Overview of the Guidebook

Why a sustainability planning guidebook?

The Sustainability Institute (SI) created the guidebook and associated web-based resources to help units:

- Focus on the right things Identify what is appropriate for your particular unit and leverage what you are already doing.
- Save time Sustainability planning is a new idea and the six-step process and associated tools make it straightforward.
- Learn from others SI conducted three pilots and the results
 are shared in pilot summaries (see the appendices) and in
 examples throughout the guidebook.

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

- Penn State Definition of Sustainability

What will the guidebook help my unit do?

With an engaged, dedicated team using it together, the guidebook leads to actionable sustainability strategies that advance a unit's priorities and

Penn State's educational and research mission.

Strategic sustainability enhances a unit's ability to:

- Attract, engage and educate students
- Attract and retain the top faculty, staff, and administrators
- Advance research innovations and access to new funding sources
- Create new program innovations and enter new markets
- Reduce operating costs and risks

A unit also discovers its unique contribution to Penn State's commitment to create a prosperous, healthy future shared by all people that safeguards our natural environment—a sustainable future.

These outcomes become possible through the effective integration of sustainability into your planning process. We define "effective" as fulfilling six criteria:

- Mission Leverages and enhances unit mission and expertise
- Leadership Secures senior leadership support
- Resources Receives sufficient resources (e.g. people, time, technology, funding)
- Integrated Integrated into organizational processes
- Specific Outlines specific, actionable steps with clear roles and accountability
- Measurable Achieves measurable sustainability outcomes

Who is this guidebook for?

The guidebook is primarily for planning teams at Penn State campuses, locations, colleges, and support units. However, it could be useful for anyone wanting to find their unique contribution to the university's sustainability strategy.

A word about language. We tried to find a tone that would appeal to most audiences. Penn State is a large, complex organization, and it is a challenge to write for such a diverse audience of faculty, staff, and administrators. The intent was to strike a balance and present information in a concrete and usable form in a tone that is approachable.

How should this guidebook be used?

- 1. Assemble your team (tips for doing this effectively are on page 6).
- 2. Review the Quickview of the Six Steps on page 4.
- 3. Review the information and tools on our strategic planning website (*sustainability.psu.edu*).

What is sustainability strategy?

Bryson (1995) defines strategic planning as "... a disciplined effort to produce fundamental decisions and actions that shape and guide what an organization is, what it does, and why it does it." Sustainability is a way of thinking that concurrently considers the social, environmental, and economic dimensions of our decisions. Strategic sustainability, therefore, is a carefully considered plan combining short- and long-term strategies, tied to a unit's mission and goals, which advance the university's sustainability vision and mission.

Tips for the Facilitator

Each of the six steps features suggestions for the facilitator of your sustainability planning process.

These tips will be in a colored box, like this one, at the beginning of each step.

Consider how you can involve students every step of the way. This could be a rich learning experience for them in the development of your plan and in its evaluation.

This view of *strategic* sustainability is different from the one held by most people. Sustainability often creates immediate vivid mental images of recycling bins, climate change, hybrid vehicles, green roofs, and solar panels. Their immediate

Strategic sustainability is a carefully considered plan combining short- and long-term strategies, tied to a unit's mission and goals, which advance the university's sustainability vision and mission.

reaction may be to focus on these things whether they are really strategic or not. In reality, sustainability is a new perspective that can be a source of substantial strategic value. The key to harnessing the power of sustainability

strategy is to find the overlap with a unit's mission, expertise, and assets.

Where should we send ideas and feedback? And what if our planning team would like assistance working through some of the processes in the guidebook?

We envision many more editions of this guidebook, and we need your help to make them even better. Your feedback is encouraged and can be sent to <code>erik@psu.edu</code>.

To speak with someone on our Strategic Planning Team, please email team leader Erik Foley at *erik@psu.edu* or call (814) 865-2291.

The Smeal College of Business Story

The opportunity to test the Penn State Sustainability Strategic Plan gave Smeal the opportunity it needed to take its sustainability work to the next level. Former Dean James Thomas appointed two co-chairs for the sustainability planning effort, Dr. Gerald Susman, Emeritus Klein professor of management, and Dr. Terry Harrison, professor of supply chain and information systems and the Earl P. Strong Executive Education Professor in Business. They assembled a task force with broad representation and began regular meetings to examine current activity and set a vision for the future.

They pulled together input and drafted the Smeal Sustainability Plan that touches every aspect of the college, and includes 20 goals to be implemented over three years. The plan was completed and submitted to Dean Charles Whiteman in November 2012. He approved the plan in mid-December and authorized funds for its implementation. The excerpt below lays out the plan's compelling vision:

Our vision is that Smeal will be a top-ten business school in the area of sustainability through our teaching, research, and outreach. Through our teaching, we will enhance the understanding of sustainable business practices and produce knowledgeable graduates prepared to apply these practices in the marketplace. Through our research efforts, we will create knowledge relative to sustainable business practices and their impact on businesses and on society. Through our outreach, we will work with industry and government to collaboratively provide thought leadership in understanding and implementing sustainable business practices, and demonstrate within Smeal how these business practices can enable organizational success.²

Smeal student Dan Trushkov is proud of Smeal's efforts. "Sustainability is now a big part of every major, and I am honored to be part of this movement."

