



University of Richmond
Sustainability Plan
2019-2025



Letter from the President

Our ability to thrive as a community and endure as an institution of higher education rests upon a shared commitment to act as responsible stewards of our resources. The unprecedented challenges of changing environmental, social, and political conditions require equally creative approaches to generating solutions. In University of Richmond's Strategic Plan, *Forging Our Future, Building from Strength*, we committed to adopting practices that will make us leaders in sustaining our environmental, human, and social resources. Our first Sustainability Plan, which lays out an ambitious set of goals and strategies, articulates how we will get there.

This plan comes at a time of increasing momentum for sustainability at the University. In 2018, we announced our commitment to become the first institution of higher education in the southeast to match 100% of its electricity needs with solar energy. This follows the 2016 installation of an on-site solar array on the Weinstein Center for Recreation, the result of a first-of-its-kind power purchase agreement in Virginia. Over the past few years, dozens of students, staff, and faculty have been engaged in a project to restore land on the southern portion of campus. Their efforts have informed the creation of the Gambles Mill Eco-corridor, a project that will steward the James River, improve connection to the city, and provide more recreational opportunities. Perhaps most critically, student learning has been central in each of these efforts.

The University of Richmond Sustainability Plan represents a transformative step toward a more sustainable future – on campus and beyond. By working toward the goals in this plan, we

will continue to develop a living laboratory for sustainability in which our teaching and research informs campus operations and further supports community relationships, equipping our students with the ability to address pressing real-world problems when they graduate.

I would like to express my gratitude to the many students, staff, faculty, and community members who contributed to the Sustainability Plan, and to Rob Andrejewski, Director of Sustainability, for his extraordinary leadership during the plan development process. To successfully weave sustainability into the fabric of the University, we all must take part. The plan calls upon each of us to take an active role in the creation of a campus that supports the well-being of both people and the natural world. If the collaboration demonstrated during the creation of the plan is any indication, we are well positioned to heed that call.

President Ronald A. Crutcher





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Connection to the Strategic Plan

In 2017, the University of Richmond created *Forging our Future, Building from Strength*, a strategic plan that provides direction, inspiration, and an invitation to co-create a bold future together. Under the pillar of Stewardship in a Changing World, the plan mandated the creation of UR's first Sustainability Plan with an initiative to, "Complete and implement a Sustainability Strategic Plan to further weave responsible environmental stewardship into the fabric of the University."

This poetic statement captured the University value of Responsible Stewardship and reflected the community's call for a renewed focus on sustainability. Over the past year, members of the University community have come together to contemplate and articulate the actions we will take to integrate sustainability into our endeavors. The goals, strategies, and actions outlined in this document aim to strengthen existing sustainability efforts and pioneer new practices throughout the operational, academic, and administrative areas of the University.

While most easily linked to Stewardship in a Changing World, the Sustainability Plan seeks to address, directly or indirectly, objectives related to all of the goal areas in the UR Strategic Plan. Incorporating sustainability into the core functions of the University means leveraging disciplinary strength to address the world's problems, innovating in outreach, developing high-impact educational experiences, increasing opportunities for alumni engagement, and caring for our most precious resources now and into the future. The aim of this plan is to chart a course that will advance UR's mission and strengthen our ability to transform learners into leaders capable of navigating the challenges of our time.



“Complete and implement a Sustainability Strategic Plan to further weave responsible environmental stewardship into the fabric of the University.”

-University of Richmond Strategic Plan

History of Sustainability at University of Richmond



Robert R. Merhige, Jr.
Center for Environmental
Studies established

1985

James M Ball Jr., in
cooperation with the
Virginia Outdoor
Foundation, established
a conservation easement
of 104 acres in
Goochland County for
University of Richmond
to use for educational
purposes.

1968



Environmental Studies
Program established

2000

Class of 1992
Environmental Awareness
Endowment established

1992

Weinstein Hall became
first LEED (Leadership in
Energy and Environmental
Design) Certified building
in Central Virginia

2004

President Ayers signs
Presidents' Climate
Commitment; Commitment to
(LEED) Silver or better for new
construction (part of ACUPCC);
RENEW student group founded

2007

1971

Student Beth Marschak
helped organize the
city of Richmond's first
Earth Day event

1997

First annual Big Yard Sale
held in partnership with the
Falls of the James Sierra
Club Group

2005

Earth Lodge (formerly
Outdoor House) Living
Learning Community created;
Dual degree programs with
Duke initiated

1991

Recycling
program begins



2003

Former President Cooper signs
Talloires Declaration; Provost
establishes Environmental
Awareness Group (EAG)

2008

RENEW began
partnership with UR
Sierra Club chapter;
Department of
Geography and the
Environment founded





Green Office Program started; USGBC chapter started

2011



205 kW solar array installed on roof of Weinstein Recreation & Wellness Center; University of Richmond Sustainability Advocates founded; Sustainability Internship Program established; Faculty Learning Community on Climate Change Education; UR signed the American Campuses Act on Climate Pledge

2015

2019-Gambles Mill Eco-Corridor construction and stream restoration of Little Westham Creek; First Sustainability Plan released

2019

Office for Sustainability established; Energy-use dashboard installed in dorms; UR became the 100th school to sign the Talloires Declaration on the Civic Roles and Social Responsibilities of Higher Education; RENEW becomes GreenUR; Inaugural greenhouse gas inventory conducted

2009

Awarded Silver rating on Sustainability, Tracking, and Assessment Rating System (STARS)

2013

Rethink Waste campaign launched, UR commits to 75% waste diversion by 2025; First RecycleMania basketball game; First Rethink Waste football game; Sus-Dane-Ability Challenge; SEAC Founded; UR joins We Are Still In

2017

Sustainability Working Group (SWG) founded; Community Garden started; URot campus composting project established; AASHE Student Diary; Climate Action Plan Completed

2010

Parking Lot Project created as part of Tucker Boatwright Festival; Environmental Justice Think Tank created

2014

Spider Solar off-campus PPA announced; Gambles Mill Eco-Corridor Faculty Think Tank formed

2018

River City Project created; Dual degree program with VCU started; solar pilot on University Forest Apartments; Earth lodge began clearing Gambles Mill trail; University stopped burning coal; UR begins purchasing green power

