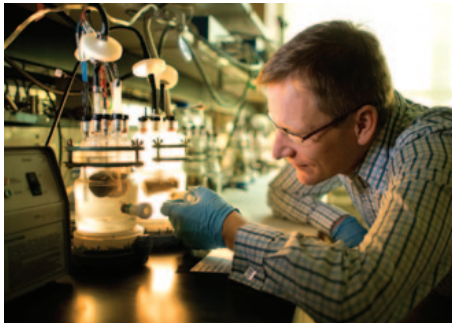




CELEBRATING FIVE YEARS OF CLIMATE LEADERSHIP

The Progress and Promise of the American College & University Presidents' Climate Commitment



Since 1993, Second Nature has been working with higher education to create a healthy, just, and sustainable society. All of our graduates, in all fields, must fully understand the sustainability challenge and be prepared to create systems that meet people’s health, security, and economic needs while living in harmony with our life support systems. Higher education, which represents 100% of society’s educational footprint, must lead this transformative change.

Through the American College & University Presidents’ Climate Commitment (ACUPCC), higher education has taken a huge, unprecedented first step: making education and action for sustainability a strategic priority at hundreds of institutions. Although we are still a long way from sustainability, higher education’s leadership through the ACUPCC has brought us closer to our goal. It holds the potential of jumpstarting a healthy, just, and sustainable economy, capable of meeting the needs of people worldwide, now and in the future.

Anthony D. Cortese

Anthony D. Cortese, President

Second Nature, the lead supporting organization of the ACUPCC

Inside front cover photos clockwise from top:

When the University of Rhode Island’s research ship Endeavor topped off its 53,000-gallon fuel tanks in December 2011, it filled up with refined biodiesel, making it the first ship in the US research fleet to use the alternative fuel. *Photo courtesy of URI/Leslie Smith*

The De Anza College Associated Student Body adopted the VTA Eco Pass program in 2011, providing all students with unlimited rides on local buses and light rail for the duration of each quarter. The program is supported through a small required fee paid by all students. *Photo courtesy of Gino DeGrandis*

Warren Wilson College’s iconic EcoDorm (top center) was the first building on a college campus to achieve LEED Platinum certification in the category of Existing Buildings. *Photo courtesy of Samsel Architects*

Largus Lars Angenent, Cornell University Associate Professor of Biological and Environmental Engineering and inventor of a novel anaerobic bioreactor, is developing a way to produce fuel from cow manure. His research is a critical part of Cornell’s plan to build a bioenergy demonstration and research facility. *Photo courtesy of UPHOTO/Lindsay France*

In 2009, Colgate University broke ground on its 8.5-acre willow plot. Today, 60,000 willow plants stand 8 feet tall and in the next year or two will be harvested and combusted in the university’s biomass steam plant. By growing some of its own energy, Colgate hopes to encourage local farmers to utilize out-of-production land to grow willow for local energy consumption. *Photo courtesy of Colgate University*

CELEBRATING FIVE YEARS OF CLIMATE LEADERSHIP

The Progress and Promise of the American College & University Presidents’ Climate Commitment

Contents

2 The ACUPCC Steering Committee

3 Letter from the Co-Chairs

4 Five Years of Climate Leadership

6 The Network’s Progress and Promise

12 Institutional Success Stories

14 Preparedness

15 Houston Community College District

16 Kankakee Community College

17 Mount Wachusett Community College

18 New York University

19 Portland State University

20 Pratt Institute + PALS

21 United Tribes Technical College

22 Opportunity

23 Allegheny College

24 American Public University System

25 Elizabeth City State University

26 Montgomery County Community College

27 University of Arizona

28 Weber State University

29 William Paterson University of New Jersey

30 Innovation

31 Bethany College

32 Colorado State University

33 Georgia Institute of Technology

34 Haywood Community College

35 Luther College

36 SUNY Upstate Medical University

37 University of California, Irvine

38 The ACUPCC’s Founding Signatories

40 Resources & Support

42 Thanks to Supporters

Front cover photos, clockwise from top left:

Allegheny students and faculty work with a local farmer on an aquaponics project that allows for a beautiful marriage of ecology and economy: raising tilapia and growing lettuce in the same facility. *Photo courtesy of Allegheny College*

The Washington State University Extension Energy Program has a leadership role in the Washington Wind Working Group, a coordinated effort to plan for large wind systems in Washington State. *Photo courtesy of Washington State University Marketing and Communications*

The solar array at American Public University is the largest in the state of West Virginia, containing 1,600 panels and producing more than 480,000 kilowatt hours of electricity annually. It doubles as covered parking where 15 plug-ins for electric vehicles are available for staff, visitors, and community members to use. *Photo courtesy of APUS*

Bucknell University Associate Professor of Biology Matt McTammany spearheads an effort to clean up the Chesapeake Bay, beginning with studying pollutants in the Susquehanna River. *Photo courtesy of Bucknell University / Bill Cardoni*

In 2011, Dickinson’s organic farm was an incubator for more than 225 faculty, students, and staff members from 57 colleges and universities in the US and Canada who attended the two-day conference, Seeding the Future: The Role of College Farms and Gardens in Liberal Arts Higher Education. *Photo courtesy of Dickinson College*

The green roof at New York University’s new, LEED Platinum Wilf Hall. *Photo courtesy of NYU Office of Sustainability*

Washington State University’s Climate Friendly Farming project helps farmers develop and implement agricultural systems and practices that mitigate global climate change. *Photo courtesy of Washington State University Marketing and Communications*

Unity College students sample lake sediment on Unity Pond. The sediment core is analyzed in the lab to assess environmental and climate conditions of the region for thousands of years. *Photo courtesy of Unity College*



Envisioning 2050 A Letter from the Co-Chairs

Dear Colleagues,

Higher education has a unique opportunity and responsibility to provide the knowledge and the graduates needed to lead to a thriving, civil, and sustainable society. In 2007, realizing that society is not on a socially, economically, or environmentally sustainable path, a number of college and university presidents took a unique and unprecedented step to change course through the American College & University President's Climate Commitment (ACUPCC).

In so doing, we believed we could make significant progress on immediate challenges including career preparation and workforce development, access and affordability of higher education, and innovation for renewed and sustainable economic prosperity.

Let's imagine for a moment it's 2050, and through the ACUPCC we have played an instrumental role in creating a sustainable society. What might it look like?

There are no research centers or majors focused on sustainability because sustainability principles are at the core of teaching, learning, and knowledge creation in every discipline.

All campuses are climate neutral and secure in the face of new climate patterns. Our smart, high-performance buildings generate

more energy than they consume. Campus and community design makes biking and walking easy, safe, and enjoyable, and what vehicles are needed run on electricity and sustainable biofuels.

Our supply chains are enhancing the social and ecological capital upon which our society depends. Our institutions procure goods and services — from food to furniture — that are designed with a 'cradle-to-cradle' perspective, powered by clean renewable energy, and do not contribute to using resources faster than they can be regenerated. These processes support strong communities and enable people to live full, peaceful lives. Students are deeply involved in these efforts as a fundamental part of their educational experience.

These ways of meeting our needs are the norm throughout all sectors — thanks in large part to higher education's leadership.

Now, look back from this 2050 perspective to 2012 and ask: *how did we get here?* There are many possible paths, but some things are clear.

We remained active and persistent in ensuring that meeting the American College & University Presidents' Climate Commitment was a strategic imperative for our institutions. Faculty, administrators, and leaders from across the network partnered to create new

ways of teaching and learning so our graduates understand sustainability and are prepared for 21st century careers. Together, we adopted new ways of educating and operating — we reduced costs and opened up funding opportunities to help improve the accessibility and affordability of higher education. We took a number of actions to engage all of higher education, communities, and the private sector to ensure mutual success.

While we are proud of our achievements to date, we must accelerate our efforts over the next five years if we are to realize our 2050 vision. The scientific information on the scope and scale of society's challenge continues to accumulate. In November 2011, the International Energy Agency released an analysis finding that, without significant action in the next five years, we will 'lock in' carbon emissions that will make it impossible to avoid irreversible, dangerous climate change. The next five years are critical in ensuring a safe, thriving society in 2050.

As we celebrate the past five years and prepare to hasten our work over the next five, we invite you to participate in making this vision a reality. We cannot do it without the engagement of all of higher education.

Sincerely,

The ACUPCC Steering Committee

The Steering Committee is the chief governing body of the ACUPCC and is responsible for guidance, policy, and direction. It is comprised of more than 20 volunteer presidents and chancellors who reflect the diversity of the US higher education sector.