Among many lessons, they learned the following:

- Appointing a faculty or staff champion in sustainability
 was necessary to overcome obstacles and leverage existing
 support and initiatives. Make sure they are good communicators and well-respected leaders.
- Senior leadership support and dedicated resources were fundamental to success.
- Viewing sustainability as a transformational concept led to bold innovations rather than small, piecemeal initiatives.
- An external advisory board can lead to many innovations and is a good way to align with the work of external partners.
- Using the Penn State Sustainability Strategic Plan (SSP) helps build towards a common vision.

For more information: www.smeal.psu.edu/sustainability-council

Quickview of the Sustainability Planning Process

1

Understand Sustainability

Ensure your planning team develops a common understanding of sustainability, and what it means for higher education and Penn State.

Tool: Sustainability Strategic Plan and Video

Tool:

Opportunity Finder

& Sustainability

Maturity Model

2

Assess Current State

Assess how your unit, department on campus is already engaging with sustainability.

3

Identify Priorities

Determine what you do that relates to sustainability and pinpoint priority areas to focus on by looking outside and inside your unit.

Tool:
Sustainability
SWOT,
Convergence
Model

4

Create a Vision of Sustainability

This is where you answer the question: "What kind of impact can your unit or department ultimately make?"

Tool: Strategic Linking Diagram

5

Set Goals and Develop Metrics

Create goals for reaching your vision, prioritize them, and establish how progress will be assessed.

6

Develop an Implementation Plan

Develop a plan for how you will work toward your goals.
Who will do what by when?

Tool:
Decision Matrix
& Metrics
Worksheet

Tool:
Implementation
Template & Support
System Checklist

STEP 1 Understand Sustainability

Sustainability planning begins with ensuring that everyone on the planning team has a shared understanding of sustainability, what it means to Penn State, and what it could mean for your unit. When you have completed this step, you will have:

- An understanding of sustainability as a defining issue for higher education
- Penn State's definition of sustainability
- High-level ideas for potential strategies

Understanding sustainability and Penn State's approach will save time and effort. This understanding will spur thinking, begin to provide a decision-making framework, and ensure your plan is aligned with the university's sustainability vision and mission.

The Challenge

Today, we face the global challenge of sustainability, and Penn State is answering the call as its faculty, staff, students, and communities race to solve some of the toughest problems in history, from feeding a growing population to protecting a threatened environment to ensuring energy security. Higher education, as a major educational force and significant business enterprise, plays a unique and vital role in creating a sustainable society where the economic, cultural, and health needs of the world's people are met while the vitality of living systems is maintained or enhanced.

Is sustainability the same as "going green"?

No, but they are related. "Going green" is a popularized way of referring to actions that reduce impact on the environment. Sustainability includes the consideration of environmental impacts, but also includes the social and economic dimensions of our decisions.

Tip for the Facilitator

Show the Penn State Sustainability video at a staff or faculty meeting. Utilize the Discussion Guide available on the website. Be sure to write down the key ideas people mention. Similarly, ask that everyone read over the Sustainability Strategic Plan and come to a meeting ready to discuss how your unit can contribute.

Above and beyond: look up the sustainability definition, principles or frameworks used by your peers at other institutions or by your national association, industry or trade group. This could be something students help to accomplish.

Access the video at sustainability.psu.edu

The challenges we face are substantial:

- Over 60% of ecosystems are in decline (Millennium Ecosystem Assessment).
- The U.S. has approximately 5% of the world's population and consumes 25% of the world's resources (World Watch Institute).
- Economic, health, and technology disparity persists despite the rising standard of living for some in the developed and developing world (World Economic Forum Global Risk 2013 report).

In sum, the science suggests we are overwhelming and depleting the living systems we need to survive, and increasingly the poorest and most underserved populations bear the largest burden. It is notable that the challenges we face are in large part unintended consequences. Many issues of our own making have arisen from human innovations and aspirations for a better life for ourselves and our children. No one intended to put 60% of our ecosystems at risk while quickly consuming so much of the world's resources.

Sustainability is this shift in understanding to seeing the connections that make up our lives. Indeed, it is about the connections among all life on earth. As the Penn State Sustainability Strategic Plan (SSP) explains, we now know about the interconnections between human prosperity and ecological health. This represents a critical shift in understanding.

⁴Penn State Sustainability Strategic Plan available at sustainability.psu.edu

A way to visualize this shift in understanding is in our systems of production and consumption. The old way of thinking has been referred to by Willard (2012) as "take-make-waste."⁵

This line of thinking, still prominent in some sectors, is that we can take whatever is needed from the environment and society, make a low cost product, and dispose of the waste. All the emissions, loss of habitat, and health and safety concerns are seen as a cost to be avoided and are not considered in the process.

