



UNIVERSITY OF VIRGINIA

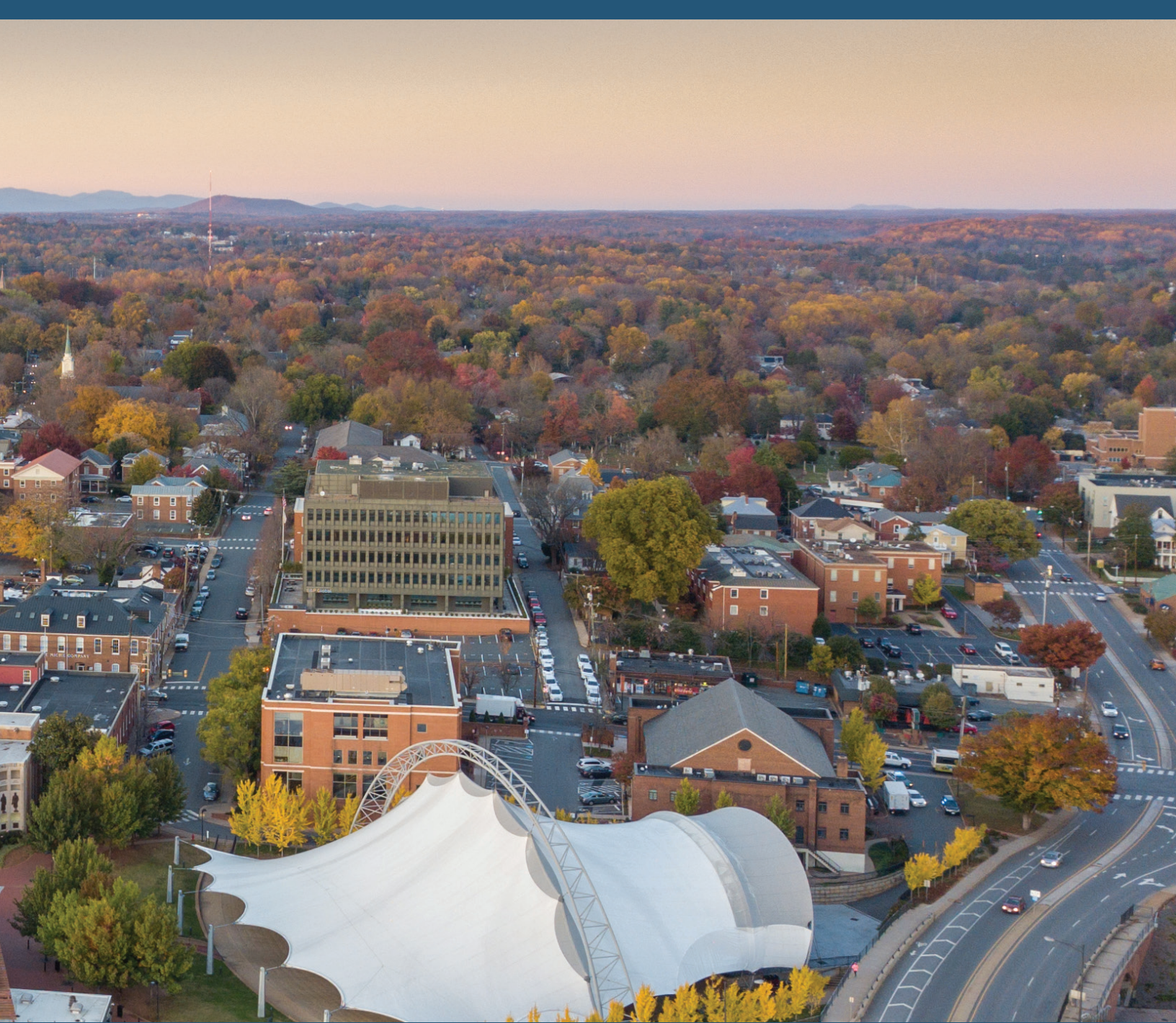
SUSTAINABILITY

2020-2030 PLAN

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LETTER FROM PRESIDENT JIM RYAN

The University of Virginia is committed to making the world a better place. The ambitious sustainability goals outlined in these pages, and the strategic actions we will take to achieve them, exemplify our institutional commitment to that higher purpose.

As a community, we want to live our values consistently. Key among those values is being a good neighbor, locally in our community, and also on a global scale. We should always consider our collective impact on our community and the world. But we need to do more than express our commitment to sustainability; we need to follow through on that commitment.

