

Kean University's President's Sustainability Task Force





Our Mission

(written by Planning Committee)

The President's Sustainability Task Force supports and creates sustainability initiatives at Kean through four key areas of focus: Academics and Research, Planning, Operations, and Engagement.

The Task Force seeks to engage the campus community in sustainability initiatives for the benefit of the surrounding area and the planet. Sustainability efforts at Kean are supported by policies and planning designed to facilitate governance and transparency. At Kean, both formal education and meaningful campus experiences reflect our ongoing commitment to building a more sustainable future.

Over the last year, we organized our efforts 45 people – 4 subcommittees

Categories and Subcategories

STARS is organized into four main categories - Academics (AC), Engagement (EN), Operations (OP) and Planning & Administration (PA) - and an optional fifth category: Innovation & Leadership (IN). Each category contains two or more subcategories, which define specific sustainability impact areas. For example, the Academics category contains the Curriculum and Research subcategories.





Score	Recognition Level
85+	Platinum
65-84	Gold
45-64	Silver
25-44	Bronze
0-24	Reporter

Credits available: Academics

Subcategory	Credit Title	Points Available	Pts possible
Curriculum (up to 40 pts)	Academic courses	14	5.11
	Learning outcomes	8	5.51
	Undergrad program	3	3
	Graduate program	3	0
	Immersive experience	2	2
	Sustainability literacy assessment	4	1
	Incentives for developing courses	2	2
	Campus as a living laboratory	4	4
Research (up to 18 pts)	Research and scholarship	12	11.75
	Support for sustainability research	4	1
	Open access to research	2	1.33

Academics:

Curriculum and Research - Methods

Curriculum - Enormous work compiling every course that was offered over the past 3 years at all Kean locations.

Methodology:

1. The AC team requested a complete section list from the Registrar courses for the reporting interval which came to 31,188 sections.
2. The team realized that there were often multiple sections of the same course and requested a single entry listing of any unique course offered during the interval which brought the total down to 2877.
3. The final tally included 1855 undergraduate sections and 1022 graduate sections to review.
4. The final course lists were divided by College and program for review by the corresponding school/department.

Academics:

Curriculum and Research - Methods

Research-

1. The AC Research team (**El-Rayes, Cardoza, and Marjerison**) reached out to the Office of Research and Sponsored Programs (ORSP) to obtain reliable faculty data.
2. The team then contacted department heads (Executive Directors, and Chairs) to complete a landscape analysis of faculty publishing in sustainability related research.
3. After gathering the publishing data (author, title, journal info, abstract,etc.), the team reviewed the collected data to verify sustainability related research.
4. The team had to sort through multiple faculty entries and arrive at the total number of faculty publishing sustainability research during the reporting interval.

Academics:

Curriculum and Research - Findings

1. 1,855 total undergraduate courses - 20 Sustainability-Focused Courses and 117 Sustainability Inclusive Courses = **8.6% of undergraduate courses**
2. Because Kean's GE SLOs include Diversity, Active Citizenship and Ethical Judgement and Integrity, **4,331.0 out of 9,872.0 graduate with an understanding of sustainability**
3. 8 out of 32 academic departments offered sustainability (focused or inclusive) courses equalling **25%**.
4. Conducted a Campuswide Sustainability Assessment.
5. **74 faculty** across all locations have been or are engaged in sustainability research.
6. **23 out of 32 departments** have faculty that are engaged in sustainability research.

Academics – Ways to Improve

1. Make sure that new and updated courses have specific wording relating to sustainability when applicable and require transmittal forms to contain a box for sustainability-inclusivity.
2. Utilize new logo for Research Days - and designating connections to SDGs
3. Consider Sustainability designation in catalog listings.
4. Data review in this area is fairly labor intensive; need to consider catalog review hours.
5. After careful review and in adherence to AASHE guidelines, certain courses such as general independent study and practicum focused courses could have been eliminated from the review total.
6. Need for some refresher/update on the evolving and expanding definition of sustainability to the university community.
7. At a minimum, offer sustainability units in GE1000 and GE 3000 as either of these courses must be taken by every Kean student, regardless of entry type, and at every location.
8. Encourage more sustainability related multidisciplinary academic programming such as the CBPM ESG panel discussion with industry experts.

