



SUSTAINABILITY · UVA
From the Grounds Up

UNIVERSITY OF VIRGINIA SUSTAINABILITY PLAN 2016 - 2020



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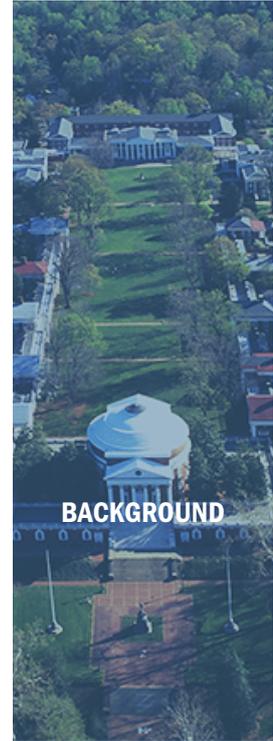
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MESSAGE FROM PRESIDENT SULLIVAN



President Teresa Sullivan

In a 1785 letter to James Madison, Thomas Jefferson wrote, “The earth is given as a common stock for man to labour and live on.” Like the founder of the University of Virginia, the members of our University community today see the environment as a shared treasure.

Since our goals for sustainability were approved by the Board of Visitors in 2011, we have made remarkable progress. For example, our water usage is down more than 30% from its all-time high in 1999. Also, despite significant growth at UVA, our carbon emissions have fallen below the 2009 baseline level, and we continue to work toward the goal of a 25% reduction by 2025.

I am grateful to the University Committee on Sustainability, as well as dedicated students, staff, and faculty across the University whose hard work has produced this plan, which builds on prior efforts in the area of sustainability.

At UVA, we want to create policies and practices that create positive change, both on Grounds and beyond. We can set goals to minimize our environmental impact, and also to protect and preserve the environment through education and research initiatives. From the classroom to the laboratory, our students, faculty, and staff are leading a dialogue about sustainability and developing solutions that will change the way we interact with the environment. We want to develop innovative solutions that will have a beneficial impact on the University and the global community. UVA is fortunate to have faculty, staff, students, and alumni who share this commitment.

“From the classroom to the laboratory, our students, faculty, and staff are leading a dialogue about sustainability and developing solutions that will change the way we interact with the environment”

LETTER FROM THE CO-CHAIRS

Dear Colleagues,

In the past five years, the University of Virginia has seen an unprecedented growth in interest in sustainability by its faculty, students, practitioners, and alumni. Increasingly, they see climate change as one of the defining challenges of the 21st century and are advocating for more opportunities on Grounds to learn, create and translate knowledge, incorporate sustainability practices, and engage in effecting positive environmental and social change. Globally, the issue of climate change has taken on a mounting sense of urgency as world leaders are increasingly concerned about its long term impacts on coastal and infrastructure resiliency, food security, water scarcity, political stability, and environmental and economic health. In this context, the University of Virginia has a great opportunity as well as a great responsibility to respond.

This past year, the UVA Committee on Sustainability and associated task forces and work groups, comprised of over one hundred faculty, students, practitioners, and alumni across the University, have been working together to develop the UVA Sustainability Plan (2016-2020): Sustainability....From the Grounds Up. The Plan builds on those areas in which UVA is exceptional, including interdisciplinary research among schools, student self-governance, research in topics of the environment and resilience, ethics, and a holistic approach to sustainable solutions that considers the inter-relationships of the built environment, biophilic design, well-being, equity and wellness, connections to community, and social and civic engagement.

The time to act is now. Please join is in this very important work, as together, we can and will have an impact.

CO-CHAIRS,

University Committee on Sustainability



Cheryl Gomez
Director of Operations

***UVA FACILITIES
MANAGEMENT***



Mark White
***Associate Professor of
Commerce***

***MCINTIRE SCHOOL OF
COMMERCE***

INTRODUCTION



The University of Virginia (UVA) has a distinguished tradition in environmental research, education, and management, and is consequently well-positioned to assume a leadership role in reshaping both energy use and ingrained social habits, as will be required if we are to seriously address the challenges posed by climate change and associated disruptions of ecological, socioeconomic, and geopolitical systems. In response to the Resolution on Climate Commitment by the Faculty Senate in 2008, then President John T. Casteen III established the Presidential Committee on Sustainability (now the University Committee on Sustainability).

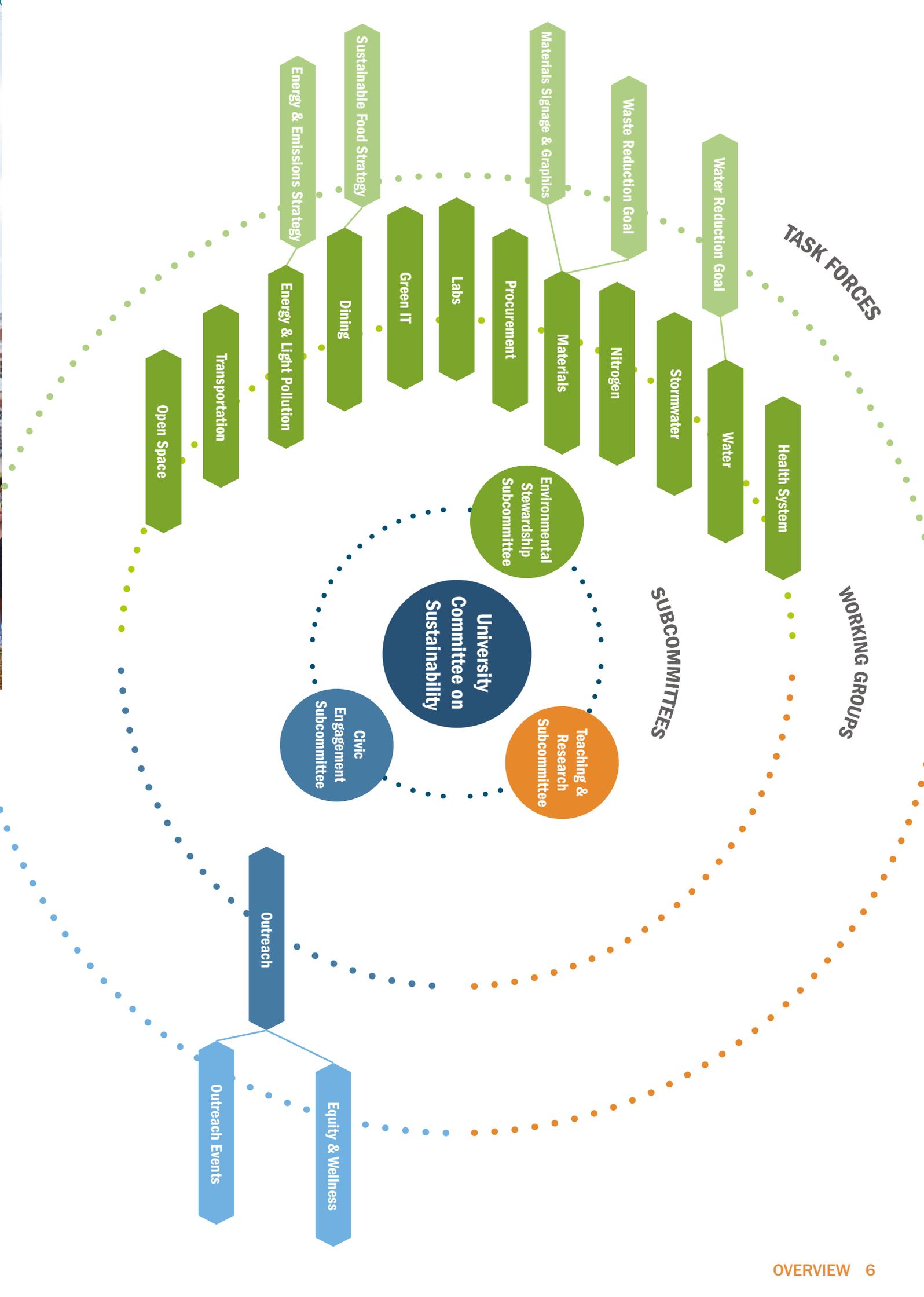
The Committee's charge is to advise the Executive Vice Presidents on all matters related to the University's commitment to sustainability and how those impact the future of the University including interrelated environmental, financial, teaching, research, and social aspects.



