARS rating system. AASHE, or the Association for Advancement of Sustainability in Higher Education, developed the STARS framework to measure sustainability across higher education institutions and recognize those institutions that excel. As explained in the STARS 2.2 Technical Manual, the "Sustainability Tracking, Assessment & Rating System (STARS) is a voluntary, self-reporting framework for helping colleges and universities track and measure their sustainability progress" that has been used globally since 2006[2].

The STARS Benchmarking tool compares the sustainability achievements of reporting schools. The *Benchmarking* section at the end of this report uses this tool to compare Ramapo to four similar schools. The recommendations in this report reflect the successfully implemented sustainable practices by the chosen peer schools, while also incorporating the team's knowledge in engineering, energy, marketing, and permaculture.

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[1] Managing Complex Change. (2020, February 6). Retrieved from https://bclma.org/managing-complex-change/
[2] About STARS. (n.d.). Retrieved from https://stars.aashe.org/about-stars/

ENGAGEMENT AND COMMUNITY BUILDING

One of the most important elements in implementing sustainability measures is community buy-in. Creating a culture of sustainability inside as well as outside the classroom will lead to increased willingness for behavioral change and school pride. In turn, focusing on engagement can deepen the campus's understanding of sustainability principles, practices, and culture.

[3]

HIGHLIGHTS

- ✓ Sustainability Focused Student Organizations
- ✓ Conducted Sustainability Culture Indicator Survey
- ✓ Sustainable Living and Eco-stewardship Program (SLE)

BACKGROUND

Many faculty and staff members at Ramapo agree that one of the key barriers to sustainable growth and transformation is lack of visibility of current efforts. For example, there was little press coverage and communication with the community after the 5 MW solar array project was completed. Because completed projects are not receiving the recognition that they deserve, the wider community remains uninformed about sustainable projects and possibilities. In a Sustainability Culture Indicator[4] survey conducted in August 2019, students and staff expressed that they felt sustainability was important, but that they were not knowledgeable about issues relevant to Ramapo.

SECTION OVERVIEW

This section evaluates the strengths and weaknesses of Ramapo's efforts to create a culture of sustainability, student engagement, and employee training programs in sustainability. In addition, it provides goals and strategies to increase efforts in creating greater awareness for sustainability.

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[3] Serving The Community Clipart. (n.d.). Retrieved from https://www.clipart.email/clipart/serving-the-community-clipart-274130.html
[4] Awake. (2019). *Student SCI Report for Ramapo College of New Jersey* [Data file].

Managing Complex Change in Engagement

Key Element	Description	Progress
Vision	Ramapo has a passionate subsection of faculty, staff, and students who promote sustainability through event planning, programming, and learning opportunities on campus.	
Expertise	Many of the same techniques used to engage students on other issues can be applied to sustainability as well.	
Resources	With a large commuting population, it is difficult to have active participation and involvement in sustainable events on campus.	
Incentives	Effective engagement is key to incentivizing people to change their behaviors. An uninformed population may not understand the need for change.	
Action Plan	The goals and strategies outlined below give a framework from which to build a plan of action.	

Many members of the Ramapo community have the *vision* and *expertise* in promoting sustainable behavior — sustainability focused clubs and the President's Committee on Campus Sustainability are leaders in this area. However, their efforts can be further extended to the wider Ramapo community with the support of the administration. Ramapo has most of the *resources* needed to engage students and faculty in sustainability, as existing channels of student and employee engagement just need to be modified. Because students perceive a lack of direction from Ramapo leadership and are not well informed about sustainability issues relevant to Ramapo, most have low *incentive* to change their behaviors. The following goals serve as a starting point for developing an *action plan*.

KEY BENEFITS

- ✓ Enhanced awareness of sustainability issues on campus
- ✓ Increase prestige and reputation
- ✓ Increased student and employee campus involvement

UN Sustainable Development Goals

This section supports the goal to incorporate sustainable development education for all learners.

Increased community engagement helps to promote sustainable habits.

This section supports climate change awareness.

Goals and Strategies

AT A GLANCE

Goal 1	**Increase visibility of sustainability efforts by establishing consistent media and communications coverage.**
Action 1	Update the Ramapo website to reflect current sustainability efforts by Spring 2021.
Action 2	Establish a protocol to ensure media coverage of sustainability milestones such as meeting a goal, signing a pledge, or spotlighting student leaders and already completed projects.
Action 3	Improve quality and frequency of posts on Ramapo Green Facebook, LinkedIn, Twitter, and Instagram accounts.
Action 4	Engage Marketing and Communications Team with every President's Committee on Campus Sustainability meeting.

Goal 2	**Incorporate sustainability activities into new student orientation in time for the Fall 2021 semester.**
Action 1	Ensure that campus tours involve various dimensions of sustainability (green buildings, dining, transit, and food).
Action 2	Introduce new students to public transportation and shuttle options and the ridesharing program once it is implemented. (See *Sustainability in Operations,* Goal 3).
Action 3	Have resident assistants (RAs) train new students on composting in dorms where it is available.
Action 4	Develop approaches to incentivize students to increase use free, reusable bags, bottles, and beverage containers offered at orientation.

Goal 3	**Incorporate sustainability topics into employee orientation programming by Fall 2021.**
Action 1	For faculty: Highlight how elements of the UN Sustainable Development Goals can be incorporated into their classes (execute in tandem with Goal 2 in *Sustainability in Academics*).
Action 2	For staff: Highlight current sustainable efforts and short comings in the new employee's department and ways they can get involved.
Action 3	Introduce new employees to public transportation and shuttle options and the ridesharing program once it is implemented. (See *Sustainability in Operations,* Goal 3).

Goal 4	**Post signage explaining all sustainable features on campus by Fall 2021 and establish a protocol for adding new signage with every sustainable feature added to campus.**
Action 1	Compile a comprehensive list of all sustainable features on campus.
Action 2	Designate areas where signage can be placed.
Action 3	Deliver these plans to marketing personnel to design signage.

Goal 5	**Incorporate sustainability highlights into all future literature advertising Ramapo College by Fall 2021.**
Action 1	Research and review other universities' materials for sustainability content.
Action 2	Give the list of sustainability efforts developed from Goal 3 to marketing personnel to design content according to university standards.

GOAL 1 - INCREASE VISIBILITY OF SUSTAINABILITY EFFORTS BY ESTABLISHING CONSISTENT MEDIA AND COMMUNICATIONS COVERAGE

Maintaining visibility is vitally important for securing community buy-in for sustainability efforts. If members of the Ramapo community are not aware of the steps the college is taking to be more sustainable, then their confidence in the administration's ability to manage complex change will be low. To increase awareness, various pages on Ramapo's website should be updated to reflect current sustainability efforts by Spring 2021. In addition, a protocol should be established to ensure media coverage of sustainability milestones and events. Media coverage can also retroactively spotlight completed projects. In tandem, the social media presence of Ramapo Green should be improved. As explained in the *Planning and Administration* section, a student intern can be responsible for creating social media content. Ramapo Green already has LinkedIn, Facebook, Instagram, and Twitter accounts, but they can be updated more frequently to help promote the Ramapo Green brand. Finally, marketing and communications personnel should attend every meeting of the President's Committee on Campus Sustainability (PCCS).

GOAL 2 - INCORPORATE SUSTAINABILITY ACTIVITIES INTO NEW STUDENT ORIENTATION IN TIME FOR THE FALL 2021 SEMESTER

Introducing sustainability to students right as they arrive on campus for the first time will jump start sustainable habits and awareness. Campus tours can be easily modified to include sustainable campus features and initiatives, such as the wildflower meadows, compost heaps, sustainable food choices, and environmental student organizations. During orientation, new students can be trained on composting by resident assistants in dorms where it is available. Students are already given reusable bags, bottles, and beverage containers during orientation, but often do not use them around campus. They can be incentivized to do so by learning about their importance during orientation and getting discounts or points when using them around campus. In addition, before students even arrive on campus, they should be introduced to alternative commuting options, including taking public transportation then the campus shuttle and carpooling (see *Sustainability in Operations,* Goal 3 for more details).

GOAL 3 - INCORPORATE SUSTAINABILITY TOPICS INTO EMPLOYEE ORIENTATION PROGRAMMING BY FALL 2021

Integrating sustainability topics within employee orientation can provide new employees with the tools and training they will need across all facets of the school's mission: to promote diversity, inclusiveness, sustainability, student engagement, and community involvement. Employees would receive useful tips on how to conserve energy, water, and paper within the department offices. In addition, they would learn

about what sustainability efforts are being worked on all throughout the campus (inside and outside of their respective office). Faculty can be introduced to the UN Sustainable Development Goals and trained on how they can be incorporated into their classes (see *Sustainability in Academics,* Goal 2). Similar to students, employees should be introduced to alternative commuting options (see *Sustainability in Operations,* Goal 3 for more details). Finally, employees can be informed of all the highlights of sustainability programs and accomplishments the campus has already achieved.

GOAL 4 - POST SIGNAGE EXPLAINING ALL SUSTAINABLE FEATURES ON CAMPUS BY FALL 2021 AND ESTABLISH A PROTOCOL FOR ADDING NEW SIGNAGE WITH EVERY SUSTAINABLE FEATURE ADDED TO CAMPUS

Signage allows campus visitors and community members to learn more about Ramapo's current sustainability efforts and accomplishments. Signs advertising sustainable features, such as the solar array, wildflower meadows, LED lighting, etc., will increase awareness and visibility and will demonstrate Ramapo's commitment to sustainability. A group, such as the PCCS, can work together to compile a comprehensive list of all features that can display signage. Areas can be designated for each sign and a list of ideas can be made for the content and design. These plans can then be delivered to marketing and design personnel to create the final design. As new projects are completed, additional signage should be developed. Signs should be made from sustainable materials with longevity.

GOAL 5 - INCORPORATE SUSTAINABILITY HIGHLIGHTS INTO ALL FUTURE LITERATURE ADVERTISING RAMAPO COLLEGE BY FALL 2021

Advertising sustainability to prospective students can help increase enrollment and prestige of the school. Rankings such as the Princeton Review Guide to Green Colleges help students look for sustainability in potential colleges. Ramapo should review sustainability highlights in the brochures and websites of the top schools ranked by the Princeton Review for guidance on altering their own material. The list of sustainable features for signage created in Goal 3 can also be used as a list of items to include in advertising material for prospective students.

VISIBILITY OPPORTUNITIES

Look for this symbol in the following sections for ideas on how to promote the goals and strategies throughout this report.

SUSTAINABILITY IN ACADEMICS

Academics are at the core of Ramapo. Providing students across all majors with a foundation of sustainability education will enable them to become leaders in sustainable development. Sustainability in academics goes far beyond environmental studies - business students can learn about sustainable supply chain management and arts students can learn about sustainable materials.