Academics – Ways to Improve

9. Promote the sustainability science minor to an expanded student audience.
10. Consider conducting a feasibility study on a graduate degree in sustainability
11. The data suggests a high level of sustainability related research occurring in academic disciplines, however not necessarily across disciplines - answer should foster research collaboration.



Engagement

Subcategory	Credit Title	Points Available	
Campus Engagement (up to 21 pts)	Student educators program	4	2.49
	Student orientation	2	2
	Student life	2	1.75
	Outreach materials and publications	2	1.60
	Outreach campaign	4	4
	Assessing sustainability culture	1	.50
	Employee educators program	3	0
Public Engagement (up to 20 pts)	Employee orientation	1	0
	Staff Prof. Devel. And Training	2	0
	Community partnerships	3	3
	Inter-Campus collaboration	3	3
	Continuing education	5	0
	Community service	5	.24
	Participation in public policy	2	2

Engagement – Methods

- The Engagement Subcommittee divided themselves into smaller subgroups to examine Kean's campus engagement and public engagement initiatives.
- Members of our subcommittee included full-time faculty, adjunct instructors, professional staff, current Kean students (including LEAP scholars), and EngageNJ AmeriCorps VISTAS.
- The subcommittee took active steps to locate and incorporate data from as many departments on campus as possible.
- The Engagement Subcommittee helped launch the Sustainability Assessment Survey, which encouraged outreach across multiple academic and administrative units, including our Kean Skylands campus.
- University Relations assisted with the creation of the Sustainability Task Force [webpage](#).

Engagement – Main Findings

- The Engagement Subcommittee's major findings included:

1. The sustainability assessment survey suggests that Kean University students are in line with or above national, state, and county level data presented by the Yale Program on Climate Change. The data and additional data collected through the survey suggest that Kean students are literate about climate change and are interested in the University taking a more significant role in climate change awareness and action.
2. Two examples of on-campus developments included the Environmental Alliance, previously the Earth Science Club, who organized Earth Week events such as presentations, clean-ups, and field trips for students. In addition, Kean's College of Business and Public Management held a panel discussion on the role of business in addressing climate change.
3. Our community partnerships continue to be a steadfast avenue for sustainability and hands-on participation. Examples include the John S. Watson Institute for Urban Policy and Research, Groundwork Elizabeth, NJ Clean Communities, and more.

John S. Watson Institute for Urban Policy and Research



NJ Clean Communities



Engagement – Ways to Improve

- The Engagement Subcommittee found that our employee orientation and education programs did not explicitly include sustainability goals or materials, thus not earning any points for these categories. The same was found for staff professional development opportunities.
- One way to improve in these areas is to work with our on and off campus partners to actively include sustainability goals in our programs and ensure they becomes a natural focus for all current and future employees.
- The subcommittee plans to work with the new Division of General Education and Interdisciplinary Studies, New Student Orientation, and other departments with student education programming to incorporate additional sustainability certainied options.
- The subcommittee fostered inter-departmental collaboration among staff, faculty, and students that provided additional avenues for sustainability focused endeavours and potential partnerships in line with the University's Strategic Goals.

Research Days 2023

- We were able to engage 8 student researchers outside of the Engagement Subcommittee, all of which participated in Research Days 2023.

Why Kean University's Sustainability Work is Important

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Introduction

In 2022, Kean University launched the President's Task Force for Sustainability. This research was conducted as part of a Fall 2022 LEAP Internship. Our goal was to assist the Engagement Subcommittee of the Sustainability Task Force in compiling data toward Kean's submission for AASHE STARS recognition.

The application of sustainability as a whole is a fundamental factor in any community. We recognize Kean University and its co-curricular program and initiatives that contribute to faculty and staff participation in sustainability and students learning about sustainability in class materials and outside of the physical classroom. These programs and initiatives engage students by integrating sustainability into their lives, experiential learning experiences, and campus culture.

Results

- Kean's Environmental Alliance, formerly known as the Earth Science club, serves all majors, faculty/staff, and alumni. One of their main goals is sustainability at Kean University and the surrounding community. The Environmental Alliance "promotes social, professional, and educational activities, opportunities, and partnerships."
- The Diversity Council, through their annual High School Leadership Conference, presented to more than 500 NJ students on the theme "Speak Your Truth."
- Kean offers multiple classes related to sustainability and the environment. Most of them fall under the School of Environmental and Sustainability Sciences. Students also have the opportunity to conduct research on sustainability related topics. These include Research Days submissions, field trips to clean rivers, litter picks, and habitat explorations.