SUSTAINABILITY PLAN OVERVIEW



UVA's Sustainability Plan, developed by the University Committee on Sustainability and facilitated by the Office for Sustainability, is based on ideas and recommendations from over one hundred students, staff, and faculty from across Grounds. It is responsive to the 2011 Sustainability Assessment and specifically the action item to “approve a comprehensive set of objective, measurable goals for sustainability designed to focus priorities and drive change.” The plan builds on the University’s many existing programs and accomplishments and is a key element of institutional efforts to meet the UVA Board of Visitors Sustainability Commitment. The plan lays out a framework by which our educational, operational, and financial resources will be mobilized to achieve significant positive environmental and societal impacts across a broad range of scales from local to global. The framework is organized around three interrelated themes -- **Engage**, **Steward**, and **Discover** -- each of which includes a set of specific goals and objectives that will be addressed over the next four years together with the corresponding approaches and timelines by which these objectives will be achieved. A lead unit or group is identified and will have primary responsibility for addressing each objective in collaboration with relevant stakeholders. The University Committee on Sustainability and Office for Sustainability will be responsible for overseeing implementation of the plan, including tracking metrics and reporting on progress. This plan is a working document that will be updated as needed. To get involved or to review progress, visit sustainability.virginia.edu.



BACKGROUND

“The University of Virginia is a public institution of higher learning guided by a founding vision of discovery, innovation, and development of the full potential of talented students from all walks of life. It serves the Commonwealth of Virginia, the nation, and the world by developing responsible citizen leaders and professionals; advancing, preserving, and disseminating knowledge; and providing world-class patient care.” - **U.Va. Mission Statement.**

Founded by Thomas Jefferson in 1819, UVA is a community of 21,000 students and almost 13,000 faculty and staff. UVA's Grounds feature Thomas Jefferson's Rotunda within the Academical Village (a UNESCO World Heritage site) and over 525 buildings that house 11 schools and encompass 16.5 million square feet. The UVA Health System includes a 604-bed hospital and Level I Trauma Center, with 750,000 outpatient visits a year.

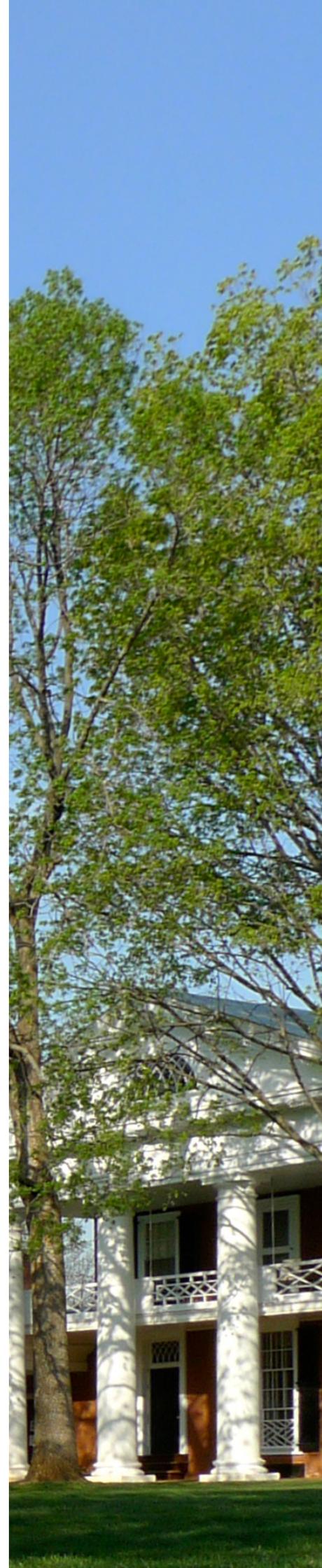
UVA's Cornerstone Plan outlines a vision and strategic direction for the University. One of the Principles for Implementation in the Cornerstone Plan is collaboration: “We will make collaboration an institutional hallmark. We will view collaboration not only as a technique to leverage our size to maximum advantage but also as a critical source of innovation.” Collaboration and progress through partnerships are of paramount importance in successfully advancing sustainability at UVA. To this end, the University has actively sought means of bringing together students, staff, and faculty to contribute their interests and expertise to develop and implement sustainability-related initiatives, projects, and programs.

The Sustainability Plan is aligned with UVA's Cornerstone Plan – its Pillars as well as its Principles for Implementation:

- We will ensure that our actions conform to our values of honor, diversity, self-governance, and public service.
- We will maintain our commitment to access and affordability.
- We will welcome opportunities to serve the Commonwealth.
- We will leverage technology for maximum gain.
- We will pursue continuous improvement as the source of ongoing excellence.
- We will make collaboration an institutional hallmark.
- We will seek opportunities to enhance our global perspective and presence.
- We will align resources with aspirations.

The Sustainability Plan supports all pillars and strategies in the Cornerstone Plan and particularly Student Leadership Development, Pan-University Research, High-Impact Educational Experiences, and Organizational Excellence.

For additional background information and progress to date, view the most recent UVA Sustainability Annual Report or the Sustainability at UVA website.



SUSTAINABILITY PLAN AT A GLANCE

ENGAGE



Increase sustainability awareness within the UVA community.



Increase sustainability engagement beyond Grounds.

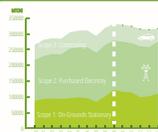


Incorporate social, environmental, and economic sustainability considerations into strategic initiatives.



Cultivate healthy and equitable places for learning, living, & working.

STEWARD



Reduce greenhouse gas emissions 25% below 2009 levels by 2025.

Reduce building energy use intensity 20% below 2010 levels by 2020.



Reduce reactive nitrogen losses to the environment 25% below 2010 levels by 2020.



Reduce potable water use 25% below 2010 levels by 2035.



Reduce the total tonnage of waste generated at UVA 50% below 2014 amounts by 2035.



Landfill less than 2000 tons of waste annually by the year 2035.



Increase environmentally preferable purchasing as a percentage of purchases.



Increase efficiency of UVA land and buildings to limit the need for new construction.