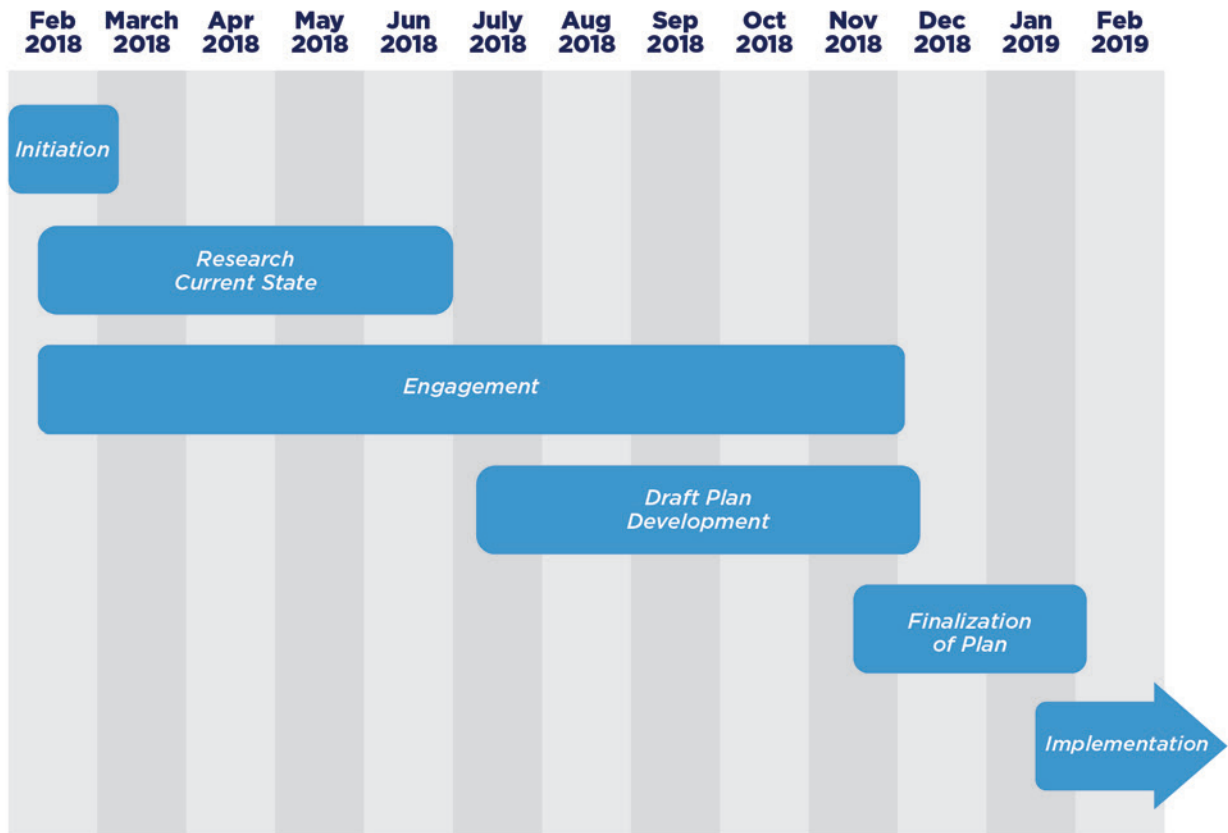
2012

Awarded Silver STARS rating for second time; first Rethink Waste Commitment

2016



Planning Timeline



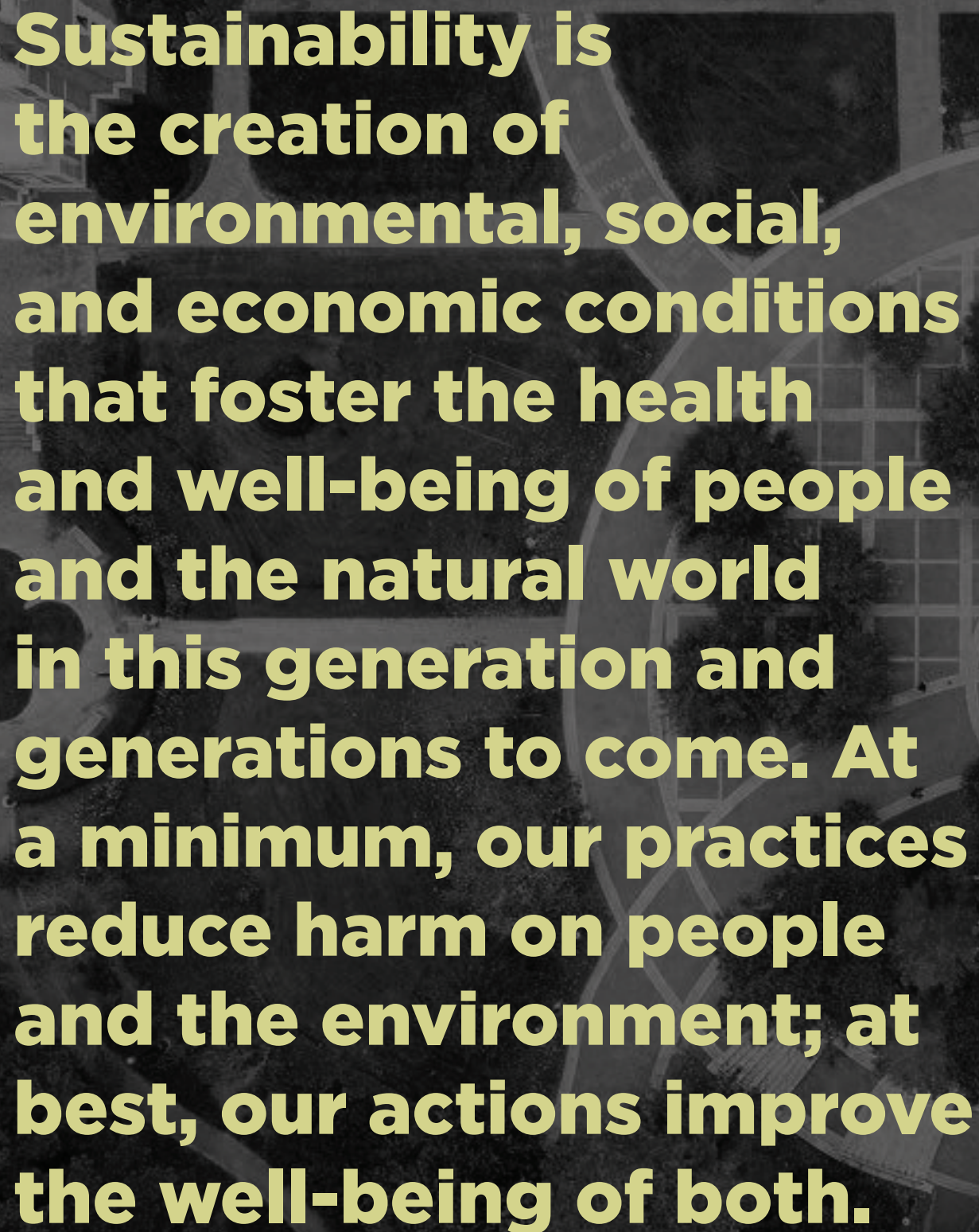
Levels of the Plan

Goal: A broad primary outcome

Strategy: An approach taken to achieve a goal

Action: A measurable step used to achieve a strategy

Photo: Students, faculty, and staff give feedback on a draft version of the Sustainability Plan at a Town Hall meeting

An aerial photograph of a university campus, featuring a prominent circular building with a grid-like facade and surrounding greenery. The image is darkened to serve as a background for the text.

Sustainability is the creation of environmental, social, and economic conditions that foster the health and well-being of people and the natural world in this generation and generations to come. At a minimum, our practices reduce harm on people and the environment; at best, our actions improve the well-being of both.

-University of Richmond



Engagement Process

University of Richmond's Sustainability Plan was built around a shared vision of weaving sustainability into the fabric of the University to steward our natural and human resources. In January of 2018, UR brought on integrated design firm SmithGroup and formed a Steering Committee to develop a sustainability plan aligned with the University's Strategic Plan.

The first step in this process was conducting a detailed analysis of the current state of sustainability at UR. This involved a thorough examination of past efforts, including review of the 2010 Climate Action Plan, 2011 Campus Master Plan, 2013 and 2016 STARS appraisals, and the 2017 Sustainability Report. University personnel were interviewed to discuss existing conditions, challenges, and near-term project plans, and utility data was examined. Findings from this process presented a clear picture of challenges and opportunities. The Office for Sustainability then summarized this information in sustainability "fact sheets" to make it accessible to planning committees and the broader University community.