[5]

HIGHLIGHTS

- ✓ BA in Environmental Studies
- ✓ BS in Environmental Science
- ✓ BA in Sustainability
- ✓ Programmatically Diverse Student Body

BACKGROUND

Ramapo College was one of the first higher education institutions in the United States to develop environmental and sustainability programs. Currently, Ramapo has three undergraduate majors related to the field of sustainability: Bachelor of Arts in Environmental Studies, Bachelor of Sciences in Environmental Science, and Bachelor of Arts in Sustainability. Previously, there was a Master of Arts in Sustainability Studies (MASS), but the program ended due to only moderate enrollment. However, sustainability can apply to every field and belongs in almost every classroom. Sustainability is a multifaceted challenge, requiring knowledge and cooperation across several fields and sectors. Liberal arts students possess many of the skills required to advance the UN Sustainable Development Goals, from extending access to healthcare, to conserving natural resources, to promoting gender equality.

SECTION OVERVIEW

This section assesses the strengths and weaknesses of Ramapo's sustainability education, explores why the MASS program failed and how to revive it, identifies benefits of expanding sustainability education, and provides goals and strategies to advance the curriculum.

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[5] Journal of Sustainability Education. (n.d.). Retrieved from http://www.susted.com/wordpress/content/sustainability-education-framework-for-teachers-developing-sustainability-literacy-through-futures-values-systems-and-strategic-thinking_2015_01/

Managing Complex Change in Academics

Key Element	Description	Progress
Vision	Ramapo has undergraduate sustainability classes, but no college-wide policies in place to encourage sustainability education.	
Expertise	Ramapo has several educators trained in sustainability, but faculty members in other subjects should research and consider how themes can be incorporated into their fields of expertise.	
Resources	Course discussions can by augmented by faculty members to include topics of sustainability relevant to their classes.	
Incentives	Some faculty members may need to be incentivized to include sustainability themes in their coursework.	
Action Plan	The goals and strategies outlined below give a framework from which to build a plan of action.	

Ramapo can enact the goals in this section to form a uniform *vision* of sustainability education. The college also already has many educators with the *expertise* to teach sustainability, but that knowledge can be further developed in faculty members teaching subjects less traditionally linked to sustainability through training and distributing resources. *Resources,* such as workshops, can be developed by departments to aid course development. Faculty members already incorporating these elements into their courses can be recognized and their work documented, providing *incentive* for their colleagues to follow suit. The following goals serve as a basis for developing an *action plan*.

KEY BENEFITS

- ✓ Prepare students to be well-rounded professionals
- ✓ Increased prestige
- ✓ Interdepartmental cooperation
- ✓ Low cost to implement some changes

UN Sustainable Development Goals

This section supports the goal to incorporate sustainable development education for all learners.

This section supports education on climate change mitigation and adaptation.

A number of additional SDGs can be addressed across courses.

Faculty members can draw on these goals to consider how they relate to their classes.

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Goals and Strategies

AT A GLANCE

Goal 1	**Restart the Master of Arts in Sustainability Studies program by the Fall 2025 semester.**
Action 1	Survey current students to gauge interest in continuing their education through the master's program during the Fall 2021 semester.
Action 2	Launch a live-streamed speaker series that invites sustainability professionals to speak on campus.
Action 3	Finalize a MASS curriculum by Spring 2021 that incorporates an online option.
Action 4	Prepare a proposal for restarting the program by Fall 2021.
Action 5	Work with and train admissions staff to target the right students and develop language to advertise the program.

Goal 2	**Engage faculty to incorporate sustainability into undergraduate courses. Target 25% of courses by the beginning of the Fall 2021 semester, 50% by Fall 2023, and 75% by the Fall 2025.**
Action 1	Conduct an inventory of classes that are sustainability-focused or sustainability-inclusive by January 2021.
Action 2	Conduct faculty workshops by department on integrating sustainable development goals into coursework.
Action 3	Update inventory every semester.

GOAL 1 - RESTART THE MASTER OF ARTS IN SUSTAINABILITY STUDIES PROGRAM BY THE FALL 2025 SEMESTER

The Master of the Arts in Sustainability Studies (MASS) was a unique, cohort-based, multidisciplinary, and intensive program that set Ramapo apart from other schools. However, the program suffered from only moderate enrollment and eventually ended. The main causes of moderate enrollment were the school's location, which is an inconvenient commute for working master's students, and poor execution in promotion of the program. MASS can be brought back in a strategic way to ensure higher enrollment. During the Fall 2021 semester, current undergraduate students can be

surveyed to gauge their interest in staying at Ramapo for the master's program. To generate more interest on campus and in prospective students, Ramapo can launch a speaker series that brings sustainability professionals to campus to talk about their work and career paths. The series should be live streamed and posted to social networks to reach audiences beyond Ramapo. Potential students can also be invited to campus to sit in on the talks.

Faculty should revise the MASS curriculum to allow for online classes. This will allow students worldwide to join the program and it will solve the issue of students who are already working full time not being able to commute to campus. Finally, in the Fall 2021 semester, a proposal can be developed with the intention of a possible first cohort starting in the Fall 2025 semester. Upon approval, faculty in the program should work closely with admissions staff to ensure that students most likely to be interested in the program are targeted and to develop language to market the program.

GOAL 2 - ENGAGE FACULTY TO INCORPORATE SUSTAINABILITY INTO UNDERGRADUATE COURSES. TARGET 25% OF COURSES BY THE BEGINNING OF THE FALL 2021 SEMESTER, 50% BY FALL 2023, AND 75% BY THE FALL 2025.

Having an integrated approach to sustainability education will provide Ramapo students with an added dimension to their coursework that is unlike most institutions in the US. An inventory of sustainability-focused and sustainability-inclusive classes should be conducted by January 2021 to help further understand current course offerings. While sustainability-focused classes may be easy to identify, sustainability-inclusive courses (classes which include certain themes but are not wholly dedicated to them) may take more time to identify.

Conducting an inventory provides a foundation from which to advance the sustainability curriculum. From the inventory, strengths and weakness by level, department, and field of study can be revealed. In addition, an inventory of courses can aid both current and prospective students in recognizing sustainable course offerings. Through the process of making the inventory, classes with the potential for elements to be added can also be identified. To aid faculty in supplementing their courses, departments can hold workshops, drawing on resources such as the UN Sustainable Development Goals. The inventory of classes can be updated every semester to recognize faculty members that have updated their courses.

VISIBILITY OPPORTUNITIES

- ✓ Livestream sustainability speaker series and post recordings on social media
- ✓ Post annual results of sustainable classes inventory on the Ramapo website

See Goal 1 in *Engagement and Community Building* for more strategies on increasing the visibility of sustainability efforts on campus.

SUSTAINABILITY IN OPERATIONS

Campus operations, which range from buildings and grounds to dining and purchasing, create the most significant and quantifiable environmental impact. These areas, therefore, offer the greatest opportunities for reducing greenhouse gas emissions, pollution, and waste.

[6]

HIGHLIGHTS

- ✓ 5 MW Solar Photovoltaic Installation
- ✓ Energy Star Rebates on New Appliances Purchased
- ✓ Circular Material Use Within Campus
- ✓ Two Compost Heaps and a Rocket Composter
- ✓ Some Geothermal Power
- ✓ Wildflower Meadows
- ✓ Hydration Stations

BACKGROUND

Ramapo College has significant accomplishments in sustainable operations. Many of these accomplishments were motivated by fiscal responsibility, which is an important incentive that can be utilized to drive further improvements on campus. For example, the reuse of furniture, locks, lighting, and other materials to create a temporary library space in Linden Hall reduced waste from buying new materials, did not increase the institution's physical footprint, and saved money. Further resources, incentives, and action plans connecting to the institution's strategic plan can be implemented to expand Ramapo's sustainable operations.

SECTION OVERVIEW

This section assesses the strengths and weaknesses of Ramapo's operational sustainability, identifies benefits of further sustainability initiatives, and provides goals and strategies to advance sustainability in the areas of greenhouse gas emissions, purchasing, transportation, dining, waste management, and landscaping.

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[6] FlyClipart. (n.d.). Retrieved from https://flyclipart.com/download-png#environment-382324.png

Managing Complex Change in Operations

Key Element	Description	Progress
Vision	Ramapo students and staff have several initiatives to improve sustainable operations, but they are having trouble gaining traction and there is little communication between groups.	
Expertise	Ramapo facilities staff have successfully completed many sustainability projects and can further their knowledge of sustainability options by accessing available resources.	
Resources	As a small public institution, Ramapo does not have access to extra capital.	
Incentives	The primary motivator for sustainability projects is financial savings, but other incentives can be explored as well.	
Action Plan	The goals and strategies outlined below give a framework from which to build a plan of action.	

Ramapo's *vision* for sustainable operations needs improvement: possible initiatives need to be prioritized and more communication is needed between divisions. Goals in this section will aid Ramapo in forming a cohesive vision for operations. Ramapo staff have *expertise* in coordinating sustainability projects, such as the solar installation and the installation of hydration stations. Their experience can be leveraged to tackle more sustainability projects and enhanced by accessing free and low-cost *resources*, which will be explored in the goals below. Proper recognition for completed projects, which is driven by the goals in the *Engagement and Community Building* section, and close tracking of energy and financial benefits from completed projects will help to *incentivize* further initiatives. The following goals serve as a basis for developing an *action plan*.

KEY BENEFITS

- ✓ Energy savings
- ✓ Increased student, faculty, and staff health
- ✓ Reduced trash hauling costs
- ✓ Preserve natural assets of campus

UN Sustainable Development Goals

2 ZERO HUNGER

3 GOOD HEALTH AND WELL-BEING

7 AFFORDABLE AND CLEAN ENERGY

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION

14 LIFE BELOW WATER

15 LIFE ON LAND

Goals and Strategies

AT A GLANCE

Goal 1	Reduce scope 1 and scope 2 emissions 40% from 2021 levels by 2030.
Action 1	Perform a greenhouse gas emissions inventory of scope 1, 2, and 3 emissions by April 2021 and repeat biennially.
Action 2	Perform campus-wide building energy audits by June 2021.
Action 3	Develop a sustainability savings tracking dashboard by June 2022.
Action 4	Electrify campus heating and cooling by 2025.

Goal 2	Establish a purchasing policy that works to improve campus wide sustainable procurement practices.
Action 1	Join the Sustainable Purchasing Leadership Council (SPLC) by Fall 2020.
Action 2	Designate a staff member from Purchasing to coordinate sustainability efforts.
Action 3	Adopt a sustainable purchasing policy based on the Model Policy Template written by the SPLC by Summer 2021.
Action 4	Transition all offices to purchasing recycled paper from current supplier, W.B. Mason, by Fall 2021.
Action 5	Continually phase out non-essential, non-compostable, single-use disposable plastic items as alternative products or behaviors are available. Reevaluate progress annually.
Action 6	Reduce free giveaways of single-use items at campus events.

Goal 3	Increase the number of students and employees that carpool or take the campus shuttle at least twice per week 20% by 2022.
Action 1	Prepare a baseline commuter data report on student/employee transportation habits by Spring 2021.
Action 2	Survey students about interest in ridesharing program participation and satisfaction with current shuttle program by Spring 2021.
Action 3	Incentivize students to carpool to campus with discounted parking permits.
Action 4	Introduce incoming freshmen and transfer students to ridesharing programs and public transit before their first semester.
Action 5	Deploy and distribute subscriptions to a ridesharing program by the Fall 2021 semester.