Methods and Materials

- Active student groups focused on sustainability known as the Environmental Alliance.
- Programs by which students can learn sustainable life skills: <https://www.jagins.com/environments/education/environments-environmental-internship-the-club>
- Created by Daniela Ford and the University Leadership team, the President's Task Force for Sustainability website is available for students, staff, and faculty to stay up-to-date on Kean's sustainability efforts.
- The Diversity Council on Global Education and Citizenship focused on Goal 10 (Reduce Inequality) of the United Nations 17 Sustainable Development Goals.

References

- United Nations. 17 Sustainable Development Goals
- <https://www.kean.edu/president-sustainability-task-force>
- <https://www.campanile.com/inspire/organization-to-innovate-sustainability>
- <https://www.jagins.com/environments/education/environments-environmental-internship-the-club>
- <https://www.kean.edu/files/leadership-environmental-center-teacher-training-kean-university-global-education-and-citizenship>






Working with Kean's Sustainability Task Force on achieving AASHE STARS ratings for Campus Engagement on Sustainability

Loki Curtis, Kristen Conlan, Essence Gandy, Malik Gray, Carl Johnson | Dr. Daniela Shebitz

Introduction

This senior capstone project is to outline the efforts involved with assisting the Kean University Sustainability Task Force in achieving a Bronze or higher rating from the Association for the Advancement of Sustainability in Higher Education (AASHE) Sustainability Tracking, Assessment & Rating System (STARS) initiative. The AASHE STARS initiative is a fully self-reporting tool colleges and universities use to gain insight on current sustainability efforts being made on college campuses. The reporting and collection data on several topics such as Academics, Engagement, Operations, Planning & Administration, and Innovation & Leadership. In collaboration with the Kean University Sustainability Task Force, we prepared for the 10th year cycle.

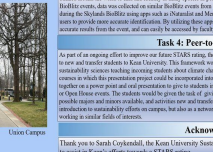
Task 1: Collecting data on existing requirements for the AASHE STARS submission for Engagement (EN) section 2: Student Orientation, 3: Student Life, 4: Green Sustainability Culture, 5: Best Campus Collaborations, and 11: Community Service.

Task 2: Creation of a campus wide survey based on the Yale Climate Survey created at Yale.

Task 3: Interviewing & facilitating a BioBlitz event at the Kean Skyland Campus.

Task 4: Creation of Interview for a Peer-to-Peer presentation for Kean University's Transition to Green (T2G) and GEI 3000 courses.





Task 1: Data Collection for AASHE STARS

The team's main focus was to compile existing information for the Kean University Sustainability Task Force for Engagement (EN) sections 2, 3, 4, 5, and 11. After reviewing requirements from AASHE STARS, our team conducted research on existing programs and completed information about Kean University's sustainability efforts that the Sustainability Task Force may have already stored, wanted to confirm, or did not have enough information on at the time. Using the checklist from the STARS reporting tool, we gathered all possible information for the EN sections assigned. These sections included questions involving student life, assessing sustainability knowledge and culture, campus collaborations, and student orientation. These completed our team would complete questions on the STARS reporting tool and add details of Kean University's programs and initiatives by the time the data is collected.

Task 2: Campus wide Survey

Our team created a campus wide distributed survey by Questionnaire based on the Yale Climate Survey. The assessments survey various sustainability culture across campus amongst the students at Kean University. The questions all focus on how individuals perceive issues surrounding sustainability and climate change. This is a survey from many students before climate change is occurring, when they think it will happen, if they have been harmed personally, what policies they might support or oppose they believe should fight climate change and how much they expect their sustainability focused goals. Distributed before a spring break period, when first students close the task force asked, then those surrounding them, that proximity in the buildings we frequent, allowing QR code generated by the team. Challenges to this task were both were in survey acceptance and survey completion. Possible solutions could involve future surveys being faculty or staff or 10 minutes of a specific class to distribute the survey amongst their students and have faculty acknowledge completion from each student.