In early spring, a robust stakeholder engagement process was initiated to develop a set of shared goals and strategies representative of the entire campus. The Steering Committee ensured that students, staff, faculty, and community members were involved in every stage of the plan's development. A campus-wide survey, intercept interviews, workshops, presentations, class research, and key-informant interviews comprised a half-year engagement process aimed at defining sustainability plan priorities.



Photo: Students in Earth Lodge brainstorm ideas for sustainability at the beginning of the planning process

Concurrent with this effort, the Sustainability and Environmental Awareness Committee (SEAC) developed working groups around the emerging focus areas of teaching, engagement, operations, and leadership. Based on current state research and stakeholder engagement outcomes, the working groups developed an initial list of goals and strategies. The Steering Committee utilized this work to create a preliminary draft plan. An iterative process of review, refinement, and consolidation followed, incorporating community input and narrowly-focused expert evaluation to generate successive drafts. These efforts culminated near-final draft for community consideration via a series of “roadshow” presentations, a town hall, and an online feedback form that reached more than 700 individuals.

The final plan was reviewed by the Sustainability and Environmental Awareness Committee and senior administrators. Final approval of the Sustainability Plan was signed by President Ronald Crutcher in early 2019.

Stages of Engagement





Goal 1

Integrate sustainability into a University of Richmond education.



Goal 2

Increase understanding of sustainability issues and provide resources and opportunities for individuals and groups to enact sustainable behaviors on campus.



Goal 3

Implement sustainable practices in campus operations and services that steward the natural world and support human well-being.



Goal 4

Identify and activate organizational systems, resources, partnerships, and processes that weave sustainability into the fabric of the University.



Goal 1

Integrate sustainability into a University of Richmond education.

Photo: During Summer 2018, students traveled with a class taught by Dr. Todd Lookingbill to study ecosystems in Australia's Outback and Great Barrier Reef

New ways of thinking and doing are required to develop solutions to the grand challenges that face humanity today, including climate change, food insecurity, water scarcity, poverty, and loss of biodiversity.

The study of sustainability navigates the intersections of society, environment, economy, and culture to explore the causes, consequences, and potential responses to these complex topics.

To adequately address such multifaceted concepts, diverse ways of knowing must be brought together, bridging academic fields and building interdisciplinary partnerships. Conflicting opinions on the right course of action augment the need for critical thinking and deep inquiry that define a Richmond education and offer students practice communicating across differences.

Educating for sustainability also presents an opportunity to further transform the University into a living laboratory. Drawing on the talents of students and expertise of faculty and staff, we can use the campus as a test site for innovation, providing students with real-world applications for sustainability theory that support the University's operational goals.

Integrating sustainability into a University of Richmond education means building upon the significant efforts already underway to ensure that all students have access to sustainability-related courses and research opportunities, thereby strengthening our ability to prepare students for “lives of purpose, thoughtful inquiry, and responsible leadership in a diverse world.”

“Our five schools and Liberal Arts College provide an ideal framework for students to assess the values, meanings, and cultures embedded in our global society while embracing the exploration and discovery necessary to encounter new understandings to inform a sustainable future.”

-David Salisbury, Associate Professor & Chair, Geography & the Environment

1.1 Increase the opportunity for University of Richmond students to engage in coursework focused on sustainability.

1.1.1 Across the five schools, support the efforts of faculty, staff, and students working to grow the number of courses that focus on a holistic concept of sustainability (including social, economic, and environmental dimensions) or examine an issue or topic using sustainability as a lens.

1.1.2 Provide support for faculty, staff, and students who seek to explore incorporation of sustainability into common learning experiences, including the general education curriculum.

1.1.3 Support the efforts of faculty, staff, and students who are exploring the development of a formal sustainability education program, including a minor in sustainability.

1.1.4 Investigate the establishment of an 's-designation' for sustainability courses to enhance the rigor of the sustainability course tracking system and increase the visibility of new and existing sustainability courses.

1.1.5 Develop UR-specific resources that outline and measure the sustainability knowledge, attributes, and skills a student is expected to demonstrate through completion of a sustainability-related course, program, or unit.

1.2 Support the integration of sustainability into co-curricular initiatives and high-impact educational practices, including first year experience, themed semesters, living learning communities, undergraduate research, study abroad, community-based learning, internships, and capstone courses.

1.2.1 Further develop a University of Richmond sustainability living lab program that connects coursework, research, and campus services and operations.

1.2.2 Partner with Living-Learning Programs, the Center for Civic Engagement, Study Abroad, Student Development, and other campus departments to increase awareness of and participation in sustainability-related immersive educational programs.

1.2.3 Partner with the Office of Alumni and Career Services and Academic Advising to increase the profile and number of sustainability-related career opportunities available to students, including job listings, internships, career fairs, and networking opportunities.



16

out of 30 departments taught sustainability courses in 2016.

2

sustainability-focused undergraduate degree programs, Geography and the Environment and Environmental Studies, were offered in 2018.



**46**

faculty were engaged in sustainability related research in 2016.

66%

of departments in 2016 included at least one faculty or staff member conducting sustainability research.

1.3 Strengthen connections and establish incentive structures to support scholarship and teaching across different academic programs and disciplines engaged in sustainability.

1.3.1 Provide resources to help faculty enhance their ability to develop academic initiatives and conduct research related to sustainability, especially across disciplines and in collaboration with others.

1.3.2 Support interdisciplinary scholarship and teaching on innovative topics that address global, systemic problems, including climate change, water scarcity, loss of biodiversity, and land use.

1.3.3 Provide professional development opportunities in sustainability education to assist faculty in all disciplines in creating or reworking sustainability courses and learning outcomes.

1.3.4 Appoint a sustainability faculty fellow to support sustainability research and the integration of sustainability into the curriculum.



Goal 2

Increase understanding of sustainability issues and provide resources and opportunities for individuals and groups to enact sustainable behaviors on campus.

Photo: During Summer 2018, visiting lecturer Jennifer Sevin's ecology course installed a pollinator garden on campus

Efforts to adopt behaviors that have a positive effect on campus, the community, and beyond have always been present at Richmond.