Goal 4	Sign the Cool Food Pledge by Summer 2021 and meet its goal of reducing the GHG emissions associated with food consumption at Ramapo 25% from a 2015 baseline by 2030.
Action 1	Designate a member of the dining staff to coordinate sustainability efforts.
Action 2	Use the Behavioral Playbook as a resource to inform decisions on incorporating more plant-based foods into campus dining options.
Action 3	Collect and report annually food purchase amounts to the Cool Food Pledge.

Goal 5	Continually commit to reducing single-use disposable products.
Action 1	Develop a zero-waste task force of students, staff, and faculty to create a formal action plan and establish goal dates for the following actions by November 2021.
Action 2	Eliminate non-essential, non-compostable, single-use disposable plastic and other material items that have readily accessible alternatives.
Action 3	Align these actions with Goal 2 to establish a purchasing policy that phases out non-essential, non-compostable, single-use disposable plastic and other material items.
Action 4	Develop alternative systems on campus for reusing non-disposable products and expanding composting access.

Goal 6	Infuse sustainability and biodiversity principles into all grounds management actions.
Action 1	Develop a grounds management plan by Fall 2022.
Action 2	Implement an Integrated Pest Management (IPM) Program and an Organic Land Care Program on at least 80% of campus grounds.
Action 3	Become a Tree Campus USA recognized institution every year by meeting its five standards.
Action 4	Improve hydrology, water use, and materials management by mowing/mulching leaves in the fall and keeping a compost heap for grounds materials.
Action 5	Conduct assessments to identify environmentally sensitive areas and endangered and vulnerable species (including migratory species) with habitats on institution-owned or managed land.
Action 6	Incorporate energy-efficient and biodiverse landscape design by adding more no-mow zones and meadows and fields that protect endangered species.

GOAL 1 - REDUCE SCOPE 1 AND SCOPE 2 EMISSIONS 40% BY 2030

Scope 1 emissions come directly from on-campus operations, such as burning fuel for heat and exhaust from the campus vehicle fleet. Scope 2 emissions come from the electricity generated for on-campus use. Scope 3 emissions include all other indirect emissions from institutional activity such as employee travel, waste, and the production of purchased materials.[7]

Only scope 1 and 2 emissions are included in this goal as they are easier to measure, quantify, and reduce. To form a baseline of emissions levels, Ramapo should engage a firm to perform an inventory of emissions by April 2021 and repeat the process every two years. Because buildings are often the largest emitters of carbon on college campuses, a campus-wide building energy audit should be performed by June 2021. This audit will reveal opportunities for energy saving measures that will help reduce emissions and save on operating costs. Campus buildings should also be electrified – meaning their heating should come from electricity instead of heating fuels. This action's goal date can be moveable, as electric heating technology such as heat pumps and variable refrigerant flow (VRF) are still nascent technologies in the United States. The completion of this action should be contingent upon technology offerings, available rebates, and the anticipated end-of-life date of the current heating plant. Lastly, a sustainability tracking dashboard will help to quantify and visualize energy savings from

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[7] Greenhouse Gases at EPA. (2018, June 21). Retrieved from https://www.epa.gov/greeningepa/greenhouse-gases-epa

on-going and completed projects. The dashboard could incorporate energy generated from the solar array, metering data, and progress updates on on-going projects. This dashboard or "sustainability hub" would track financial savings to help justify further investment in new projects, project carbon savings to track progress towards emissions goals, and advertise Ramapo's sustainability efforts to current and potential members of the campus community.

GOAL 2 – ESTABLISH A PURCHASING POLICY THAT WORKS TO IMPROVE CAMPUS WIDE SUSTAINABLE PROCUREMENT PRACTICES

Ramapo already has some sustainable purchasing practices, such as buying Energy Star appliances. Those practices can be expanded and formalized by joining the Sustainable Purchasing Leadership Council (SPLC). Joining by Fall 2020 will give Ramapo access to workshops, conferences, peer organizations, and reference material regarding sustainable purchasing choices. One staff member from Purchasing at Ramapo should be designated to coordinate this effort. The SPLC offers a model template for writing a sustainable purchasing policy which can be used to draft one for Ramapo.

Under this policy, Ramapo should prioritize transitioning to recycled paper and phasing out single-use plastics (which can be executed in tandem with Goal 5). In addition, the college should reduce the number of single-use free giveaways (pens, notebooks, magnets, etc.) that are given to all attendees at campus events. Many of these giveaways have little useful value to their recipients and are a drain on both the natural resources used to manufacture them and the money used to purchase them. As most people already have plenty of pens, notebooks, and the like, free giveaways are unsustainable. Instead, items given to attendees should be offered only to attendees who want them. This includes sustainable alternative giveaways such as reusable water bottles and mugs. As sustainable alternatives to traditional products are always evolving, Ramapo should adopt a Plan-Do-Check-Act management method to iteratively evaluate and improve its purchasing policies.

GOAL 3 - INCREASE THE NUMBER OF STUDENTS AND EMPLOYEES THAT CARPOOL OR TAKE THE CAMPUS SHUTTLE AT LEAST TWICE PER WEEK 20% BY 2022

Approximately half of Ramapo students commute to campus. According to a study done by Ramapo students, commuting students from Bergen county alone consume 53,656 gallons of gas per semester[8]. Because of its isolated location, Ramapo faces unique challenges in providing options and incentives for students and employees to green their commutes. Carpooling and increasing access to the campus shuttle are the best ways to cut the community's transportation emissions. A baseline report should be compiled from available data by the Spring 2021 semester that outlines the current student and employee commuting modal split. Concurrently, students and employees can be surveyed about their current satisfaction with alternative commuting options and their interest in ridesharing programs. Students can be incentivized to rideshare by offering discounted parking permits. In addition, incoming students should receive information

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[8] Project completed by Kelly McCann, Steven Panagi, Andrew Poremba, and Jamie Thomas

about ridesharing and public transportation options shortly after matriculation so that they can plan their commutes accordingly. A ridesharing program should be deployed in time for the Fall 2021 semester. There are several ridesharing apps available, including Miles2Share and Wheeli, which have already gained some interest in the Ramapo community. A focus group of commuters, administration, and staff can be formed to choose which program would be the best fit.

GOAL 4 – SIGN THE COOL FOOD PLEDGE BY SUMMER 2021 AND MEET ITS GOAL OF REDUCING THE GHG EMISSIONS ASSOCIATED WITH FOOD CONSUMPTION AT RAMAPO 25% FROM A 2015 BASELINE BY 2030

Food production accounts for nearly a quarter of global greenhouse gas emissions. Signatories of the Cool Food Pledge work to reduce their food related GHG emissions 25% from a 2015 baseline by 2030. The Pledge offers many resources to help guide organizations in transitioning their meal offerings from meat-based foods, which have a much higher environmental impact, to more plant-based foods. Sodexo, which provides dining services for Ramapo, is a supporter of the Cool Food Pledge. A member of the dining staff should be designated to coordinate the signing of the pledge, the planning efforts to expand plant-based meal options, and the annual food purchasing reporting required by the pledge. In particular, dining staff should reference the Behavioral Playbook[9] created by the World Resources Institute for the pledge, as it gives detailed guidance on how to encourage community members to choose plant-based options when they are offered. Working towards this goal will not only reduce [10] emissions and mitigate environmental impacts, but also improve the health of the community if new plant-based options are nutritionally balanced.

GOAL 5 - CONTINUALLY COMMIT TO REDUCING SINGLE-USE DISPOSABLE PLASTIC

This goal does not have a deadline because zero-waste is still an evolving science. Achieving this goal should be a continuous effort and any progress will have a significant impact in diverting waste from landfills. The strategies in this section are adapted from the #BreakFreeFromPlastic Campus Pledge developed by the Post-Landfill Action Network (PLAN)[11]. Ramapo is already a member school of PLAN, which gives it access to many action plans, best practices, and case studies on reducing waste on college campuses. By November 2021, Ramapo should form a task force of students, faculty, and staff committed to developing a path to a zero-waste campus. PLAN includes suggestions on key stakeholder groups to include on the team. This task force would be responsible for setting goal dates for actions 2, 3, and 4, developing action plans, doing research, educating community members on various zero waste initiatives, and forming a uniform vision for zero-waste at Ramapo. The next essential step is to eliminate

[9] Attwood, S., Voorheis, P., Mercer, C., Davies, K., & Vennard, D. (n.d.). PLAYBOOK FOR GUIDING DINERS TOWARD PLANT-RICH DISHES IN FOOD SERVICE. Retrieved from https://wriorg.s3.amazonaws.com/s3fs-public/19_Report_Playbook_Plant-Rich_Diets_v1.pdf

[10] About Cool Food. (n.d.). Retrieved from https://www.coolfoodpledge.org/overview

[11] Pledge: Post-Landfill Action Network (PLAN). (n.d.). Retrieved from https://www.postlandfill.org/bffp-pledge/?doing_wp_cron=1587832985.5062069892883300781250

single-use plastics that have readily available alternatives and identify which items cannot be easily replaced with reusable alternatives. Again, PLAN has resources to help in identifying items that can be substituted. At the same time, in tandem with Goal 2, purchasing policies can be developed to phase out non-essential items. Finally, Ramapo can develop programs to encourage circular usage of materials, such as dorm move-out collection initiatives. Zero-waste programs can save money because they ultimately reduce the number of products purchased. In addition, recycling is not part of true zero-waste because of the energy involved, the lack of markets for recycled materials, and the low actual recycling rates of material sent to recycling facilities. Therefore, adopting zero-waste policies can help save on recycling pick up.

GOAL 6 – INFUSE SUSTAINABILITY AND BIODIVERSITY PRINCIPLES INTO ALL GROUNDS MANAGEMENT ACTIONS

The Ramapo campus, located near the Ramapo Valley County Reservation and the Ramapo River, possess great natural beauty that should be protected. The best way to do this is coordinating all efforts through a grounds management plan (GMP). A GMP will establish protocols for caring for the Ramapo campus grounds and will help to ensure that grounds management is consistent and effective. What follows are recommendations of land and biodiversity conservation measures that should be included in the GMP.

Ramapo College can make their landscape management practices more sustainable by managing campus grounds in accordance with an Integrated Pest Management (IPM) program and an Organic Land Care Program that uses a four-tiered approach for 80% of the campus area. IPM establishes a sustainable approach to managing pests by combining biological, cultural, physical, and chemical tools in a way that minimizes economic, health, and environmental risks. An Organic Land Care Program dictates that campus grounds can be managed in accordance with an organic land care standard that has eliminated the use of inorganic fertilizers and chemical pesticides, fungicides, and herbicides in favor of ecologically preferable materials[12]. Organic land care practices may be as simple as setting up preserved land and monitoring its natural health and taking care not to disturb the natural processes present. The areas that are managed using conventional landscape management practices should include some IPM or organic principles or techniques.

Ramapo should also strive to be recognized by Tree Campus USA.[13] Tree Campus USA has five standards that a campus needs to meet every year to be recognized: 1) Establish a campus tree advisory committee, 2) create a campus tree care plan, 3) allocate finances to annual campus tree program, 4) observe Arbor Day, and 5) institute a service learning project. The Tree Campus USA website has resources and examples from which to draw ideas.

