THE PENN STATE SUSTAINABILITY STRATEGIC PLAN

Sustainability is the simultaneous pursuit of human health and happiness, environmental quality, and economic well being for current and future generations.

Penn State’s vision is a comprehensive integration of sustainability into the University’s research, teaching, and service that will prepare students, faculty, and staff to be tomorrow’s sustainability leaders.

LAND GRANT 2.0

In 1855, the Pennsylvania legislature chartered the Farmers’ High School that would one day become The Pennsylvania State University, a flagship of the land-grant mission. The original charter called for “an institution for the education of youth in the various branches of science [and] learning ... as they are connected with each other.” This philosophy of interconnectedness was echoed by President Abraham Lincoln in a charge he wrote to his Congress a mere seven months before creating land-grant colleges on July 2, 1862. “We can succeed only by concert. It is not ‘can any of us imagine better?’ but ‘can we all do better?’ The dogmas of the quiet past are inadequate to the stormy present. As our case is new, so we must think anew, and act anew.”

It is with this charge to do better, to think and act anew—a charge carried in the hearts of hundreds of thousands of students, nearly 500,000 living alumni, and our dynamic students—that the University now creates The Penn State Sustainability Strategic Plan. It is a roadmap and a toolbox that will enable succeeding generations of our graduates to realize their full potential as individuals to sustain their families, advance their professions, and contribute to our country’s strength. It is also a plan to enable Penn State to realize its full potential as an institution of truly higher learning.

Today, to remain vibrant and true to our purpose, the University must again transform how it pursues its mission. Penn State must provide an atmosphere that encourages critical thinking and develops our capacity to account for the ethical, environmental, and economic outcomes of our decisions—an immersive education in sustainability.

GLOBAL CITIZENS

In the grand foyer of Old Main, at the center of the University Park campus, is an enormous mural painted in true fresco by Henry Varnum Poor, illustrating the University’s history and the establishment of land-grant institutions. Under the watchful gaze of Lincoln and amid the coal miners, iron workers, musicians, and scientists rendered on the plaster is a striking image of a farm family sending their child off to school on horseback. Over the last 150 years, we have provided hundreds of thousands of young men and women with the knowledge and skills to forge their destinies.

Sustainability knowledge is not confined to energy and the environment. It is a fundamentally different way of approaching our living, working, designing, and manufacturing. Providing this education in sustainability will require new ways of teaching and new ways of learning. Sustainable solutions will not emerge from solitary silos of research. Indeed, they require new paradigms of interaction between individuals and disciplines, academics and operations, research and outreach.
By bringing together researchers, educators, students, staff, and community members from multiple colleges, campuses, and frames of reference, all in pursuit of new ways of thinking, we will maximize the University’s existing strengths and tap the unlimited potential of collaboration.

Penn State students continue to be community leaders long after graduation, and they are increasingly defining their communities in global terms. More and more students are spending time abroad, taking internships with international companies, and working to overcome social and economic challenges around the world. As they graduate, they are putting their Penn State education to work in professions that bridge geographical and disciplinary boundaries, and they are serving as ambassadors for the University to their local communities and their world. What they desire, and what is increasingly expected of them from employers and society, are the tools for complex decision-making and problem-solving. They are seeking University experiences that will prepare them for success in cutting-edge fields and a global economy.

These same skills are also essential for Penn State’s faculty and staff. A sustainability education broadens thinking, encourages all people to analyze the pros and cons of arguments, and generates solutions that benefit from the range of viewpoints on issues of great or even modest complexity. The Sustainability Strategic Plan will provide a platform that encourages exploration of multiple dimensions of a topic, the critical skills necessary to appreciate diverse viewpoints, and the value of more fully informed and respectful discourse. It will allow our students, faculty, and staff to become critical thinkers in our business, political, and social communities. This immersive and holistic education, will affirm Penn State’s pioneering role as an innovator in training the leaders of tomorrow.

**GOOD STEWARDSHIP AND GOOD BUSINESS**

When people think about sustainability, many think first of increased operational efficiency and waste diversion, and there is ample evidence for that benefit. For example, Penn State has reduced its electrical usage by about 7% since 2005 (while its footprint has grown significantly,) avoiding $5 million annually in utility costs. Twenty-two thousand gallons of used-cooking oil are refined yearly into fuel for campus vehicles and pieces of equipment. More than 3,000 tons of food and landscaping waste are converted into 1,200 tons of compost. Penn State has a highly developed waste management program and is now recycling more than 58% of its waste, avoiding half a million dollars annually in landfill tipping fees. These early successes and savings in operational efficiency are just the beginning of what is possible.