Form connections with our larger community through UVA and UVA Foundation lands.



Enhance and expand the number of sustainable and meaningful sites and buildings.



Annually increase the percentage of sustainable food and beverages available on Grounds.



Reduce food waste and single-use food serving items sent to landfill by 2030, in alignment with the overall UVA waste goals.



Reduce the energy and water impact of dining operations.



Increase student, staff, and faculty awareness of sustainable food systems.



Collaborate within UVA and with the region...to advance sustainable food systems in the broader community.



Consider environmental, governance, social, and ethical issues in managing institutional investment assets.

DISCOVER



Enhance sustainability research and UVA's reputation as a locus of sustainability.



Enhance sustainability-focused teaching and curricular development.



Utilize the Grounds as a learning tool through collaboration between operational and academic units.

SUMMARY OF 2016 FOCUS AREAS

1

Create and communicate a detailed implementation plan for the Sustainability Plan, including timelines to enable actions to be completed by 2017-2020.

2

Expand sustainability outreach and programs to new and wider audiences within UVA.

3

Create a sustainability literacy survey to assess student sustainability awareness of both global and local topics, particularly UVA's sustainability goals, administered upon entering UVA and again when graduating.

4

Establish a baseline and set a goal to increase the percentage of students involved in sustainability-related service within the community.

5

Engage neighborhood associations, the City of Charlottesville, Albemarle County, and key area stakeholders in regular sustainability dialogue.

6

Leverage partnerships with the Office of Advancement, UVA Foundation, City of Charlottesville, Albemarle County, the College at Wise, Commonwealth of Virginia, and institutes of higher education across the country to advance strategic initiatives with broad impact.

7

Leverage partnerships with local and regional non-profit organizations to collaborate on programs that benefit the community.

8

Identify tools to improve evaluation, analysis, tracking, and measurement of the social impacts and benefits of new and existing programs.

9

Benchmark and collaborate with other institutions that are incorporating diversity and equity with sustainability.

10

Finalize and implement a 2016-2025 Energy and Emissions Action Plan.

11

Build accountability within schools and units for meeting institution-wide energy and emissions goals. Set school and unit-specific reduction goals informed by baseline measurements.

Create tools that leverage the responsibility-centered financial model to incentivize continual progress towards goals. Consider internal carbon trading and incorporating externalities into financial analysis.

12

Launch a Green Labs program.

13

Launch Green Technology programs.

14

Finalize and implement a 2016-2025 Nitrogen Reduction Action Plan.

15

Finalize and implement a 2016-2035 Water Reduction Action Plan, outlining strategies to meet the water goal.

16

Finalize and implement UVA -specific sustainable building standards within the Facility Design Guidelines.

17

Finalize and implement a 2016-2035 Waste Reduction Action Plan, outlining strategies to meet the goal.

18

Create and implement a Sustainable Food Systems Action Plan, with a focus on strengthening existing and exploring new pathways for sustainable sourcing.



19

Track and benchmark sustainable food purchases with other universities by using the most recent current version of AASHE STARS as a metric. Track UVA -wide: UVA Dining, Health System, and Darden. Use STARS definitions to set a quantitative sustainable food purchasing goal, as a percentage of overall purchasing cost – individually for UVA Dining, the Health System, and Darden.

20

Consider the merits of creating targets, aligned with STARS, within the overall sustainable food goal for criteria such as local, community based, organic, ecologically sound, humanely raised, and fairly traded.

21

Implement and expand strategies to reduce, recover, and recycle (compost) food waste to the greatest extent possible, i.e. organic, ecologically sound, humanely raised, and fairly traded.

22

Enable other Food actions for 2016-2020.

23

Increase the visibility of UVA sustainability research internally, nationally, and internationally.

24

Increase the number of sustainability research projects and publications by UVA faculty.

25

Establish a sustainability curriculum position, with administrative support, for interdisciplinary sustainability degree programs.

26

Ensure structures are in place to make operations staff and data readily available to faculty and students, with mechanisms to successfully maintain multi-year projects.

ENGAGE

Engage seeks to build unity and cohesiveness of communication, to foster sustainability literacy and awareness across Grounds and with the broader community, to convey the breadth and interconnectedness of sustainability (environment, equity, economics), and to translate sustainability awareness into action to reduce the impact of human activities on the environment while promoting a healthy, equitable society. We will engage our community via comprehensive and cohesive communication mechanisms, programs, projects, and tools based in behavioral science. We will collaborate with the Office for Diversity and Equity, UCARE, Hoo's Well, and others to align initiatives involving social aspects of sustainability.

COMMUNITY ENGAGEMENT

UVA's deeply held values of honor, diversity, self-governance, and public service have fostered a strong network of programs that support individual, community, and social development at UVA and beyond. Current programs that foster elements of individual and community engagement within UVA include the student Sustainability Advocate peer-to-peer education program, the Office for Sustainability student employee program, the Green Workplace program for staff, and the pilot Green Labs program. To raise awareness, dozens of events and several campaigns are held throughout the year. The Civic Engagement Subcommittee, Outreach Working Group, Outreach Events Task Force, Office for Sustainability, Green Grounds, Student Council, and over 30 sustainability-related student clubs organize the majority of these programs as well as develop partnerships with community groups to build sustainable practices throughout the community. Community engagement is also facilitated through the Office of Diversity and Equity, Community Relations, Student Affairs, and Madison House. Several initiatives connect UVA Sustainability to the City of Charlottesville, Albemarle County, and the wider region to strengthen social sustainability practices and policies. UVA also continues to build partnerships with other colleges and universities via leadership in in local, regional, and national networks.

GOAL

**INCREASE SUSTAINABILITY
AWARENESS WITHIN THE UVA
COMMUNITY.**



Action

Lead

*Target
year*

Education:

Provide all new students and employees an opportunity to participate in orientation activities and programming in which sustainability is a prominent component.

CES

2018

Develop sustainability-focused professional development opportunities for UVA students and employees. Broaden participation in trainings related to diversity, inclusion and a respectful workplace.

CES
UHR

2018

Host a speaker on diversity and sustainability annually.

CES

2017

-

2020

Communication:

Develop a sustainability communications plan that integrates sustainability into mainstream communications.

OFS
UCOM
CES

2017

<i>Action</i>	<i>Lead</i>	<i>Target year</i>
<p>Expand sustainability outreach programs to new and wider audiences within UVA.</p> <p>.....</p>		<p>2016</p> <p>-</p> <p>2020</p>
<p>Annually expand and refine new and existing programs, projects, and events in creative ways, including social, economic, and environmental sustainability, while reaching wider audiences.</p> <p>.....</p>		<p>2016</p> <p>-</p> <p>2020</p>
<p>Achieve 50% faculty and staff participation in sustainability outreach programs and events such as Earth Week, Green Workplace, Sustainability Partners and Green Labs.</p> <p>.....</p>		<p>2016</p> <p>-</p> <p>2020</p>
<p>Create tools that allow the UVA community to identify and communicate sustainability opportunities in real-time.</p> <p>.....</p>		<p>2016</p> <p>-</p> <p>2020</p>
<p>Assesment:</p>		
<p>Create a sustainability literacy survey to assess student sustainability awareness of both global and local topics, particularly UVA's sustainability goals, administered upon entering UVA and again when graduating.</p> <p>.....</p>		<p>2016</p>
<p>Develop tools to assess staff and faculty sustainability awareness and critical thinking.</p> <p>.....</p>		<p>2017</p>

GOAL

INCREASE SUSTAINABILITY ENGAGEMENT BEYOND GROUNDS.