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[12] Technical Manual. (n.d.). Retrieved from https://stars.aashe.org/resources-support/technical-manual/
[13] Tree Campus USA Standards. (n.d.). Retrieved from https://www.arborday.org/programs/treecampususa/standards.cfm

Hydrology, water use, and materials management can be improved by mowing and mulching leaves instead of removing them and keeping a compost heap for grounds materials. Mulching reduces soil moisture loss through evaporation, meaning grounds have to be watered less often. In addition, Ramapo should conduct assessments to identify 1) endangered and vulnerable species (including migratory species) with habitats on institution-owned or managed land, and 2) environmentally sensitive areas on institution-owned or managed land. Assessment data can then be used to best protect the identified species, habitats, and environmentally sensitive areas by replacing mowed areas with meadows and fields that create a safe haven for endangered species.

VISIBILITY OPPORTUNITIES

- ✓ Announce GHG emissions goal
- ✓ Create social media content about green purchasing practices
- ✓ Launch public awareness campaign about carpooling
- ✓ Announce signing of the Cool Food Pledge
- ✓ Publicly pledge to ban plastic bags on campus

See Goal 1 in *Engagement and Community Building* for more strategies on increasing the visibility of sustainability efforts on campus.

SUSTAINABILITY IN PLANNING AND ADMINISTRATION

The Ramapo community looks to the administration for leadership and example. For any sustainability initiative to work, there needs to be strong communication and cohesion among Ramapo's leaders.

14

HIGHLIGHTS

- ✓ President's Committee on Campus Sustainability
- ✓ Sustainability Student Internship

BACKGROUND

Sustainability starts with effective leadership and organization. The President's Committee on Campus Sustainability (PCCS) aims to explore and facilitate sustainable initiatives across campus. The committee is composed of several faculty and staff members from various departments, each weighing in on the development of sustainability planning and decision-making for the college. With increased organization, vision, and communication, Ramapo's administration can continue to encourage the community to strengthen its commitment to sustainability.

SECTION OVERVIEW

This section evaluates the strengths and weaknesses of Ramapo's efforts to dedicate resources to sustainability coordination, planning, and governance. Furthermore, it will highlight the goal of developing a sustainability officer position whose would assist with organizing and implementing the institution's sustainability decision-making.

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[14]PinClipart. (n.d.). Retrieved from https://www.pinclipart.com/downpngs/oJhwxw_teamwork-clipart-circle-people-together-icon-png-transparent/

Managing Complex Change in Administration

Key Element	Description	Progress
Vision	Ramapo's leadership has demonstrated commitment to sustainability in the past, but that commitment has not been consistent.	
Expertise	Ramapo administration can apply their leadership skills in other areas to sustainability issues.	
Resources	Ramapo's faculty and staff are well-versed in sustainability education/operations but are in strong need of dedicated sustainability staff.	
Incentives	Increased renown and prestige are significant incentives to show sustainability leadership.	
Action Plan	The goals and strategies outlined below give a framework from which to build a plan of action.	

Ramapo's administration has taken steps to demonstrate sustainability *vision* and leadership - forming the PCCS and signing the American College & University Presidents Climate Commitment (ACUPCC). However, the PCCS requires restructuring and the college has not upheld its commitment to the ACUPCC. The PCCS is a vital *resource* to coordinate and organize campus sustainability initiatives. It is an essential piece in tying together all other goals and strategies stated within this document. The addition of a part-time or dedicated full-time sustainability staff member would elevate the institution's level of *expertise* in sustainability coordination and planning and *incentivize* the administration to continue to provide more leadership throughout the campus activities. The following goals serve as a basis for developing an *action plan*.

KEY BENEFITS

✓ Collaborative sustainability planning & decision-making
✓ Dedicated sustainability staff member
✓ Revamped sustainability student internship

UN Sustainable Development Goals

This section supports creating a comprehensive plan to move towards sustainability.

Strong sustainability leadership promotes institution-wide collaboration.

This plan outlines measurable objectives to move towards sustainability.

29

Goals and Strategies

AT A GLANCE

Goal 1	**Restructure the President's Committee on Campus Sustainability (PCCS).**
Action 1	Encourage the PCCS to read through this report to evaluate recommendations, goals, and strategies.
Action 2	Develop interdepartmental working groups for various sustainability initiatives for the committee by the Spring 2021 semester. Each working group can focus on a goal or goals outlined in this report.

Goal 2	**Grow and enhance the sustainability student internship program to 3 students by the Fall 2021 semester.**
Action 1	Work with Career Services to make the internship Federal Work Study eligible.
Action 2	Develop a short-term curriculum or training manual for new student interns.

Goal 3	**Hire a dedicated full-time Sustainability Officer by Fall 2025.**
Action 1	Hire a part-time sustainability advisor by Fall 2021.
Action 2	Continually evaluate the performance and accomplishments of the part-time sustainability advisor.
Action 3	Prepare a proposal for transitioning the position to full-time by Spring 2025.

GOAL 1 - RESTRUCTURE THE PRESIDENT'S COMMITTEE ON CAMPUS SUSTAINABILITY (PCCS)

The President's Committee on Campus Sustainability is a group of faculty and staff members that oversees and coordinates many actions concerning sustainability on campus. The committee's vision is to raise sustainability awareness and facilitate sustainability programming and initiatives on campus. The PCCS should be one of the first groups to read this document and evaluate its recommendations, goals, and strategies. The committee can edit the suggestions and goal dates as appropriate. One issue cited by many members of the committee was that they struggled to turn ideas into plans. To solve this issue, the PCCS can be subdivided into working groups, each focusing on a section or specific goal in this report. Action items can be set at each meeting to have certain deliverables pertaining to the goals completed by the next meeting.

GOAL 2 - GROW AND ENHANCE THE SUSTAINABILITY STUDENT INTERNSHIP PROGRAM TO 3 STUDENTS BY THE FALL 2021 SEMESTER

In the past, Ramapo had sustainability interns to aid faculty and staff members in various projects. To revive the program, the internship can be made Federal Work Study eligible. This will open funding opportunities and attract more students who see the position on work study job boards. This will also ensure more consistent funding. In addition, a curriculum should be developed to quickly train new hires to help maintain continuity between interns. This can consist of presentations and articles relevant to both Ramapo and sustainability issues as a whole. The student interns can take part in the PCCS by keeping notes, writing newsletters, and reminding members of their obligations and action items. They can also do research, post flyers around campus, create social media content, set meetings, and plan events.

GOAL 3 - HIRE A DEDICATED FULL-TIME SUSTAINABILITY OFFICER BY FALL 2025

The PCCS is responsible for sustainability planning and decision-making on campus as mentioned in Goal 1. To aid the committee in its sustainable efforts, Ramapo should hire a part-time sustainability advisor by Fall 2021. All of the committee members are full-time faculty and staff from various departments, and they lack the time to make sustainability their first priority. A part-time sustainability advisor would assist the PCCS in the development and implementation of sustainability practices. The sustainability advisor would work to initiate, execute, and carry out sustainability strategies and goals directed under the leadership of the committee. In turn, this would allow the PCCS to focus on the development of new sustainability initiatives and programming on campus. Working part-time would allow Ramapo to continually evaluate their performance and

accomplishments over a designated period within this position. Once progress has been made, the PCCS can develop a proposal to transition this job to a full-time position continuing to coordinate all future sustainability activities on campus in tandem with the PCCS.

VISIBILITY OPPORTUNITIES

- ✓ Have student interns create sustainability social media content
- ✓ Post spotlights – a picture and short biography – of new student interns and student organization leaders on social media
- ✓ Dedicate time every PCCS meeting to discuss ways to promote visibility on campus
- ✓ Make public outreach and engagement one of the main responsibilities of the Sustainability Officer
- ✓ Invite a member of communications personnel at Ramapo to become a member of the PCCS

See Goal 1 in *Engagement and Community Building* for more strategies on increasing the visibility of sustainability efforts on campus.

BENCHMARKING

Benchmarking sustainability performance is useful for understanding how Ramapo's efforts compare to those of peer institutions. Peer institutions were chosen based on the following criteria: At least one school had to be STARS Gold rated (see the *Methodology* section for background on the STARS framework), in the NJ/NY region, comparable student size (4000-8000 students), similar campus size (200-800 acres), rural or suburban setting, annual snowfall >20 in, a cost of living index close to 140, and public status. The idea was to select schools that were in the NJ/NY area with similar cost of living and climate, even if Ramapo may not consider them competitor schools, because these schools have similar opportunities and challenges for sustainability. With this search criteria, the group chose SUNY-Cortland, Raritan Valley Community College (RVCC), SUNY-Purchase, and SUNY-Fredonia as peer institutions.

College	STARS Rating	State	Total Students (#)	Campus Size (acres)	Region	Snowfall (in)	Cost of living Index
Ramapo	No Rating	NJ	6,110	300	Rural/ Suburban	26	140.8
SUNY-Cortland	Gold	NY	6,913	798	Suburban	83	76.5
Raritan Valley Community College	Silver	NJ	5,463 (Full time only)	240	Suburban	24	143.3
SUNY-Purchase College	Silver	NY	4,264	505	Suburban	30	232.8
SUNY-Fredonia	Bronze	NY	4,845	251	Suburban	73	77.4

Table 1. School Specs: Size, Geography, Economy, Climate[15,16]

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[15] Stats about all US cities - real estate, relocation info, crime, house prices, cost of living, races, home value estimator, recent sales, income, photos, schools, maps, weather, neighborhoods, and more. (n.d.). Retrieved from http://www.city-data.com/
[16] Best Places to Live: Compare cost of living, crime, cities, schools and more. Sperling's BestPlaces. (n.d.). Retrieved from https://www.bestplaces.net/

Based on the benchmarking graph in Figure 3, SUNY-Cortland has the top STARS score amongst the chosen peer schools because they are leaders in Engagement, Academics, Operations, and Planning & Administration. For each of the categories, the top schools scored above 50% in each credit rating. Below in Table 4, the score percentages coinciding with the benchmarking graph in Figure 4 are given.
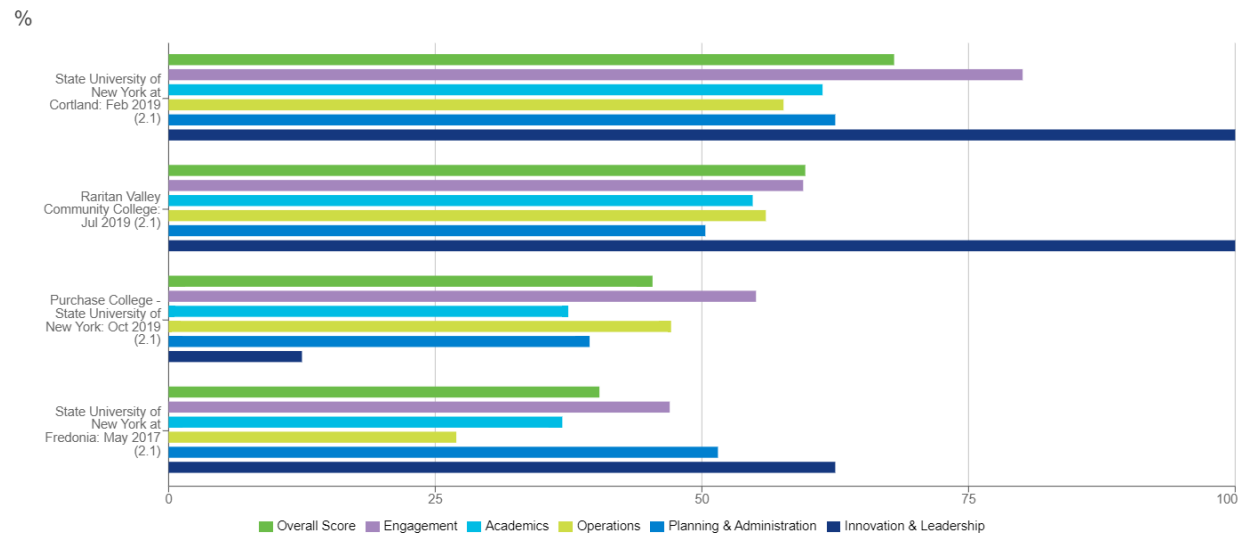