Task 3: Facilitating a BioBlitz at Skyland Campus

For community engagement, we went out and set up by having a BioBlitz event at the Skyland campus. BioBlitz events are related around the world to find and identify as many species as possible in a given location over a short period of time. To improve past BioBlitz events, data was collected on similar BioBlitz events from different areas, making sure ways to record the specific species found, along the Skyland BioBlitz using apps such as iNaturalist and Merlin Bird ID. Both apps allow download of collected photographs taken by users to provide more accurate distribution. By utilizing these apps, it would increase biodiversity, facilitate design, and more accurate results from the event, and can be used by faculty conducting research on specific species.

Task 4: Peer-to-Peer Presentations

As part of an ongoing effort to improve our STARS rating, we were asked to develop a framework for a Peer-to-Peer presentation to new and transfer students at Kean University. This framework would involve student and senior students regarding environmental or sustainability resources teaching incoming students about climate change and sustainability. The team collected several 2000 and 4000 level courses in which this presentation project could be incorporated into for a potential grade. Students would be broken up into teams and work together on a seven-point and end presentation to give students in Kean's General Education GEI 3000 courses. New Student Orientation, Open House events. The students would be given the task of giving presentations on sustainability and environmental efforts at Kean, possible resources and career possibilities, and activities new and transfer students can become involved in. The project would serve as an introduction to sustainability efforts on campus, but also as a networking event for new and transfer students to connect with fellow students working in similar fields of interest.

Acknowledgments

Thank you to Sarah Coykendall, the Kean University Sustainability task force, and Dr. Daniela Shebitz for the opportunity to assist in Kean's efforts towards a STARS rating.



Operations

Subcategory	Credit Title	Points Available	
Air and Climate (up to 11 pts)	Emissions inventory and disclosure	3	0.33
	Greenhouse gas emissions	8	0
Buildings (up to 8pts)	Building design and construction	3	0
	Building operations and maintenance	5	0
Energy (up to 10 pts)	Building energy efficiency	6	0
	Clean and renewable energy	4	0
Food and dining (up to 8 pts)	Food and beverage purchasing	6	0
	Sustainable dining	2	1.8
Grounds (up to 4 pts)	Landscape management	2	0
	Biodiversity	1-2	2
Purchasing (up to 6 pts)	Sustainable procurement	3	.75
	Electronics purchasing	1	0
	Cleaning and janitorial purchasing	1	0
	Office paper purchasing	1	0

Operations, Cont.

Subcategory	Credit Title	Points Available	
Transportation (up to 7 pts)	Campus fleet	1	0.43
	Commute modal split	5	0
	Support for sustainable transportation	1	0.60
Waste (up to 10 pts)	Waste minimization and diversion	8	0
	Construction and demolition waste diversion	1	0
	Hazardous waste management	1	1
Water (up to 8 pts)	Water use	4-6	0.76
	Rainwater management	2	0.50

OP-17 Support for Sustainable Transportation

Or, even better, eliminate the commute!

- Most employees work remotely from home one day per week, lessening traffic and pollution.
- Kean observes a 4-day workweek during the summer. Many employees are still able to WFH one day a week during the summer..
- The on-campus transportation will now include electric buses.
- Installed EV charging stations provide Kean community members 4 free hours of charging time daily.
- There are both train and bus options adjacent to campus with discounts offered to students.



OP-20 Hazard Waste Management

- Labs have moved to micro-scale experiments, creating less waste.
- The used electronics program focuses on reuse and donation of working electronics. Disposal with a certified recycler is a last resort.
- EHS maintains a robust program for waste identification, collection, classification, and appropriate disposal.



OP-22 Rainwater Management

- Kean complies with the NJDEP regulations for stormwater management.
- New construction includes rainwater management systems that filter debris and slow the flow going into the creek and the Elizabeth River.
 - Stormwater detention basins are under the parking lots at NAAB, LHAC, STEM, New Upper, the East Campus lower lot, and East Campus Faculty Housing.
- There are also stormwater systems to filter water and/or allow it to be absorbed into the soil, becoming groundwater:
 - Above ground bioretention basins at GLAB, Thomas Court Faculty Housing
 - Pervious pavement used for the electric bus parking lot and the overflow lot at East Campus.
- Lastly, green roofs at STEM, LHAC, and Hynes clean the rainwater and slow its release to the stormwater system.