2011–2012 Steering Committee Members

Timothy P. White Chair
Chancellor
University of California,
Riverside

Judith A. Ramaley Co-Chair
President
Winona State University

Mary S. Spangler Co-Chair
Chancellor
Houston Community
College District

Beverly Daniel Tatum Co-Chair
President
Spelman College

Michael L. Burke
President
Milwaukee Area
Technical College

Rebecca Chopp
President
Swarthmore College

Michael M. Crow
President
Arizona State University

William W. Destler
President
Rochester Institute of Technology

John M. Dunn
President
Western Michigan University

S. Verna Fowler
President
College of Menominee Nation

Jonathan C. Gibraltar
President
Frostburg State College

Jean Goodnow
President
Delta College

John D. Haeger
President
Northern Arizona University

Rose H. Johnson
President
Haywood Community College

Jacqueline Johnson
Chancellor
University of Minnesota, Morris

Scott D. Miller
President
Bethany College

Harris Pastides
President
University of South Carolina,
Columbia

Thomas L. Purce
President
The Evergreen State College

Rosalind Reichard
President
Emory & Henry College

John J. Sbrega
President
Bristol Community College

David J. Schmidly
President
University of New Mexico

Greg Smith
President
Central Community College

Richard L. Torgerson
President
Luther College

Wim Wiewel
President
Portland State University

Photos from left to right:

In Washington DC, Steering Committee co-chair Beverly Daniel Tatum moderates a panel at the 2011 Summit on higher education, business, and government collaboration for sustainability.

A working session for presidents and chancellors entitled, "Leading Your Sustainability Team toward Climate Neutrality" at the 2010 ACUPCC Climate Leadership Summit in Denver, CO.

Another working session at the 2010 ACUPCC Climate Leadership Summit in Denver, CO.

Scott Miller, President of Bethany College and Steering Committee member, and Harry L. Williams, President of Delaware State University during a networking event at the 2011 Summit.

Photos courtesy of Second Nature



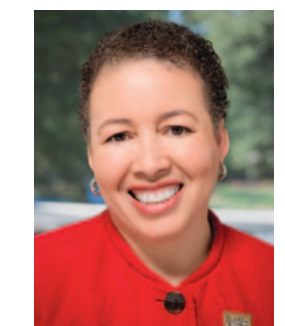
Timothy P. White
Timothy P. White
Chair



Judith A. Ramaley
Judith A. Ramaley
Co-Chair



Mary S. Spangler
Mary S. Spangler
Co-Chair



Beverly Daniel Tatum
Beverly Daniel Tatum
Co-Chair

Five Years of Climate Leadership

In late 2006, twelve visionary college and university presidents initiated the American College & University Presidents' Climate Commitment (ACUPCC). They were motivated by their conviction that higher education had the capacity and responsibility to lead on climate and sustainability action for the sake of their students and society.

These “Founding Signatories” (see page 38) worked with Second Nature, ecoAmerica, and the Association for the Advancement of Sustainability in Higher Education (AASHE) to develop the Commitment. In early 2007, they invited their peers across the nation to join this historic endeavor. By Earth Day 2008, it became a truly national initiative with signatories in all 50 states and the District of Columbia.

The ACUPCC made higher education the first sector with a coherent critical mass publicly committed to pursuing the scientifically necessary target of climate neutrality — net-zero greenhouse gas emissions from specified campus activities.

Early on, some felt this initiative was just a symbolic gesture—a sentiment that the actions and progress of the ACUPCC signatories have since quelled. In 2010, greenhouse gas inventories showed that, on balance, the network was already

reducing emissions — an incredible feat considering the growth momentum that most institutions face. Schools reported more progress and tangible results in 2011 and 2012 in the form of emissions reduced, courses offered, and money saved (for details see *The Network's Progress & Promise*, page 6). These reports indicate that sustainability efforts are saving money and securing funds from new sources helping to improve access and affordability in higher education.

The cumulative impact of this collective initiative is being realized, but the real progress has just begun.

As the US economy continues to climb out of the Great Recession, higher education faces challenges of accountability, affordability, workforce preparation, and relevance.

ACUPCC institutions are leading the way in promoting sustainable solutions to the major economic and social issues

of our time. They are cultivating preparedness, opportunity, and innovation to connect sustainability education with the unfolding job market; to realize cost savings and attract new funding sources; to build partnerships with the private sector; to become centers of innovative research and demonstration; and to support retention and graduation rates.

The time period for the necessary transition is rapidly closing. The International Energy Agency recently concluded that we have just five years to make major changes to avoid locking in runaway climate change.

The ACUPCC is up for the challenge. The network has set bold new goals for the next five years and is preparing new strategies to support the policies needed for success and to ensure graduates are educated to create a healthy, just, and sustainable society.



2006–2007

In October 2006, the Commitment emerges from planning sessions among the 12 Founding Signatories, Second Nature, AASHE, and ecoAmerica.

In early 2007, the Founding Signatories invite their peers across the nation to join the ACUPCC.

The ACUPCC holds a public launch in June 2007 at the first annual Climate Leadership Summit. Presidents hear from Senator John Kerry, Representative Jay Inslee, climate scientist James Hansen, and others about the importance of their leadership.

By the fall of 2007, 400 institutions—Charter Signatories—have joined the network.

2008

At the 2008 Summit, presidents hear from legendary sustainability leader Ray Anderson, founder of Interface—a carpet manufacturer that he was transforming from an old-economy, dirty company to a model for the sustainable industries of the 21st century.

The ACUPCC, Second Nature, and College of the Atlantic coordinate the development of the ACUPCC Voluntary Carbon Offset Protocol. A working group comprised of individuals from across the ACUPCC network, experts in finance, energy, land use, and climate science produce the protocol to help signatories evaluate and invest in the carbon offset market.

That fall, Charter Signatories submit their first greenhouse gas inventories, setting a baseline for their progress toward net-zero.

The network now represents one-third of the total US student population. Signatories involve these students in completing their greenhouse gas inventories and creating their climate action plans—preparing them with desirable technical skills and invaluable experience in organizational change and leadership.

2009

Early signatories submit their climate action plans, detailing a variety of approaches for pursuing climate neutrality in their operations and strategies for ensuring sustainability-literate graduates.

The ACUPCC Steering Committee develops *Leading Profound Change: A Resource for Presidents and Chancellors* to serve as a guide in leading the transformational change toward climate neutrality.

President Bill Clinton delivers the keynote at the 2009 Summit, reinforcing the importance of this work and the incredible opportunities to save money and create jobs that it represents.

In November, the ACUPCC's success is recognized with a Leadership Award from the US Green Building Council.

2010

Throughout 2010, updated greenhouse gas inventories show that the network is already reducing emissions.

At the 2010 Summit, former CIA Director James Woolsey emphasizes the many reasons—including human rights, economic prosperity, and national security—why getting society off fossil fuels and eliminating greenhouse gas emissions is so critical.

Second Nature initiates the Climate Leadership Awards, recognizing 32 ACUPCC institutions to date for their innovation and excellence.

The ACUPCC becomes an academic partner of the R20 initiative in support of sub-national efforts to address climate change around the world

Initiatives modeled after the ACUPCC gather steam in Scotland, Canada, Peru, and other countries.

2011–2012

More progress and tangible results are reported in 2011 and 2012 in terms of reports submitted, emissions reduced, courses offered, and money saved (see *The Network's Progress & Promise*, page 6).

ACUPCC institutions complete hundreds of innovative ventures. A few examples: the integration of sustainability into all education at Dickinson College and Pratt Institute; large-scale energy projects like Ball State's geothermal system and Arizona State's solar array; the Institute for Sustainable Solutions at Portland State University founded by a \$25M private grant; and dynamic community partnerships like the Tompkins County Climate Protection Initiative with Cornell University, Ithaca College, and Tompkins Cortland Community College.

As a result of its focus on engaging under-resourced and minority-serving institutions, the ACUPCC network includes 90 Historically Black, Hispanic-Serving, and Tribal colleges and universities. One-hundred and fifty of the signatories are considered under-resourced by the federal government.

The ACUPCC celebrates the transformative power it has had on US higher education and society in 5 short years, and sets bold goals for the next five.

The Second Nature Climate Leadership Award Winners



The Second Nature Climate Leadership Awards highlight campus innovation and climate leadership at ACUPCC signatory institutions. Award recipients are announced and recognized at the annual ACUPCC Climate Leadership Summit. Photo courtesy of Second Nature

2010	2011	2012
Institutions: Alamo Community College District Ball State University Cornell University Dickinson College Pasadena City College University of California, San Diego University of Maine, Presque Isle University of Pennsylvania Warren Wilson College	Bunker Hill Community College Colgate University Delaware State University Frostburg State University Green Mountain College Montgomery County Community College Mount Wachusett Community College University of California, Irvine University of Maine University of Maryland, College Park	Allegheny College Arizona State University Austin Community College District Florida Gulf Coast University Haywood Community College Luther College Pratt Institute and PALS University of California System University of Central Missouri University of South Florida
Individuals: George Dennison, President, University of Montana Jean Goodnow, President, Delta College Jesse Pyles, Sustainability Coordinator, Unity College		

Photos, top left to right:

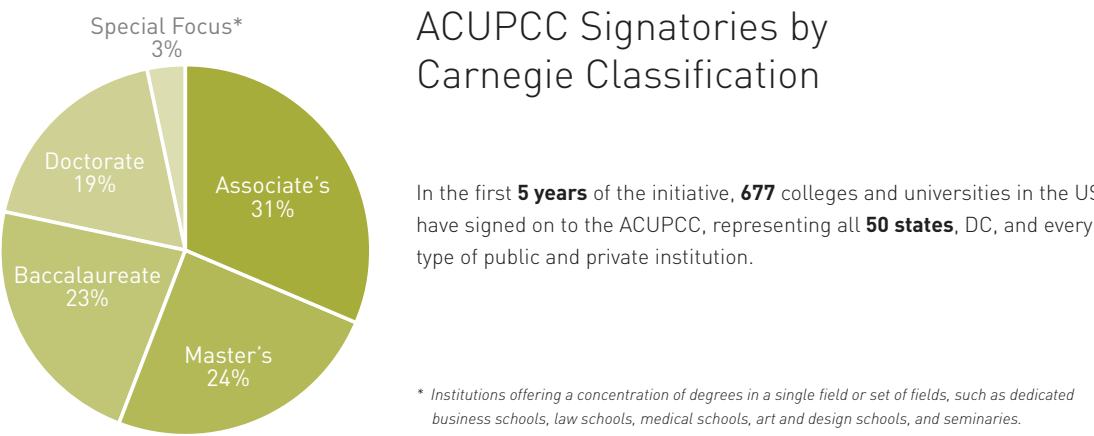
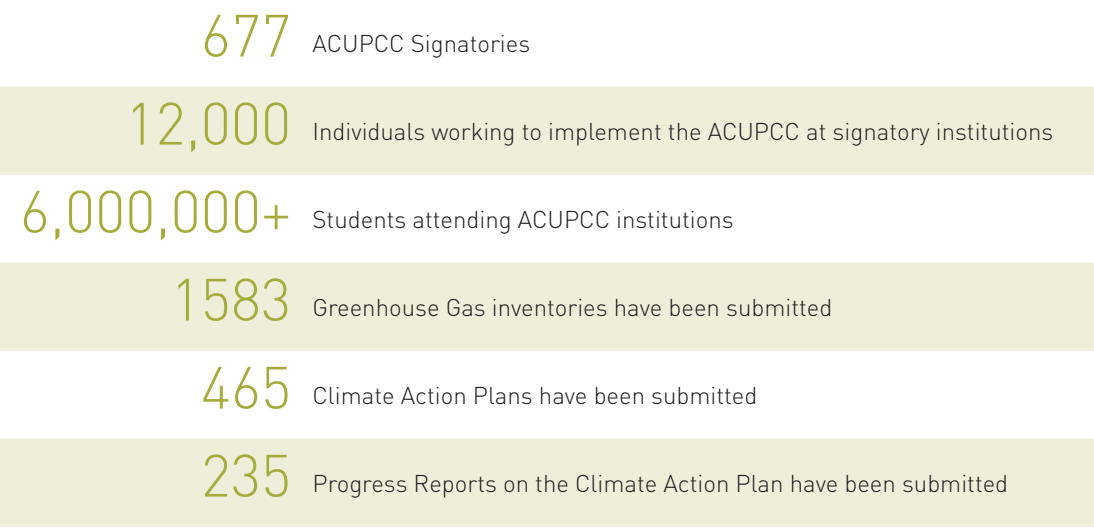
The 2007 first annual ACUPCC Climate Leadership Summit in Washington, DC. Photo courtesy of Second Nature

President Bill Clinton at the 2009 ACUPCC Climate Leadership Summit in Chicago, IL. Photo courtesy of Second Nature

UC Irvine athletes Jacob Yowell and Kiara Belen shovel dirt to plant one of 25 orange trees donated by the Great Park in a new grove along W. Peltason Drive. The effort was led by the Student Athlete Advisory Committee. Photo courtesy of Steve Zylius / UC Irvine Communications

The Network’s Progress & Promise

Higher education must lead the transition to a sustainable future. Through the ACUPCC, higher education has become the only sector in the US with a critical mass committed both to the scientifically necessary goal of climate neutrality and to preparing students to develop the solutions for a just, healthy, and sustainable society.

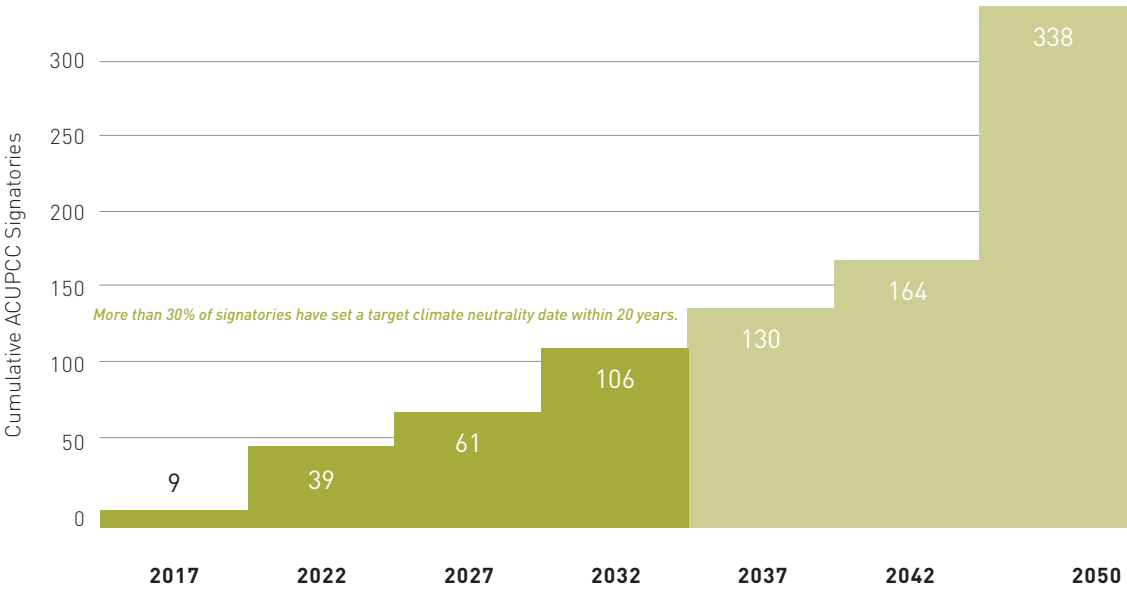


Climate Leadership

Setting a climate neutrality date is critical to maintaining an ongoing and institution-wide commitment to tangible emissions reductions, technological innovation, and new ways of business. Having a target date is a powerful driver of progress as well as a central component to why the ACUPCC approach has been so successful.

Timeline of Climate Neutrality Dates

In signing the commitment, signatories agree to develop an institutional action plan for becoming climate neutral, which will include a target date for achieving climate neutrality as soon as possible.



Green Building

Institutions are transforming the way their campus environments are designed, constructed, and operated. From residence halls to research facilities, the campus is becoming a living laboratory for student learning and sustainable living with buildings that consume less and teach more.

491 signatories have **1779** USGBC LEED certified buildings.

325 green buildings are planned or scheduled for completion in next **2 years**.

CampusGreenBuilder.org

An online portal, operated by Second Nature, to green building information that is free and accessible to all higher education institutions particularly geared toward under-resourced colleges and universities.

Renewable Energy

ACUPCC signatories are collectively the **3rd largest purchaser** of Renewable Energy Credits in the USA*, which is equivalent to purchasing green power for **131,047** American households.

130 institutions produce **171,000,000 kwh** of renewable energy annually. This is the equivalent of powering **14,702** American households' annual electricity needs.

TOTAL SOLAR OUTPUT:	85,577,602 kwh annually
TOTAL WIND OUTPUT:	45,560,973 kwh annually
TOTAL GEOTHERMAL, FUEL CELLS, BIOMASS OUTPUT:	40,842,342 kwh annually