Figure 3. Benchmarking Graph of Top Peer Schools [17]
(SUNY-Cortland, Raritan Valley Community College, SUNY-Purchase, SUNY-Fredonia).
Scores are shown in percent (%)

Report	Overall Score (%) ↑	Engagement (%)	Academics (%)	Operations (%)	Planning & Admin… (%)	Innovation & Lea… (%)
State University of New York at Cortland Gold: Feb 2019 (2.1)	68.02	80.07	61.31	57.65	62.5	100
Raritan Valley Community College Silver: Jul 2019 (2.1)	59.69	59.49	54.76	55.99	50.32	100
Purchase College - State University of New York Silver: Oct 2019 (2.1)	45.37	55.07	37.47	47.11	39.47	12.5
State University of New York at Fredonia Bronze: May 2017 (2.1)	40.39	46.98	36.91	26.97	51.5	62.5

Table 2. Benchmarking Table of Top Peer Schools[17]
(SUNY-Cortland, Raritan Valley Community College, SUNY-Purchase, SUNY-Fredonia).
Scores are shown in percent (%)

See Table 3 below for a breakdown of top schools in each STARS category. Top schools were chosen based on their credit rating being above 50% for each STARS category. SUNY-Cortland and RVCC were top schools for all 5 categories. SUNY-Purchase only did well in Engagement, while SUNY-Fredonia excelled in Planning & Administration and Innovation & Leadership.

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17 STARS Benchmarking Tool. (n.d.). Retrieved from https://benchmarks.aashe.org/login/?next=/#tool

STARS Categories	Top Schools (above 50% credit rating)
Engagement	SUNY-Cortland, RVCC, SUNY-Purchase
Academics	SUNY-Cortland, RVCC
Operations	SUNY-Cortland, RVCC
Planning & Administration	SUNY-Cortland, RVCC, SUNY-Fredonia

Table 3. Breakdown of Top Schools per STARS category

Tables 4a through 4d compare Ramapo with each school across all STARS categories. ORANGE (AVERAGE) represents average practices that have many areas for improvement. RED represents little to no sustainability efforts. YELLOW represents minimal areas for improvement. GREEN represents a leader in sustainability. The sustainability initiatives listed by peer schools can be found in the Appendix.

LEGEND for Tables 4.a – 4.d			
POOR PRACTICES- Little to No Sustainability Efforts	AVERAGE PRACTICES- Many Areas for Improvement	GOOD PRACTICES- Minimal Areas for Improvement	EXCELLENT PRACTICES- Leader in Sustainability

Table 4.a-d. Comparing Sustainability Efforts for Ramapo College versus Peer schools; 4.a. Academics; 4.b. Engagement; 4.c. Operations; 4.d. Planning & Administration

Table 4.a. Benchmarking: Academics			
STARS Categories	**Ramapo College**	**SUNY-Cortland**	**RVCC**
Undergraduate	- Sustainability, B.A. - Environmental Science, B.S. - Environmental Studies, B.A.	- Conservation Biology, B.S. - Outdoor Recreation, B.S.	- Environmental Science, A.S. - Environmental Studies, A.A.
Graduate	No graduate level sustainability program	- M.S. in Sustainable Energy Systems - Masters of Recreation with Concentration in Outdoor and Environmental Education	No graduate level degree program
Immersive Sustainability Program	Various faculty-led study abroad programs in environment, health, and social issues	Expeditionary Learning Practicum-Costa Rica Rainforest Outward Bound course	Ecology and Conservation of the Atlantic Rainforest of Northeastern Brazil
Campus as Living Laboratory	- Greenhouse - Meadows - Beekeeping	- GHG inventory for campus done as part of coursework - Students conduct building envelopes assessment using IR cameras and data-loggers. - Students assess campus heat-pump well field through Building Automation System data. - Solar PV performance assessed by students through on-line dashboard and data-loggers - Model Campus Garden Program/Native Plants	- Build LEED Silver or better - Energy Control Technology Program - Energy Projects on Cogen plant and solar panels. - Campus Rideshare program - Green roof vegetable garden/Organic Campus Garden - Campus food pantry - Certified River Friendly by NJ Water Supply Authority

Table 4.b. Benchmarking: Engagement				
STARS Categories	Ramapo College	SUNY-Cortland	RVCC	SUNY-Purchase
Student Life	Environmentally focused student organizations: - 1Step - Beekeeping Club Several organizations supporting social work, diversity and inclusion, and fundraising	- SUNY Cortland Green Representative Program - Green Day events - Community bike project - Campus garden - Sustainability focused student groups	- Environmental Club - Organic Vegetable Garden/Green roof - Donate produce to needy families - My Neighbor's Garden Project - Weekly Science Seminar - Sustainable Fashion Shows - Internships in Facilities/Environmental Science Dept - Service Learning Program - 15 hrs of community service in sustainability projects	- Green Team - The GreenFee oversees all of the green services and its coordinators on campus. - Native Species garden is used for research for a variety of faculty members in multiple departments. - FreeStore: A student-run, on-campus thrift store - Art symposiums with upcycled waste art pieces. - "Outdoors Skills" program - Green Living Certification
Outreach Materials, Publications	- Sustainability Website: Ramapo Green - Social Media: Ramapo Green	- Sustainability website - Bimonthly Sustainability Newsletter - Social media promoting campus sustainability - Promoting Student Sustainability Research - Green Day Events - Signage for food-related waste - Sustainability Walking/Trail Maps	- Sustainability Website - Monthly Sustainability Newsletter - Environmental Club Instagram - Sustainability coverage in Main Student Newspaper - Signage on the grounds for sustainable groundskeeping	- Monthly sustainability newsletter by the Sustainability Coordinator - Facebook page and an Instagram account that releases updates on school sustainability - Sustainability walking tour during summer orientation - Information such as recycling and other sustainability efforts is disseminated at student orientations and seminars.
Sustainability Culture	- Conducted Sustainability Culture Survey	- Conducted Sustainability Culture Survey	N/A	- Conducted assessment by Sustainability Coordinator
Community Partnerships	- Community Partnerships to advance sustainability, i.e. Local Farms	- Cortland Resiliency Assessment Coalition - Local Food Project - Migrant Education Tutorial and Support	RVCC partners with the Sustainable Somerset Committee to support social equity and wellbeing, economic prosperity, and ecological health.	- Westchester Green Business Partnership - Feeding Westchester - County Harvest
Inter-Campus Collaboration	NJHEPS	- Second Nature - AASHE - USGBC - In-State Coalition	- Bee Campus USA - Monarch Watch Monarch Waystation Program	- AASHE - NYCSHE (New York Coalition for Sustainability in Higher Education) - SSC (State University of New York Sustainability Coalition)

Table 4.c. Benchmarking: Operations			
STARS Categories	**Ramapo College**	**SUNY-Cortland**	**RVCC**
Greenhouse Gas Emissions	- Signed President's Climate Commitment in 2007	- AASHE - NYCSHE (New York Coalition for Sustainability in Higher Education) - SSC (State University of New York Sustainability Coalition)	- Uses UNH's Simap Tool - Purchase Energy Offsets - 100% reduction in Scope 1 and 2 GHG emissions from baseline
Building Design and Construction; Operations and Maintenance	- Building near or to LEED standard - Follow Indoor Air Quality (IAQ) Policy	- Governing policies require all renovated facilities to be LEED-NC Silver certifiable and all NEW facilities to be LEED-NC silver certified buildings. - Exceeded the LEED-NC Silver certification level with one building achieving Platinum. - Use published indoor air quality (IAQ) management policy	- No LEED Buildings, but committed to building future buildings LEED Silver or better. - IAQ management policy - AutomatedLogic Building Management System - All new or replacement fixtures are metered/low-flush/waterless.
Energy Efficiency	- Have data on grid-purchased electricity, electricity from on-site renewables. - LED upgrades - Energy Star Appliances - Thermal energy storage	- LED upgrades - Summer and winter demand response efforts	- HVAC managed by AutomatedLogic Building Management System - LED Upgrades
Clean and Renewable Energy	Support renewable energy sources: - Solar - Small geothermal	- Total Energy Consumption from clean and renewable sources: 32.83% - 4 large solar arrays and two small systems across campus - Passive solar thermal water pre-heating for residential bldgs. - Ground source heat pump - Purchase Renewable Energy Credit Offsets	- Total Energy Consumption from clean and renewable sources: 47.44% - Passive Solar - Co-generation engine - Onsite Solar Array - Wind RECs
Sustainable Dining	- Two compost heaps - Rocket composter	- Herbs form campus garden - Partner with Local farm - Lean Path Food Waste Management System- Pulper system/Composting	- Food Pantry - Waste Not program: food waste tracked and managed - Off-site food waste composting program throughout campus