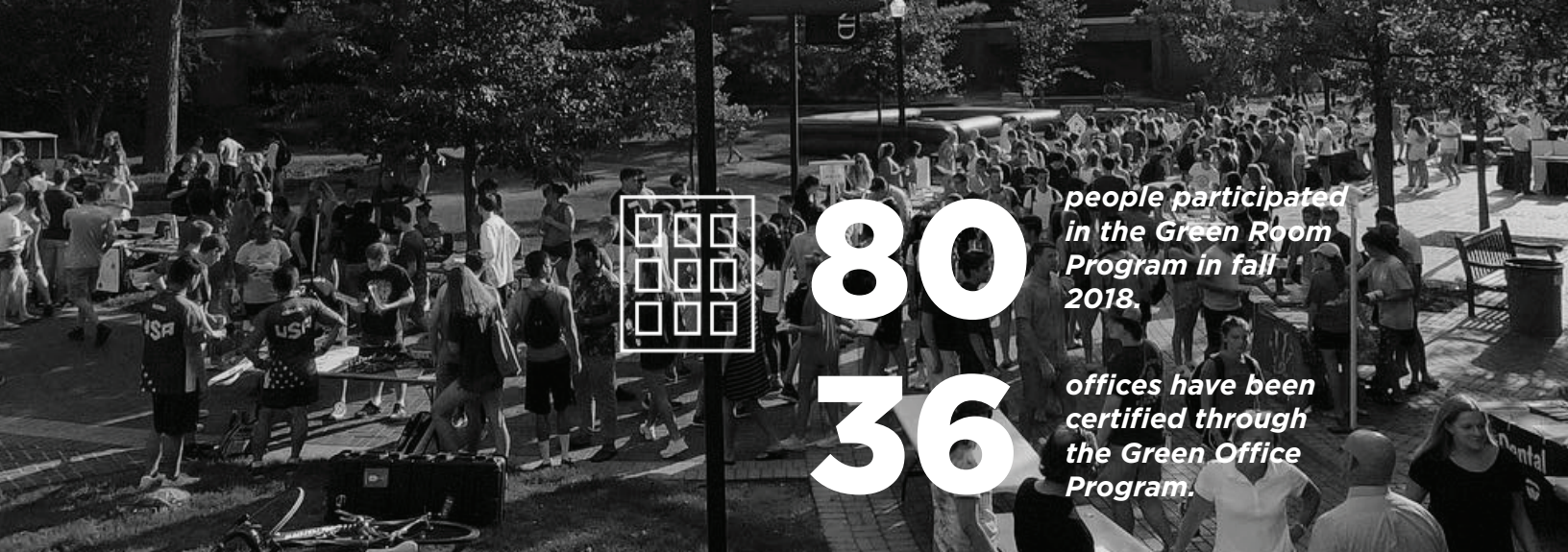
The strategic initiative to weave sustainability into the fabric of the University, however, calls for something deeper and more integral. It necessitates a culture of sustainability.

“The more I learn about sustainability, the more I think it’s all about people and the decisions we have to make throughout the day. We need to make doing the right thing easy, obvious, and just part of what we do.”

-Harleen Bal, '18

For sustainability to flourish, its profile must be raised. With inclusion in campus tours, orientation, and promotional materials, sustainability will become visible to each visitor, student, employee, and alumnus. Signage and educational displays in both official and informal settings will increase awareness and communicate the importance of sustainability in our operations, academics, and campus life. Teaming up with partners to co-host events and bring speakers to UR will introduce sustainability to new audiences and broaden understanding.

Moreover, this plan calls for making it easier to adopt sustainable behaviors. Barriers to implementing sustainable living and work practices will be navigated with adequate training and program development. Professional development opportunities in sustainability will engage employees and provide leadership opportunities for students while advancing institutional priorities. Collectively, these efforts to communicate, collaborate, and educate will make sustainability an essential part of the Spider experience.



2.1 Meaningfully feature sustainability in orientation and onboarding activities for all students, staff, and faculty.

2.1.1 Create the opportunity for all new UR students to participate in orientation activities and first-year experiences that prominently feature sustainability.

2.1.2 Add a formal, interactive component of new employee orientation that supports knowledge of and active engagement with sustainability initiatives at the University and department/office level.

2.2 Improve the visibility of sustainability on campus.

2.2.1 Design and promote a campus sustainability tour, both online and on campus, and explore incorporating sustainability into official UR campus tours.

2.2.2 Post prominent signage and educational displays that highlight campus environmental stewardship efforts.

2.2.3 Identify, recognize, and promote the work undertaken by sustainability experts and professionals on campus.

2.2.4 Develop cohesive sustainability-based marketing and branding efforts across campus in coordination with appropriate personnel.

2.3 Establish and promote training and education for students, staff, and faculty in environmental sustainability practices.

2.3.1 In partnership with appropriate personnel on campus, design online and in-person training programs on University sustainability initiatives and practices, including recycling, energy conservation, and sustainable purchasing.

2.3.2 Raise awareness of and increase participation in existing programs that promote personal sustainability (i.e., Green Office Program, Green Room Program, Be a Green Spider quizzes, etc.) and develop new resources that support environmentally responsible living and working.

2.3.3 Establish and train a cohort of employee and student sustainability peer educators to increase awareness and expand engagement across campus.

2.4 Design and execute a comprehensive menu of sustainability events, programs, and activities for student, staff, and faculty.

2.4.1 Create a directory of existing sustainability and sustainability-related programs, events, and initiatives offered across campus.

2.4.2 Work with partners on campus and in the community to generate and implement new programming ideas and activities that will increase understanding of sustainability and support the creation of a culture of sustainability.

2.4.3 Collaborate with existing speaker series organizers to bring sustainability thought leaders to campus and broaden the audience for sustainability topics.



5

Sustainability student groups are active on campus.

100+

sustainability-related events, trainings, or gatherings took place in 2017.

Photo: Faculty, staff, and students learn about sustainability on campus and brainstorm the future of sustainability at UR during a World Cafe



Goal 3

Implement sustainable practices in campus operations and services that steward the natural world and support human well-being.



***University of Richmond
has a long tradition of
sustainability in operations
and services.***

Among the beautiful green spaces and Collegiate Gothic architecture that characterize campus are 14 LEED-certified buildings, including the first in Central Virginia. Rethink Waste has forced us to reconsider procurement and materials management decisions in order to achieve a goal of diverting of 75% of our waste from the landfill. The 205-kW solar array on the Weinstein Center for Recreation was the first constructed in Virginia under a pilot program and serves as a site for applied learning in renewable energy.

The Sustainability Plan will build upon these demonstrations of stewardship in facility construction, energy conservation, dining services, transportation, landscape management, waste reduction, and more. These new actions and initiatives will promote practices that increase operational efficiency while simultaneously reducing stress on climate, food, and water systems. To do so calls for innovations in the design, maintenance, and management of our campus, creating valuable opportunities for collaboration with teaching and learning in a real-world context.

The Sustainability Plan value of gratitude is informed by the work of the many campus leaders

whose legacy efforts have laid a strong foundation of sustainable operations and services. We draw inspiration from them as we strive for new ways of being and doing that steward our environment and support the well-being of our campus and community.

**“University of
Richmond is committed
to environmental
sustainability and is
addressing the challenge
head-on, from education
to conservation,
purchasing policies to
land management.”**

UR Campus Master Plan

3.1 Implement resource-efficient and environmentally responsible design, construction, and operation practices in all campus building projects.

3.1.1 Provide energy and water metering on all building systems to track performance and report usage data.

3.1.2 Maintain a third-party green building rating system standard for new buildings (equivalent to LEED Silver equivalent or better) for all new buildings and major renovations.

3.1.3 Perform a cost-benefit analysis on the adoption of a third-party green building rating system for existing building renovations.

3.1.4 Explore the feasibility of constructing a net-zero energy building, which generates 100% of its energy on-site.

3.2 Update the 2010 Climate Action Plan with greenhouse gas reduction strategies that accelerate the achievement of carbon neutrality.

3.2.1 Match 100% of UR's electricity usage with procurement from renewable sources by 2021.

3.2.2 Conduct a solar feasibility study of campus and UR-owned properties to assess the potential to increase renewable energy production, including site selection, availability of energy, equipment specification, financial analysis, and risk assessment.

3.2.3 Implement and publicize energy policies that improve outdoor air quality and minimize pollutants from stationary and mobile sources.