Action

Establish a baseline and set a goal to increase the percentage of students and employees involved in sustainability-related community service.

Lead

CES
ODOS
MH

Target year

2016

Engage neighborhood associations, the City of Charlottesville, Albemarle County, and key area stakeholders in regular sustainability dialogue.

CES

2016
-
2020

Leverage partnerships with the Office of Advancement, UVA Foundation, City of Charlottesville, Albemarle County, the College at Wise, Commonwealth of Virginia, and institutes of higher education across the country to advance strategic initiatives with broad impact.

CES

2016
-
2020

Leverage partnerships with local and regional non-profit organizations to collaborate on programs that benefit the community.

CES

2016
-
2020

METRICS AND MEASURES OF SUCCESS: Percentage of incoming students and employees participating in sustainability-related orientation activities, increased scores on sustainability literacy assessments, number of community members participating in regular dialogue, and percentage of student engaged in community service.

EQUITY AND WELLNESS

The Civic Engagement Subcommittee of the University Committee on Sustainability works to expand and deepen sustainability-related initiatives within the UVA community, both on and off Grounds. This subcommittee seeks to promote, engage, and advocate for policies and practices that build an inclusive, safe, healthy, and equitable community aligned with environmental principles to advance the well-being of this and future generations. The subcommittee includes members from a wide range of departments across Grounds that have come together to develop the following goals and actions to further UVA's vision for a sustainable community.



GOAL

INCORPORATE SOCIAL, ENVIRONMENTAL, AND ECONOMIC SUSTAINABILITY CONSIDERATIONS INTO STRATEGIC INITIATIVES.



Action

Seek to incorporate sustainability into University-wide strategic planning and decision-making.

Lead

Target year

CoS

2020

Identify tools to improve evaluation, analysis, tracking, and measurement of the social impacts and benefits of new and existing programs.

CES
OFS

2016

Benchmark and collaborate with other institutions that are incorporating diversity and equity issues with sustainability.

CES
OFS

2016
-
2020

GOAL

CULTIVATE HEALTHY AND EQUITABLE PLACES FOR LEARNING, LIVING, AND WORKING.



Action

Advocate for policies or programs to encourage healthy lifestyles, such as supporting a smoke-free campus, gym membership incentives, bike commuter incentives, and support for work-life balance.

Lead

CES
USS

Target year

2020

Design infrastructure to promote wellness. Include occupant productivity and health in building performance measures—e.g., via Post-Occupancy Evaluations.

OAU
FM

2017

Cultivate active, safe, and pedestrian-friendly communities. Connect UVA and the City of Charlottesville planning efforts to set shared transit goals and collaborate on connectivity-oriented projects.

OAU
P&T

2020

METRICS AND MEASURES OF SUCCESS: Improvement shown via Hoos Well employee assessments to gauge work-life balance and health at work. Increased partnerships with CIOs, UVA departments, peer institutions and local government agencies to identify opportunities for tracking and benchmarking for equity and wellness objectives. Improvement in employee satisfaction will be measured by the UVA Academic Staff Survey.

STEWARD

Steward seeks to ensure the stability and longevity of both the natural and human environments to support the goals and functions of the University. We will reduce the environmental, social, and economic impacts of human activities on our climate, air quality, water quality and usage, other natural resources, and human health through mobilization of our educational, operational, and financial resources to achieve significant, quantifiable goals.

ENERGY AND EMISSIONS



**REDUCTION
IN ENERGY USE INTENSITY**



**REDUCE CARBON
EMISSIONS**

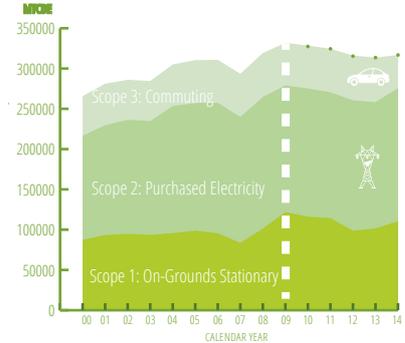
In 2009, UVA's Board of Visitors (BOV) adopted a resolution committing the institution to reduce greenhouse gas emissions 25% below 2009 levels by 2025. In 2010, an Environmental Footprint Reduction Plan was created, with initial projections and strategies. As of calendar year 2015, a 7% reduction has been achieved, primarily through district energy-scale plant improvements and existing building energy efficiency upgrades, despite significant increases in building square footage and population. For more detailed information on progress, see the most recent UVA Greenhouse Gas Progress Report. In 2011, UVA's BOV augmented the 2009 resolution with a commitment to reduce reactive nitrogen emissions 25% below 2010 levels by 2025. In 2013, UVA joined the Department of Energy's Better Buildings Challenge, seeking to reduce building energy use intensity (kBtu per square foot) 20% below 2010 levels by 2020. As of FY2015, a 9% reduction in building energy use intensity has been achieved.

GOAL

REDUCE GREENHOUSE GAS EMISSIONS 25% BELOW 2009 LEVELS BY 2025.

REDUCE BUILDING ENERGY USE INTENSITY 20% BELOW 2010 LEVELS BY 2020.

GREENHOUSE GAS EMISSIONS
2000-2014



Action

Finalize and implement a 2016-2025 Energy and Emissions Action Plan. At a minimum:

Sustainable energy portfolio:

Increase the percentage of UVA's energy derived from renewable sources.

Evaluate creating a renewable portfolio standard for the University that supplements the voluntary renewable portfolio standard currently in place in Virginia.

Develop an energy shift plan that seeks to reduce the use of fossil fuels, including eliminating coal as a fuel within the next ten years, and seeking opportunities to utilize waste heat.

Lead

Target year

EETF

2016

FM

2020

FM

2020

FM

2019



Action

Lead

Target year

Sustainable existing buildings:

Design frameworks for accountability within schools and units for meeting institution-wide energy and emission goals. Set school and unit-specific reduction goals informed by baseline measurements. Create tools that leverage the responsibility-centered financial model to incentivize continual progress towards goals. Consider internal carbon trading and incorporating externalities into financial analysis.

FM
OFS
UBO

2016

Launch a Green Labs program, and by 2020, assess sustainability in 100% of labs.

GLWG

2016
-
2020

Launch Green Technology programs.

GITWG

2016

Articulate UVA's on-Grounds vulnerability to climate change and identify methods to increase resiliency.

CoS

2017

Sustainable design and construction:

Finalize and implement UVA -specific sustainable building standards within the Facility Design Guidelines, with energy targets for new construction and major renovations and a commitment to evaluating the feasibility of net zero energy use and potential for maximizing daylight and passive design principles. Seek synergies that reduce energy use while honoring UVA's historic preservation priorities.

GBSWG

2016

Action

Lead

Target year

Sustainable transportation:

Prioritize new environmentally efficient technology in new fleet acquisitions.



