



Ramapo College of New Jersey Sustainability Management Plan 2020

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Stevens Institute of Technology Master's Program in Sustainability Management



Presentation Outline

- Background
- Sustainability Management Plan
- Key Areas of Focus
- Methodology
- SMP Breakdown
- Project Implications
- Future Plans & Opportunities
- Q&A Discussion



Background

Information and data for this report were gathered through:

- On-site and Virtual discussions with
 - Ramapo faculty, staff, administration, and student leaders.
 - President's Committee on Campus Sustainability (PCCS) meetings



What is a "Sustainability Management Plan"?

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.



Key Areas of Focus

Four focus areas:

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









































SMP Breakdown

- Executive Summary
- Introduction
- Methodology
- Key Focus Areas
- Benchmarking
- Appendix

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.			





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.

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SMP Breakdown

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.

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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 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.



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HIGHLIGHTS

- Sustainability Focused Student Organizations
- Conducted Sustainability Culture Indicator Survey

CONSUMPTION AND PRODUCTION

KEY BENEFITS

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



Increasing Media and Communications coverage.

Update the Ramapo website by Spring 2021

Ensure media coverage of sustainability milestone.

Increase frequency of posts on Ramapo Green social media accounts.

Invite marketing and communications personnel to PCCS meeting. Incorporate
sustainability activities
into Student Orientation
for the Fall 2021.

Ensure that campus tours involve various dimensions of.

Introduce students
to public
transportation,
shuttle and
ridesharing
program.

Have resident assistants (RAs) train new students.

Incentivize students to use free, reusable bags provided at orientation. Incorporate
sustainability topics into
Employee Orientation
programming by Fall
2021.

For faculty: Highlight the UN Sustainable Development Goals within classes.

For staff: Highlight current sustainable efforts and boost involvements.

Introduce
employees to public
transportation,
shuttle and
ridesharing
program.

Post signage explaining all sustainable features on campus by Fall 2021.

Compile a comprehensive list of all sustainable features on campus.

Designate areas where signage can be placed.

Deliver these plans to marketing personnel to design signage. Incorporate
sustainability highlights
into literature advertising
Ramapo College by Fall
2021.

Research and review other universities' materials for sustainability content.

Give the list of sustainability efforts developed from Goal 3 to marketing personnel to design content according to university standards.

Sustainability in Academics



HIGHLIGHTS

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

KEY BENEFITS

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





Restart the Master of Arts in Sustainability Studies program by the Fall 2025 semester.

Survey current students to gauge interest in continuing their education through the master's program during the Fall 2021 semester.

Launch a live-streamed speaker series that invites sustainability professionals to speak on campus.

Finalize a curriculum by Spring 2023 that incorporates an online option.

Prepare a proposal for restarting the program by Fall 2023.

Work with and train admissions staff to target the right students and develop language to advertise the program. 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.

Conduct an inventory of classes that are sustainability-focused or sustainability-inclusive by January 2021.

Conduct faculty workshops by department on integrating sustainable development goals into coursework.

Update inventory every semester.





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
- Wildflower Meadows
- Hydration Stations

Key Benefits

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

















Reduce scope 1 and scope 2 emissions 40% from 2021 levels by 2030. Still deciding on goal Establish a purchasing policy that works to improve campus wide sustainable procurement practices.

Increase the number of students and employees that carpool or take public transportation & the campus shuttle to campus at least twice per week 20% by 2022.

Perform a greenhouse gas emissions inventory of scope 1, 2, and 3 emissions by April 2021 and repeat biennially.

Join the Sustainable Purchasing Leadership Council (SPLC) by Fall 2020. Prepare a baseline commuter data report on student/employee transportation habits by Spring 2021.

Perform campus-wide building energy audits by June 2021.

Designate a staff member from Purchasing to coordinate sustainability efforts.

Survey students about interest in ridesharing and current shuttle program by Spring 2021.

Electrify campus heating and cooling by 2030.

Adopt a Sustainable Purchasing Policy based on the Model Policy Template written by the SPLC by Summer 2021.

Incentivize students to carpool to campus with discounted parking permits.

Develop a sustainability savings tracking dashboard by June 2021. Continually phase out nonessential, non-compostable, single-use disposable plastic items.

Deploy and distribute subscriptions to a ridesharing program by the Fall 2021 semester.

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.

Designate a member of the dining staff to coordinate sustainability efforts.

Use the Behavioral Playbook as a resource to inform decisions on incorporating more plant-based foods into campus dining options.

Collect and report annually food purchase amounts to the Cool food Pledge.

Continually commit to reducing single-use disposable products.

Develop a zero-waste task force of students, staff, and faculty by Fall 2021.

Eliminate non-essential, noncompostable, single-use disposable plastic and other material items that have readily accessible alternatives.

Align these strategies with goal #2 phases out non-essential, non-compostable, single-use disposable plastic and other material items.

Develop alternative systems on campus for reusing nondisposable products and expanding composting access. Infuse sustainability and biodiversity principles into all grounds management actions.

Develop a grounds management plan by Fall 2022.

Implement an Integrated Pest Management (IPM) Program.

Become a Tree Campus USA recognized institution every year by meeting its five standards.

Deploy and distribute subscriptions to a ridesharing program by the Fall 2021 semester.

Incorporate energy-efficient and biodiverse landscape design.



Sustainability in Planning & Administration

Highlights:

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

Key Benefits:

- Collaborative sustainability planning & decision-making
- Dedicated Sustainability Staff Member
- Revamped sustainability student internship







Restructure the President's Committee on Campus Sustainability (PCCS).

Encourage the PCCS to read through this report to evaluate recommendations, goals, and strategies.

Develop
interdepartmental
working groups for
various sustainability
initiatives for the
committee by the Spring
2021 semester.

Grow and enhance the sustainability student internship program to 3 students by the Fall 2021 semester.

Conduct an inventory of classes that are sustainability-focused or sustainability-inclusive by January 2021.

Conduct faculty workshops by department on integrating sustainable development goals into coursework.

Hire a dedicated full-time Sustainability Officer by Fall 2025.

Hire a part-time sustainability advisor by Fall 2022.

Continually evaluate performance and accomplishment of the part-time sustainability advisor.

Prepare a proposal for transitioning the position to full-time by Spring 2025.



Methodology

The four focus areas closely follow the four main credit categories of the AASHE STARS rating system.

The STARS Benchmarking tool compares the sustainability achievements of reporting schools. The recommendations included in the 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.





































Benchmarking

Benchmarking sustainability performance is useful for understanding how Ramapo's efforts compare to those of peer institutions.

College	STARS Rating	State	Total Students (#)	Campus Size (acres)	Region	Snowfall (in)	Cost of living Index
Ramapo	No Rating	ИЛ	6,110	300	Rural/ Suburban	26	140.8
SUNY- Cortland	Gold	NY	6,913	798	Suburban	83	76.5
Raritan Valley Community College	Silver	2	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}

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/

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 AVERAGE PRACTICES- Minimal Areas for Improvement 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 dataloggers - 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		



SMP Constraints

- The Incidence of COVID-19 disrupted the planning of the process
- Getting the Administration on board was a heavy lift
- We were only able to meet with the Administration team the one time
- We were only able to meet with the President's Committee on Campus Sustainability (PCCS)
 the one time
- We were only able to meet with the Student Sustainability Cohort the one time



Future Plans & Opportunities

- Present the SMP for the members of the Ramapo's PCCS
- PCCS will review, analyze, and breakdown the contents of the SMP
- Consult with the PCCS to help move the implementation of the SMP forward





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Questions?