3.2.4 Investigate best practices in carbon offsets and carbon sequestration, including utilization of University-owned lands.

3.2.5 Explore an internal carbon accounting model that would establish baseline measures and encourage building and department-specific reduction targets.

3.3 Reduce energy use intensity (energy per square foot per year) 40% below 2009 levels by 2025.

3.3.1 Implement an energy conservation management plan to identify, prioritize, implement, and track energy reduction and efficiency opportunities.

3.3.2 Establish an energy management system to guide and monitor energy usage and energy use intensity on campus.



Buildings, Climate & Energy

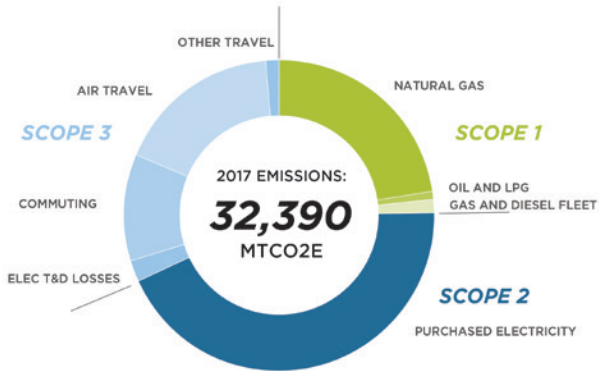
University of Richmond's Climate Commitment

University of Richmond committed to achieving carbon neutrality — avoiding, sequestering, or offsetting greenhouse gas (GHG) emissions — in 2007 under the President's Carbon Commitment. The 2010 Climate Action Plan (CAP) established the framework for reaching this goal by 2050. Along the way to carbon neutrality, the CAP set milestone targets of reducing GHG emissions 30% by 2020 and 65% by 2035. Advances in technology, improvements in the power transmission grid, and growing awareness that the window for effective response to climate change is closing faster than anticipated necessitate revisiting the trajectory of our GHG emission reductions.

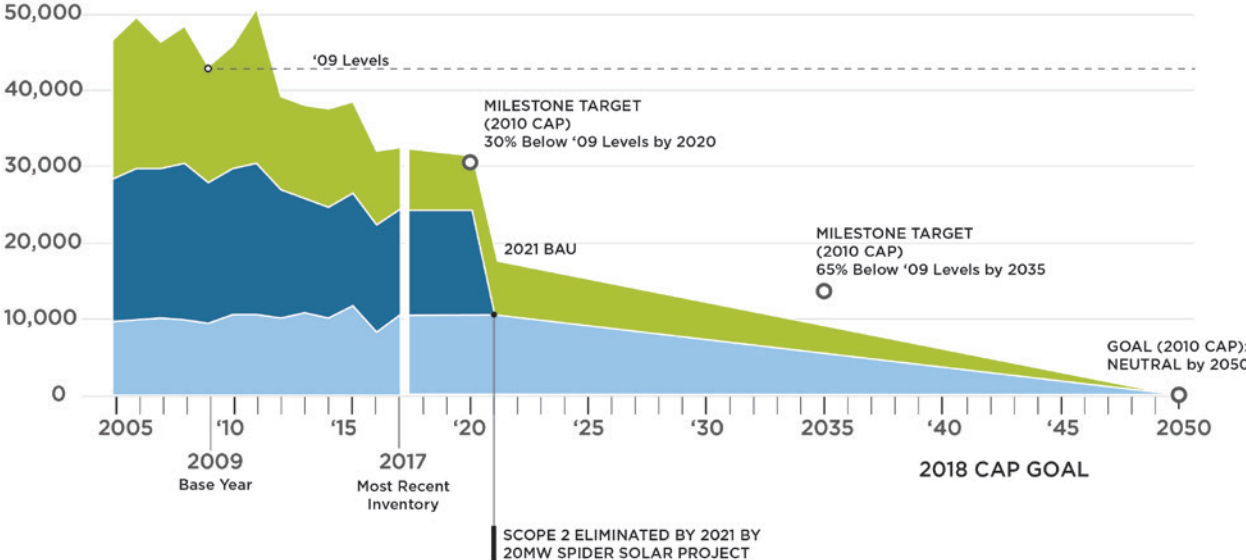
UR has positioned itself to accelerate the date of our carbon neutrality objective. In 2018, the University boldly committed to procuring renewable energy at a rate that will match the emissions from our purchased electricity. An energy conservation management plan that identifies, prioritizes, and tracks financial and environmental savings from energy efficiency projects will launch in 2019. Finally, opportunities to sequester carbon locally through urban forestry that will also reduce heat island effect and improve air quality are already being examined.

The graphs below show the University's 2017 emissions breakdown and our greenhouse gas emission reduction progress to date. During the Climate Action Plan update, we will formally re-examine the steps needed to reach carbon neutrality and determine whether a nearer-term deadline will galvanize our efforts to achieve this important goal.

2017 Emission Information



Greenhouse Gas Reduction Progress & Targets



A black and white photograph of a hand holding a fork over a plate of food. The food appears to be a salad or a mix of vegetables and proteins. The word "Dining" is overlaid in a large, bold, yellow font on the left side of the image.

Dining

3.4 Identify opportunities to increase procurement of sustainable food at the capacity needed for consistent, high quality meals.

3.4.1 In partnership with Dining Services, establish a food system working group comprising students, staff, and faculty to benchmark best practices in sustainable food procurement, increase collaboration across stakeholder groups, and publicize green dining efforts.

3.4.2 Track and assess sustainable food purchases annually based on the STARS and Real Food criteria (including local, community-based, organic, ecologically sound, humane, and fair).

3.4.3 Using STARS and Real Food criteria as a guide, establish UR-specific sustainable food procurement targets by 2020.

3.4.4 Implement a sustainable food plan aimed at achieving UR-specific sustainable food procurement targets by 2021.

3.4.5 Explore sustainable procurement guidelines for catering and off-campus food vendors.

3.5 Reduce food waste to the landfill by 50% by 2025.

3.5.1 Research best practices in food recovery, establish internal processes for both recovery and reuse, and develop partnerships to streamline and increase capacity for food donations.

3.5.2 Pilot back-of-the-house food composting collection in Retail Dining by 2020.

3.5.3 Compost all back-of-the-house and post-consumer food waste by 2025.



1,500

pounds of food were donated to a local food pantry in spring 2018.

3.6 Develop innovative funding mechanisms to support sustainable practices on campus.

3.6.1 Revisit the proposal and selection process of green revolving fund projects to accelerate implementation of strategies that reduce the University's environmental impact, provide a long-term economic return, and promote education and engagement of campus stakeholders.

3.6.2 Explore development of a green fund that provides small, competitive grants for the campus community to develop sustainability solutions.

3.6.3 Investigate the feasibility of adopting a revenue-neutral carbon charge on campus.

3.7 Enhance the University's ability to engage with the campus community on issues of responsible investing.

3.7.1 In partnership with Spider Management, explore the development of a committee on responsible investing aimed at increasing understanding of institutional investments and providing input on matters of importance to students, faculty, and staff.

3.7.2 Collaborate with other universities who have established responsible investment committees to benchmark best practices.

3.8 Increase the amount of environmentally and socially preferable purchases as a percentage of total goods purchased.

3.8.1 Explore the feasibility of setting internal sustainable purchasing standards and identifying how to implement data tracking measures.

