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# A ROAD MAP FOR CAMPUS SUSTAINABILITY

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## A Letter from Amit Mrig President, Academic Impressions

**Whether your institution is driven by social values, economic reality, or political and market demand, the trend to become more sustainable is undeniable.** Yet, with all of the momentum throughout the industry and society writ large, including more than 650 campus presidents pledging carbon neutrality, most sustainability efforts have a difficult time achieving meaningful gains.

Such efforts are often driven more by the individual will of a student, faculty member, or campus president than through smart planning, implementation, and resourcing. This reality was the impetus for the **Academic Impressions Sustainability Road Map** – a methodology that advocates for an integrated, scalable approach to campus sustainability, and one that can help generate broad-based support and buy-in.

We've gathered experts from the leading green institutions to share their insights on how to maximize the economic, social, and environmental returns on these investments. We hope their advice will be useful.



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# CONTRIBUTORS



## **Amit Mrig, President, Academic Impressions**

Amit co-founded Academic Impressions in 2002 to provide a variety of educational products and services that help higher education administrators tackle key, strategic challenges. Since 2002, AI has designed and directed hundreds of conferences and has served representatives from over 3,500 higher education institutions. Besides designing and leading events for cabinet-level officers focused on strategic planning, budgeting, and leadership development, Amit leads Academic Impressions' ongoing research into the five- and 10-year challenges facing higher education and plays a lead role in outlining each issue of *Higher Ed Impact: Monthly Diagnostic* to highlight how college and university leaders can take an institution-wide approach to answering those challenges.



## **Daniel Fusch, Director of Research and Publications, Academic Impressions**

At Academic Impressions, Daniel provides strategic direction and content for AI's electronic publication *Higher Ed Impact*, including market research and interviews with leading subject matter experts on critical issues. Since the publication's launch in 2009, Daniel has written more than 150 articles on strategic issues ranging from student recruitment and retention to development and capital planning. Daniel previously served as a conference director for Academic Impressions, developing training programs focused on issues related to campus sustainability, capital planning, and facilities management. Prior to joining Academic Impressions, Daniel served as adjunct faculty for the University of Denver. Daniel holds a Ph.D. in English.



## **Naomi Nishi, Director of Program Design and Customization, Academic Impressions**

Naomi is responsible for the design, development, and facilitation of Academic Impressions' customized workshops. Under her direction, Academic Impressions has developed customized workshops for diverse institutions in areas across higher education. Naomi was instrumental in developing AI's Sustainability Road Map and all related programming. In addition to her four years designing and facilitating programs with Academic Impressions, Naomi has over eight years of experience in adult education. She has served as a faculty member of the University of Denver's University College for five years, where she designs and teaches graduate courses in culture and conflict, facilitation, and intercultural training.



## **Jack Byrne, Director, Sustainability Integration Office, Middlebury College**

As the director of sustainability integration at Middlebury College, Jack coordinates Middlebury's effort to achieve carbon neutrality by 2016. Jack's prior career has been in the non-governmental sector starting and developing organizations that support local, national, and international initiatives in soil and water conservation; watershed health; citizen science; and building capacity to integrate sustainability knowledge and skills in public schools, corporations, and nonprofit organizations. He has led the development of learning networks and communities on a variety of topics. He is a co-founder of Foundation for Our Future. He founded and directed the River Watch Network. He currently serves as green campus leader for the International Union for the Conservation of Nature's Commission on Education and Communication.



## **Angela Halfacre, Director, Shi Center for Sustainability, and Associate Professor, Department of Political Science/Department of Earth and Environmental Sciences, Furman University**

With 15 years of experience creating or nurturing environmental and sustainability programs on college campuses and within their surrounding communities, Angela is engaged with the development and provision of Furman's new interdisciplinary sustainability science major. She coordinates several curricular and co-curricular programs related to sustainability on campus and in the local community, and provides ongoing Andrew W. Mellon Foundation-funded workshops for faculty to infuse sustainability concepts into existing courses. Angela also co-coordinates Furman's Sustainability Planning Council, chairs The Duke Endowment Task Force on Sustainability, is an appointed member of the City of Greenville's Green Ribbon Advisory Committee, and serves on several boards of local and national conservation and community organizations. development at the Public Relations Summit of the Independent Colleges of Indiana.

## CONTRIBUTORS (CONTINUED)



### **Dave Newport, Director of the Environmental Center, University of Colorado Boulder**

Dave Newport is director of the Environmental Center at the University of Colorado Boulder — the nation's first, largest, and most accomplished center of its kind. Dave chairs the university's Carbon Neutrality Working Group, led the creation of CU's climate action plan, and is a faculty associate in the Environmental Studies department, where he teaches a course in carbon neutrality planning for higher education. He is secretary of the Board of Directors of the Association for the Advancement of Sustainability in Higher Education (AASHE) and is one of the three original co-creators of the Sustainability Tracking, Assessment and Ratings System, or STARS, that is emerging as higher education's gold standard for assessing campus sustainability.