However, Penn State’s commitment to sustainability will yield benefits that far exceed its investment of time and resources. It will also enhance its access to critical resources, such as more students who apply for admission, which will enable selection of the best and brightest among them. According to The Chronicle of Higher Education, sustainability is rising in popularity among students, and sustainability programs are expected to increase at more universities. By pursuing sustainability, the University will also improve its prospects for recruiting high quality faculty to develop and teach new courses and conduct new research for which federal funding is growing significantly. Finally, Penn State’s commitment to sustainability will inspire its stakeholders to pledge more gifts and endowments. For example, philanthropic alumni at other universities are rising to the challenge and establishing legacies such as the $80 million David R. Atkinson Center for a Sustainable Future at Cornell and the $5.5 million Graham Environmental Sustainability Institute at the University of Michigan.
Penn State’s enhanced access to resources will increase the quality of its graduates, which, in turn, will further enhance its academic reputation. Companies committed to sustainability will be particularly interested in our graduates, and the careers afforded them promise to be secure and successful as there is ample evidence that sustainability-focused companies have superior economic performance. Companies in GS SUSTAIN (Goldman Sachs’s sustainability index) performed 25% better on return on investment between 2005 and 2007 when compared to a set of highly diverse companies, and outperformed peers in their respective industries 72% over the same period. Moreover, research tracking over ninety "sustainability focused" companies of the Dow Jones Sustainability Index and GS SUSTAIN, found that they had superior performance over their counterparts.

The business case for sustainability is clear and compelling. It is indeed possible to "do well by doing good." Penn State’s reputation for ethical leadership and academic excellence will soar by doing what is right in the present for the benefit of the future.

**A LIVING LABORATORY**

An education in sustainability goes far beyond mastering the material in a textbook and requires hands-on experiences for the entire University community. Of paramount importance for ensuring the success of the Sustainability Strategic Plan will be to involve all campuses, research centers, and thirty million square feet of Penn State facilities in developing a living laboratory to pilot sustainable practices and pioneer sustainability education.

This Penn State education will transcend the boundaries of traditional learning by connecting our students, faculty, and staff to on-campus facilities, broader communities, and landscapes at every scale as a resource for learning. Our entrepreneurial partnerships with industrial, agricultural, educational, government, and community partners will underscore the University’s commitment to creating a learning environment that extends far beyond the borders of our campuses to reinvigorate our unique land-grant mission.

Building this vibrant living laboratory for sustainability will provide a more holistic intellectual environment for the entire Penn State community. It will help the University achieve its historical mission of preparing the next generation of leaders with a core education in traditional arts and sciences—and it will achieve its new mission of ensuring that those leaders possess the critical thinking essential for understanding and solving the challenges of tomorrow.

When longtime Penn State Professor of American Literature Fred Lewis Pattee sat down to write the lyrics of the Penn State Alma Mater in 1901, he was looking forward, anticipating but perhaps not even able to imagine what the institution would become—“For the future that we wait....”.

With the Sustainability Strategic Plan, we stand poised to live out Pattee’s immortal words: “When we stood at childhood’s gate, shapeless in the hands of fate, thou didst mold us, dear old State.” We stand at the gate of the sustainability challenge. We have the opportunity, the responsibility, and the great honor of molding a sustainable future. This is not a future we can afford to wait for but one we must actively forge by teaching our students, and ourselves, how to pursue human health and happiness, environmental quality, and economic well being for current and future generations.

For our students—for the glory—for the future.
GOAL 1—LEARN

All members of the Penn State community will realize, advocate, and contribute to sustainability literacy.

The world rarely operates at the extremes. Few issues are black or white. The gray areas dominate decisions made in the workplace, in the home, in communities, and across borders. Good leaders understand the burdens and frustration—as well as the potential and beauty—of gray. The Sustainability Strategic Plan provides curricular and extra-curricular opportunities that encourage comprehensive and inclusive thinking—an appreciation of gray—as well as the ability to implement decisions with sensitivity to the circumstances that led them there, and the ability to rethink decisions and even change course along the way, if that is in the best interests of their employers, shareholders, clients, families, organizations, or communities.

Strategy 1.1 Incorporate sustainability practices and learning opportunities into daily life across the University, including in classrooms and research labs; service and program delivery; and within administrative and infrastructure support units.

Actions

Highlight visible demonstrations of sustainability as we create facilities and grounds that teach (e.g., LEED-certified buildings, green roofs, etc.).

Leadership: Senior Vice President of Finance & Business

Provide sustainability training for existing and incoming administrators, governing board members, faculty, and staff at all campus locations.

Leadership: Senior Vice President of Finance & Business
Designated Leader from the Milton S. Hershey Medical Center

Integrate sustainability practices and learning opportunities into all University-associated events including those held on University property, alumni and development functions, and appropriate external events (e.g., Festival of the Arts, farmers’ markets, student recruitment fairs, etc.).