3.8.2 Formalize and publicize sustainable procurement policies on purchased goods, including electronics (e.g., EPEAT), appliances (e.g., Energy Star), paper goods (e.g., Forest Stewardship Council), cleaning supplies (e.g., Green Seal).

3.8.3 Identify professional development opportunities in sustainable purchasing for Procurement personnel.

3.8.4 Research sustainable purchasing standards and available training for personnel who purchase goods on campus.

3.8.5 Examine best practices of total cost of ownership and total life-cycle cost implementation in purchasing and decision making.

3.9 Research and implement sustainability procurement standards for vendors.

3.9.1 Reinforce prioritization for working with women- and minority-owned enterprises.

3.9.2 Identify a process to certify that all Richmond trademarked apparel is produced under fair labor conditions.

3.9.3 Develop environmental standards and practice guidelines for major business partners.



Investment & Procurement

3.10 Design and maintain campus landscapes in a manner that supports ecological health, advances student learning, and promotes recreation.

3.10.1 Develop and implement a Sustainable Landscape Management Plan following guidelines from the Sustainable SITES initiative.

3.10.2 Alongside partners in Biology and Environmental Studies, generate UR biodiversity management and invasive species management plans for the Gambles Mill Eco-Corridor, Westhampton Lake, Westhampton Green, and other open spaces on campus.

3.10.3 Conduct an assessment to identify endangered or vulnerable species, environmentally sensitive areas on University land.

3.10.4 Explore the development and use of outdoor spaces on campus and along the James River to support education, wellness, recreation, and research, including open-air classrooms, gathering spaces, and field sites.

3.10.5 Research the appropriateness and availability of using battery-powered landscape equipment on campus.

3.11 Manage campus lands to steward the James River watershed, increase water capture, and reduce stormwater impacts.

3.11.1 Create a watershed management plan centered on restoring the ecological function, aesthetic beauty, educational capacity, and recreational function of Westhampton Lake, and implement best management practices to increase groundwater recharge and reduce nutrient and sediment flow to the James River.

3.11.2 Explore use of Westhampton Lake as a source of on-campus irrigation.

3.11.3 Restore Little Westham Creek and implement best management practices to improve stormwater management in the Eco-Corridor.

3.11.4 Increase use of low-water landscape features and install rain catchment systems and cisterns in areas where irrigation is desired.

3.11.5 Assess the ratio of hardscape (paved, wood, or stone surfaces) to softscape (living objects in the landscape) to inform need for permeable paving surfaces.

3.12 Reduce potable water usage 50% below 2010 levels by 2025.

3.12.1 Investigate and utilize on-site technologies for water reclamation and reuse for utility and landscape purposes.

3.12.2 Sub-meter water usage in each building, set reduction targets based on established baseline, and implement efficiency and reduction strategies.



Land & Water

Transportation

3.13 Reduce carbon emissions related to transportation and mobility.

3.13.1 Increase the use of carpooling, public transit, walking, and/or biking as primary means of student, staff, and faculty transportation.

3.13.2 Study the feasibility of offsetting emissions associated with University-supported travel.

3.13.3 Increase the number of electric and gas-electric hybrid vehicles, solar-powered electric vehicle charging stations, and infrastructure to support them.

3.13.4 Transition 30% of the University fleet to electric vehicles by 2025.

3.14 Improve campus connectivity with the greater Richmond region.

3.14.1 Build community and agency partnerships to make the roadways surrounding campus safer for biking and walking in alignment with the City of Richmond's Complete Streets Policy.

3.14.2 Explore the opportunity to expand the Green Bike program and connect with City of Richmond on potential partnership regarding bicycles, scooters, and other personal transportation options.

3.14.3 Increase the number of sidewalks, bike lanes, and car-free areas to promote a more pedestrian friendly campus as described in the 2011 Campus Master Plan.

3.14.4 Pursue certification in the League of American Cyclists Bicycle Friendly University program.



50

Green Bikes are available for use by staff, faculty, and students on campus.

90

Vans and cars comprise the campus transportation fleet.

Waste



3.15 Divert 75% of materials from the landfill by 2025.

3.15.1 Achieve Rethink Waste rollout (co-location of bins; standardized signage, bins, and bag colors) across campus by 2020.

3.15.2 Implement a pre- and post-consumer composting program on campus.

3.15.3 Explore the feasibility of a materials sort center on or near campus.

3.15.4 Provide in-person and online Rethink Waste training for all students, staff, and faculty.

3.16 Reduce gross waste totals by 15% by 2025.

3.16.1 Research and adopt processes that consider the end of product life in purchasing decisions, including questions of avoidance, reduction, reuse, and recycling.

3.16.2 Implement and promote reuse strategies across campus and develop measures to minimize prevalence of single-use disposable items.

3.16.3 Develop internal systems and external partnerships to improve capacity for capture of usable goods, including creation of a space for students, faculty, and staff to exchange, donate, and purchase items that would otherwise go to the landfill.



91%

of UR's construction waste is recycled or reused.

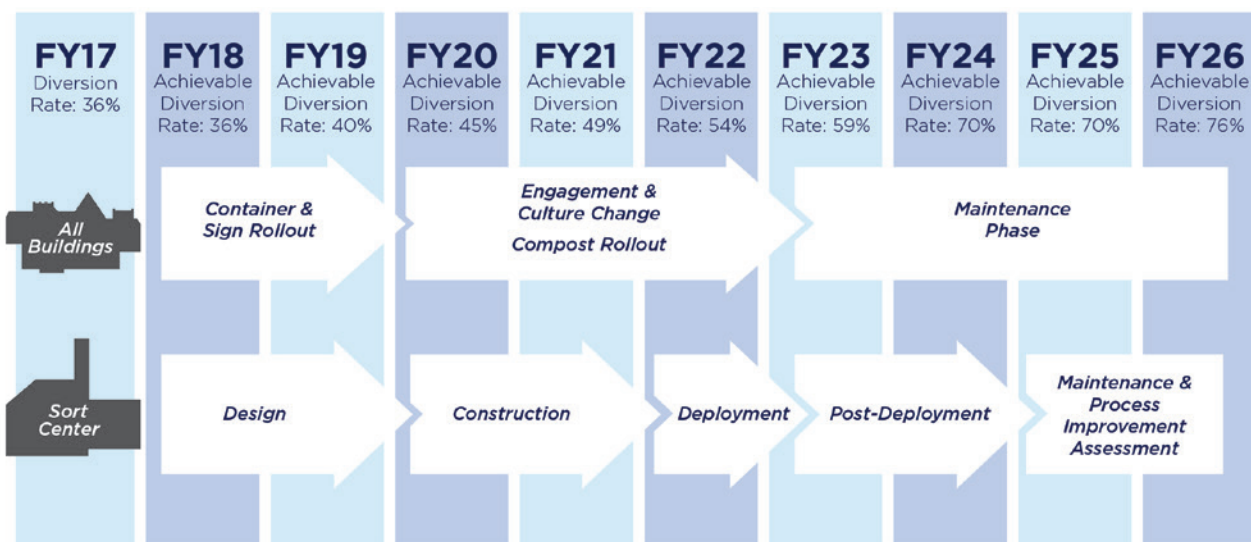
University of Richmond's Waste Diversion Progress and Goals

Recycling came to campus in 1991 and reuse efforts like the annual Big Yard Sale have been keeping items out of the landfill at the University for decades. University of Richmond expanded its commitment to waste diversion in 2017 by setting ambitious goal of 75% waste diversion by 2025. This means that by 2025, the University will have 75% of our waste recycled, composted, or donated

for reuse instead of going to the landfill. This will be achieved through changes in bins, signage, education efforts, and purchasing.