Dave led the University of Colorado team that compiled the nation's first STARS Gold sustainability assessment award last year. CU has also been ranked as the nation's No. 1 green campus by Sierra magazine, and is consistently rated among the nations greenest campus by an array of other ranking systems.



### **Blase Scarnati, Director of University First Year Seminar Program and Global Learning, Northern Arizona University**

At Northern Arizona University, Blase recently led an initiative to establish student learning outcomes on environmental sustainability, diversity education, and global engagement in all 98 of NAU's undergraduate programs. Blase has also co-chaired first-year curricular and liberal education reform initiatives on campus. He is an associate professor of historical musicology in NAU's School of Music.



### **Matthew St. Clair, Sustainability Manager, University of California's Office of the President**

Matt has led sustainability efforts across the 10-campus UC system since 2004. He is a founding member of the Board of Directors for the Association for the Advancement of Sustainability in Higher Education. He also serves on the Chancellor's Advisory Committees on Sustainability at UC Berkeley, UC San Francisco, UC Santa Cruz, and UC Merced. He is a co-founder of the Berkeley Environmental Alumni Network. Matt has advised the US House of Representatives on the formation of an office of sustainability for the US Capitol. He has been profiled in *Businessweek* and *Business Officer* magazines, and he was given the 2007 Sustainability Champion award at the 6th Annual California University Sustainability Conference in June 2007.



### **Faramarz Vakili, Associate Director, Physical Plant, University of Wisconsin-Madison**

Faramarz oversees facilities maintenance, remodeling, utilities generation, fleet management, and energy conservation on a campus of 300 buildings and over 20 million gross square feet of instructional and research space. He is also the founder of the Engineering Management Operations, a consulting firm specializing in customized facilities management process improvement and software solutions.

# PRIORITIZING SUSTAINABILITY INVESTMENTS: AN INSTITUTIONAL ROAD MAP

August 1-3, 2011 :: San Diego, CA

Join us in San Diego to understand the vital components of sustainability in higher education and to create your unique institutional road map based on your past achievements and prioritized next steps.



Learn more about the [AI Sustainability Road Map conference](#).

# A SUSTAINABLE APPROACH TO SUSTAINABILITY

Whether driven by a desire for social impact, or the harsh economic realities of unsustainable utilities expenditures, or by political and market demand, more colleges and universities are taking the trend to become more environmentally sustainable seriously. More than 650 institutional presidents have pledged carbon neutrality as signatories to the American College & University Presidents' Climate Commitment (APUCC), and hundreds of institutions now employ sustainability coordinators.

Yet many sustainability initiatives have yet to see meaningful gains. In fact, at the majority of colleges and universities, sustainability efforts remain limited to disparate, one-off programs, from trayless dining to student-directed recycling programs to "green" capital projects and energy efficiency measures.

**The question to address now is: How do you get from everybody doing their own thing to an integrated community of practice? What kind of activities can institutions engage in to get there?**

Paul Rowland, Executive Director, AASHE

To move beyond one-off programs, it's critical to identify how efforts toward a sustainable campus add benefits beyond just cost savings and social impact. Defining the value proposition for sustainability at your campus and mapping the impact of sustainability on a wide array of campus priorities (e.g., student recruitment and retention, stakeholder relations and fundraising, etc.) will empower an institution to more effectively target campus-wide or system-wide investment in sustainable initiatives, and to better engage broader campus constituencies and build alliances beyond the "usual choir."

Institutions that have taken significant steps to define the value proposition for sustainability and coordinate efforts across campus have been able to achieve a lot very quickly. Middlebury College now has a sustainability integration office and an environmental council advising the college's president, and has established internal grants and awards for incentivizing and funding further work. The University of Colorado Boulder's Carbon Neutrality Working Group has made progress on an aggressive carbon action plan, and

last year the institution received the nation's first STARS Gold sustainability assessment award. The University of California is currently coordinating sustainability initiatives across 10 campuses.

These are institutions that have proven successful in developing the grassroots efforts already in play on their campuses, identifying the highest-return next steps to take and effectively gathering support and momentum for larger-scale initiatives. They have demonstrated that an integrated approach creates a sum that is greater than the whole of its parts.

An institution does not need to be an ACUPCC signatory or have sustainability mentioned in the strategic plan to begin seeing gains; you can undertake smaller-scale efforts that make sense in terms of both mission and finances, and then scale up over time.