We now recognize our connection and complete dependence on ecological health and therefore the need for a new model. The new way of thinking is the "borrow-use-return" model. This model suggests we borrow natural and human resources, use them efficiently and respectfully, and then return value to society and to the environment. In this model, we aim to not pass our costs of doing business to society, future generations, or the environment.

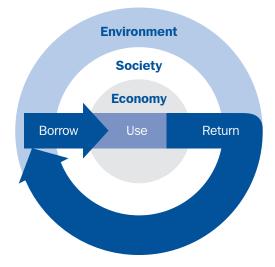
An example of this key concept from our pilots: The Office of Physical Plant set a goal of office composting in buildings across University Park. Instead of a "take-make-waste" approach of people taking food, consuming most, and wasting the rest, they have shifted to a "borrow-use-return" approach. Now, with the Mobius program, people can return the food scraps to a value-adding process via a compost program, or donate food to a local food bank. Some examples can be much more complex, such as Procurement Services' new carpet purchasing standard, which actually recycles old carpet by sending it back to the manufacturer.

The key message is that sustainability represents a shift from seeing ourselves—and our organizations, economy, households, etc.—as separate from the environment to seeing ourselves as connected.

Old Way of Thinking



New Way of Thinking



⁵Willard, Bob. The New Sustainability Advantage: Seven Business Case Benefits of a Triple Bottom Line. Gabriola Island, B.C.: New Society, 2012.

Higher Education's Role

In 2012, over 66% of graduating high school students in the U.S.—2.5 million young people—entered college. With the majority of young people attending post-secondary institutions, higher education has grown to have significant influence on the skills, knowledge, and values in the U.S. and around the world. How can we ensure that our young people achieve the needed change in mind-set/skill-set to meet the sustainability challenge?



In 1990, in one of the earliest attempts to articulate the role of colleges and universities in facing the challenges of sustainability, a group of faculty and administrators wrote:

"Sustainability" implies that the critical activities of a higher education institution are ecologically sound, socially just, and economically viable, and that they will continue to be so for future generations. A truly sustainable college or university would emphasize these concepts in its curriculum and research, preparing students to contribute as working citizens to an environmentally healthy and equitable society. The institution would function as a sustainable community, embodying responsible consumption of energy, water, and food, and supporting sustainable development in its local community and region⁶.

According the College Student Educators International (ACPA), higher education plays a very unique role in creating a sustainable society because of the impact, both educationally and financially, of the sector:

- 4,400 colleges and universities
- 20 million students
- \$300 billion annual expenditures; 2.8% of the U.S. GDP
- U.S. higher education expenditures are greater than the GDP of all but 25 countries in the world.

ACPA goes on to say, "Higher education can change operational, curricular, and policy norms so all students can learn and practice how to be environmentally responsible, socially responsible, economically responsible, and active citizens in a global economy. The goal is to engage students as effective change agents in our sustainability challenges. Students need to know that their daily decisions affect the quality of life of people around the globe."

⁶University Leaders for a Sustainable Future (ULSF) was founded in 1992 and was the first organization in the United States focused on sustainability in higher education. ULSF also serves as the secretariat for signatories of the Talloires Declaration, a statement of 10 principles for higher education. This statement is from its website www.ulsf.org

The Living Laboratory

The Sustainability Strategic Plan outlines a core concept: the living laboratory for sustainability. During the work of the committee and the listening done with various faculty, staff, students, and external partners, it became clear that Penn State had a unique opportunity to create a "living lab." This became a cornerstone concept in the plan and is central to understanding Penn State's overall approach to sustainability.

The plan states:

Penn State is committed to the creation of a learning environment that dissolves the boundaries of classrooms and campuses and creates immersive sustainability experiences. Of paramount importance for ensuring the success of the Sustainability Strategic Plan will be to involve all campuses, research centers, and 30 million square feet of Penn State facilities in developing a living laboratory to pioneer sustainability education, implement sustainable practices, and lead the innovation of technologies and practices.

Further, this Penn State education will transcend the boundaries of traditional learning by connecting our students, faculty, and staff to broader communities and landscapes at every scale as a resource for learning. Our entrepreneurial partnerships with business, 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 fulfill our land-grant mission in the context of 21st century challenges.

Sample Living Lab Type Initiatives From Our Pilots

Living Laboratory Approach to Sustainability	Traditional Approach to Sustainability	
Academic Unit Smeal College of Business is using its own building as a teaching tool as it goes for LEED-EB Certification ⁷	Academic Unit Sustainability content is added to an existing course.	NEW PART PART PART PART PART PART PART PART
Support Unit The Office of Physical Plant holds a workshop about integrated design with high performance building experts from the Energy HUB Project at the Navy Yard in Philadelphia.	Support Unit Facilities employees do a relamping project in a building to increase energy efficiency.	Image: Pem State

⁷LEED stands for "Leadership in Energy and Environmental Design." The EB stands for "existing buildings." The LEED Program was created by the U.S. Green Building Council to ensure there are clear standards for sustainable design and operation of buildings. Learn more at www.usgbc.org. Penn State has a policy to build to LEED standards in all new construction and major renovation.



Go back to page 5 and write your conclusions in Step 1.