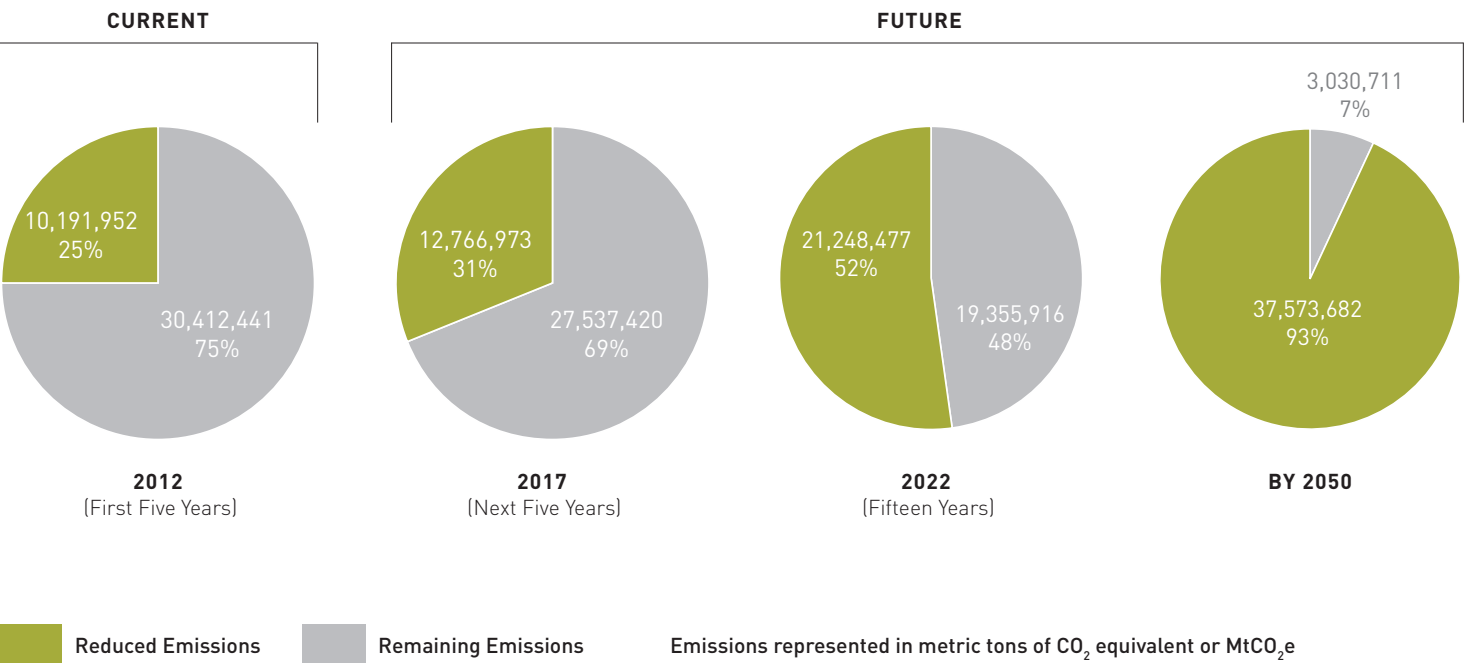
* Based on US EPA Green Power Partnership National Top 50 green power purchasers as of April 2012.

The re-stabilization of the earth's climate is the defining challenge of the 21st century. Without preventing the worst aspects of climate disruption, we cannot hope to deal with the other social, health, and economic challenges that society is facing and will face in the future.

Reaching Climate Neutrality

Emissions Reductions Achieved and Projected for ACUPCC Network

In the first five years of the initiative, ACUPCC institutions reduced gross greenhouse gas emissions (total scopes 1, 2, and 3) by **10.2 million MtCO₂e**. Although not all institutions submitted GHG inventories for 2007 and 2012, average gross emissions for the five Basic Carnegie Classification categories in those years were normalized to reflect the size of the ACUPCC network in 2012. Based on a comparison of current GHG emissions and the climate neutrality dates chosen by ACUPCC institutions, the network is projected to reach a reduction of over **50%** of its gross emissions in the next fifteen years, and will have reduced **93%** of baseline emissions by 2050.



Interim Target Reduction Goals

258 schools have set interim emissions reduction targets to ensure tangible, short-term progress while implementing plans in the context of the broader goal of climate neutrality. Greenhouse gas emissions accumulate in the atmosphere and can impact the climate for decades—even centuries—to come. Moreover, the adverse impact of today's emissions will not be fully felt for 30–50 years. This understanding underscores the urgency of reducing emissions as much as possible in the short term.

The 2007 Intergovernmental Panel on Climate Change report states: "Mitigation efforts over the next two to three decades will have a large impact on opportunities to achieve lower stabilization levels," and notes that to stabilize atmospheric concentrations of CO₂ at 350–400 parts per million (the level needed to avoid dangerous and irreversible climate disruption), emissions must peak and start declining by 2015.

For information on the GHG emission sources covered under total scopes 1, 2, and 3, visit rs.acupcc.org.

Curriculum and Research

Higher education contributes a small percentage of the nation’s carbon footprint, but it represents 100% of the ‘educational footprint’ —our institutions teach not only our college students but also the teachers who prepare our K-12 students for the new challenges of the 21st century. More than 6 million students attend an ACUPCC institution, representing approximately one-third of all college and university students in the US. ACUPCC institutions are employing a range of innovative approaches to ensure that climate and sustainability issues are incorporated into the educational experience of all students in order to prepare the next generation of leaders to create and implement solutions for a sustainable society.

Data on this page is based on Progress Reports submitted by 235 signatory institutions between January and May 2012.

Strategy for Advancing Sustainability Through Higher Education

In 2012, a group of chief academic officers and education for sustainability experts from across the country began creating a five-year strategy to integrate a sustainability perspective into the educational experience of all students in all disciplines. The goals established to guide this strategy include:

- A vibrant learning community around education for sustainability among chief academic officers.
- Programs to incentivize faculty and chief academic officers for innovative academic integration of sustainability across the curriculum.
- Integration of sustainability into institutional master planning, academic strategic planning, and mission statements.
- Sustainability as a critical agenda for higher education professional organizations.
- Collaborative clusters of peer institutions to support education for sustainability.
- Research programs to demonstrate how sustainability addresses higher education challenges like retention, graduation rates, and career preparation.
- Sustainability literacy among academic officers, faculty and students.

198 Signatories Combine To Offer 9,548 Sustainability Focused Courses, and Report The Following Programs For Sustainability Education:

153 have undergraduate degrees and 78 have graduate degrees in Sustainability.	70% of all graduate-degree granting institutions offer programs in sustainability, while 77% of all institutions offer an undergraduate degree program in sustainability.	92 schools (54% of schools where research is a priority) provide incentives to faculty for developing or incorporating sustainability into existing courses.
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Methods To Provide All Students With Sustainability Education

112	schools require all students to have sustainability as a learning objective.
60	offer professional development to all faculty in sustainability education.
43	have included sustainability learning outcomes into institutional General Education Requirements.
37	have included sustainability in fulfilling regional or state accreditation requirements.
15	have included sustainability learning outcomes, tracks, or certificates in every academic major.

Supporting Research for Climate and Sustainability

11,223	faculty members are engaged in sustainability research.
114	schools have a program to encourage student climate and or sustainability research.
119	have faculty engaged in sustainability research.
85	have a program to encourage faculty climate and / or sustainability research.
67	have a policy that recognizes interdisciplinary research in faculty promotion and tenure.

Community Engagement

Engaging with the community to build sustainable and thriving regional economies is an important pursuit for higher education. Campuses create community partnerships to implement sustainable solutions beyond their institutional boundary, engaging students in valuable service learning experiences, and foster ongoing dialogue, research, and support to ensure the long-term resiliency of the regions in which they teach.

Data on this page is based on Progress Reports submitted by 235 signatory institutions between January and May 2012.



Photos clockwise from far left:
Second graders get a gardening lesson (from Justin Hougham) as part of Washington State University’s Palouse Pollinators, a sustainable food project that engages kids, their teachers, and Washington State University College of Education students. *Photo courtesy of Julie Titone.*
University of Pennsylvania staff and School of Design students review proposals for a 2010 Green Fund project that aimed to integrate new sustainability features into West Philadelphia retail stores. *Photo courtesy of the University of Pennsylvania.*
Austin Community College students restore and beautify a local park annually. *Photo courtesy of Austin Community College District*

Regional Collaboration & Partnerships

ACUPCC institutions have created learning networks to increase their capacity to pursue climate leadership work both on campus and within their communities. Of the 235 institutions that submitted Progress Reports between January and May 2012, 55% participate in community climate change or sustainability partnerships.

Oberlin Project Partnership between Oberlin College and surrounding community to improve the prosperity and sustainability of the community. The Oberlin Project plans to create a “green” downtown area that includes shops and restaurants that will sell locally produced food from the green belt surrounding the city.	Tompkins County Climate Protection Initiative Cross-sector partnership between Ithaca College, Cornell University, and Tompkins Cortland Community College and local government and civic agencies which has created a county-wide climate leadership agenda and adopted a county-wide carbon emissions reduction target goal of 80% by 2050.	Illinois Green Economy Network A partnership among all 39 Illinois community college districts and 48 campuses working with businesses and local communities to grow Illinois’ green economy, providing new employment opportunities and healthy communities for all.
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Community Colleges Preparing for the 21st Century

Understanding sustainability is requisite for career preparedness in the 21st century. Of the Associate Colleges with a January–May 2012 Progress Report, 68% offer degrees or certificates for green job training. By providing training in solar, wind, energy efficiency, sustainable food and land use, alternative fuels and transportation, green building, and general sustainability development, these programs are helping both first-time and returning students build livable careers. In delivering real preparation for the jobs and infrastructure of a transitioning economy, these institutions are not only advancing the needs of their communities and students—they are playing a critical role in transforming higher education to meet the needs of a changing society.

For information on the GHG emission sources covered under total scopes 1, 2, and 3, visit **rs.acupcc.org**.

Institutional Success Stories

The following are a few examples of concrete steps ACUPCC institutions are taking towards a sustainable society—in classrooms, research labs, campus operations, and local communities. These stories provide just a taste of what these campuses—and hundreds more like them—have accomplished as part of their holistic approaches to tackling the sustainability challenge. They are the result of a subtle transformation that is occurring within the sector as more and more leaders at all levels of our country's colleges and universities recognize that creating a sustainable society is essential and central to the mission of higher education.