## A ROAD MAP FOR FINDING THE NEXT STEPS

Academic Impressions recently partnered with Dave Newport, director of the Environmental Center at the University of Colorado Boulder and a thought leader in campus sustainability, to develop the new AI Sustainability Road Map program. Based on Academic Impressions' research into current sustainability initiatives and their impact on key institutional objectives, and applying the framework of AASHE's STARS assessment, the AI Sustainability Road Map is designed to offer to an institution's sustainability champions:

- A tool for defining the whole value proposition of sustainability initiatives to your campus, and then mapping the benefits of specific activities
- An intentional methodology for moving forward with sustainability and integrating disparate sustainability efforts across campus into a more comprehensive and high-return initiative

The Road Map represents a systematic and incremental approach to sustainability, and therefore a sustainable approach to sustainability. Naomi Nishi, director of program design and customization for Academic Impressions, explains: "This approach focuses on leveraging what you have done to build the justification for a larger commitment, in phases."

For example:

- If your institution has implemented a robust energy conservation initiative but has done relatively little to integrate sustainability into the curriculum, one way to address the gap is to design educational programming that leverages the efficiency work that has already been done (Can your engineering students use an energy-efficient building on campus as a case study? Can a capstone course devote a term to researching how to take your efficiency efforts to the next level?)
- If you have professors in different courses across campus who are engaging undergraduates in sustainability-related projects, can you hold a charette or a colloquium to bring them together, pool ideas, and proactively identify several interdisciplinary efforts for the next year?

Nishi notes that while ramping up a campus-wide sustainability initiative can appear as daunting as inspiring, most institutions don't have to "start from scratch." You can build on the efforts currently in place by measuring the impact of what's been done, developing a meaningful action plan for prioritizing possible future projects, and identifying untapped internal capacity for moving on those projects.

This comprehensive approach identifies six core components that any institution needs to address (but not necessarily in sequence) in order to move toward a comprehensive sustainability initiative (see Figure 1):

Dave Newport stresses that this is "a rotary, not a digital model"; in other words, many of these components can be addressed in tandem, and different institutions will enter the Road Map at different points. For some, the president's public commitment to climate action will be the galvanizing factor; others may simply have an energy efficiency initiative under way and are looking for the next step.

To assist you in applying the Road Map approach to your institution, this issue of *Higher Ed Impact: Monthly Diagnostic* draws on the practical advice of several contributors to the Road Map program as well as other leaders of comprehensive sustainability initiatives at post-secondary institutions as diverse as the University of California, Middlebury College, Northern Arizona University, the University of Colorado Boulder, Furman University, and the University of Wisconsin-Madison. They have contributed their expertise and lessons learned to help you scale up:

- Coordination of current efforts across your campus
- Integration of sustainability into curricular and co-curricular programming
- Energy efficiency and cost control
- Leveraging early successes to increase involvement and funding ■

Figure 1: The AI Sustainability Road Map





# AI CUSTOMIZED WORKSHOPS IN SUSTAINABILITY

A customized workshop with an outside expert and facilitator can provide your institution with the objectivity and expertise necessary to engage your campus in developing a sustainability plan, and can offer training in specific areas to allow you to intentionally grow sustainability at your institution.



## WORKSHOP OFFERINGS:

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### **DEVELOPING A SUSTAINABILITY ROAD MAP**

At virtually every institution of higher ed, there are various pockets of sustainability initiatives in facilities, curriculum, student life, research, etc. Academic Impressions will work with you to identify these pockets, bring those involved to the table, and develop a sustainability road map for your institution, prioritizing projects that will increase visibility and buy-in across campus.

### **PRIORITIZING, FINANCING, AND DEVELOPING EFFICIENCY PROJECTS**

Efficiency and costs-savings projects are key when trying to build clout at your institution for sustainability and its ROI. However, it can be difficult to find the upfront capital for these projects, and difficult to justify that capital under traditional financing and accounting practices. This workshop brings facilities, students, faculty, and the finance office to the table to collaboratively identify, plan, and finance those projects that will yield the highest return.

### **INCLUSIVE GOAL-SETTING AND PUBLIC COMMITMENT FOR SUSTAINABILITY**

For an institution to achieve an integrated and leading sustainability effort, institutional leaders must engage in a collaborative discussion with other constituents to set goals and make a public commitment to those sustainability goals. This workshop brings all of the necessary stakeholders to the table to create those goals and develop a plan for continuing to become a more sustainable institution.

### **To Learn More:**

**Contact Naomi Nishi at 720.988.1216 or [naomi@academicimpressions.com](mailto:naomi@academicimpressions.com)**

**[www.academicimpressions.com/events/sustainability](http://www.academicimpressions.com/events/sustainability)**

# COORDINATING SUSTAINABILITY EFFORTS ACROSS CAMPUS

If your institution's leadership has already made a public commitment to sustainability, then it is important to educate the president, provost, and chief financial officer about the whole picture of the sustainability efforts already under way on campus, and what opportunities there may be for building further. It will be important to define, as quickly as possible, what sustainability means at your institution. Is it limited to energy efficiency? Is it broader in scope? What does your college or university want to achieve? This definition should be arrived at collaboratively, with input from students, institutional leaders, and sustainability champions at your institution.