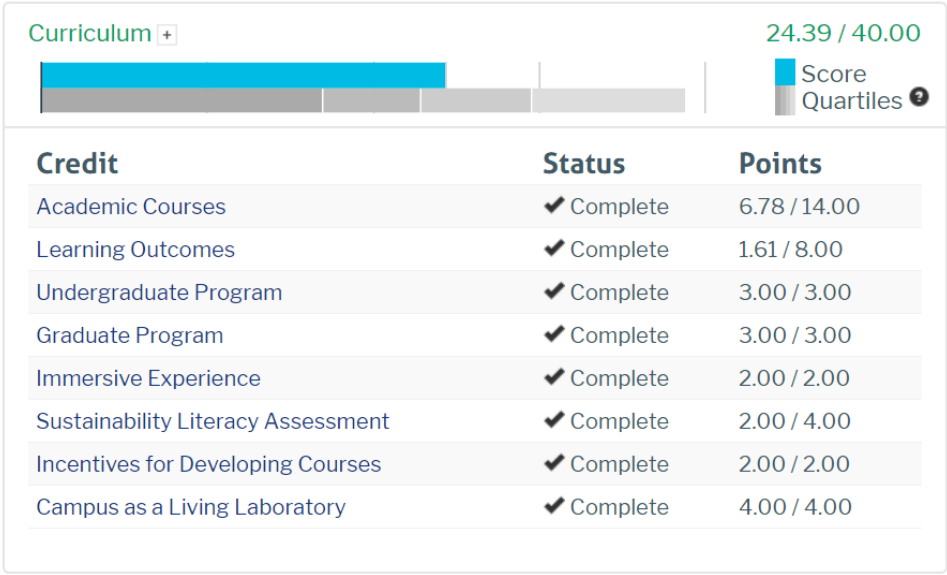|			
		- Biodegradable/ Compostable serviceware - Discount for using reusable mugs - Donate unused perishables	- Discount on drinks for using reusable containers
Sustainable Procurement	- Need Sustainable Procurement Protocol - Purchase Energy Star equipment	- Follow NY State Office of General Services Procurement Law - Life Cycle Cost Analysis (LCCA)	- Life Cycle Cost Analysis (LCCA) - No formal procurement policy
Commute Modal split	Most commuter students and employees drive to campus	- 20% Commute with only driver - 68% Walk, bicycle, or use other non-motorized means - 6% Vanpool/carpool - 5% Take a campus shuttle or public transportation - 1% Use a motorcycle, scooter or moped	- 78.57% Commute with only driver - 0.84%Walk, bicycle, or use other non-motorized means - 17.65% Vanpool/carpool - 2.94% Take a campus shuttle or public transportation - 0% Use a motorcycle, scooter or moped
Waste Minimization and Diversion; Construction and Demolition Waste Diversion	- Trash audit completed - Some circular material usage on campus	- Surplus program to share overage of office supplies with other state agencies - End of Semester Re-store Program-General public "garage sale" or donate to local charities	- Recycling/ Donation Programs: demolition materials, batteries, light bulbs, electronics, library books, bottle caps
Water Use	Insufficient data collected	- LEED - Use EnergyCAP and the US EPA's Portfolio Manager to monitor and benchmark campus water use	- Non-potable rainwater used in toilets, irrigating green wall and green roof, enabling garden, and watering plants.
Landscaping Management	- Wildflower meadows - Facilities Master Plan (2013)	- Ground Certification: Tree Campus/Bee Campus USA - IPM Program - Campus Tree Committee - Composting and mulching on-site - No-mow zones and low maintenance landscape areas.	- River- Friendly Certification - IPM Program - Organic Garden - GreenScapes Policy - Bee Campus USA - Hydrology/Water use: No-mow areas/Rain barrels/Rainwater Cisterns - Composting and mulching on-site

| Table 4.d. Benchmarking: Planning & Administration				
STARS Categories	Ramapo College	SUNY-Cortland	RVCC	SUNY-Fredonia
Sustainability Coordination	President's Committee on Campus Sustainability (PCCS)	- SUNY Cortland Sustainability Coalition - Energy Management Office - Sustainability Office	Environmental Sustainability Committee	Sustainability Office
Sustainability Planning	- Strategic Plan - Facilities Management Plan (2013) - No published sustainability plan	- Strategic Plan - Sustainability Curriculum and Outreach Plan - Climate Action Plan - Facilities Management Sustainability Plan	- Strategic Plan - No Sustainability Plan - No Climate Action Plan	- Strategic Plan (include sustainability) - No Sustainability Plan - Climate Action Plan
Diversity & Equity	Office of Equity, Diversity, Inclusion and Compliance (EDIC)	- The Chief Diversity Office - The Institutional Equity and Inclusion Office - The President's Council on Inclusive Excellence	- Raritan Valley Community College Diversity Council - Office of Multicultural Affairs	- Office of Diversity, Equity, and Inclusion - Diversity, Equity, and Inclusion Advisory Council
Support for Underrepresented Groups	Insufficient data collected	N/A	- Sister to Sister and Brothers Helping Brothers - Multicultural Initiative for Leadership & Excellence (MILE) - CRECER Latino High School Student Conference	- Center for Multicultural Affairs - Educational Development Program - Full Opportunity Program
Affordability	- In-state Tuition, EOF and Scholarships	SUNY Cortland Financial Aid	The New Jersey Educational Opportunity Fund (EOF)	SUNY Fredonia's Educational Development Program (EDP)

APPENDIX

Sustainability Examples from Peer Schools (Source: https://benchmarks.aashe.org)
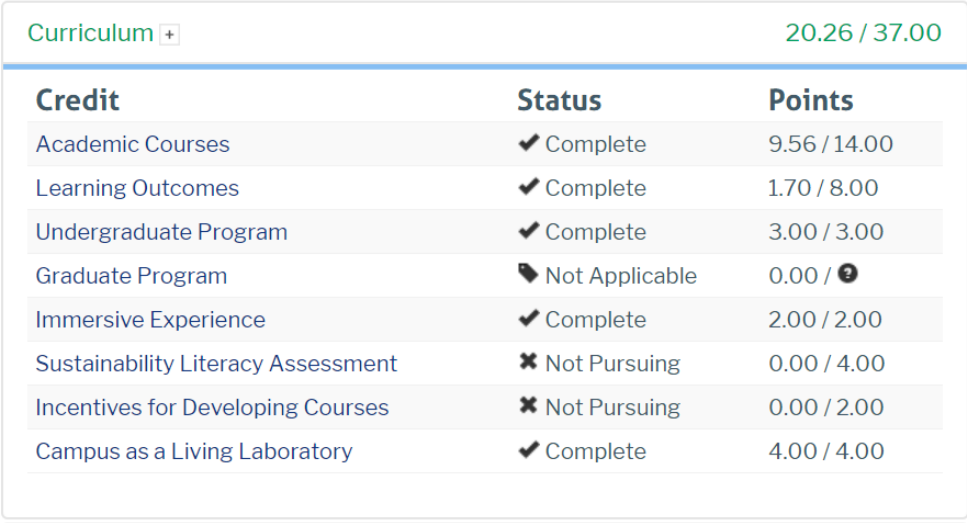Examples of Sustainability in Academics
  I.SUNY-Cortland

CURRICULUM: Exemplary Sustainable Practices	
Undergraduate Program	- Conservation Biology, B.S. - Outdoor Recreation, B.S.
Graduate Program	- M.S. in Sustainable Energy Systems - Masters of Recreation with concentration in Outdoor and Environmental Education
Immersive Sustainability Program	-Expeditionary Learning Practicum-Costa Rica Rainforest Outward Bound course
Campus as Living Laboratory	-GHG Inventory for Campus done as part of coursework, Second Nature updates, and Revised Climate Action Plan -Building Envelopes Assessment using IR cameras and data-loggers. -Campus Heat-pump well field assessed through Building Automation System Data. -Solar PV performance assessed by students through on-line dashboard and data-loggers -Model Campus Garden Program/Native Plants
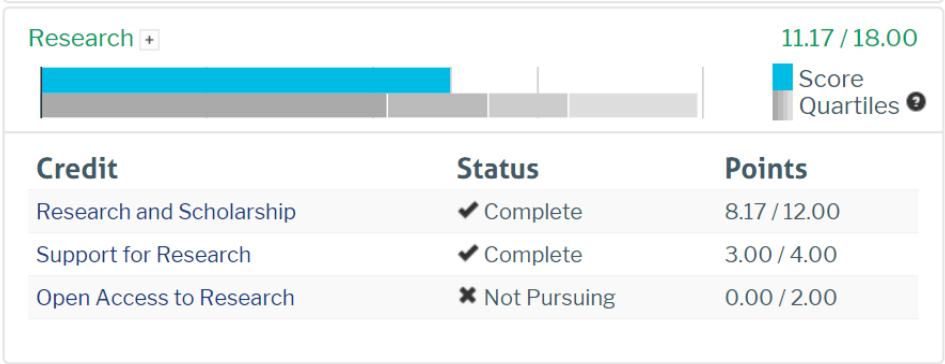
RESEARCH: Exemplary Sustainable Practices	
Research and Scholarship	- Develop a list of full-time faculty that have interests in sustainability. - Reviewed college documents to confirm research projects related to sustainability.
Support for Research	- A dedicated librarian to help student and faculty research. - multiple faculty research incentive programs that support sustainability research

II.   RVCC

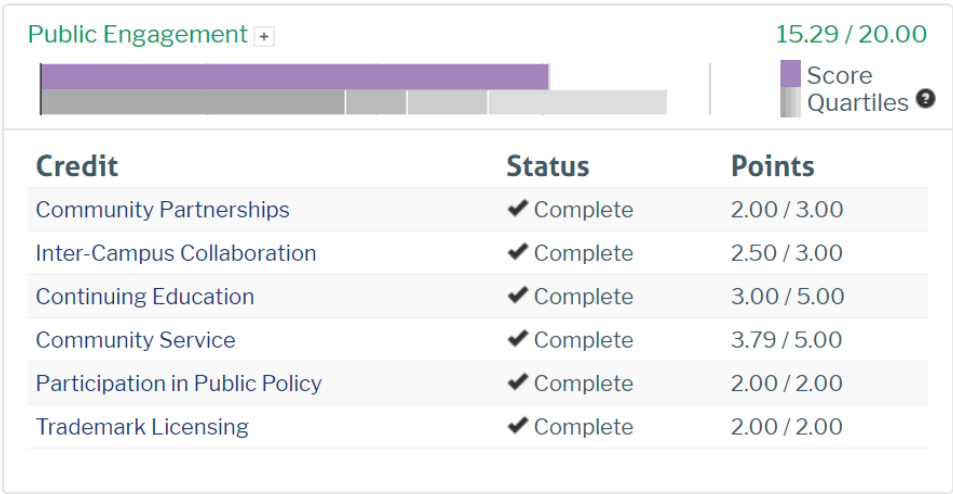| CURRICULUM: Exemplary Sustainable Practices	
Undergraduate Degree Programs	-Environmental Science, A.S. -Environmental Studies, A.A.
Graduate Degree Programs	None
Immersive Experience	Ecology and Conservation of the Atlantic Rainforest of Northeastern Brazil
Campus as a Living Laboratory	-Build LEED Silver or better -Energy Control Technology Program - Energy Projects on Cogen plant and solar panels. -Campus Rideshare program -Green roof vegetable garden/Organic Campus Garden -Campus food pantry -Certified River Friendly by NJ Water Supply Authority

No Research

Examples of Sustainability Engagement
    I. SUNY-Cortland

CAMPUS ENGAGEMENT: Exemplary Sustainable Practices	
Student Orientation	Sustainability on Campus present during New Student Orientation by: -Residence Life (Green Rep Program, recycling, zip car, and other sustainability efforts at the College) -Director of Facilities Operations and Services -Dining hall service (sustainable practices)
Student Life	-SUNY Cortland Green Representative Program: *Inspire and Educate sustainable lifestyles through peer to peer programs -Green Day Events -Community Bike Project -Campus Garden -Sustainability focused Student Groups

Outreach Materials & Publications	-Sustainability website
	-Bimonthly Sustainability Newsletter
	-Social media promoting campus sustainability
	-Promoting Student Sustainability Research:
	  *Biweekly "sandwich" seminars: forum for Students, Faculty and Staff
	  *Green Day Events held throughout the year: cortland.edu/greendays
	-Signage for food-related waste
	-Sustainability Walking/Trail Maps

Outreach Campaign	-Residence Hall Energy Challenge:
	  *provide tools to the residents on how they could curb their energy usage in the hall with simple tips.
	-Get Caught Being Green Campaign:
	  *reward students that were caught in the act of being sustainable (using reusable water bottles, reusable grocery bags, utilizing the ZipCars on campus, and taking advantage of the Community Bike program)
	  *Hashtag #CaughtBeingGreen used to tag students being sustainable on campus for a chance to win prizes.