In other words, if we're going to extol the value of sustainability, we also have to practice it. As you'll see in this report, it's going to take a lot of work to reach our goals. But if all of us — students, faculty, staff, and alumni — work together, I have no doubt we will succeed.



BOARD OF VISITORS 2020-2030 SUSTAINABILITY PLAN

WHEREAS, the University of Virginia's long tradition of environmental stewardship and sustainability practices has enabled it to put its values into practice, create and advance knowledge, and translate research into action to serve the Commonwealth and beyond; and

WHEREAS, due to investments in energy efficiency, utility scale solar, technology innovations, and other related initiatives, the University expects to meet its current carbon goal of a 25% reduction below 2009 levels in calendar year 2019, six years ahead of schedule; and

WHEREAS, the University is committed to ambitious goals that will build on previous successes and establish the University as the leader among institutions of higher education in the areas of sustainability and energy and environmental stewardship; and

WHEREAS, the University has developed a 2020-2030 Sustainability Plan that calls for bold leadership in addressing sustainability challenges across the interconnected areas of research, teaching, operations, service, and community engagement;

RESOLVED, the Board of Visitors approves the following goals included in the University's 2020-2030 Sustainability Plan:

- (1) Be carbon neutral by 2030 and fossil fuel free by 2050;
- (2) Achieve the "30 by 30" goal by 2030 (relative to 2010 levels):
 - Reduce water use and reactive nitrogen emissions by 30%
 - Reduce its waste footprint to 30%
 - Increase sustainable food purchases to 30%;
- (3) Partner with the community to accelerate collaborative initiatives to advance sustainable, equitable, and healthy places for all; and

RESOLVED FURTHER, the initiatives to achieve these goals will be evaluated on the basis of benefit, cost, and availability of funding; and

RESOLVED FURTHER, a progress report will be presented annually to the President and the Board of Visitors.



LETTER FROM THE UNIVERSITY COMMITTEE ON SUSTAINABILITY

UVA's strengths as a top ranked public university with a highly collegial and collaborative world class faculty and staff, diverse student body, engaged and committed alumni, involved community, and use of our Grounds as a tool for discovery and learning position us to exemplify our values in practice, create and advance knowledge, and translate research into action to serve the Commonwealth and beyond.

Sustainability at the University of Virginia is at an important inflection point. We can become a leader in solving the world's most pressing challenges, with the confluence of several important milestones of the Bicentennial, UVA's new strategic plan, the accomplishments of UVA's first five year Sustainability Plan (2016-2020), the approach of the endpoint of UVA's first greenhouse gas and nitrogen reduction goals (2025), and the City of Charlottesville and Albemarle County's new climate action goals (both a 45% reduction by 2030 and carbon neutral by 2050).

As UVA moves into its third century as a top ranked public university, it is imperative that we demonstrate bold leadership in addressing sustainability challenges, particularly climate change, across the interconnected areas of research, teaching, operations, service, and community engagement.

This includes science, technology, engineering, design, humanities, ethics, governance, business, law, policy, public health, and other discovery areas; our Grounds for learning and research; our practice as it relates to our own use of fossil fuels, water, materials, and other resources; and service to our community, the Commonwealth, and beyond. By weaving these areas into this comprehensive plan for sustainability, we will be able to maximize our impact in addressing pressing global challenge and will lead by example in our own practice on Grounds.

UVA's sustainability efforts are organized around how we **Engage** and serve our community, **Steward** resources and live our values, and **Discover** ways to learn about and solve global challenges. Building upon decades of environmental and sustainability work, the acceleration of sustainability strategic planning of the past decade, the strengths of our schools, collaborative faculty and staff, engaged students and alumni, and action-oriented community, UVA is well positioned to realize a bold, innovative vision for sustainability for 2030 and beyond. This can be realized only through engagement and collaboration so we invite you to take bold action, realize your ideas, and join us in this important work.

BACKGROUND

The UVA Sustainability Plan 2016-2020, has been instrumental in strategic planning as well as catalyzing pan-University stewardship, engagement, curriculum and research. UVA's collaborative network of faculty, students, staff, and alumni committed to sustainability provides a strong foundation for UVA to lead transformational change and build on its community partnerships to advance regional climate action and sustainability plans. UVA has a strong history of collaborating with city, county, governmental agencies, non-profits, and other institutions on shared sustainability initiatives such as the recent launch of Climate Action Together. UVA also has a strong portfolio of outreach and engagement programs, and with additional partnerships will more deeply address social aspects of sustainability.