Operations – Ways to Improve

- EHS and FCP are looking for ways to improve the rainwater management systems in the older portions of campus.
- Install more EV charging stations.

OP21 – Methods – Evaluation of Water Usage

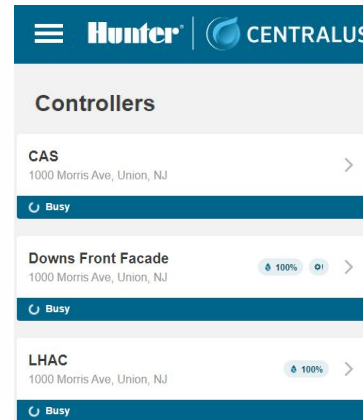
- All Utility bills were thoroughly evaluated to understand usage and consumption.
- Buildings and mechanical systems were then evaluated to identify any areas with potential leaks or excessive use.
- Large water leaks were found and repaired in 5 of our 31 irrigation systems and in our building mechanical systems in the Residential Life buildings along with the cooling tower at CAS.

OP21: Findings – Water Use

- Water usage varied dramatically between summer and winter months.
- As we were evaluating the systems we discovered that it was extremely difficult and inefficient to adjust the watering schedules across the entire campus in 31 different areas.
- Water Usage not only affects our costs for water, but sewer bills are directly tied to amount of water consumed.

OP21- Water Use – Ways to Improve

- We contracted a feasibility study to consider digging our own wells to avoid purchasing water. Unfortunately the infrastructure needed to reach the entire campus was extremely cost prohibitive.
- In the summer of 2023 we purchased and installed 31 new irrigation controllers for our watering systems. The new controllers allow us to monitor and adjust schedules remotely. We are able to measure specifically how much water is distributed to different areas. The platform also ties into weather and automatically makes adjustments as needed. This gives us the ability to lower or skip watering based on rain received or increase usage based on evapotranspiration rates and other factors.



Planning and Administration

	Credit Title	Points Available	
Coordination and planning (up to 9 pts)	Sustainability coordination	1	1
	Sustainability planning	4	1.50
	Inclusive and participatory governance	3	1.38
Diversity and Affordability (up to 10 pts)	Reporting assurance	1	0
	Diversity and equity coordination	2	1.78
	Assessing diversity and equity	1	1
	Support for underrepresented groups	3	2.50
	Affordability and access	4	2.57
Investment and Finance (up to 7 pts)	Committee on investor responsibility	2	0
	Sustainable investment	3-5	0
	Investment disclosure	1	0

Planning and Administration, cont.

Subcategory	Credit Title	Points Available	
Wellbeing and Work (up to 7 pts)	Employee compensation	3	1.19
	Assessing employee satisfaction	1	1
	Wellness programs	1	0.75
	Workplace health and safety	2	1.39



KEAN
wellness
center

Uwill

Student Mental Health & Wellness



Planning and Administration – Methods

1. Coordination & Planning:

- a. Crafted mission statement for task force
- b. Established comprehensive member list for effective coordination

2. Diversity & Affordability:

- a. Reviewed programs for diversity, equity, and support for underrepresented groups
- b. Data collection on low-income students, financial need met and student loan debt

3. Investment & Finance:

- a. Researched existing sustainable investments and opportunities
- b. Explored Committee on Investor Responsibility feasibility

4. Wellbeing & Work:

- a. Conducted a living wage assessment
- b. Gathered wellness program information for staff and students

Planning and Administration – Main Findings

1. Strengths:

- a. Incorporating DEI in the academic curriculum
- b. Conducting DEI assessments via Campus Climate Survey
- c. Actively recruiting students, faculty, and staff from underrepresented groups
- d. Implementing robust wellness programs

2. Weaknesses:

- a. Strategic Plan considered a "minor theme"
- b. Lack of formal published plans in various sustainability areas
- c. Struggling to meet living wage requirements
- d. Financial support for low-income students
- e. Absence of a strategic health and safety risk management system

3. Limitations:

- a. Limited control over representation of stakeholders on the board of trustees
- b. Challenges in mandating DEI training for faculty and staff
- c. Lack of opportunities for further financial investments in socially responsible funds