Assessing Sustainability Culture	Sustainability Culture Assessment/Survey
Employee Orientation	Brochure highlighting campus sustainability-related operations and activities.

Credit	Status	Points
Community Partnerships	✔ Complete	2.00 / 3.00
Inter-Campus Collaboration	✔ Complete	2.50 / 3.00
Continuing Education	✔ Complete	3.00 / 5.00
Community Service	✔ Complete	3.79 / 5.00
Participation in Public Policy	✔ Complete	2.00 / 2.00
Trademark Licensing	✔ Complete	2.00 / 2.00

Public Engagement +   15.29 / 20.00

PUBLIC ENGAGEMENT: Exemplary Sustainable Practices	
Community Partnerships	-Cortland Resiliency Assessment Coalition -Local Food Project -Migrant Education Tutorial and Support
Inter-Campus	-Second Nature -AASHE -USGBC -In-State Coalition
Participation in Public Policy	-Presented and shared our advocacy work at various conferences and in nationally published higher education industry publications (NACUBO). -Both AASHE and Second Nature have been supportive in spreading the efforts in New York State. -SUNY Cortland is a pledging member of the "We Are Still In" campaign which advocates for the principles of the Paris Climate Commitment and lobbies nationally and internationally for broad action on carbon mitigation strategies.

II. RVCC

Campus Engagement +		10.25 / 21.00
Credit	**Status**	**Points**
Student Educators Program	✖ Not Pursuing	0.00 / 4.00
Student Orientation	✖ Not Pursuing	0.00 / 2.00
Student Life	✔ Complete	2.00 / 2.00
Outreach Materials and Publications	✔ Complete	2.00 / 2.00
Outreach Campaign	✔ Complete	4.00 / 4.00
Assessing Sustainability Culture	✖ Not Pursuing	0.00 / 1.00
Employee Educators Program	✖ Not Pursuing	0.00 / 3.00
Employee Orientation	✔ Complete	1.00 / 1.00
Staff Professional Development	✔ Complete	1.25 / 2.00

CAMPUS ENGAGEMENT: Exemplary Sustainable Practices	
Student Life	-Environmental Club -Organic Vegetable Garden/Green roof -Donate produce to needy families-My Neighbor's Garden Project -Weekly Science Seminar -Sustainable Fashion Shows -Internships in Facilities/Environmental Science Dept -Service Learning Program - 15 hrs of community service in sustainability projects
Outreach Materials & Publications	-Sustainability Website -Monthly Sustainability Newsletter -Environmental Club Instagram -Sustainability coverage in Main Student Newspaper -Signage on the grounds for sustainable groundskeeping
Outreach Campaigns	-Ridesharing Campaign -Recycling Campaign -"Take Back the Tap" Campaign-promoting Reusable bottle/Bottle Filling stations; petition to end the sale of bottled water
Assessing Sustainability Culture	N/A
Employee Orientation	-Employee Assistance Program -Given a reusable bottle/thermos and encouraged to use the campus bottle filling stations rather than bottled water

Public Engagement +		12.95 / 18.00
Credit	**Status**	**Points**
Community Partnerships	✔ Complete	2.00 / 3.00
Inter-Campus Collaboration	✔ Complete	2.00 / 3.00
Continuing Education	✔ Complete	5.00 / 5.00
Community Service	✔ Complete	1.95 / 5.00
Participation in Public Policy	✔ Complete	2.00 / 2.00
Trademark Licensing	🏷 Not Applicable	0.00 / ❓

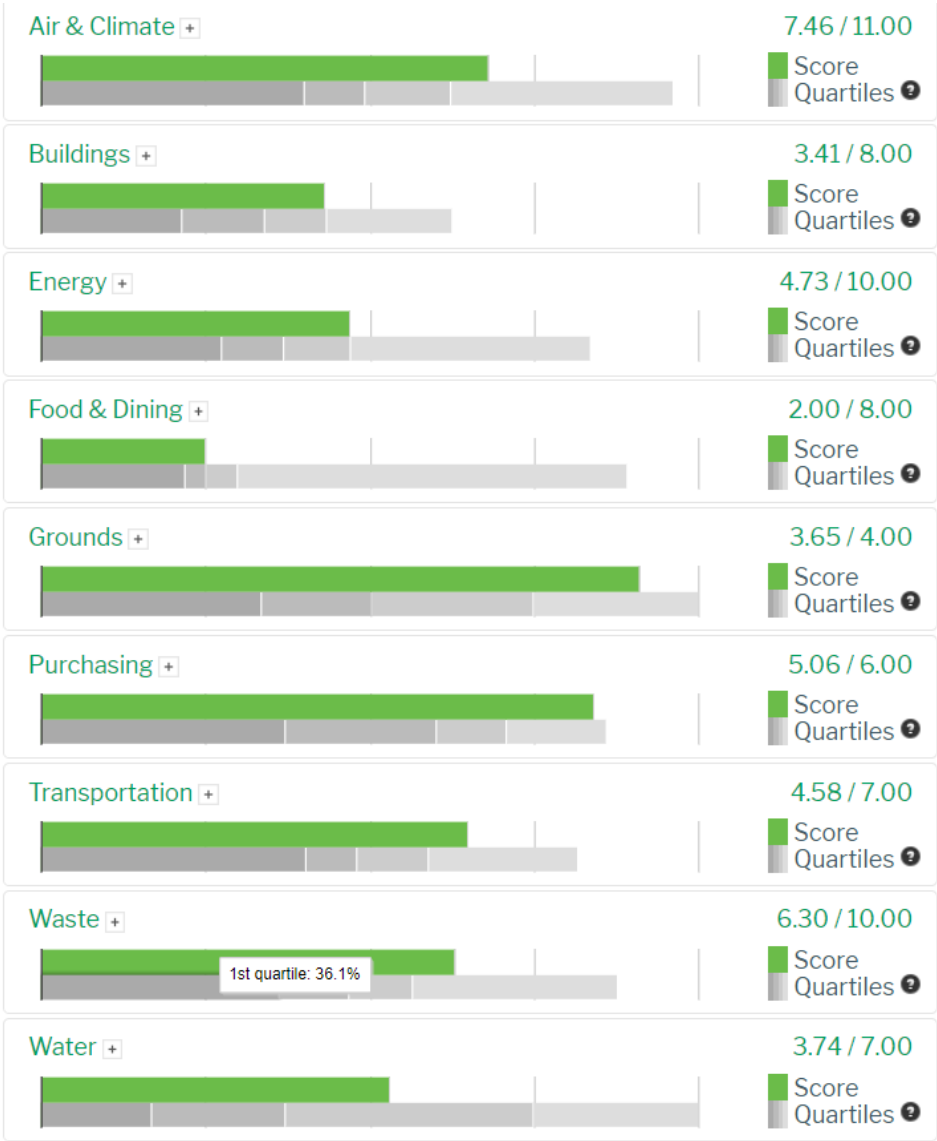| PUBLIC ENGAGEMENT: Exemplary Sustainable Practices	
Community Partnerships	RVCC partners with the Sustainable Somerset Committee to support social equity and wellbeing, economic prosperity, and ecological health.
Inter-Campus Collaboration	- Bee Campus USA - Monarch Watch Monarch Waystation Program
Continuing Education	- Leadership Development in Women - How to Develop an Effective Holistic Business - HVAC/R TECHNICIAN AND INSTALLER certificate program
Participation in Public Policy	- Readington Environmental Commission - Pinelands Preservation Alliance

III. SUNY-Purchase

Campus Engagement [+]		14.31 / 21.00
Credit	**Status**	**Points**
Student Educators Program	✔ Complete	2.81 / 4.00
Student Orientation	✔ Complete	2.00 / 2.00
Student Life	✔ Complete	2.00 / 2.00
Outreach Materials and Publications	✔ Complete	2.00 / 2.00
Outreach Campaign	✔ Complete	4.00 / 4.00
Assessing Sustainability Culture	✔ Complete	0.50 / 1.00
Employee Educators Program	✖ Not Pursuing	0.00 / 3.00
Employee Orientation	✖ Not Pursuing	0.00 / 1.00
Staff Professional Development	✔ Complete	1.00 / 2.00

CAMPUS ENGAGEMENT: Exemplary Sustainable Practices	
Student Life	- The Green Team's mission is environmental activism and raising sustainability awareness among the campus community. - The GreenFee oversees all of the green services and its coordinators on campus. - Native Species garden is used for research for a variety of faculty members in multiple departments. - FreeStore: A student-run, on-campus thrift store - The Purchase College Green Fee supports initiatives related to sustainability manners. - The Visual Arts department has hosted several art symposiums with upcycled waste art pieces. - "Outdoors Skills" program. - Green Living Certification encourages on-campus residents commit to green living actions.
Outreach Materials and Publications	- A monthly sustainability newsletter email is written by the Sustainability Coordinator. - Facebook page and an Instagram account that releases updates on school sustainability. - A sustainability walking tour during summer orientation. - Information such as recycling and other sustainability efforts is disseminated at student orientations and seminars.
Outreach Campaign	- RecycleMania: a nationwide competition between colleges and universities to increase recycling and spotlight our waste management program.
Assessing Sustainability Culture	The sustainability assessment developed by the Sustainability Coordinator.