If sustainability efforts at your institution are operating at a grassroots level, then auditing and building coordination between current efforts, developing a full cost accounting tool, and marketing your successes can be key efforts in cultivating investment by both institutional leadership and the campus community.

Whether you are starting with an executive commitment or with a grassroots effort, the critical early step is to audit what is already happening on campus and what resources are already available to you. Then you will be better-equipped to coordinate across departments and scale up. To move from a series of ad hoc efforts toward a more integrated initiative, it's important to find out:

- What programs you currently have (look across student and auxiliary services, facilities services, and across your curriculum)
- Who your sustainability "champions" are

Once you have this information, you can:

- Form a robust sustainability committee
- Coordinate efforts across campus and build on what you already have
- Plan ahead by mapping your institution's needs and opportunities, and performing a gap analysis
- Move toward setting campus-wide sustainability goals

## FORMING YOUR COMMITTEE

If your campus does not currently have one, you will need to create a sustainability committee. Organize a temporary task force to identify who should be on your committee and what the nature of their work should be. As soon as you do know who your champions are, Matt St. Clair, sustainability manager for the University of California's Office of the President, advises establishing an ongoing steering committee that is charged with:

- Managing the flow of information across silos and the sharing of best practices
- Organizing people into discrete task forces or working groups that have short-term objectives centered on specific projects with specific outcomes

St. Clair suggests ensuring that your committee includes representatives from all parts of your institution's organizational structure. It will also be important to identify the right chair for your committee. This needs to be a professional that the other committee members (as well as the larger community of your institution) will respect and respond to, someone with credibility and a track record of facilitating communication or work across multiple departments.

### FINDING CULTURAL TRAVELERS

For a little more information, [read this article](#) in our June issue of *Higher Ed Impact: Monthly Diagnostic*. The article reviews characteristics to look for in effective leaders in higher education; one section of the article discusses "cultural travelers" who demonstrate skill at working across silos.

## BUILDING ON WHAT YOU HAVE: COORDINATING GRASSROOTS EFFORTS

Dave Newport suggests that a good initial step for the committee is to hold a charette to kick off the process of sharing resources and ideas across different stakeholders on campus. Invite your campus's current sustainability champions – faculty, students, and staff – into one room, have them showcase their current efforts, and then work in small groups to brainstorm next steps given the resources available.

## HOLDING A SUSTAINABILITY CHARETTE

[This video](#) offers a short documentary of a sustainability charette at Rensselaer Polytechnic University, demonstrating how the activity can work.

This type of activity achieves several aims:

- Generates increased excitement and momentum among your champions
- Educates your champions about one another's efforts and about the resources and expertise already present on campus
- Inventories your current curricular and co-curricular programming
- Gives champions a creative and collaborative space in which to set attainable next steps

To sustain momentum, Newport suggests scheduling regular brown-bag lunch discussions, holding workshops where one or more of your champions can educate and involve others on campus in their effort, and – when possible – organizing a colloquium on your campus or even a summit that will invite sustainability leaders from other campuses and organizations.

**If you are starting with a small handful of sustainability champions on your campus, you need to gather ideas. You don't have to reinvent the wheel; find every opportunity to invite others across the country to share their practices.**

Angela Halfacre, Furman University

## IDENTIFYING YOUR BEST FUTURE OPPORTUNITIES

Once you have both coordination among your current efforts and leadership support for sustainability, the crucial step is to map the external conditions and the internal needs and opportunities that can drive smart and intentional investments in sustainability going forward. The AI Sustainability Road Map identifies two discrete sets of questions institutions need to address.

## External Mapping

Dave Newport suggests that the traditional SWOT analysis is not enough to identify where an organization stands related to sustainability. To really identify both the right future opportunities for your institution and the steps you need to take today, you need to examine:

- The influence of the availabilities and costs of various natural resources
- Current and anticipated changes in the regulatory environment or in state and federal funding available for sustainability projects and programs
- Whether your institution is currently "in step" with the expectations of your constituents (Are you perceived as a leader? Or is your institution not living up to the expectations of your students, prospective students, alumni, donors, and local community?)
- Trends in student demand, demographics, and expectations that are likely to have an impact on both your institution's carbon footprint and your sustainability efforts

For example, consider the rising demand for online learning. If your institution has growth of online programming among its strategic objectives, you will want to consider:

- What is the foreseeable impact on campus investments in facilities renovation and capital planning?
- How are your student demographics expected to change with regard to transportation demand? (For example, if your institution is a commuter campus moving into online programming, does your institution anticipate fewer commuters five years from now?)
- What are the implications for energy consumption? (Will the campus be relying on traditional servers drawing large quantities of energy, or is it time to plan a green data center?)