2020

Assess and analyze current University bus usage and routes to update routes and schedules to maximize efficiency.



2020

GOAL

**REDUCE REACTIVE NITROGEN
LOSSES TO THE ENVIRONMENT 25%
BELOW 2010 LEVELS BY 2020.**



Action

Lead

Target year

Finalize and implement a 2016-2025 Nitrogen Reduction Action Plan, outlining strategies to meet the goal, aligned with the strategies in the Energy and Emissions Action Plan. Include strategies for reducing the nitrogen impact of purchased food.



2016

METRICS AND MEASURES OF SUCCESS: Total greenhouse gas, energy, and nitrogen reductions, reductions per capita and per square foot.

WATER

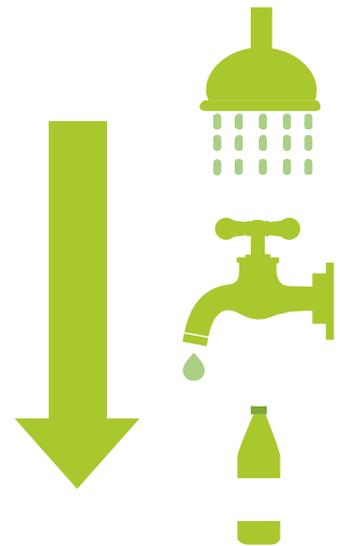
UVA's water consumption as of FY2015 has declined more than 32% since the peak in FY1999 (despite a 30% increase in square footage and 22% increase in the number of faculty, staff, and students), including a 4% reduction between FY2014 and FY2015. In FY2015, UVA used 453,270,000 gallons of water. The largest consumer of water is the chilled water plant system for cooling, but there is also significant water use in academic buildings, residence halls, and the hospitals. For more information, see the most recent FM Operations Annual Report.



GOAL

**REDUCE POTABLE WATER USE 25%
BELOW 2010 LEVELS BY 2035.***

**EQUIVALENT TO A REDUCTION OF
132,822,000 GALLONS OF PURCHASED
WATER IN YEAR 2035; A 59% REDUCTION
BELOW THE 1999 PEAK*



Action

Finalize and implement a 2016-2025 Water Reduction Action Plan, outlining strategies to meet the goal. At a minimum:

.....

Design frameworks for accountability within schools and units for meeting institution-wide water goals. Set school and unit-specific reduction goals informed by baseline measurements.

.....

Identify and employ best practices to reduce water consumption, reduce chilled water demand, use rainwater and condensate, and recycle wastewater.

.....

Within UVA-specific sustainable building standards, include no potable water for irrigation, fixture requirements, sub-metering evaporative end uses, and site design guidelines.

.....

Lead

Target year



2016



2016



2020



2016

Action

Expand education and competitions for water use reduction.

Lead

GBSB

Target year

2017

Explore synergies with the College of Wise and UVA Foundation, including documenting the full direct water footprint of each entity.

OFS
ESS

2020

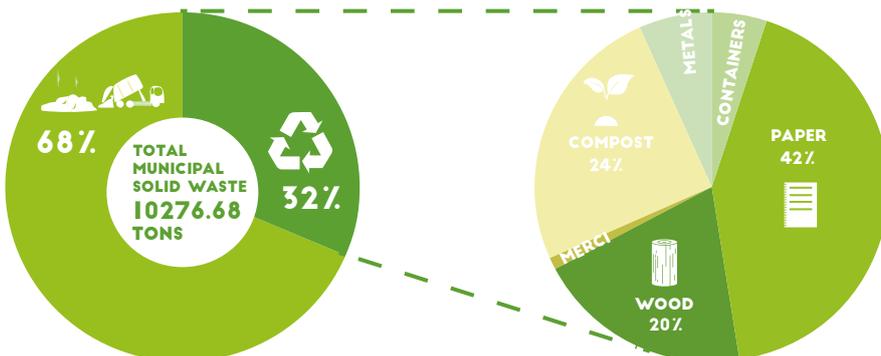
METRICS AND MEASURES OF SUCCESS: Reductions in total potable water use, total water use per acre of vegetated grounds, total water use per FTE, and total water use per square foot.

MATERIALS AND WASTE

During Calendar Year 2014, the University generated 15,994 tons of waste, and of this diverted 8,542 tons from landfills, for a total diversion rate of 53%. The total waste landfilled was 7,451 tons. These numbers, as well as the goals below, include all waste generated at UVA, by calendar year: aluminum, plastic, glass, metal, paper, cardboard, furniture, wood, construction waste, organic materials, coal ash, chemicals, lamps/ballast, tires, oil, batteries, and electronics. For more information, view the current Recycling Report and Recycling at UVA.



RECYCLING & WASTE 2014



GOAL

REDUCE THE TOTAL TONNAGE OF WASTE GENERATED AT UVA 50% BELOW 2014 AMOUNTS BY 2035.*

**INCLUDES ALL TRACKABLE WASTE STREAMS, EQUIVALENT TO GENERATING LESS THAN 7,856 TONS OF TOTAL WASTE.*



Action

Finalize and implement a 2016-2030 Waste Reduction Action Plan, outlining strategies to meet the goal. At a minimum:

.....

Create a set of procurement policies to minimize waste, such as packaging reduction and incentivizing the use of salvaged or surplus materials.

.....

Institute sustainability training for all purchasers.

.....

Include food-related waste reduction strategies (see Food section).

.....

Lead

Target year



2016



2020



2019



2016



GOAL

LANDFILL LESS THAN 2000 TONS OF WASTE ANNUALLY BY THE YEAR 2035.*

**INCLUDES ALL WASTE STREAMS, EQUIVALENT DESCRIBED ABOVE, EQUIVALENT TO DIVERTING 87% OF THE 2014 WASTE STREAM, OR APPROXIMATELY 75% OF THE MINIMIZED WASTE GENERATED IN 2030.*



Action

Lead

Target year

Finalize and begin to implement a 2015-2035 Waste Reduction Action Plan, outlining strategies to meet the goal. At a minimum:

WRGTF

2016

Achieve 100% co-location for interior and exterior recycling and trash containers, with standardized and graphically consistent bins and signage.

FM

2020

Institute mandatory basic waste diversion education for new students, faculty, and staff with data from waste audits.

**OFS
OTHERS**

2017

Engage off-Grounds students and connect messaging with the City of Charlottesville and Albemarle County.

**OFS
OTHERS**

2017

Include food-related diversion strategies (see Food section).

SFSTF

2016

GOAL

INCREASE ENVIRONMENTALLY PREFERABLE PURCHASING AS A PERCENTAGE OF PURCHASES.



Action

Standardize and streamline means of sustainable purchasing data tracking and analysis.

Lead

Target year

PWG

2019

Create a set of procurement policies with agreements that require adherence to minimum environmental standards, with an associated handbook for sustainable purchasing.

PWG

2019

Expand Building Services' Green Seal program to the majority of UVA buildings. Require that other custodial vendors employ green cleaning practices.