Leadership: Senior Vice President of Finance & Business
Vice President for Student Affairs
University Relations
University Athletics
Designated Leader from the Milton S. Hershey Medical Center

Strategy 1.2 Develop and promote coordinated academic and co-curricular programs that address sustainability, including online, residential, and global offerings.

Actions

Build and advance a network of sustainability courses and practitioners.

Leadership: Director of The Sustainability Institute
Regularly convene sustainability leaders (including potential employers) to provide input into the sustainability skill sets that Penn State should be cultivating in all students (residential and on-line).

**Leadership:** Director of The Sustainability Institute
College Deans
Campus Chancellors

Develop a Field Guide for Sustainability Curriculum that will provide resources and support for integrating sustainability into existing courses and new courses.

**Leadership:** Director of The Sustainability Institute

**Strategy 1.3.** Create programs to facilitate experiential learning opportunities and projects that involve students in the enhancement of sustainability.

**Actions**

Incorporate community-based experiential learning opportunities into students’ coursework, whether residential or virtual.

**Leadership:** Director of The Sustainability Institute
College Deans
Campus Chancellors

Formalize and promote themed semesters or years in pursuit of sustainability and create co-curricular sustainability projects for students.

**Leadership:** Vice President and Dean for Undergraduate Education

**Strategy 1.4** Create sustainability-focused programs and learning opportunities for external constituents and the general public.

**Actions**

Increase investment in place-based opportunities for local public education (e.g., Shaver’s Creek, Penn State Pittsburgh Center, and the Rockview/Spring Creek Property).

**Leadership:** Vice President for Outreach
Dean, College of Agricultural Sciences

For external stakeholders, develop formal programs (degrees, certificates, short courses, conferences, and workshops) to prepare, update, and retool the workforce with leading-edge sustainability knowledge and competencies.

**Leadership:** Vice President for Outreach

For the general public, develop informal education programs about sustainability that are media-based (public radio, television, and Web) as well as offered in person through University Extension.

**Leadership:** Vice President for Outreach
Dean, College of Agricultural Sciences
GOAL 2—LIVE

Penn State will actively develop and deploy the knowledge, science, and art of sustainability.

Sustainability is the pursuit of balance. As a leading international research university with a land-grant mission, Penn State has a responsibility to inculcate the consideration of social, economic, and environmental implications in its own decision-making and to cultivate innovations and solutions that support the long-term success and prosperity of students, staff, faculty, and alumni. In the context of this culture, Penn State will be committed to supporting the internal and external partnerships that are necessary for the development, implementation, and communication of sustainability solutions on a local and global scale.

Strategy

2.1 Develop means to readily recognize and respond to sustainability challenges.

Actions

Create structures and processes for the identification of sustainability challenges, communicate activity related to these challenges internally and externally, and develop a process for advancing solutions.

Leadership: Director of The Sustainability Institute
Office of the Vice President for Research

Utilize centers of strength to develop a portfolio of sustainability research and identify priority areas so that the creation of knowledge proceeds in an effective manner.

Leadership: Office of the Vice President for Research

Design and deploy a process by which the individual and collective goals for sustainability solutions across units can be identified and periodically revisited through the Reinvention Engine.

Leadership: Director of The Sustainability Institute
Senior Vice President for Finance & Business

Consistently utilize sustainability concepts in the design, delivery, and evaluation of University services and functions, whether physical or virtual (dining, healthcare, advising, applications, etc.).

Leadership: Senior Vice President for Finance & Business

Strategy

2.2 Create strategies and programs to generate resources and recognition for sustainability solutions.

Actions

Establish and pursue resources (e.g., expertise, development funds, advice) that can be utilized for investment into sustainability projects.

Leadership: Director of The Sustainability Institute
Office of the Vice President for Research
Investigate and pursue resources to implement sustainability solutions on our campuses

**Leadership:** Senior Vice President for Finance & Business

Create forums for the sharing of sustainability solutions and best practices across the Penn State community and beyond.

**Leadership:** Director of The Sustainability Institute

### Strategy 2.3

**Identify and develop strategic partnerships, both internal and external, to facilitate the advancement of sustainability solutions.**

**Actions**

Utilize a bidirectional approach with our unique network of campuses to establish and assess scale-able pilot programs that provide sustainability research and living experiences.

**Leadership:** Director of The Sustainability Institute  
Senior Vice President for Finance and Business  
Office of the Vice President for Research  
Vice President for Commonwealth Campuses  
Designated Leader from the Milton S. Hershey Medical Center

Create and/or expand faculty exchange and scholar-in-residence programs to synergize collaboration of faculty across campuses and units and infuse expertise from external sources.

**Leadership:** Executive Vice President and Provost

Engage with external stakeholders (businesses, organizations, governments, and communities) to understand and address sustainability challenges, practices, policies and solutions.