Planning and Administration – Ways to Improve

1. **Establish a Sustainability Office/Officer** - Centralize sustainability efforts
2. **Publish Plans with Measurable Objectives** - Track progress and accountability
3. **Create a Campus-Community Council** - Give external stakeholders a voice
4. **Support Program for Underrepresented Staff** - Foster inclusivity and diversity
5. **Increase Institutional Need-Based Aid**
 - a. Raise graduation rates of low-Income Students
 - b. Boost graduation rate without loan debt
 - c. Increase the percentage of need met for aid recipients
6. **Meet Minimum Living Wage Requirements** - Elevate wages for Academic Specialists
7. **Prohibit Tobacco Use Across Campus** - Ensure a healthier campus environment
8. **Implement Occupational Health and Safety Management System** - Enhance workplace safety and standards

Campus Sustainability Assessment:

Led by Karen Woodruff

Goal: To seek to understand the current level of knowledge, beliefs and behaviors of students at Kean to inform the path forward.

Undergraduate students

- 93.9% state residents educated in state K-12 schools
- 46% percent of students are first-generation college students
- Kean is designated as a Hispanic Serving Institution

This study included 5.5% of undergraduate population at Kean.

525 students consented to participate



METHODOLOGY

Survey

- Yale Program on Climate Change Communication (Howe et al, 2015; Leiserowitz et al., 2022)
- We added additional questions about the Kean community
- Four parts
 - **Global Warming Beliefs**
 - Risk Perceptions
 - **Behaviors**
 - **Kean University**
- Invited faculty involved with teaching Research and Tech and members of the Sustainability Task Force to share with classes
- Students in Sustainability Practicum recruited participants at the Miron Student Center.

KEAN UNIVERSITY

	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree
I learned about climate change in my coursework at Kean University.	30.77%	30.27%	17.62%	21.34%
I believe that Kean University is preparing me to be a climate literate citizen.	24.81%	39.45%	23.57%	12.16%
Kean University is involved in climate change studies and sustainability studies in New Jersey.	32.24%	48.61%	13.60%	5.54%
Kean University should pay more attention to sustainability and climate change issues.	43.00%	45.04%	7.89%	4.07%
My education in high school provided me with a strong understanding of climate change and sustainability.	24.14%	32.02%	29.56%	14.29%
It is important for high schools to provide students with evidence for climate change and facts about sustainability.	65.67%	25.37%	6.22%	2.74%

NEXT STEPS

Gather Feedback from:

- You (Sust Task Force)
- President Repollet
- Entire university
- Resubmit to Rutgers for Review
- Submit to AASHE
- Focus our energy and efforts on improvement



Some steps being taken:

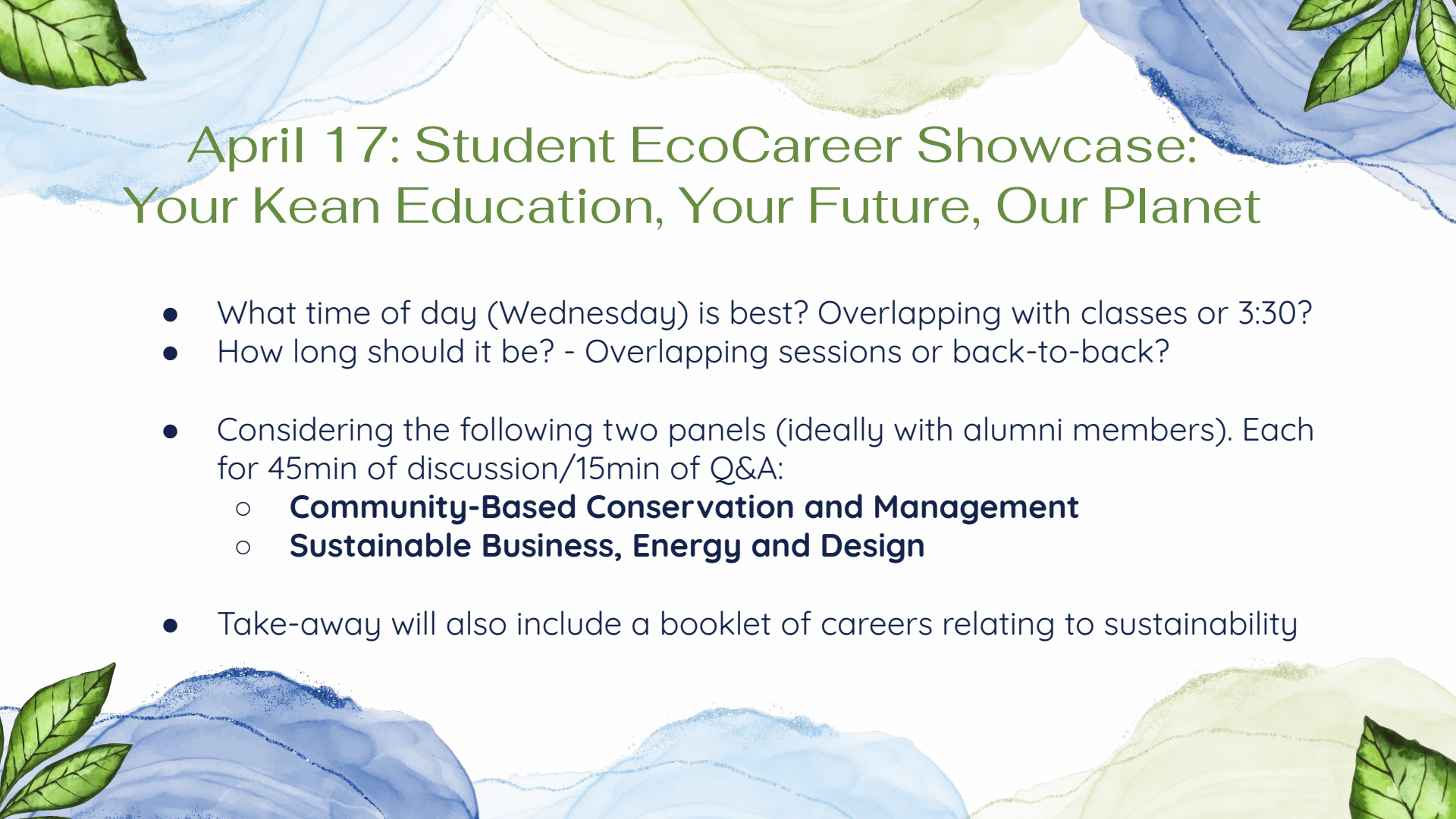
Engagement and Academic Subcommittees

- Integrate environmental awareness and sustainability into the **General Education curriculum.**

Collaborate on Spring events -

- April 17 - Eco Careers Professional in Sustainability Careers
- April 18 - River Cleanup
- April 19 - Climate Change Education Workshop
- April 22-24 - Research Days - With Kean-Green Cert.





April 17: Student EcoCareer Showcase: Your Kean Education, Your Future, Our Planet

- What time of day (Wednesday) is best? Overlapping with classes or 3:30?
- How long should it be? - Overlapping sessions or back-to-back?
- Considering the following two panels (ideally with alumni members). Each for 45min of discussion/15min of Q&A:
 - **Community-Based Conservation and Management**
 - **Sustainable Business, Energy and Design**
- Take-away will also include a booklet of careers relating to sustainability

April 18: 10:30-1:00

Elizabeth River Clean-up



April 19th: Teacher Education Workshop

Goal: Serve as a resource for K-12 teachers on how to incorporate climate change into classes according to the state mandate

- | | |
|------------|---|
| 8:30 | Registration and coffee |
| 9:00-9:20 | Welcome |
| 9:20-10:30 | Sarah Sterling-Laldee, Senior Climate Change Education Advisor, Keynote |
| 10:45 | Panel SubjectToClimate - mentor/mentee - Subject and grade level diversity |
| 12:00 | Lunch |
| 1:00-3:00 | Breakout rooms - By subject area (and a K-5 bucket) <ul style="list-style-type: none">• Primarily discussion• Resources - Leaders will demonstrate how they came up with the framework for their lesson plans that align with climate change standards and help attendees develop their own ideas. |

Needs: Look for partners/sponsors: proposal sent to Atlantic Shores, also spoke with SubjectToClimate promote to teachers (through NJDEP, connections),

Let's open it up to you for feedback

- Suggestions for STARS Report
- Suggestions for Sustainability Initiatives on Campus

Note: with the announcement of our draft report, we will also be sending out a call for new members.