We build upon a distinguished legacy, with the first Environmental Sciences department in the US and a World Heritage site committed to and founded on the pedagogical concept of active learning from our Academical Village. Finding solutions to environmental challenges is increasingly transdisciplinary, with the most impactful discoveries spanning boundaries of disciplines and approaches. UVA has a competitive advantage in this respect. Our size, physical adjacencies of our schools, and shared faculty and resources amongst the schools facilitate deep and sustained collaborations.

This 2020-2030 Sustainability Plan builds on our successes to date. UVA is expected to meet its current carbon goal of 25% below 2009 levels in 2019, six years ahead of schedule. This is due to investments made in energy efficiency work, utility scale solar, innovations in technology, and similar initiatives. UVA's first strategic plan for sustainability, the UVA Sustainability Plan 2016-2020 catalyzed pilot initiatives into replicable and scalable longer-term solutions, enabling deeper engagement, and fostering new pan-University and community partnerships. Seed funding, allocated across UVA's strategic framework of Discover, Engage, and Steward, and administered by the University Committee on Sustainability and its three subcommittees: Teaching and Research (Discover), Civic Engagement (Engage), and Steward (Environmental Stewardship), has enabled the development of new sustainability courses, instituted new sustainability fellows, seeded new research, provided career and professional development, implemented student-led projects, and has facilitated engagement events, Grounds as a living lab projects, and further strategic sustainability development. Additionally, with \$2 million in seed funding, the Environmental Resilience Institute (ERI) has made strong connections between schools, supporting 28 collaborative team projects on Water Futures, Climate Resilience, and Environment and Health and involving over 100 faculty from 10 schools, 6 Water Futures Faculty Fellows, and 16 Postdoctoral / Graduate Fellows and Undergraduate Externs.

This 2020-2030 Sustainability Plan is part of a larger sustainability strategic planning framework:





PLAN AT A GLANCE

The University of Virginia's leadership role in environmental stewardship and broader social and economic sustainability issues has evolved and expanded over the past 200 years with significant acceleration over the past decade. Through this 2020-2030 Sustainability Plan, UVA commits to new goals and accelerates existing goals and strategic actions that deepen our leadership in all realms of sustainability: serving our community (Engage); living our values (Steward); and global impact through curriculum and research (Discover).

2020-2030 GOALS

Governance and Collaboration

- Advance sustainability leadership and impact by incorporating environmental, economic and equity considerations in decision-making, building accountability for sustainability goal achievement at every level of the University.

Engage

- Partner with our community to accelerate collaborative initiatives to advance sustainable, equitable, and healthy places for all.

Steward

- Be carbon neutral by 2030 and fossil fuel free by 2050.
- Reduce reactive nitrogen losses to the environment 30% below 2010 levels by 2030.
- Reduce potable water consumption 30% below 2010 levels by 2030.
- Reduce waste footprint to 30% of 2010 totals by 2030.
- Increase sustainable food purchases to 30% of the annual total by 2030.

Discover

- Enhance sustainability-focused teaching, curricular development, and experiential learning.
- Promote sustainability research and UVA's reputation as a locus of sustainability.
- Foster collaborations that enable mutually beneficial community- and Grounds-engaged research and learning.

GOVERNANCE AND COLLABORATION

UVA's deeply held values of honor, student self-governance, and public service have fostered a strong network of sustainability initiatives that support individual and community engagement on Grounds and beyond. In addition to addressing the University's own environmental impacts through stewarding its operations, UVA supports over 130 sustainability related courses and hundreds of faculty involved in sustainability-related research. UVA is continually exploring cutting edge teaching and research, transforming prospective students into tomorrow's leaders in a wide variety of fields, and crossing disciplinary boundaries for faculty to incubate ideas and create solutions to some of today's greatest challenges.

GOAL:

Advance sustainability leadership and impact by incorporating environmental, economic and equity considerations in decision-making, building accountability for sustainability goal achievement at every level of the University.

STRATEGIC ACTION: Develop school and unit-level action plans that align with the UVA 2030 Great and Good University sustainability goals, the UVA 2020-2030 Sustainability Plan, and sustainability action plans.

STRATEGIC ACTION: Evaluate financial investments and incentives to advance transformational change.





Photo by Sanjay Suchak, University Communications

ENGAGE: COMMUNITY AND SERVICE

Serving our community and beyond requires partnering with the local community as well as across the Commonwealth on regional climate action and sustainability planning with focus on the disproportionate impact of climate change on underserved populations. Initiatives include developing new ways of engaging the community to partner on policy, law, and programs focused on K-12 education, food justice, transportation, resilience, equitable access to healthy living, and Grounds as community resource for learning. In partnership with our neighbors in Charlottesville and surrounding counties, we will work toward being a just and sustainable community.