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Public Engagement ⊞		8.27 / 20.00
Credit	**Status**	**Points**
Community Partnerships	✔ Complete	3.00 / 3.00
Inter-Campus Collaboration	✔ Complete	3.00 / 3.00
Continuing Education	✔ Complete	2.00 / 5.00
Community Service	✔ Complete	0.27 / 5.00
Participation in Public Policy	✖ Not Pursuing	0.00 / 2.00
Trademark Licensing	✖ Not Pursuing	0.00 / 2.00

PUBLIC ENGAGEMENT: Exemplary Sustainable Practices	
Community Partnerships	- Westchester Green Business Partnership - Feeding Westchester - County Harvest
Inter-Campus Collaboration	- AASHE - NYCSHE (New York Coalition for Sustainability in Higher Education) - SSC (State University of New York Sustainability Coalition)
Continuing Education	- GIS certificate program
Participation in Public Policy	None

Examples of Operations
I.SUNY-Cortland

Category	Score	Quartiles
Air & Climate +	7.46 / 11.00	Score / Quartiles
Buildings +	3.41 / 8.00	Score / Quartiles
Energy +	4.73 / 10.00	Score / Quartiles
Food & Dining +	2.00 / 8.00	Score / Quartiles
Grounds +	3.65 / 4.00	Score / Quartiles
Purchasing +	5.06 / 6.00	Score / Quartiles
Transportation +	4.58 / 7.00	Score / Quartiles
Waste +	6.30 / 10.00	Score / Quartiles
Water +	3.74 / 7.00	Score / Quartiles

1st quartile: 36.1%

OPERATIONS: Exemplary Sustainable Practices	
Greenhouse Gas Emissions	-Annual Scope 1 and 2 GHG Inventory by Climate Action Planning Committee -Electricity Offsets purchased -19.55% reduction in Scope 1 and Scope 2 GHG from baseline -Signed President's Climate Commitment in 2007
Bldg Design and Construction	-Governing policies require all renovated facilities to be LEED-NC Silver certifiable and all NEW facilities to be LEED-NC silver certified buildings. -Exceeded the LEED-NC Silver certification level with one building achieving Platinum.
Operations and Maintenance	-New Construction designed and built to minimum LEED Silver -Use published indoor air quality (IAQ) management policy
Energy Efficiency	-LED upgrades -Summer and winter demand response efforts
Clean and Renewable Energy	-Total Energy Consumption from clean and renewable sources: 32.83% -4 large solar arrays and two small systems across campus -Passive solar thermal water pre-heating for residential bldgs. -Ground source heat pump -Purchase Renewable Energy Credit Offsets
Sustainable Dining	-Herbs form campus garden -Partner with Local farm -Lean Path Food Waste Management System-Pulper system/Composting -Biodegradable/Compostable serviceware -Discount for using re-usable mugs -Donate unused perishables
Sustainable Procurement	-Follow NY State Office of General Services Procurement Law -Life Cycle Cost Analysis (LCCA)
Commute Modal Split	-20% Commute with only driver -68%Walk, bicycle, or use other non-motorized means -6% Vanpool/carpool -5% Take a campus shuttle or public transportation -1% Use a motorcycle, scooter or moped
Waste Minimization and Diversion; Construction and Demolition Waste Diversion	-Surplus program to share overage of office supplies with other state agencies -End of Semester Re-store Program-General public "garage sale" or donate to local charities

|	
Water Use	-LEED -uses EnergyCAP and the US EPA's Portfolio Manager to monitor and benchmark campus water use
Landscaping Management	-Ground Certification: Tree Campus/Bee Campus USA -Implement Sustainable Land Management Practices: Integrated Pest Management (IPM) Program on at least 17.5% of campus grounds and Organic Land Care Program on 74% of campus grounds. -Promote plant stewardship by developing a Campus Tree Committee -Keeping a compost heap for grounds materials. -Materials management and waste minimization by composting and mulching on-site waste. -Energy-efficient landscape design by adding more no-mow zones and low maintenance landscape areas. -Reduce the impacts of ice and snow removal by using non-salt products (i.e. grit/sand) for ice control and investing in more efficient salt spreaders for even salt distribution.

II.   RVCC

Air & Climate +	10.25 / 11.00
Buildings +	2.62 / 8.00
Energy +	4.53 / 10.00
Food & Dining +	2.12 / 8.00
Grounds +	1.98 / 3.00
Purchasing +	3.32 / 6.00
Transportation +	2.70 / 7.00
Waste +	5.11 / 10.00
Water +	6.00 / 6.00

OPERATIONS: Exemplary Sustainable Practices	
Greenhouse Gas Emissions	-Uses UNH's Simap Tool -Purchase Energy Offsets -100% reduction in Scope 1 and 2 GHG emissions from baseline
Bldg Design and Construction	-No LEED Buildings, but committed to building future buildings LEED Silver or better.

Operations and Maintenance	-IAQ management policy -AutomatedLogic Building Management System -All new or replacement fixtures are metered/low-flush/waterless.
Energy Efficiency	-HVAC managed by AutomatedLogic Building Management System -LED Upgrades
Clean and Renewable Energy	-Total Energy Consumption from clean and renewable sources: 47.44% -Passive Solar -Co-generation engine -Onsite Solar Array -Wind RECs
Sustainable Dining	-Food Pantry -Waste Not program: food waste tracked and managed -Off-site food waste composting program throughout campus -Discount on drinks for using reusable containers
Sustainable Procurement	-Life Cycle Cost Analysis (LCCA) -No formal procurement policy
Commute Modal Split	-78.57% Commute with only driver -0.84%Walk, bicycle, or use other non-motorized means -17.65% Vanpool/carpool -2.94% Take a campus shuttle or public transportation -0% Use a motorcycle, scooter or moped
Waste Minimization and Diversion; Construction and Demolition Waste Diversion	-Recycling/Donation Programs: demolition materials, batteries, light bulbs, electronics, library books, bottle caps
Water Use	-Non-potable rainwater used in toilets, irrigating green wall and green roof, enabling garden, and watering plants. -New or replacement fixtures: Waterless/Low-flow/Watersense
Landscaping Management	-River-Friendly Certification -IPM Program -Organic Garden -GreenScapes Policy -Bee Campus USA -Hydrology/Water use: No-mow areas/Rain barrels/Rainwater Cisterns -Composting and mulching on-site -Snow and Ice removal practices in line with River Friendly Process

Examples of Planning & Administration
I. SUNY-Cortland
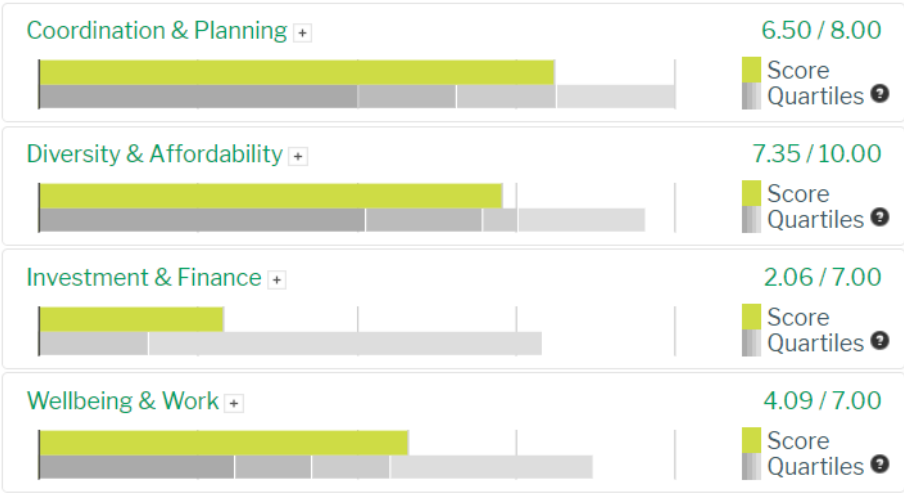
PLANNING & ADMINISTRATION: Exemplary Sustainable Practices	
Sustainability Coordination	- SUNY Cortland Sustainability Coalition - Energy Management Office - Sustainability Office
Sustainability Planning	-Strategic Plan -Sustainability Curriculum and Outreach Plan -Climate Action Plan -Facilities Management Sustainability Plan
Diversity and Equity	- The Chief Diversity Office - The Institutional Equity and Inclusion Office - The President's Council on Inclusive Excellence
Support for Underrepresented Groups	N/A
Affordability	-SUNY Cortland Financial Aid

II.   RVCC

Coordination & Planning +	3.75 / 8.00
Diversity & Affordability +	6.67 / 10.00
Investment & Finance +	0.00 / 0.00
Wellbeing & Work +	2.16 / 7.00

PLANNING & ADMINISTRATION: Exemplary Sustainable Practices	
Sustainability Coordination	Environmental Sustainability Committee
Sustainability Planning	-Strategic Plan -No Sustainability Plan -No Climate Action Plan
Diversity and Equity	- Raritan Valley Community College Diversity Council - Office of Multicultural Affairs
Support for Underrepresented Groups	-Sister to Sister and Brothers Helping Brothers -Multicultural Initiative for Leadership & Excellence (MILE) -CRECER Latino High School Student Conference
Affordability	The New Jersey Educational Opportunity Fund (EOF)

III.   SUNY-Fredonia

Coordination & Planning +	4.25 / 8.00
Diversity & Affordability +	6.74 / 10.00
Investment & Finance +	1.00 / 7.00
Wellbeing & Work +	4.49 / 7.00

PLANNING & ADMINISTRATION: Exemplary Sustainable Practices	
Sustainability Coordination	The sustainability office's mission is to integrate sustainability into all aspects of campus life
Sustainability Planning	-Strategic Plan (include sustainability) -No Sustainability Plan -Climate Action Plan
Diversity and Equity	- Office of Diversity, Equity, and Inclusion - Diversity, Equity, and Inclusion Advisory Council
Support for Underrepresented Groups	-Center for Multicultural Affairs -Educational Development Program -Full Opportunity Program
Affordability	SUNY Fredonia's Educational Development Program (EDP)

Examples of Innovation & Leadership
I.SUNY-Cortland

Exemplary Practice +		1.00
Credit	**Status**	**Points**
Grounds Certification	✔ Complete	0.50 / 0.50
Bicycle Friendly University	✔ Complete	0.00 / 0.50
Pay Scale Equity	✔ Complete	0.50 / 0.50
Campus Pride Index	✔ Complete	0.00 / 0.50

INNOVATION & LEADERSHIP: Exemplary Sustainable Practices	
Grounds Certification	- Tree Campus USA - Bee Campus USA
Bicycle Friendly University	The League of American Bicyclists recognized SUNY Cortland as a Bicycle Friendly University (BFU) program in November of 2017
Pay Scale Equity	- Per HR: Lowest paid salary is a total of $28,440.Senior administrator's salary is a total of $263,234. - Ratio is 1:9.16.

Innovation +		3.00
Credit	**Status**	**Points**
Innovation A	✔ Complete	1.00 / 1.00
Innovation B	✔ Complete	1.00 / 1.00
Innovation C	✔ Complete	1.00 / 1.00

INNOVATION & LEADERSHIP: Exemplary Innovations	
Innovation A	- The Water for Life program encourage students, faculty and staff to purchase a reusable water bottle
Innovation B	- Live in Cortland initiative encourages faculty and staff to live close to campus.
Innovation C	- New York Higher Education Large Scale Renewable Energy Consortium Project

II. RVCC

Exemplary Practice +		1.00
Credit	**Status**	**Points**
Grounds Certification	✔ Complete	0.50 / 0.50
Pay Scale Equity	✔ Complete	0.50 / 0.50

INNOVATION & LEADERSHIP: Exemplary Practices	
Grounds Certification	- Tree Campus USA - Bee Campus USA
Pay Scale Equity	- Per HR: Lowest paid salary is a total of $28,440.Senior administrator's salary is a total of $263,234. - Ratio is 1:9.16.

INNOVATION & LEADERSHIP: Exemplary Innovations	
Innovation A	Campus Food Pantry with Green Roof Veggies to address the growing concern of food insecurity among college students
Innovation B	Deer Management and Venison Donation
Innovation D	Prisoner Education Program that teaches certain curriculums at all NJ state prisons.

III.   SUNY-Fredonia

INNOVATION & LEADERSHIP: Exemplary Practices	
Sustainability Course Designation	- "Sustainability Related" or "Sustainability Focused"
Pay Scale Equity	- Per HR: Lowest paid salary is a total of $43,384.Senior administrator's salary is a total of $232,324. - Ratio is 1:5.36.

Innovation +		1.00
Credit	**Status**	**Points**
Innovation A	✔ Complete	1.00 / 1.00

INNOVATION & LEADERSHIP: Exemplary Innovations	
Innovation A	Food Pantry to assist students struggling with food insecurity.