Allegheny College students in Richard Bowden's *Environmental Research Methods* class work with Ernst Conservation Seeds to research which strains of switchgrass might be the most economical to grow as a biofuel. Photo courtesy of Allegheny College

Preparedness

Understanding sustainability is required for career preparedness in the 21st century. The ACUPCC provides a framework and catalyst for delivering the curricular and co-curricular education needed to ensure that students from all disciplines are “sustainability-literate” and prepared to incorporate sustainability principles into every aspect of their personal and professional lives. Signatories are taking a variety of approaches to do this, including creating interdisciplinary centers, degree programs, graduation requirements, and community-wide awareness campaigns.



Drury students in Dr. Wendy Anderson’s “Science of Sustainability” class share information discovered through water testing with the Missouri Department of Conservation to ensure that quality water resources are preserved. The natural environment of the Ozarks provides a living laboratory for students in a variety of majors. *Photo Courtesy of Sessa Shannon / Drury University*



In observance of Earth Day 2012, Houston Community College District announced the energy initiatives and recycling efforts the college is taking to pursue climate neutrality. Chancellor Mary S. Spangler dedicated six Southern Magnolia trees, one for each of HCCD’s colleges, to highlight HCCD’s conservation programs. *Photo courtesy of HCCD*

Serving Students Through Community Engagement

An interview with Mary S. Spangler, Chancellor

How does Houston Community College District (HCCD) engage the local community, including the private and public sectors, in advancing climate and sustainability education?

Houston Community College District has a 40-year history of positively serving the local community. During the course of this period, active relationship building with our partners, including entities in both the public and private sectors, positioned HCCD to leverage long-standing ties for the benefit of our students and others, particularly those having a common interest in advancing sustainable practices.

For example, HCCD engages the local community through an annual Chancellor’s Energy Symposium. This event brings HCCD students and local high school students together with faculty, staff, and external entities such as the University of Houston, Rice University, Chevron Energy Solutions, and Waste Management, as well as federal and state policy makers to explore

common interests which include promoting sustainable practices through education. This opportunity also positions HCCD to identify existing and future needs of industry and manage our efforts to accommodate them (or those needs). It is a planned win-win for those who seek positive change through an education-based forum that promotes sustainability.

How does engaging with the public and private sectors help better prepare students for the 21st century economy?

Connecting students with real-world challenges through public-private sector engagement is critically important in preparing students for the 21st century’s economy. The more we can do to model appropriate behaviors for our students and provide real-life examples of how to protect our resources, the more likely we are to have future workers and leaders who will respect and protect those resources. We recognize that contextualizing learning is a much more effective way to embed

understanding about climate neutrality than just lecturing about it.

What role has the ACUPCC played in advancing this discussion?

The ACUPCC plays a critical role in advancing the sustainability and climate neutrality discussion. This focused organization includes some of the most credible and committed voices in the climate commitment charge. In part, to advance its mission, the ACUPCC engages thought-leaders in the field, policymakers, and other relevant stakeholders to ensure that value-added discussions continue on the subject of promoting sustainable practices. The organization also advances the sustainability discussion through mentoring opportunities, website information, networking opportunities, and summits. These opportunities, often offered via president-led committees, help increase participation in the education sector and diligently advance the sustainability discussion.

HOUSTON COMMUNITY COLLEGE DISTRICT

HOUSTON, TX

CHANCELLOR: Mary S. Spangler

IMPLEMENTATION LIAISON: Remmele J. Young, Executive Director of Government Relations and Sustainability

SIGNED: June 2007

FINANCING

Working with Chevron Energy Solutions to save \$15M over a 15-year period through sustainable practices

GHG REDUCTIONS

10% drop in GHG emissions/1,000 sq. ft. building space, 2008–2010

ACADEMICS

Degree programs in Solar, Wind, Energy Efficiency, Sustainable Agriculture, and Land



Left: Professor Timothy J. Wilhelm and his “Introduction to Solar-Photovoltaic Technology” course students standing with a roof-top solar array—the capstone student project for the class.
Right: Students in the “Introduction to Small-Wind Energy Technology” class assemble a 1 kW Bergey wind turbine. *Photos courtesy of Kankakee Community College*



Built in the early 1970s as an all-electric facility, MWCC’s decade-long transformation into a sustainable campus most recently incorporated two 1.65 MW wind turbines. Together, the turbines generate enough electricity to meet the annual demand on the 450,000-square-foot campus, including the Fitness & Wellness Center and Olympic-size indoor pool. *Photos courtesy of Mount Wachusett Community College*

Preparing Students for Renewable Energy Jobs

By Bert Jacobson, Dean for Environmental and Institutional Sustainability

KANKAKEE, IL
PRESIDENT: John Avendano
IMPLEMENTATION LIAISON: Bert Jacobson, Dean for Environmental and Institutional Sustainability
SIGNED: May 2007

INSTITUTIONAL COMMITMENT <i>Sustainability is part of Kankakee’s Strategic Plan</i>
STUDENT INVOLVEMENT <i>Campus Sustainability Advisory Committee for students</i>
COMMUNITY <i>Council for Community Sustainability advances sustainability in surrounding community</i>

In 2008, Kankakee Community College (KCC) received a National Science Foundation (NSF) grant to modify an existing electrical technology AAS degree program. The new and innovative program includes a renewable energy (RE) technology concentration, three RE certifications for electrical technicians, and four new RE courses: *Survey of Renewable Energy*, *Introduction to Solar-Thermal Technology*, *Introduction to Solar-Photovoltaic Technology*, and *Introduction to Small Wind Technology*. The three introductory courses are hands-on and offer third-party certifications including North American Board of Certified Energy Practitioners Entry Level certifications, and the Communication Industry Training and Certification Academy (CITCA) certification for *Wind Tower Safety and Tower Rescue*. Professor Timothy J. Wilhelm,

an Interstate Renewable Energy Council Institute for Sustainable Power Quality (ISPQ) Affiliated Master Trainer and CITCA Certified Trainer, secured ISPQ accreditation for the *Introduction to Solar-Photovoltaic* course in 2011. Additional grants from the Illinois Clean Energy Community Foundation and the US Department of Education provided funding for lab materials for the hands-on courses as well as a 50 kW Endurance wind turbine.

The project was among 33 highlighted by NSF, recognizing it for addressing “the chicken-and-egg problem: ‘Do we wait for anticipated, emerging jobs to become available before we train the needed technicians; or do we train the technicians we expect to need before the job demand exists?’” By giving students the skills and education to step right into Renewable Energy Techni-

cian jobs as they arise, while also training them for entry level positions in a wide variety of Electrical Technology jobs, Professor Wilhelm’s RE program addresses the conundrum head on.

Professor Wilhelm has secured a transfer agreement with Illinois State University, and has shared the curriculum, equipment lists, PowerPoints, and videos with the community colleges in Illinois as well as with the rest of the country. A RE Curriculum Clinic was held in February 2010 and more than 40 participants from six states left with materials to start the courses at their schools. Colleges around the country, like California Technical College, are emulating the program.

New Era of Sustainability at Mount Wachusett Community College

By Daniel M. Asquino, PhD, President

Mount Wachusett Community College (MWCC) ushered in a new era of sustainability in 2011 with the activation of two 1.65 MW wind turbines. Within the first year, the Vestas V82 turbines generated 5 million kWh — 100 percent of the college’s annual energy demand — while simultaneously turning a profit.

MWCC now operates as a near zero net energy campus and is near climate neutrality for operations as a result of the turbines, biomass heating, a 100kW photovoltaic array, solar domestic hot water technologies, and progressive conservation measures. This represents a complete turnaround in a decade.

Built as an all-electric facility in the early 1970s, the college’s annual electricity bills were topping \$750,000 by the late 1990s. Over the past decade, MWCC increased in size to 450,000

square feet and nearly tripled the number of computers on campus, yet through these innovative energy strategies and conservation measures, the annual electricity consumption has dropped from 9 million kWh per year to 5 million kWh.

Solar and geothermal technologies incorporated into a residential rehabilitation center for wounded combat veterans, built on college grounds by a local nonprofit organization, add to the highly visible sustainability efforts on campus. Combined, these technologies provide an invaluable learning tool for the public and students enrolled in the college’s Natural Resources and Energy Management programs.

Aptly located on Green Street, MWCC has incorporated sustainability into its core mission. An organic community garden, single stream recycling, composting, and

refillable water stations are among the initiatives launched with the assistance of the student sustainability club, The Green Society. MWCC further reduced its carbon footprint by adopting a four-day class schedule and increasing online course offerings.

MWCC has received a number of awards for its energy initiatives, including top awards in 2011 from Second Nature, the US Environmental Protection Agency, and the Massachusetts Executive Office of Energy and Environmental Affairs.

A charter signatory of the ACUPCC, Mount Wachusett is a true example of how an institution can invest in clean energy, elevate awareness about the need for alternative energy solutions in the US, and ultimately address the global climate crisis.