**Leadership:** Director of The Sustainability Institute  
College Deans  
Campus Chancellors  
Office of the Vice President for Research  
Vice President for Outreach  
Vice President and Dean for Undergraduate Education  
Vice Provost for Global Programs

### Strategy 2.4

**Utilize the University’s research strengths and global reach to advance sustainability.**

**Actions**

Strengthen the translational research process to generate solutions, provide proof-of-concept, and pilot test internally to further accelerate innovation and adoption.

**Leadership:** Office of the Vice President for Research
Identify solutions through the Reinvention Engine that can be implemented within and across local campus communities and utilize existing networks to encourage widespread adoption throughout the Commonwealth.

**Leadership:** Director of The Sustainability Institute
Dean, College of Agricultural Sciences
Vice President for Outreach

Support the advancement of partnerships and relationships that seek to cultivate sustainability in global communities as a path to large-scale testing and validation of sustainability solutions.

**Leadership:** Director of The Sustainability Institute
Office of the Vice President for Research
Vice Provost for Global Programs

**Strategy 2.5**

**Develop an effective infrastructure for communicating sustainability solutions both to inspire leadership in others and enhance literacy.**

**Actions**

Enhance existing platforms (e.g., the green.psu.edu web site) to create a comprehensive portal into both sustainability solutions developed and/or practiced at the University and the practitioners who can assist others in adopting them.

**Leadership:** Director of The Sustainability Institute
Senior Vice President for Finance and Business
Office of the Vice President for Research
University Relations

## GOAL 3—LEAD

Penn State will exercise leadership in the identification, application, and diffusion of innovations in sustainability technologies, policies, and practices.

Many sustainability challenges extend—geographically and temporally—beyond our current capacity to address them. An institutional-level commitment to sustainability that includes transparency in establishing goals and priorities is needed to inspire widespread leadership. By modeling sustainable behaviors, recognizing and rewarding sustainability champions, and engaging external partners in creating a sustainable world, we will have effectively established a living laboratory for sustainability that is capable of inspiring local, regional, national, and international communities.

**Strategy 3.1**

**Demonstrate institutional leadership through an integrated and transparent approach to sustainability with priorities and goals at the University and unit levels.**
Actions

Pursue transparency on institutional decision-making as a means of educating the University community and the public about how sustainability is implemented.

Leadership: Office of the President

Make sustainability leadership a fifth Penn State principle and incorporate it into the University’s mission statement.

Leadership: Office of the President

Set sustainability goals and priorities for Penn State to inspire, develop confidence, and provide opportunities for achievement.

Leadership: Office of the President

Strategy 3.2 Model, recognize, and reward individual behaviors that promote human health and happiness, environmental quality, and economic well being in a variety of settings.

Actions

Provide opportunities for self-assessment of sustainable behaviors (e.g., Know-Your-Numbers, building dashboards)

Leadership: Senior Vice President for Finance and Business
Vice President for Outreach
Vice President for Student Affairs
Vice President and Dean for Undergraduate Education

Strategy 3.3 Recognize and reward the achievements of students, staff, faculty, administrators, and alumni in the generation, implementation, and advancement of sustainability solutions.

Actions

Establish Sustainability Innovations Awards for staff, faculty, students, and alumni

Leadership: Office of the President

Incentivize units by returning a portion of demonstrated cost savings to reinvest into sustainability programs

Leadership: Senior Vice President for Finance and Business

Integrate sustainability metrics into the University’s review process for faculty and staff.

Leadership: Senior Vice President for Finance and Business
Executive Vice President and Provost

Strategy 3.4 Develop an enduring framework for the pervasive instantiation of sustainability at Penn State.
**Actions**

Facilitate the infusion of sustainability innovations between all Penn State units and campuses and between Penn State and its external stakeholders.

*Leadership:*
- Director of The Sustainability Institute
- Senior Vice President for Finance & Business
- Chancellor of the Commonwealth Campuses

Establish The Sustainability Institute to support the continual growth and advancement of sustainability literacy, solutions, and leadership in the context of an immersive living lab environment.

*Leadership:*
- Office of the President
- Executive Vice President & Provost

**Strategy 3.5**

**Position Penn State as a global leader in sustainability.**

**Action**

Contribute substantively to national and international sustainability conversations and solutions through membership, leadership, and service in sustainability-related organizations and forums.

*Leadership:*
- Office of the President
- Executive Vice President and Provost

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**THE POWER OF WE**

As an institution of higher learning—and, more importantly, as Penn State—we have a responsibility to our students, our institution, and our greater society to teach, embody, and communicate a world view that allows the collective “we” to prosper, both now and in the future. We have risen to the challenge before—with humility, responsibility, openness, commitment, and a profound belief in the power of “we.” We are recognizing a turning point in history and answering the call. We are launching *The Penn State Sustainability Strategic Plan—Land Grant 2.0.*