PWG
FM

2020



LAND AND BUILDING USE

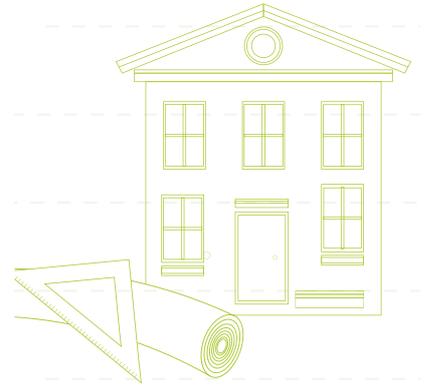
Sustainable environmental design at UVA addresses the broad physical environs of the Grounds and management of University land use. Sustainable development improves opportunities for beneficial planning by taking into consideration such broad parameters as green LEED buildings, landscapes, transportation, stormwater management, and utility infrastructure to implement smart growth practices.

In 2007, the University committed to the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) certification of all new buildings and major renovations, and has completed 39 LEED certified buildings as of 2015, including the College at Wise. In 2007, UVA established the Grounds Improvement Fund (GIF) to support projects that enhance the appearance, sustainability, functionality, and safety of the University's environs, with 10 – 15 projects that are designed and implemented per year. Phases 1 and 2 of the UVA Transportation Demand Management Plan have been completed and are actively being implemented across Grounds, including local transit reciprocity, ZipCar, and bikeshare programs. The Office of the Architect for the University (OAU) has developed a strategic set of planning documents to guide future growth and focus on supporting and progressing sustainability practices at UVA: the Grounds Plan, the Health System Area Plan, and the Precinct Plans.



GOAL

INCREASE EFFICIENCY OF UVA LAND AND BUILDINGS TO LIMIT THE NEED FOR NEW CONSTRUCTION.



Action

Program and develop opportunities for multidisciplinary use of buildings along with efficient and integrated facilities.

Lead

Target year

OAU
FM
SLC

2016
-
2020

Increase usage of existing space in buildings and in building density, to minimize need for new facilities.

OAU
FM
SLC

2016
-
2020

Build awareness throughout the University community of our campus plans that guide growth of buildings, density of development, and the integration of green space.

OAU
FM
SLC

2016
-
2020

GOAL

FORM CONNECTIONS WITH OUR LARGER COMMUNITY THROUGH UVA AND UVA FOUNDATION LANDS.



Action

Invest in creating bridges to our community through program integration and sharing of physical resources.

Lead

Target year

OAU
UF
UCOM

2016
-
2020

Analyze where communities are in terms of sustainability; blend local sustainability planning and programming initiatives with University initiatives.

OAU
UF
UCOM

2016
-
2020

Continue working with adjacent University neighborhoods to address issues of common concern.

OAU
UF
UCOM

2016
-
2020

Share physical resources with our larger community, developing additional reciprocal access to land, building, and transportation resources.

OAU
P&T
UF

2016
-
2020

Continue developing additional alternative transportation options for commuting to Grounds and travel within Grounds for employees, students, and visitors.

P&T

2016
-
2020

GOAL

ENHANCE AND EXPAND THE NUMBER OF SUSTAINABLE AND MEANINGFUL SITES AND BUILDINGS.



Action

Increase funding and investment for landscapes and spaces between buildings and pedestrian corridors.

Lead

Target year

OAU
FM

2016
-
2020

Expand use of environmentally beneficial site and building design strategies such as green roofs, permeable paving, plantings with wildlife habitat benefit and improved stormwater quality.

OAU
FM

2016
-
2020

Incorporate sustainable site strategies into Facilities Design Guidelines.

OAU
FM

2016
-
2020

Plan and design landscapes and open space that can support learning, research and teaching in areas such as environmental sciences, civil engineering, stormwater management and conservation/preservation of biodiversity resources.

OAU
FM

2016
-
2020

Action

Increase student, faculty and staff engagement with campus natural lands through research, stewardship, and maintenance practices.

Lead

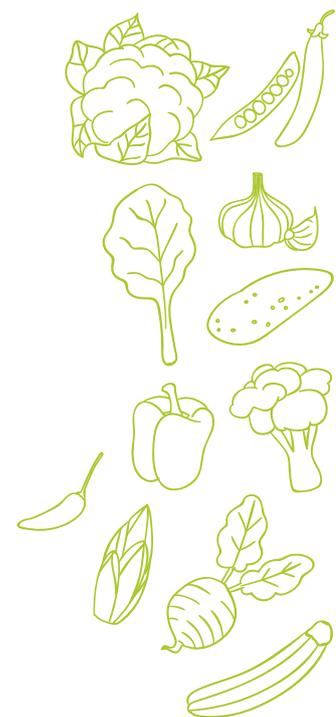


Target year

2016
-
2020

FOOD

UVA Dining (Aramark), has embedded sustainability actions into their Green Dining programs for many years, with strong student support. The Health System (Morrison's) and Darden are also incorporating sustainability into their operations. A newly-formed Sustainable Food Strategy Task Force brings together the three dining entities with other faculty, staff, and student stakeholders across Grounds to build unity and collaboration within UVA to achieve a food system that supports University sustainability goals and contributes to improved health outcomes for students, faculty and staff. Additionally, members of the Task Force collaborate across Virginia via a 4-VA Sustainable Food Forum and with other colleges and universities across the Southeast. The Food Collaborative, consisting of faculty, students, staff, and community members, works to promote research, teaching, and community engagement. The Food Collaborative sponsors talks, panels, and film screenings, and provides a focal point for studying and improving regional and local food systems. There are also several food-related student organizations.



GOAL

ANNUALLY INCREASE THE PERCENTAGE OF SUSTAINABLE FOOD AND BEVERAGES AVAILABLE ON GROUNDS.



Action

Create and implement a Sustainable Food Systems Action Plan, with a focus on strengthening existing and exploring new pathways for sustainable sourcing. At a minimum:

Track and benchmark sustainable food purchases with other universities by using the most recent current version of AASHE STARS as a metric. Track UVA wide: UVA Dining, Health System, and Darden. Use STARS definitions to set a quantitative sustainable food purchasing goal, as a percentage of overall purchasing cost – individually for UVA Dining, the Health System, and Darden.

Consider the merits of creating targets, aligned with STARS, within the overall sustainable food goal for criteria such as local, community-based, organic, ecologically sound, humanely raised, and fairly traded.

Lead

Target year

SFSTF

2016

SFSTF

2016

SFSTF

2016

Action

Create a target for annually decreasing the percentage of conventionally produced animal-derived products purchased as a percentage of the total food purchased.

Lead



Target year

2016
-
2017

Develop new strategies and expand existing pilots for inclusion in the food portion of the Nitrogen Reduction Plan to help achieve the existing nitrogen reduction goal.

SFSTF

2016
-
2020

Develop a UVA - sustainability rating for food purchased on Grounds to indicate sustainable criteria, including catered food purchased from off-Grounds vendors.

SFSTF

2018
-
2020

Goal

REDUCE FOOD WASTE AND SINGLE-USE FOOD SERVING ITEMS SENT TO LANDFILL BY 2030, IN ALIGNMENT WITH THE OVERALL UVA WASTE GOALS.