It's important to plan for sustainability initiatives that not only make sense for today's campus, but that also take into account where your institution will be five or 10 years from now.

## Internal Mapping

Next, chart where sustainability efforts currently do – or could in the future – add value to key objectives for your institution (such as student recruitment and retention,

faculty recruitment and retention, or donor cultivation and stewardship). This can empower you to perform a gap analysis to identify missed opportunities as well as determine where the institution most needs to build capacity for advancing sustainability efforts.

For example, beyond tracking the impact of your sustainability efforts on your utilities costs, have you considered the possible impact on alumni giving? "Often," Newport advises, "by not bringing a coherent and comprehensive story to the alumni community about the institution's commitment to and work toward sustainability, many institutions are leaving money on the table."

By charting where your efforts could have more impact, your institution will be in a better position to identify what efforts will add the most value. "Once you understand the value proposition of sustainability," Newport remarks, "and can identify where sustainability can contribute measurable value to your institution, it becomes easier to locate the highest-impact opportunities for growing your sustainability efforts."

## LEARN MORE

The AI Sustainability Road Map offers a unique framework that quantifies where specific sustainability initiatives can show impact on a variety of core campus outcomes. To learn more, contact Naomi Nishi at 720.988.1216 or [naomi@academicimpressions.com](mailto:naomi@academicimpressions.com).

## EFFECTIVE GOAL-SETTING

Once you have an external and internal map of sustainability-related needs and opportunities, you can set informed goals. To learn more about doing so effectively, we interviewed Matt St. Clair, who leads the University of California system's ongoing sustainability goal-setting and planning exercises, coordinating efforts across the system's campuses. St. Clair speaks to the necessity of having an inclusive planning process that allows you to collect input from the widest possible array of stakeholders.

**Make sure all the people who will be implementing the goals have buy-in and ownership of those goals. The most effective way to do this is to develop the goals in such a way as to involve everyone who has a stake in implementation. That's how you get a plan that doesn't just sit on the shelf.**

Matt St. Clair, University of California

St. Clair has seen success with goal-setting exercises that follow this process:

- Educate your stakeholders before the exercises begin; provide all participants with the results of the internal and external mapping
- Open with an inspirational speaker or video that invites participants to think "big picture," focusing on what is possible rather than on the restraints under which they will have to work
- Involve participants in a "visioning exercise" – have breakout groups discuss what becoming a "green" institution will look like
- Engage the group in "backcasting" – start with the vision of what the sustainable campus looks like, then "backcast" to the present, identifying a series of key steps needed to get from where the campus is now to that future
- Prioritize the steps and set phased goals with different, specific time horizons, from short-term goals that can be enacted in the next year, to three- to five-year goals, to longer-term goals ■

## PRIORITIZING SUSTAINABILITY INVESTMENTS: AN INSTITUTIONAL ROAD MAP

Join us in San Diego August 1-3, 2011 to understand the vital components of sustainability in higher education and to create your unique institutional road map based on your past achievements and prioritized next steps.

# INTEGRATING SUSTAINABILITY INTO CURRICULAR AND CO-CURRICULAR PROGRAMS

Once your sustainability committee has inventoried all sustainability-related educational programming that already exists on campus, you can look for opportunities to connect interested faculty with each other and to build organically on efforts already in place. The keys are to align curricular and co-curricular programming, offer structured opportunities for faculty to share resources and ideas across disciplines, and find ways to scale up efforts that see early success.



## INVOLVING STUDENTS IN AND OUT OF THE CLASSROOM

Jack Byrne, director of the Sustainability Integration Office at Middlebury College; Angela Halfacre, director of the Shi Center for Sustainability at Furman University; and Blase Scarnati, director of the University First Year Seminar Program at Northern Arizona University, suggest the following ways of integrating sustainability efforts with student learning in ways that aren't restricted to a classroom setting:

- Identify real-world issues related to sustainability in the local community, and invite a class to conduct research and make recommendations
- Identify opportunities on your campus, and pose questions in the classroom on how to move forward

In short, set up situations in which both campus and

community stakeholders act as "clients" for groups of student researchers and student consultants. This empowers your institution to both provide real-world learning and civic engagement opportunities for students and harness its own resources to solve on-campus and local problems.