MOUNT WACHUSETT COMMUNITY COLLEGE
GARDNER, MA
PRESIDENT: Daniel M. Asquino
IMPLEMENTATION LIAISON: Robert E. Labonte, Vice President of Finance & Administration
SIGNED: January 2007

WIND <i>Two wind turbines generate 100% of college’s electricity demand</i>
FINANCING <i>New wood biomass heating system saves an estimated \$300,000 per year</i>
GHG REDUCTIONS <i>2012 goal to reduce GHG emissions by 60% below 2000 levels</i>



Left: A student working on a solar panel for a Green Grant at New York University. **Center:** Green Grantees assembling solar panels in Washington Square Park near NYU. **Right:** NYU students working on a Green Grant to harness solar energy for technological art projects. *Photos courtesy of NYU Office of Sustainability*

NYU Students Learn to Lead on Sustainability

An interview with Kayla Santosuosso (Middle Eastern and Islamic Studies, NYU '12) and David M. Seaward (Sustainable Consumerism, NYU '12)

NEW YORK UNIVERSITY

NEW YORK, NY

PRESIDENT: John Sexton

IMPLEMENTATION LIAISON: Jeremy A. Friedman, Manager of Sustainability Initiatives

SIGNED: March 2007

GHG REDUCTIONS

33% GHG emissions reductions from 2006 to 2011, eliminating 1/1000th of all New York City's emissions

ENERGY

New cogeneration plant produces 2x the power of old facility, cuts EPA criteria air pollutants by 68%

ACADEMICS

Nine of NYU's 13 colleges have new sustainable course offerings since 2009

Tell us about the leadership role given to students on New York University's Sustainability Task Force.

Kayla: The Task Force engages members from all sectors of the NYU community, from students to senior university leadership. It is comprised of Working Groups distinguished by an area of expertise, and each group is co-chaired by a student. Not only are these students liaising with faculty and staff—they're leading meetings and projects with vice provosts in attendance, constantly building a sustainability management skill set.

In order to excel, students must understand the specific barriers to sustainability at NYU — navigating power structures, addressing challenges posed by our urban environment, and analyzing the campus culture. They must be acutely aware of which risks the university is willing to take, who the stakeholders are for each initiative, and where the bottlenecks and feedback loops exist on our decentralized university landscape.

How has student involvement in the Green Grants program affected outcomes?

David: Green Grants democratically allow for students to directly contribute to NYU's sustainability initiatives. As project leaders they control and design their project and, working in concert with the Office of Sustainability, they get institutional support and ensure their projects complement other campus initiatives. Furthermore, many successful grantees become members of the Sustainability Task Force, making further use of their gained knowledge of institutional change and project execution. At such a large university known for its administrative 'red tape', Green Grants are a mechanism through which students can implement their own sustainability initiatives that, if proven successful and beneficial, become institutionalized by the University on a much larger scale. For example, the Bike Share blossomed from two student-led Green Grants into one of NYU Sustainability's flagship programs, supported and run by the university.

Do you feel you have made a lasting impression on NYU's sustainability initiatives as well as your own future as a sustainable citizen and community member?

David: I believe that Green Grants would have either ended or been on hiatus for a long time had I not performed both an operational analysis and a national comparison of similar programs. Doing so demonstrated the program's efficacy and helped me discern how I could get it running smoothly again. I have also placed heavy emphasis on requiring metrics to tangibly demonstrate projects' benefits, which can have rippling effects as we share our final reports and best practices with peer universities.

Furthermore, in the community spirit essential to sustainability, working in the Green Grants program has demonstrated to me that non-expert participation in sustainability projects is necessary for sustainability literacy and behavioral change to saturate in our society.



Portland State University's Cycling Club strives to introduce the cycling lifestyle to students that are looking for an enjoyable, healthy, and lifelong recreational activity. *Photo courtesy of Portland State University*

Students At Portland State Prepare University For Carbon-Neutral Future

By Wim Wiewel, President

Students at Portland State University (PSU) expect classroom studies to incorporate community issues, and they expect the University to walk the talk when it comes to sustainability.

When PSU signed on to the ACUPCC in 2007, students took an active role in developing a Climate Action Plan. And when it came time to begin implementing the plan's aggressive steps toward carbon neutrality on campus, students came forward ready to get their hands dirty.

The Climate Action Plan Implementation Team recruited a Winter 2011 Capstone class — PSU's signature cross-disciplinary and applied learning experience for every senior — to focus its work on the goals of increasing waste diversion and decreasing materials consumption on campus.

Working with their faculty adviser, the Communities and Resources Capstone students chose two blocks in the heart of PSU's 50-acre downtown campus.

Comprised of a student recreation center, classrooms, offices, storefronts, the city's busiest transit stops, and the PSU Urban Plaza, this target area would prove small enough to generate a measurable near-term impact, yet large enough to produce meaningful and scalable information that could inform future climate action strategies.

Students in the class broke into teams. One, focused on governance issues, was successful in establishing two ongoing working groups — comprised of students, faculty, and staff from the blocks' buildings — that now meet regularly to discuss strategies for waste reduction and diversion. Another surveyed over 300 building occupants to gauge barriers and opportunities for more recycling and reduction, and inventoried existing recycling and composting available onsite.

In the most conspicuous effort of the Capstone, students sorted, weighed, and exhibited three

days' worth of waste — over 150 pounds — in the outdoor Urban Plaza. The display drew in more than 100 community members to discuss waste management on campus and its contributing role in achieving carbon neutrality.

The students' synthesis report and recommendations for next steps have served as the basis for further work by the next cohort in the Communities and Resources Capstone, as well as the Climate Action Plan Implementation Team, which is now working with other classes across campus to support the University's pursuit of carbon neutrality.

Through the University's Climate Action Plan, students gain valuable hands-on experience in helping achieve its goals, preparing them with tools to address the pervasive challenges of global climate change as engaged citizens and workforce participants after graduation.

PORTLAND STATE UNIVERSITY

PORTLAND, OR

PRESIDENT: Wim Wiewel

IMPLEMENTATION LIAISON: Jennifer McNamara, Sustainability Manager

SIGNED: February 2007

FINANCING

Awarded \$25M challenge grant in 2008 to support PSU's academic, research, and engagement activities in sustainability

ACADEMICS

Institute for Sustainable Solutions advances sustainability research, education, and outreach

WASTE

Partnership with Sequential Bio-Fuels to recycle all waste cooking oil into bio-diesel



Left: Shannon South of reMADE USA at work at Pratt's Design Incubator for Sustainable Innovation at the Brooklyn Navy Yard. *Photo courtesy of Jonathan Weitz.* **Right:** Pratt students present concepts during a design workshop to generate ideas for public seating for the greenway project in the South Bronx. The project was a collaboration between the Pratt Design Incubator for Sustainable Innovation and Sustainable South Bronx. *Photo courtesy of Kris Drury*



PALS: Working Together to Create a New Vision for Design Education

An interview with Debera Johnson, Academic Director of Sustainability, Pratt Institute

PRATT INSTITUTE

BROOKLYN, NY

PRESIDENT: Thomas F. Schutte

IMPLEMENTATION LIAISON:
Tony Gelber, Director of
Administrative Sustainability

SIGNED: June 2007

ENERGY

Electrical demand control
systems reduced peak summer
loads by 1 megawatt

WASTE

CulinArt initiated reusable to-go
container in cafeteria, allowing
students to exchange for clean
ones upon return

RESEARCH

Students learn about ecological
impact, resource usage, human
health impact, and social equity
of building materials at Center
for Sustainable Design Studies' materials library

What is PALS? How does it foster collaboration among art and design institutions?

PALS stands for Partnership for Academic Leadership in Sustainability. This group of 33 member schools of AICAD (Association of Independent Colleges of Art and Design) is working to promote and support action at the institutional level. The group started in September 2010 with four objectives: to get to know each other, to share what each school was doing, to consider what needed to happen next, and to propose how sustainability would be key to the viability of our schools. We came to listen, but more importantly we came to work together. Over 3 days at our first summit, we created a presentation deck to share our strategy with each of our presidents. Our goal was to leverage the power of 30 to convince our leadership to create relevant and meaningful change. We meet monthly online to applaud success, discuss challenges, and build the connective tissue of the cohort.

How does the collaboration among these ACUPCC institutions strengthen each individual campus's approach to sustainability?

At the PALS 2011 summit we created a *Sustainability Initiatives*

Report to share what's going on at each school. It uses the 17 categories of the Sustainability Tracking, Assessment & Rating System™ (STARS) to sort data. We designed it for our presidents so they could compare and rate their schools' accomplishments against their peers, but we've found it valuable at all levels — everyone wants to know what other schools are doing. It's a great way to generate ideas and we now have some baseline standards to build on each year to chart progress. Our monthly online meetings are now themed — recent topics have included: Life Cycle Assessment, Sustainability in the Fine Arts, and Shared Studios between PALS Schools. These conversations are critical, especially at schools where resources are scarce. We've had Chief Academic Officers and Deans participate alongside department heads and faculty.

What is the value in encouraging collaborative curriculum development at different institutions? Do you think this is an emerging trend?

Collectively we are modeling the future of education. Raising tuition isn't a viable solution, and we are no longer each other's competition. By sharing and leveraging our resources we can

share the cost of conducting professional workshops for our faculty or jointly run a design studio. We can divide expenditures by 30 and multiply value by 30. Longer term, we are preparing our faculty to teach across institutions by creating innovative models that will help us meet the academic standards we aspire to and take on some of the financial challenges facing us.