The information below showcases the University's waste diversion progress and the steps that will be taken over the next 6 years to achieve a 75% diversion rate.

Rethink Waste Roadmap



Note: University of Richmond's fiscal year runs July to June, so FY17 would be from July 2016 through the end of June 2017.



Goal 4
Identify and activate
organizational
systems, resources,
partnerships, and
processes that
support weaving
sustainability into
the fabric of the
University.



In order to be truly woven into the fabric of the University, sustainability must be integrated into the disciplines, departments, and activities beyond which it is traditionally found.

The strategies and actions in Goal 4 aim to support cross-functional work that will embed sustainability in all levels of the University. Fulfillment of this goal will expand understanding of sustainability so that it includes more than the environment and increase resources so that individuals and offices can more adeptly contribute to the University's sustainability goals.

A unified vision from leadership also goes a long way toward integrating sustainability. President Crutcher, who provided input and support throughout the planning process, urged UR to achieve the highest external standard for sustainability in higher education, an AASHE STARS Platinum rating. A coordinated effort among constituents in academics, operations, outreach, and administration is required to attain the level of excellence demanded by this target. UR has set an ambitious goal to achieve STARS Platinum within five years.

Increased collaboration with administrative offices, academic departments, and functional units will

help clarify the value of sustainability and the way each student, staff, and faculty member can contribute to the University's goals.

“We have seen remarkable momentum in campus stewardship in recent years. This will only increase as we pursue the goals and strategies in the Sustainability Plan and work toward achieving a STARS Platinum rating.”

-President Ronald A. Crutcher

These efforts will create a lens for sustainability through which all Spiders see themselves as stewards of this great place and the world beyond our campus.



4.1 Build UR's capacity to achieve Association for the Advancement of Sustainability in Higher Education (AASHE) Sustainability Assessment, Tracking & Rating System (STARS) Gold by 2021 and STARS Platinum by 2024.

4.1.1 Increase financial and human resources available to the Office for Sustainability in order to manage institutional sustainability goals, collaborate with administrative, operational, and academic partners, assess and report on UR's sustainability performance, communicate effectively, and develop new programming.

4.1.2 Conduct a gap analysis to identify what is needed to achieve Platinum status in the AASHE STARS rating system and devise improvements to close the gap by 2024.

4.2 Support the ability of departments, offices, and other functional units to create unit-level sustainability plans that utilize their unique abilities to advance sustainability on campus.

4.2.1 By the end of 2020, create online and in-person resources that help interested departments, offices, and functional units develop a shared understanding of sustainability and identify how their work may support implementation of the Sustainability Plan.

4.2.2 Work alongside a cohort of departments, offices, or functional units to pilot at least 3 unit-level sustainability plans that support both the unit's mission and the goals and strategies outlined in the Sustainability Plan by 2022.

4.3 Welcome an expanded definition of sustainability that includes the capacity to create thriving communities and intersects with wellness, justice, equity, diversity, inclusion, and work-life balance.

4.3.1 Collaborate with offices, functional units, and departments that work toward a more inclusive, just, and diverse campus and community.

4.3.2 Continue to work with the Center for Civic Engagement to identify and enact strategies that will strengthen community partnerships and advance sustainability initiatives in Richmond and beyond.

4.3.3 Join forces with the Health and Well-Being Advisory Group to support a culture of wellness and the pursuit of a balanced life.

4.4 Incorporate sustainability into development, planning & policy, and strategic communications.

4.4.1 Partner with the Advancement Office to clarify the case for sustainability as an important development strategy for the University.

4.4.2 Alongside the Office of Planning & Policy, develop a guide for existing sustainability policies, implement and publicize new policies that support University sustainability goals, and establish a mechanism to communicate, track, and implement sustainability-related policies.

4.4.3 Collaborate with University Communications to develop a common understanding of sustainability and explore the feasibility of a communications plan that increases the ability of the University to tell its sustainability story.



STARS is a voluntary self-reporting assessment that provides a common standard of measurement for sustainability in higher education. It measures sustainability performance and progress in four key areas: academics, engagement, operations, and planning & administration. University of Richmond earned a Silver STARS rating in 2013 and 2016.

Photo: Earth Lodge students partner with the James River Association to clean up litter from the James River at Presquile National Wildlife Refuge



Next Steps

The most critical action UR can take following creation of the Sustainability Plan is ensuring a successful transition from strategy to implementation. This involves associating each action with deliverables, responsible parties, resource requirements, implementation milestones, metrics, and timelines to build an understanding of the resources required to carry out plan goals.

Putting this plan into effect will require allocation of tasks, acquisition of funding, intentional sequencing of strategies, coordination across functional areas, and consistent communication of initiatives. To support this considerable effort over the next six years, an implementation plan has been created. This roadmap, which will be managed by the Office for Sustainability and supported by the Sustainability and Environmental Awareness Committee (SEAC), delineates timelines, responsible parties, cost, performance indicators, and status of each strategy and associated action in the plan. It is intended to function both as a project management and accountability tool.

SEAC subcommittees, which are organized around each plan goal, will meet regularly and welcome new members. The cross-functional nature of sustainability invites participation not only of students, staff, faculty from across the University, but also alumni and community members.

University of Richmond is committed to yearly assessment and reporting of our sustainability progress. Ongoing evaluation and communication allows us to learn from our efforts, showcase successes, and share new opportunities. The annual Sustainability Report will communicate straightforward, easy-to-interpret metrics on a user-friendly platform.

The Sustainability Plan is intended to be a living document that will be reviewed, updated and amended as needed. It must be able to adapt to new opportunities, offer value to congruent initiatives, and respond to changing demands. This plan establishes a foundation from which we will continue to explore new ideas that increase our capacity for stewardship and leadership in a changing world.

Get Involved With Sustainability on Campus

Opportunities for Students:

- Join a student group like URSA or Green UR
- Take a sustainability-related course
- Intern with the Office for Sustainability
- Participate in summer sustainability research with a UR professor
- Volunteer with sustainability-focused organizations in Richmond through the Bonner Center for Civic Engagement
- Attend or volunteer at annual sustainability events
- Get Green Room certified
- Join a SEAC subcommittee
- Explore resources available at sustainability.richmond.edu

Opportunities for Faculty & Staff:

- Get Green Office Certified
- Donate items and shop through the UROSE Office Supply Exchange
- Attend or volunteer at annual sustainability events
- Join the University's community garden when it reopens in 2020
- Take part in a faculty learning community
- Incorporate a unit on economic, social, or environmental sustainability into one of your courses
- Explore resources available at sustainability.richmond.edu

Reduce your Impact:

- Choose reusable items like straws, utensils, bags, and bottles
- Pick vegan or vegetarian options when dining on campus
- Get a free bus pass from the Transportation Office and use public transportation to get to and from campus
- Know what's recyclable on campus through the Rethink Waste campaign
- Shop locally and seasonally for fruits and vegetables
- Donate unwanted items and shop secondhand before buying something new

Questions?