For example:

- Design a capstone course for seniors in engineering or environmental studies, in which the students undertake research projects that culminate in recommendations to the institution's board or to city representatives (for example, a class could make recommendations on how to make an upcoming campus landscaping activity more sustainable, or could research the viability of the city adopting electric vehicles)
- Harness your first-year student experience program or seminar to create freshman research terms -- start with one section and then scale up

Scarnati offers two examples of projects that freshman-year "action research teams" at Northern Arizona University engaged in:

- One team connected with a local nonprofit organization and signed 100 households up for energy retrofits
- Several teams partnered with local elementary schools, providing fourth-graders with disposable cameras and with college-aged mentors; the fourth-graders then photographed evidence of an issue on their elementary school campus or the surrounding community, interviewed school officials, and made presentations to their school board. Scarnati recalls that one team successfully lobbied their school board to upgrade bathroom facilities, another to bring in upgraded, safer playground equipment, and still others are currently researching issues around sustainable foods and local homelessness

**Pilot the effort, then track the impact on students' academic performance and persistence. These students engage in building both a social network and a learning network in their first year, and they see the real-world impact of their studies. They can also become mentors for the next year of students.**

Blase Scarnati, Northern Arizona University

## DEEPENING INTEGRATION INTO THE CURRICULUM

Furman University mapped out different gradations of curricular integration (see Figure 2):

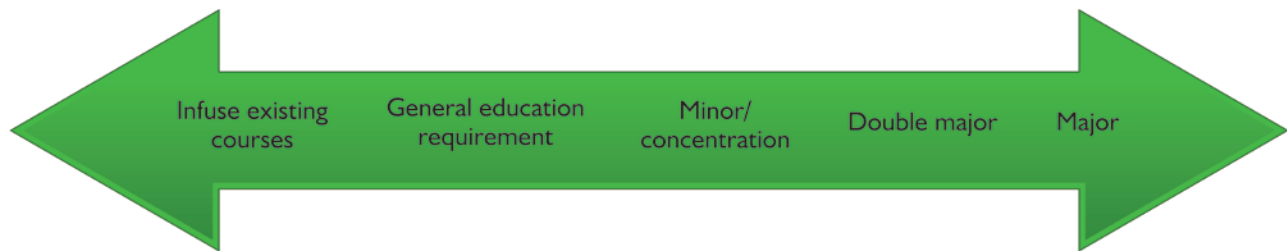


Figure 2: Levels of curriculum integration

If your institution is on the left end of that spectrum, Blase Scarnati recommends starting by encouraging faculty champions to serve as “lead discussants” with the rest of their department, starting if needed with one-on-one meetings. These champions within their various departments can inventory how that department’s majors are currently engaged in sustainability both in and out of the classroom, and then engage their colleagues in discussions of where to do more. “You need early discussions of how sustainability matters to that major,” Scarnati suggests. “How do historians look at sustainability? How does sustainability matter to you as engineers, as biologists?”

As you scale up, the next step is to identify learning outcomes around sustainability, then move toward developing a “curricular map” for how work toward these outcomes can be achieved across the sophomore through senior years. You want to ensure that the opportunities available in each year build upon the last year’s opportunities, and that there aren’t gaps (for example, a sophomore year infused with many curricular and co-curricular opportunities to study sustainability, followed by a junior year in which few or no opportunities are offered).

As you look to ramp up integration into the curriculum, Halfacre and Scarnati suggest considering:

- Will you require freshmen to take one sustainability-related course in their first year?
- Can you set up a series of “faculty infusion workshops” in which faculty can work together to identify ways to infuse sustainability into existing courses across disciplines, rather than creating new courses?
- Do you want to create a sustainability-related concentration within a particular major (and then track both the level of student interest in the concentration and how students make use of that concentration after graduating)?

Halfacre suggests supporting the growth of this effort by:

- Establishing an affiliate faculty support program, whereby faculty with interdisciplinary interests can connect and share resources, coordinating on grants and teaching opportunities. Furman University has taken this approach a step further by partnering with faculty at several other institutions
- Establishing student fellowships to support undergraduate and graduate students in researching sustainability issues ■

# EFFICIENCY AND COST CONTROL



“Demonstrating that sustainability isn’t just a cost but also provides payback, especially financial payback, is crucial to establish early,” Dave Newport suggests. As you look to build momentum for sustainability efforts on your campus, it will be critical to identify what energy, water, and resource savings projects have already been undertaken at your institution, and then to prioritize your key projects – “low-hanging fruit” that will show rapid returns in the form of cost savings. The key is to begin a cycle of cost savings and reinvestment of savings in further sustainability efforts. “You can’t do everything. Focus on finding those early wins that allow you to generate support for more robust efforts,” Dave Newport advises.