Action

Implement and expand strategies to reduce, recover, and recycle (compost) food waste to the greatest extent possible. Include strategies in the 2016-2030 Waste Reduction Action Plan. At a minimum, include:

Lead



Target year

2016
-
2020

Action

Estimate the amount of food and single-use food serving items sent to landfills, to create a baseline, and then set a specific annual target for reduction, including standardization across Grounds.

Lead

FCOLAB

Target year

2016
-
2020

Explore strategies for reducing food waste.

FM

2016
-
2020

Evaluate the feasibility and potential impact of implementing a food waste diversion policy at UVA – no food waste from major events or front-of house food locations can be sent to landfills. Develop a phased strategy for implementation.

SFSTF
OFS

2016
-
2020

Develop a strategy for providing composting at all major UVA events, including Athletics, catered events, and dining locations, concurrently developing a strategy for utilizing only reusable, recyclable, or compostable materials as a default.

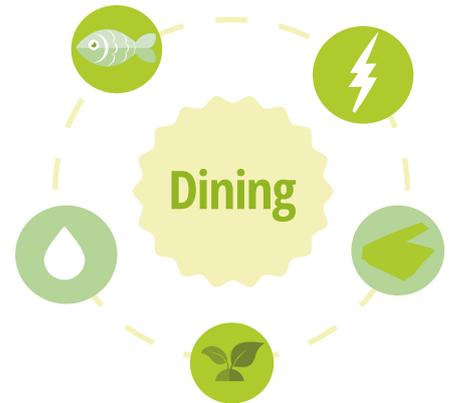
OFS

2016
-
2020



GOAL

**REDUCE THE ENERGY AND WATER
IMPACT OF DINING OPERATIONS.**



Action

Aligned with accountability tools outlined in the emissions and water sections, set reduction targets starting from baseline measurements.

Lead

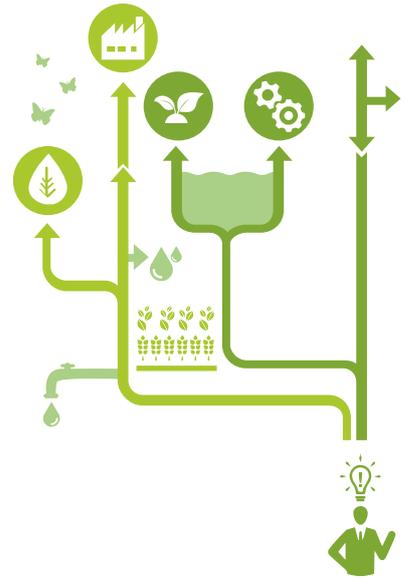


Target year

2016
-
2020

GOAL

INCREASE STUDENT, STAFF, AND FACULTY AWARENESS OF SUSTAINABLE FOOD SYSTEMS AND SEEK TO TRANSLATE THIS HEIGHTENED AWARENESS INTO INFORMED CHOICES.



Action

Develop tools to measure awareness and action and set a quantitative goal to measure progress.

Lead

Target year

SFSTF

2016
-
2020

Develop a positive and comprehensive food messaging campaign to educate the U.Va. community on ways to avoid food waste, purchase and select sustainable food, and support and connect to the local food community.

FCOLAB

2016
-
2020

Regularly hold food-specific events or symposiums.

FM

2016
-
2020

Develop signage to communicate sustainable food characteristics.

OFS

2016
-
2020

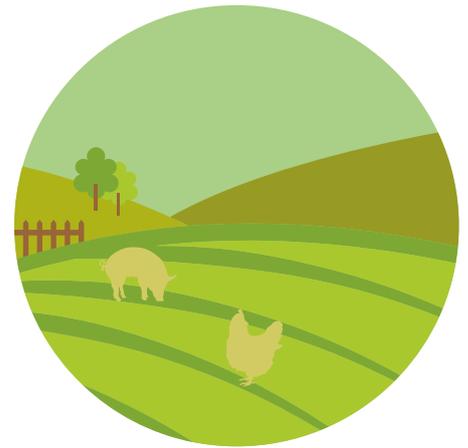
Incorporate food research into student projects and curriculum, particularly involving Morven and student gardens.

SFSTF
OFS

2016
-
2020

GOAL

COLLABORATE WITHIN UVA AND WITH THE REGION, BRINGING TOGETHER FACULTY, STAFF, STUDENTS, AND DINING OPERATIONS TO ADVANCE SUSTAINABLE FOOD SYSTEMS IN THE BROADER COMMUNITY.



Action

Bring together key food providers, within UVA, within Virginia, and nationally to share experiences, coordinate, collaborate, and demonstrate progress via the Sustainable Food Strategy Task Force, Virginia Sustainable Food Consortium, and other avenues.

Lead

Target year



2016
-
2020

Collaborate with local sustainable food organizations and farms to enhance or create additional pathways to supporting sustainable food systems, to grow the supply of local food available for UVA and partner Virginia universities, and to facilitate a method for use of local foods.



2016
-
2020

INVESTMENT ASSETS

UVA does not currently have a clearly articulated guiding philosophy for applying environmental, governance, social, and ethical (EGSE) factors to the investment of its endowment or an established process by which to evaluate proposals of this nature from the University community. In the past, issues involving ESGE were addressed on an ad-hoc basis and decisions were not entirely consistent with modern portfolio theory and fiduciary law charging fund managers to maximize returns on investment within appropriate limits of risk.

GOAL

CONSIDER ENVIRONMENTAL, GOVERNANCE, SOCIAL, AND ETHICAL ISSUES IN MANAGING INSTITUTIONAL INVESTMENT ASSETS.



Action

In consultation with the University of Virginia Investment Management Company (UVIMCO), prepare and propose to the UVA's Board of Visitors a resolution to establish an Advisory Committee on Sustainable Investment to put forth recommendations regarding investment matters pertaining to environmental, governance, social, and ethical issues raised by the University community.

Lead

SIWG

Target year

2016

METRICS AND MEASURES OF SUCCESS: Finalizing and presenting the resolution to the Board of Visitors, Board adoption and implementation of the resolution, and subsequent metrics on EGSE issues presented to and considered by the advisory committee.

DISCOVER

Discover seeks to promote and foster critical thinking about sustainability issues in future and current leaders by seeking solutions both locally and globally via interdisciplinary teaching and research to reduce the impact of human activities on the environment. We will standardize an approach to utilize the Grounds as a learning tool through collaboration between operational and academic units on areas of shared interest. We will seek to create interdisciplinary resources, to establish internal and external focal points for sustainability research, and to foster collaboration amongst the UVA community.

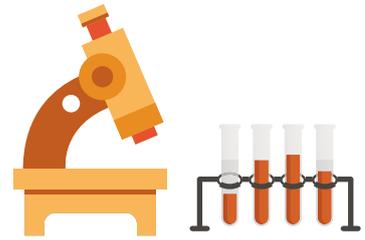
UVA currently offers over 160 undergraduate and 150 graduate sustainability-focused or sustainability-related courses. The Global Environments + Sustainability Major, housed within the College of Arts and Sciences, addresses problems associated with human transformations of the earth through the triple lens of environment, equity, and economy. The Global Sustainability Minor currently includes 114 students across six schools. Global Sustainability course students undertake a Think Global/Act Local group project each semester.