You can reach out to sustainability@richmond.edu any time with sustainability questions, or to learn more about the opportunities listed here.

Acknowledgments

The creation of the University of Richmond Sustainability Plan required contributions from many individuals, beginning with its inclusion in UR's Strategic Plan. Thank you to all of the people who named the work of sustainability and stewardship as a priority for our University, thereby initiating the sustainability planning process.

The direction of engagement, review of content, and the development of initial goals, strategies, and actions in the plan were guided by a Steering Committee that included faculty, staff, and students, chaired by the Director of Sustainability. The composition of the group represented broad expertise, invited diverse perspectives, and facilitated coordination with other groups across campus. This group met biweekly, ready to roll up their sleeves and get down to work, to keep the planning process on track.

Members of the Sustainability Plan Steering Committee

- Rob Andrejewski: Director of Sustainability
- Harleen Bal: Student '18, Environmental Studies and Healthcare Studies
- Wendy Burchard: Strategic Sourcing Manager
- Cassandra Collins: Sustainability, Communications & Engagement Specialist
- Amy Howard: AVP of Community Initiatives & the Bonner Center for Civic Engagement
- Melanie Jenkins: Director of Institutional Effectiveness
- Paul Lozo: Director of Environmental Operations
- Miriam McCormick: Associate Professor of Philosophy
- Shahan Mufti: Associate Professor of Journalism
- Andrew Schoeneman: Assistant Professor & Chair of Nonprofit Studies, School of Professional & Continuing Studies

Groups Engaged During the Planning Process

- Academic Affairs Directors
- Advancement
- Alumni & Career Services
- Architectural Services
- Bonner Center for Civic Engagement
- Business Affairs Leadership
- CAPS
- Chaplaincy
- Common Ground
- Custodial & Environmental Services
- Dining Services
- Earth Lodge
- Environmental Studies Advisory Committee
- Environmental Studies Capstone Class
- Facilities
- Faculty Senate
- Health & Wellness
- Human Resources
- Information Services
- Institutional Effectiveness
- International Education
- Jepson School of Leadership Studies
- Landscape Services
- Library
- Maintenance Services
- Mechanical Services
- President's Cabinet
- Procurement
- Provost's Office
- RCSGA
- Residence Life & Housing
- Rethink Waste Leadership Team
- School of Arts & Sciences
- School of Professional & Continuing Studies
- Spider Management
- Stewardship Faculty Learning Community
- Student Development
- University Museums
- URSA
- USAC
- WCGA

The Sustainability & Environmental Awareness Committee (SEAC) is an Administrative Committee that advises on issues pertaining to sustainability at the University. This high-level committee worked hand-in-hand with Office for Sustainability to maintain the strategic direction of sustainability at UR.

Members of the Sustainability & Environmental Awareness Committee

- Sam Abrash: Associate Professor of Chemistry & Environmental Studies
- Rob Andrejewski: Director of Sustainability
- Cassandra Collins: Sustainability, Communications & Engagement Specialist
- David Donaldson: Operations & Summer Programs Coordinator, Events, Conferences, & Support Services
- Joel Eisen: Professor of Law
- Mary Finley-Brook: Associate Professor of Geography & the Environment
- Jessica Flanigan: Associate Professor of Leadership Studies & Philosophy, Politics, Economics & Law
- Tim Hamilton: Assistant Professor of Economics
- Dee Hardy: AVP for Campus Services
- Amy Howard: AVP of Community Initiatives & the Bonner Center for Civic Engagement
- Andrew McBride: AVP for Facilities, University Architect
- Miriam McCormick: Associate Professor of Philosophy
- Justin Mure: Student '19, Biology & Healthcare Studies
- Tom Roberts: AVP Health & Well-being
- Andrew Schoeneman: Assistant Professor & Chair of Nonprofit Studies, School of Professional & Continuing Studies
- Carl Sorensen: AVP for Human Resources
- George Souleret: University Engineer
- Allison Steele: Manager of Custodial & Environmental Services

Under SEAC's direction, three working groups formed to provide input, consultation, and feedback on specific topics throughout the planning process.

Members of the Academics Working Group

- Miriam McCormick, Chair
- Sam Abrash
- Jess Flanigan
- Mary Finley-Brook
- Tim Hamilton
- David Salisbury
- Justin Mure
- Harleen Bal

Members of the Culture Change Working Group

- Andrew Schoeneman, Chair
- David Donaldson
- Amy Howard
- SK Parker
- Tom Roberts
- Roger Mancastroppa
- Corinna Waxman
- Amanda Brosnan
- Robert Ostrom
- Paige Dunlap

Members of the Operations Working Group

- Josh Wroniewicz, Chair
- Dee Hardy
- Andrew McBride
- George Souleret
- Allison Moyer
- Carl Sorensen
- Allison Steele
- Claire LeCornu

A special thank you to the students in Peter Smallwood's Environmental Studies Capstone course, who offered invaluable benchmarking data of peer institutions and generated creative and fully formed ideas for inclusion in the plan, and the contributions from the members of the Faculty Learning Communities on sustainability and environmental stewardship led by Todd Lookingbill, David Salisbury, and Mary Finley-Brook. Thank you also to Christie Shreve and Steven Baumgartener from the SmithGroup consulting team.



Goal 3: Implement sustainable practices in campus operations and services that steward the natural world and support human well-being.

3.1 Implement resource-efficient and environmentally responsible design, construction, and operation practices in all campus building projects.

3.2 Update the 2010 Climate Action Plan with greenhouse gas reduction strategies that accelerate the achievement of carbon neutrality.

3.3 Reduce energy use intensity (energy per square foot per year) 40% below 2009 levels by 2025.

3.4 Identify opportunities to increase procurement of sustainable food at the capacity needed for consistent, high quality meals.

3.5 Reduce food waste to the landfill by 50% by 2025.

3.6 Develop innovative funding mechanisms to support sustainable practices on campus.

3.7 Enhance the University's ability to engage with the campus community on issues of responsible investing.

3.8 Increase the amount of environmentally and socially preferable purchases as a percentage of total goods purchased.

3.9 Research and implement sustainability procurement standards for vendors.

3.10 Design and maintain campus landscapes in a manner that supports ecological health, advances student learning, and promotes recreation.

3.11 Manage campus lands to steward the James River watershed, increase water capture, and reduce stormwater impacts.

3.12 Reduce potable water usage 50% below 2010 levels by 2025.

3.13 Reduce carbon emissions related to transportation and mobility.

3.14 Improve campus connectivity with the greater Richmond region.

3.15 Divert 75% of materials from the landfill by 2025.

3.16 Reduce gross waste totals by 15% by 2025.



Goal 4: Identify and activate organizational systems, resources, partnerships, and processes that weave sustainability into the fabric of the University.

4.1 Build UR's capacity to achieve Association for the Advancement of Sustainability in Higher Education (AASHE) Sustainability Assessment, Tracking & Rating System (STARS) Gold by 2021 and STARS Platinum by 2024.

4.2 Support the ability of departments, offices, and other functional units to create unit-level sustainability plans that utilize their unique abilities to advance sustainability on campus.

4.3 Welcome an expanded definition of sustainability that includes the capacity to create thriving communities and intersects with wellness, justice, equity, diversity, inclusion, and work-life balance.

4.4 Incorporate sustainability into development, planning & policy, and strategic communications.