While inventorying current efforts and identifying the next several projects that will generate financial returns, make sure to integrate opportunities for student learning and student engagement into efficiency and cost control initiatives:

- Connect efficiency programs with faculty and student efforts (for example, invite students to take part in a lighting efficiency project, or involve an architecture or engineering course in the process of designing your next LEED facility)
- Prioritize tangible projects that you can show to current and prospective students as a real example of your work in sustainability

## LOOK FOR “EARLY WINS” BEYOND JUST ENERGY EFFICIENCY

Most institutions have undertaken some energy efficiency effort, though these efforts may range in scope from upgrading light bulbs in a few facilities to a campus-wide facilities retrofit. However, Matt St. Clair emphasizes that it’s important to recognize that there are other “low-hanging fruit” opportunities, as well. For example:

- Achieve utilities bill savings through reducing water consumption, or reducing solid waste that must be sent to a landfill
- Sell recyclable materials to a recycling vendor (which both saves on the costs of transporting solid waste to the landfill and also adds income)
- Audit university purchasing and go paperless with as many processes as possible; where paper is necessary, find ways to use less, such as investing in duplex printing and encouraging faculty and staff to use duplex printing for drafts
- Identify ways to consolidate equipment; “Does every department needs its own vehicle,” St. Clair asks, “or can vehicles be shared between offices? Does every office need a printer, or can you network printers?”

Note that it’s possible to create new problems if you aren’t careful; “make sure that your services aren’t compromised by the efficiency effort,” St. Clair warns. To cite one example, staff who regularly print confidential material may resist networked printing for valid reasons. You may need to establish exceptions for them – or invest in a technological solution that will require staff to input a code prior to receiving their print job.

## THE “CURB” APPROACH: LEVERAGING ENERGY SAVINGS

Nearly two decades ago, the University of Wisconsin-Madison established CURB (Concentrated Upgrade and Repair of Buildings), an initiative to achieve long-term savings in facilities repair and renovation by using energy and water savings garnered through efficiency projects (most of which saw a four- to five-year payback) to fund maintenance efforts. Faramarz Vakili, UW-Madison’s

associate director of the physical plant and the head of the project, recognized that energy savings represented a significant and untapped source of funding that could be leveraged to both carve into the deferred maintenance backlog and fund further sustainability efforts. In short, he generated savings that could be used to tackle a longstanding and expensive campus problem; the average cost of CURB was \$4.62/GSF, compared to \$200/GSF for new construction.

"We needed to change from a reactive mode of operation to a proactive one," Vakili notes. "To reverse the facilities deterioration trends on campus, a systematic approach to reconditioning facilities was a must. We had to bring the facilities to a desirable condition before increased preventive maintenance activities could prove beneficial."

For institutions hoping to replicate the approach, Vakili advises concentrating on one building at a time; this both makes the effort manageable in scope and allows you to build support and scale up in a phased effort.

Here's how it works. For each building on campus:

- Identify and document all deferred maintenance needs of a building and investigate all energy and water conservation opportunities for that building
- Allocate concentrated maintenance resources to repair and upgrade what you can in-house (in other words, assign a percentage of maintenance personnel to the project)
- Document and prioritize the remaining problems for future external funding
- Follow up and execute effective preventive maintenance procedures to maintain the upgraded buildings in good condition in the future

Besides the financial benefits of the effort, a building-by-building green upgrade and recommissioning – bringing each facility to a desirable state – also contributes to the occupants' pride in their campus, and allows for you to make a powerful case for a culture of facilities stewardship and energy conservation. "When I go to a building where I did this project," Vakili remarks, "I talk with the deans, the faculty, and the staff with my head up. I tell them: 'You now have a well-maintained facility, you have state-of-the-art air control in the labs, new fume hoods, a new coat of paint on the wall. Now let's talk about how to change behavior. You can wrestle with that thermostat all day long, but if you don't understand how your HVAC system works, it won't do you any good.'"

**Educate occupants about how to live in the newly renovated facilities. They have to see that you care about this, and that you are working hard to create a sustainable and attractive environment.**

Faramarz Vakili, University of Wisconsin-Madison

"Celebrate your successes," Vakili suggests. "Solve one problem at a time, be proud of it, and don't be shy about telling the story."

## FULL COST AND BENEFIT EVALUATION

Cost savings highlight the early return on sustainability efforts and allow you to build reinvestment and political commitment, but as you scale your efforts up, accounting for non-financial return on investment will become increasingly important because it will inform how you identify where investments in sustainability could add the greatest value to your institution, as well as how you promote your efforts.

Examples of non-financial ROI that need to be accounted for include:

- Increased recruitment of green-conscious students
- Lower carbon emissions
- Donor-affinity/increased giving to green projects
- Town-gown relations

Early on, sustainability champions need to coordinate closely with the business office to develop and pilot a full cost accounting tool. ■

### LOCALLY SOURCED FOOD PROGRAMS: A STEP-BY-STEP APPROACH

Join us for a [webcast on August 10, 2011](#) that will outline the process associated with implementing a locally sourced food program and will describe how to share the message across your campus and community.