How are students better prepared to meet the real design challenges in their fields?

If we can get our students access to more knowledge resources, they win. For example, Ontario College of Art and Design has a great *biomimicry studio*, Pratt has an *incubator* that turns designers into social entrepreneurs, and the School of the Art Institute of Chicago is working with the city to use art to *mitigate brown-fields*. The shared studios we are planning for the near future will expand our students' knowledge while they create valuable contacts with peers from other schools. By the time graduation is upon them, they will leave with a smarter, more connected network.



United Tribes Technical College is expanding with sustainability in mind. On its new campus (foreground) is an experimental garden plot and orchard — Dragonfly Garden — created as a Native American Medicine Wheel with help from North Dakota State University's Extension Service. At rear is the college's newest building — a science and technology center — that employs energy-saving technology. *Photo courtesy of Dennis J. Neumann / United Tribes News*

Inheritors of a Conservation Tradition

By Mark Mindt, Associate Vice President of Career Development

Native Americans of the Great Plains have long been known for respecting and adapting to their challenging environment. Making the most of scarce resources was commonplace. Harvesting only for necessity was customary and wise. When taking the Buffalo, the sacred provider, nothing went to waste.

Lessons from tribal history and tradition are not lost today. The students and staff of United Tribes Technical College (UTTC) have inherited a tradition of conservation going back centuries. Relying on their traditional knowledge and experience, the leaders of North Dakota's tribes founded the college in 1969. It became one of the premier tribal colleges in the nation — a place of education, support and empowerment for Native students and their families. The college campus is the site of a former military post that is, as you would expect, renovated and re-purposed for tribal higher

education. Students from tribes across the nation attend, making UTTC an inter-tribal and culturally diverse learning environment that blends forward thinking and tradition.

In its off-reservation setting at Bismarck, North Dakota, UTTC is something of a model for practices and innovations for tribal communities. The college initiated the first training program in the country for Native American energy auditors. Infused in the science curriculum are values that respect the goal of climate neutrality. The campus has an active and motivated "Green Committee" that raises awareness about global climate change, conservation, and sustainability. The college has adopted conservation measures on campus including the use of geothermal heating and cooling technology in its most recently constructed buildings: Itancan Oyanke (Leadership Hall), a coed dormitory, and a

science and technology center that has expanded the college's campus.

UTTC strives to be faithful to its tribal traditions and wise in the understanding and use of energy resources. That's why College President David M. Gipp made the decision to have the college join the ACUPCC and continue to pursue sustainability, in all its forms and possibilities, on this tribal college campus.

- Governing Tribes of United Tribes Technical College:**
- Sisseton-Wahpeton Oyate
 - Spirit Lake Tribe
 - Standing Rock Tribe
 - Three Affiliated Tribes of the Mandan / Hidatsa / Arikara Nation
 - Turtle Mountain Band of Chippewa

UNITED TRIBES TECHNICAL COLLEGE

BISMARCK, ND

PRESIDENT: David M. Gipp

IMPLEMENTATION LIAISON:
Curtis Maynard,
Facility Manager

SIGNED: July 2010

ENERGY

Building Green Planning Initiative
Project House offered energy savings retrofit workshops, sustainable equipment and materials to on-campus family housing tenants

ACADEMICS

Offers degree in Tribal Environmental Science which includes economic, cultural, and political considerations in conservation

GREEN BUILDING

New Science and Technology building will feature geothermal heating and air conditioning, highly insulated walls and windows

Opportunity

In order to remain competitive and create a thriving economy, colleges and universities must provide the relevant knowledge and skills to as many people as possible. As such, higher education is under pressure to increase access and improve affordability. The ACUPCC generates cost savings and new funding sources, helping schools reduce tuition costs and increase access, giving more people the opportunity to earn a degree.



Elyse Schmitt was one of five Allegheny College students who worked on aquaponics projects with environmental science professor TJ Eatmon in summer 2011. Schmitt used money she won in a regional business plan competition to do a market analysis of strategies for commercializing aquaponics crop production, especially in cold weather climates. Photo courtesy of Allegheny College



Left: Entrepreneurs on a cross-country road trip talk about innovative and sustainable modes of manufacturing during a stop at Meadville’s historic Market House to demonstrate 3D printers. The event was part of the Year of Sustainable Communities at Allegheny College. **Right:** Allegheny students perform an energy audit at the home of the college’s president. “This was a great learning experience for the students and for the college,” says Professor of Environmental Science Richard Bowden. “Students saw firsthand the challenges in transferring theory into action.” Photos courtesy of Allegheny College

Creating a Broad Sustainability Commitment at Allegheny College

By David McNally, Executive Vice President and Treasurer and Kelly A. Boulton, Sustainability Coordinator

Allegheny College has a long history of commitment to sustainability, beginning with the establishment of the environmental science department in 1972. The signing of the ACUPCC in 2007 became the catalyst for establishing a broad commitment to sustainability across all levels of the institution.

Moving from a loose collection of individual initiatives—mostly led by students and faculty—to an institutional commitment meant making sustainability part of the College’s deep infrastructure, including curriculum, staffing, strategic planning, facilities, student life programs, and finances. This began with numerous individual actions that were situated within established College practices, based on the principle that sustainability must become a fundamental part of Allegheny’s identity, rather than simply another program layered on top of an already-busy campus life. The first, and in many ways most significant, step was creating a full-time sustainability coordinator position, which was accomplished through a reorganization of the physical plant staff in anticipation of a pending retirement.

The coordinator became the locus of formerly-disparate sustainability efforts by assisting with student-faculty research, working with facilities staff, collaborating on a multi-year energy reduction program, assisting with the design of new buildings, engaging student leaders, recommending utility purchase arrangements, and authoring the Climate Action Plan. Other champions emerged in the faculty, physical plant, finance office, and student government, and their work to integrate sustainability into established practices was recognized and reinforced by the President and senior leadership, motivated in large part by the commitment to fulfilling the ACUPCC pledge.

Multi-year planning and financial forecasting were essential to achieving climate commitment goals, as projects that were too expensive in the short term were completed over time. A 10-year comprehensive maintenance plan was developed with an emphasis on energy projects, alongside other priorities such as classrooms, residence halls, and accessibility. Integrating sustainability with long-term planning and budgeting culminated in the inclusion of climate neutrality in the

College’s comprehensive strategic plan, made possible in large part by the fact that a Climate Action Plan was already in place.

Many success stories emerged, including a 100% wind power purchase, organic landscaping program, student-led activities (including the annual Trashion Show and Energy Challenge, as well as the establishment of a student government sustainability coordinator), inclusion of LEED standards in construction and renovation, installation of three ground-source heating and cooling systems, and a biofuel partnership with the local city government. As the result of these projects, utilities expenses were more than \$400,00 below budget in 2010-11, representing one of the key expense controls that enable the College to limit tuition increases and provide access for students. These initiatives were substantially facilitated by the fact that sustainability had already been incorporated into the College’s core values and established planning, finance, and governance systems.

ALLEGHENY COLLEGE
MEADVILLE, PA
PRESIDENT: James H. Mullen
IMPLEMENTATION LIAISON: Kelly A. Boulton, Sustainability Coordinator
SIGNED: January 2007
ACADEMICS Environmental principles and ethics taught across diverse disciplines
CLIMATE NEUTRALITY DATE 2020
COMMUNITY Completed GHG inventory for City of Meadville



Online Education: A Boon for Sustainability

An interview with Wallace E. Boston, President and Chief Executive Officer

AMERICAN PUBLIC UNIVERSITY SYSTEM

CHARLES TOWN, WV

PRESIDENT AND CEO:

Wallace E. Boston

IMPLEMENTATION LIAISON:

Elizabeth Gray, Executive Assistant to the President and CEO

SIGNED: September 2007

ENERGY

28 energy efficiency retrofit projects since signing ACUPCC

GREEN BUILDING

All materials used for Academic department building were built or purchased within 500 miles of site

SOLAR

Solar panels on Academic building expected to provide 60% of building's energy

Though American Public University System is a fully online institution, many of its students travel from around the country and around the world to convene for their commencement ceremony. Often, this is the first time the students have met one another and the APUS faculty face-to-face. Despite this, the bonds that the students form with one another in their virtual classrooms and the bonds formed between the students and their faculty are evident in the commencement ceremony. *Photo courtesy of APUS*

As an online, for-profit university system, why does advancing sustainability education interest American Public University System (APUS)?

We're interested in advancing sustainability education because it is the right thing to do. Our interest in promoting such initiatives has less to do with our online, for-profit status than with our being a member of the larger community of colleges and universities that understand the unique role higher education can play in combatting climate change.

How does APUS's online education model increase students' access to education while maintaining its affordability?

Our mission statement specifies our commitment to access and affordability and we are proud that we have offered quality educational programs without increasing our undergraduate tuition for 11 consecutive years. Our 100% online platform allows us to grow our student body without many of the same physical limitations facing more traditional institutions. It also allows us to offer monthly semester starts to enable working adults to begin their studies when it is most convenient for them. Because we do not have to build and maintain student facilities that traditional campuses have, we can keep tuition and out-of-pocket costs low.