GOAL:

Partner with our community to accelerate collaborative initiatives to advance sustainable, equitable, and healthy places for all.

STRATEGIC ACTION: Strengthen formal connections, collaboration, and communication within UVA sustainability-focused initiatives and between UVA and community initiatives.

STRATEGIC ACTION: Collaborate with the City of Charlottesville, Albemarle County, individuals, community groups, higher education, municipalities, and others across the Commonwealth of Virginia to encourage dialogue, awareness, and action.





STEWARD: LIVING OUR VALUES

Leadership in sustainability exemplifies living our values and presents an opportunity for UVA to be great, do good, and amplify its impact beyond its geographical boundaries through teaching, research, operations, sharing best practices, reducing adverse impacts on human and ecological health, and improving the lives of all.

GOAL:

UVA will be carbon neutral by 2030 and fossil fuel free by 2050.

STRATEGIC ACTION: Develop 2030, 2040, and 2050 Climate Action Plans. Ensure that all decisions made at UVA concerning its energy sources and generation, infrastructure, buildings, fleet, and transportation are guided with this ultimate objective in mind. Areas of focus will be addressing UVA's fuel mix, increasing renewable energy, reducing the impact of growth, energy efficiency, conservation, and transportation.



30 BY 30 GOALS:

*Reduce reactive nitrogen losses to the environment
30% below 2010 levels by 2030.*

*Reduce potable water consumption
30% below 2010 levels by 2030.*

*Reduce waste footprint to
30% of 2010 totals by 2030.*

*Increase sustainable food purchases to
30% of the annual total by 2030.*

STRATEGIC ACTIONS: The 2016-2020 Steward action plans (nitrogen, waste, water, and food) will be updated to reflect these accelerated goals. These action plans will provide details on major strategies and roadmaps to meet these goals.



DISCOVER: CURRICULUM AND RESEARCH

Accelerating rates of environmental change affect every aspect of the human condition, from economics to health and wellbeing, democracies and justice. Finding solutions to these challenges demands that we also accelerate our rate of discovery and student engagement. Jefferson's vision of educating citizen leaders requires that students take on the environmental challenges that define their future. While faculty across disciplines bring a wealth of knowledge to our students and the world, now is the time to build on our legacy and transform the way we teach and research. UVA will usher in a new paradigm of transdisciplinary endeavors to create a sustainable and resilient future.

Our research and teaching are collaborative, cutting-edge, and connected. Strong leadership, imagination, and investment in a cohesive set of initiatives will distinguish UVA as a global leader in sustainability and resilience. Harnessing new tools and technologies, new data, and new connections between the arts, humanities, and sciences, world-class faculty and students across Grounds will link research with action, university with community, and scholars with citizens. Excellence in research means building on our strengths from Grounds to the globe.



GOAL:

Enhance sustainability-focused teaching, curricular development, and experiential learning.

STRATEGIC ACTION: Evaluate continuing Sustainability Faculty Teaching Fellows in the pan-University Global Studies Environments + Sustainability program to create learning experiences across disciplines, build an intellectual community, and educate future sustainability leaders.

STRATEGIC ACTION: Evaluate the possibility of creating a Summer Sustainability Program in coastal Virginia, focused on climate change science and solutions, to provide experiential learning and research-to-action classes for undergraduate students, enrichment opportunities for high school students, and training in climate education for K-12 teachers.

STRATEGIC ACTION: Evaluate the feasibility of creating an Undergraduate Community Green Scholars Program to guarantee an internship for every sustainability student, delivering professional development and real-world experience in solving environmental problems.

GOAL:

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

STRATEGIC ACTION: Under the direction of the Provost and the Vice President for Research, continue the Environmental Resilience Institute to secure UVA's position as an international leader linking science, policy and practice to tackle society's biggest environmental challenges through transdisciplinary research. Evaluate strategic investments focused on people (Faculty Fellows, Graduate and Post-doctoral Fellows, Undergraduate Externs), projects (Seed Funding), and engagement (Public-Private Partnerships, Research Summits).

GOAL:

Foster collaborations that enable mutually beneficial community and Grounds-engaged research and learning.

STRATEGIC ACTION: Evaluate programs to foster innovative collaborations between operational and academic units and the community to generate solutions-oriented research on Grounds and within the community.



DESIGNED BY SAMANHA CAMPBELL



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From the Grounds Up

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