## LEVERAGING EARLY SUCCESSES TO INCREASE FUNDING AND INVOLVEMENT

Telling the story of your institution's sustainability efforts to key stakeholders is a critical step both for building momentum and support for an initiative, and for leveraging your successes to solicit both engagement and funding from your constituents. When Academic Impressions surveyed a number of the nation's leaders in campus sustainability, we found that one of the often unrealized benefits of a comprehensive sustainability initiative is its impact on stakeholder relations. Many donors, particularly young alumni, are attracted to projects related to sustainability, and institutions such as the [University of California at Berkeley](#), the [University of Notre Dame](#), [Oregon State University](#), and [Boston University](#) have already launched efforts to engage alumni in campus sustainability or fund sustainability efforts through private gifts.

Leveraging your early successes effectively to gather support for further efforts requires being deliberate in your outreach. Some key steps include:

- Develop a story about how your various efforts are integrated
- Brand your initiative – this can help you communicate the campus-wide nature of the effort and aid you in building credibility and constituency (for an example, see the [University of Wisconsin-Madison's "We Conserve"](#) initiative)
- Discuss your efforts with your institution's development office, ask about your institution's top fundraising priorities, and work together to identify opportunities to seek funding and support for sustainability initiatives in ways that build and enrich the institution's donor base

## TELL THE STORY WITH GUSTO BUT WITHOUT GREENWASHING

For committees that are working to coordinate a series of disparate projects and move toward a more sustainable and comprehensive initiative, partnering with marketing and communications staff is especially critical. Branding your efforts gives you the opportunity to connect your various efforts in the minds of your constituents, and it makes your overall program instantly recognizable.

Matt St. Clair explains: "Each time there is another marketing story on your work, your constituents remember the previous ones; the brand narrative connects the stories and helps your constituents develop a fuller appreciation of what the sustainability program is doing and what it means and what its value is. Later, when you want to engage different audiences to solicit support, you then have a lot less work to do to explain what you're asking for -- you've already made them familiar with the effort."

Faramarz Vakili adds that the key in developing the message is to articulate -- with integrity -- how the sustainability effort is connected to the mission and the larger work of the institution. "Call it what it is," Vakili advises. Whether the core objective is to educate and prepare students for a society and a marketplace increasingly concerned with environmental sustainability, or whether the goal is to cut utilities costs to free up funds that can be used in service of the educational mission, developing a consistent and compelling message around what's driving your green initiative will lend credibility to your effort.

Dave Newport recommends also providing maximum transparency around results. "Share your successes," he suggests, "but also be candid about your challenges." Candor around both goals and obstacles will aid you in making the case for the campus community's support and involvement in the effort.

## ENGAGE DONORS AND ALUMNI

One of a sustainability committee's critical tasks is to educate the development office about what efforts are taking place on campus, what story there is to tell about them, and how alumni can be a part of that story. In our March 2010 article, "[Making a Compelling Case for Scholarship Endowments](#)," fundraising expert Jim Langley, president of Langley Innovations, argued that donors respond to institutions that offer a "sense of shared enterprise," inviting donors to participate in a collaborative project to meet an outcome that donors care personally and passionately about. Yet at all but a handful of colleges and universities, donors' potential interest in sustainability initiatives remains untapped.

Engage your development office early to:

- Gauge the level of alumni interest in causes and projects related to sustainability (what percentage of your young alumni, for instance, are already engaged in giving time or financial support to other nonprofit programs related to environmental sustainability?)
- Look for opportunities to leverage the institution's growing commitment to sustainability to re-engage alumni who are not currently giving to the institution (the University of California at Berkeley, for example, has set a goal of drawing 3,000 alumni donors who are not currently giving, which allows the university to expand its donor base while not detracting from other fundraising priorities)
- Identify opportunities to engage alumni volunteers by tapping their expertise during the planning process for sustainability initiatives (read our recent article "[Making the Most of Alumni Volunteers](#)" for additional tips on harnessing the growing trend of alumni volunteerism)

Beyond asking alumni for money, by inviting the input of alumni volunteers during the research and planning of various sustainability projects, you can achieve multiple critical aims – re-engaging alumni in university life, harnessing your constituents' brainpower and manpower to engage in new programs on a limited budget, and spreading the story of your successes.



#### **EXAMPLE: MIDDLEBURY COLLEGE'S ORGANIC GARDEN**

Middlebury College established an organic garden on institution-owned land half a mile from the campus. The garden provides local, organic produce for the dining halls, and faculty often take their classes to the garden. Middlebury has seen success in increasing young alumni giving by sharing students' stories about working in the garden with young alumni and inviting alumni to give small but meaningful gifts to an endowment for the garden. Alumni were told of specific projects the endowment would fund: a study space within the garden one year, a grass roof on an outbuilding in another year, and eventually the hire of a manager for the garden. The project allows young alumni to see that their contributions having a measurable impact, and reconnects alumni early with the institution and with the next generation of students. ■