The Associate Vice President for Research, Sustainability, & the Environment undertakes strategic sustainability research initiatives, including a new Jefferson Trust Resilience Fellows program. Over 24 departments currently engage in sustainability-related research. The Teaching and Research Subcommittee, under the University Committee on Sustainability, seeks to foster the development and dissemination of sustainability knowledge through research and teaching.



GOAL

ENHANCE SUSTAINABILITY RESEARCH AND UVA'S REPUTATION AS A LOCUS OF SUSTAINABILITY.



Action

Increase the visibility of UVA sustainability research internally, nationally, and internationally.

Lead

Target year

VPR
T&R

2017

Partner and collaborate in the creation of a cross-University Resilience Institute.

VPR
T&R

2017

Establish a fund to support annual symposiums with outside and local participation.

VPR
T&R

2017

Incorporate more sustainability-related research news into the UVA communication avenues.

VPR
T&R

2017



<i>Action</i>	<i>Lead</i>	<i>Target</i>
Increase the number of sustainability research projects and publications by UVA faculty.	VPR T&R	2017
Ramp up the number of extramural dollars for sustainability research.	VPR T&R	2017
Offer competitive summer research funding to support collaborative research.	VPR T&R	2017
Encourage transdisciplinary research and integration across schools and disciplines.	VPR T&R	2017
Fund Sustainability Colloquia to foster connections between researchers.	VPR T&R	2017
Post a clearinghouse of current projects on a UVA website.	VPR T&R	2017

GOAL

ENHANCE SUSTAINABILITY-FOCUSED TEACHING AND CURRICULAR DEVELOPMENT.



Action

Establish a sustainability curriculum position, with administrative support, for interdisciplinary sustainability degree programs.

Lead

Target year

T&R

2020

Increase the number of sustainability-focused courses, including hiring cross-disciplinary faculty. Create competitive internal funding or incentives for course development or course release (e.g., a Sustainability Fellowship modeled on Fellowships in Ethics).

T&R

2020

Increase the number of students in sustainability classes.

T&R

2020

Move towards a required undergraduate course on sustainability and resilience issues.

T&R

2020

Action

Lead

**Target
year**

Offer more courses or expand existing programs, including non-traditional courses and programs, such as the Morven Summer Institute, Summer Sustainability Institutes, and non-credit courses.



2020

Increase the visibility of sustainability-focused and sustainability-related courses.



2020

Increase the number of interdisciplinary capstone courses.

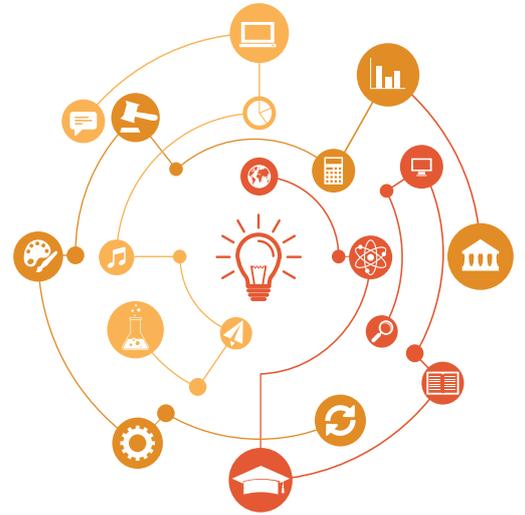


2020

GROUNDS AS A LEARNING TOOL

GOAL

UTILIZE THE GROUNDS AS A LEARNING TOOL THROUGH COLLABORATION BETWEEN OPERATIONAL AND ACADEMIC UNITS.



Action

Ensure structures are in place to make operations staff and data readily available to faculty and students, with mechanisms to successfully maintain multi-year projects. Use student projects, internships, and fellowships to supplement existing initiatives.

Lead

Target year

FM
OFS
CoS

2016
-
2020

Develop on-Grounds connections to the Biophilic Cities Project research.

FM
OFS
CoS

2016
-
2020

Energy and Emissions: Partner with schools to create capstone projects related to renewables. Connect energy research to potential implementation on Grounds.

FM
OFS
CoS

2016
-
2020

<i>Action</i>	<i>Lead</i>	<i>Target year</i>
Water: Continue to utilize existing stormwater management practices as learning tools. Develop additional synergies between water resources on Grounds and teaching and research opportunities.	FM OFS CoS	2016 - 2020
Identify a means of estimating the social cost of water.	FM OFS CoS	2016 - 2020
Expand the water footprint model research to understand impacts of our indirect water use.	FM OFS CoS	2016 - 2020
Materials/Waste: Create projects to assist departments in analyzing impacts of decisions via lifecycle costing and analysis.	FM OFS CoS	2016 - 2020
Land/Building Use: Create projects related to increasing utilization of open space and access to the outdoors on Grounds.	FM OFS CoS	2016 - 2020
Food: Support student-led projects to increase student education and awareness of food sustainability and health.	FM OFS CoS	2016 - 2020
Civic Engagement: Promote the Global Environments + Sustainability Major, and enable students to undertake sustainability/ social justice projects.	FM OFS CoS	2016 - 2020

METRICS AND MEASURES OF SUCCESS: Funding available to support the objectives, the number of sustainability-focused courses, the number of departments offering sustainability courses, the number of student projects related to sustainability, and the number of students enrolled in courses.

APPENDICIES

APPENDIX 1: GLOSSARY OF TERMS

AASHE: Association for the Advancement of Sustainability in Higher Education

CoS: Committee on Sustainability

CES: Civic Engagement Subcommittee

EETF: Energy and Emissions Task Force

EFRP: Environmental Footprint Reduction Plan

ESS: Environmental Stewardship Subcommittee

FCOLAB: UVA Food Collaborative

FM: Facilities Management

GBSB: Green Building Standards Subcommittee

GBSWG: Green Building Standards Working

GITWG: Green IT Working Group

UHR: Human Resources

MH: Madison House

NWG: Nitrogen Working Group

ODE: Office of Diversity and Equity

ODOS: Office of the Dean of Students

OFS: Office for Sustainability

OAU: Office of the University Architect

P&T: Parking & Transportation

PWG: Procurement Working Group

SESN: Southeast Sustainability Network

SFSTF: Sustainable Food Strategy Task Force

SIWG: Sustainable Investments Working Group

SLC: Space Leadership Council

STARS: Sustainability Tracking and Assessment Rating System

T&R: Teaching and Research Subcommittee

UBO: University Budget Office

UCARE: University and Community Action for Racial Equity

UCOM: Office of University Communications

UF: UVA Foundation

USS: University Staff Senate

VPR: Vice President for Research

APPENDIX 2: SUSTAINABILITY PLAN CONTRIBUTORS AND REVIEWERS

Committees, Working Groups, and Task Forces

University Committee on Sustainability

Civic Engagement Subcommittee

Environmental Stewardship Subcommittee

Teaching and Research Subcommittee

Equity and Wellness Task Force

Office for Sustainability

Sustainable Food Strategy Task Force

Energy and Emissions Action Plan Task Force

Water Reduction Goal Task Force

Materials and Waste Reduction Goal Task Force

Working Group on Sustainable Investments

Student Council and Student Plan Leaders

Green Building Standards Committee

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