APUS has seen continuous and significant student growth and enrollment increases. In

2005, we ended the year with 11,600 students; today we are serving more than 110,000, representing an annual growth rate of 48%. Our online format is appealing to our current students—and to a growing number of students across the country. The Sloan Consortium reported in its *Going the Distance* report that online enrollments accounted for more than 30% of total college enrollments in Fall 2010, increasing more than 10% since Fall 2009. We believe our growth in the past 12-18 months is based more on our affordability than the convenience accorded by online education.

Online universities often appeal to non-traditional higher education students. Who are you reaching with your sustainability courses? Can you tell us more about APUS's student body?

Some 68% of our student body is active duty military, veterans, or National Guard and Reserves. All of the military service branches are represented among our student body. The remaining students are civilians, many of them working in the public service sectors at the local, state, and federal levels. The average age for an APUS student is 31 years old. Ninety-five percent are attending school part-time and 94% are working full-time. They are studying in all 50 states and more than 100 countries, many of them deployed to various overseas duty posts with the military. More than half of our students are first-

generation college students, and our minority population mirrors the diversity of the military.

Describe how you have integrated climate change and sustainability education into your curriculum and course offerings.

We are able to disseminate climate change and sustainability education in an environmentally friendly way to our students across the US and in more than 100 countries. As they take this information into their local communities, the possibilities for action are endless.

Four of the seven schools at APUS have sustainability courses as part of their programs. Faculty in all the schools as well as the students in our Environmental Science programs benefit greatly from faculty members who are also practitioners. The Program Director for the Environmental Sciences program, for example, is the Chief of Natural Resources for the National Park Service. She is also a 28-year Coast Guard Reservist. In that capacity she was on hand in the days following the 2010 Gulf Oil Spill. In fact, several of our faculty members and many of our students were deployed to that area. Our Program Director and others documented their work in the Gulf Oil Spill with blog postings, podcasts, and video interviews and made these materials available to all members of the university community.

During the summer of 2010, the Environmental Defense Fund placed an intern on ECSU's campus. The intern, whose goal was to identify measurable energy savings, identified savings of approximately \$300,000 at an estimated cost to ECSU of \$59,000 and a payback period of 1.8 years.

Partnering for a Sustainable Campus

By Robert G. Gaines, Special Assistant to the Chancellor

Elizabeth City State University (ECSU) was founded on March 3, 1891. With a current enrollment of 3,307, the university is excelling in its mission to provide outstanding instruction, research opportunities, and community outreach projects.

As a leader in the rural setting of Elizabeth City, ECSU developed a plan to be an active community partner in the sustainability realm. To formally drive this plan, on March 9, 2010 the ECSU board of trustees adopted a sustainability policy. This policy established—as a core value—ECSU's commitment to proactively and effectively manage its environmental resources.

With the endorsement of the board of trustees, Chancellor Willie J. Gilchrist signed the ACUPCC. As a signatory, ECSU committed to documenting the university's goal of climate neutrality and to developing a comprehensive plan to achieve this goal. ECSU quickly formed a steering committee and appointed

a sustainability director to oversee the efforts. The committee has since investigated financial resources and pursued partnerships to support the implementation of all policies and initiatives created.

One such partnership was with the Environmental Defense Fund (EDF). During the summer of 2010, EDF placed an intern on ECSU's campus. The intern, whose goal was to identify measurable energy savings, identified savings of approximately \$300,000 at an estimated cost to ECSU of \$59,000 and a payback period of 1.8 years. Another positive outcome of this partnership was the development of a comprehensive sustainability plan that incorporated university goals and community outreach.

After a competitive bidding process, ECSU procured a contract with Honeywell Corporation to identify energy enhancements in selected buildings on campus. These enhancements are guaranteed by Honeywell to save more than \$5,000,000 over a 14-

year period, and will be financed through a commercial loan.

ECSU was also the recipient of a planning grant from the United Negro College Fund's Institute for Capacity Building. This grant enabled the university to train staff to develop an inventory of campus greenhouse gases and an accompanying mitigation plan.

ECSU's Center for Green Research and Evaluation received an Innovation Grant in the amount of \$400,000 from the North Carolina Rural Center. This grant served 21 counties in ECSU's catchment area. Additional grants that were funded by outside resources helped to improve energy efficiency in community residences, further demonstrating ECSU's commitment to the community. ECSU's vision for sustainability is vast, constantly evolving, and reflects the stalwart commitment of the board of trustees to the university, students, and community.

ELIZABETH CITY STATE UNIVERSITY

ELIZABETH CITY, NC

CHANCELLOR: Willie J. Gilchrist

IMPLEMENTATION LIAISON:

Robert G. Gaines, Special Assistant to the Chancellor

SIGNED: May 2010

GREEN BUILDING

Won Home Depot's \$50,000 "Retool Your School" grant to upgrade athletic facilities

COMMUNITY

Center for Green Research and Evaluation connects university, local businesses, and non-profits to create green jobs

STUDENT INVOLVEMENT

Students active in establishing sustainable actions through "Be Blue, Go Green" campaign



Montgomery County Community College President Karen A. Stout climbs aboard the new transportation shuttle with students Nicole Weising and Calvin Wang. The shuttle makes 10, 30-mile trips daily between the college's Central and West campuses and saves a potential 3,700 miles per day when operating at capacity. *Photo courtesy of Montgomery County Community College*

A Commitment to Student Access and Success

An interview with Karen A. Stout, President

**MONTGOMERY COUNTY
COMMUNITY COLLEGE**

BLUE BELL, PA

PRESIDENT: Karen A. Stout

IMPLEMENTATION LIAISON:
George A. Shal, Director of
College Services

SIGNED: July 2007

ACADEMICS

*Includes sustainability learning
outcomes in General Education
Requirements*

WIND

100% wind power purchase

TRANSPORTATION

*Working with transportation au-
thority to save 20,000 travel miles
annually on campus bus route*

Why was the decision made to make sustainability an integral part of the college's strategic plan?

Montgomery County Community College has a long history of promoting and practicing responsible environmental behavior. As we gathered input from students, faculty, and staff to develop our 2005-2010 strategic plan, sustainability emerged as a core value.

The resulting plan — Great Expectations: Keeping the Promise of Student Access and Success — identified “investing in campus renewal and sustainability” as one of our six strategic goals. This early commitment to sustainability fueled the College's interest and the Board of Trustees' endorsement in becoming a charter signatory of the ACUPCC.

Our sustainability efforts are led by a team of faculty, students, administrators, support staff, alumni, and community members that comprise the Presidents' Climate Commitment Advisory Council. This group developed our first-ever Climate Commitment Action Plan, outlining short- and long-term strategies to reach carbon neutrality.

How does this focus increase the value and accessibility of the education at your institution—for both current and

future students?

The College's Climate Commitment Action Plan is divided into key categories — including transportation, operations, curricular and co-curricular activities, and community outreach — all of which impact student access and success.

We recently introduced a new general education core curriculum that shapes students' experiences through 13 learning competencies, one of which is civic responsibility. This competency requires students to “analyze society's environmental impact on the non-human world and future generations to better ensure sustainability.” The integration of sustainability into the core ensures that every Montgomery County Community College graduate is able to think critically about his or her impact on the larger world. It also paved the way for our faculty to introduce new courses that examine sustainability from biological, economical, geological, and geographical perspectives.

The College's commitment to sustainability also enabled us to focus on transportation emissions which, because we are a commuter institution, are a significant portion of our carbon footprint. After analyzing commuter traffic trends, we instituted a shuttle between our campuses in Blue

Bell and Pottstown, which are 30 miles apart. At 10 runs per day, 20 riders per run, the shuttle reduces commuter traffic by close to 3,700 miles daily when operating at capacity. We also partnered with Zimride to promote and encourage carpooling among students, faculty, and staff. These initiatives not only help us reduce our carbon footprint, but they enhance student access to courses and activities on our campuses.

How has participating in the ACUPCC network opened up cost saving avenues and new funding sources that you might not otherwise have accessed?

The resources available to us through the ACUPCC network encourage us to think creatively about our sustainability efforts. The planning tools, such as the Greenhouse Gas Emissions Inventory, have led to significant cost-saving initiatives. For example, through a partnership with Community Energy, the College now purchases 100% of its energy from wind power, offsetting 8,500 metric tons of carbon annually and saving \$17,000 over two years. We also recently entered into a Guaranteed Energy Services Agreement with Siemens Industry, Inc., which will generate an estimated \$6,383,434 in energy savings, or 19%, over the next 15 years.



The University of Arizona Student Recreation Center Expansion is the first LEED Platinum University Recreation Facility in the US. *Photos courtesy of UA*

The University of Arizona: Innovating Its Way to Sustainability

By Eugene G. Sander, President

As President, I am very pleased to report that the University of Arizona (UA) is fully committed to sustainability in all that we do. We go far beyond traditional practices in sustainability and are leaders by innovating approaches toward sustainable outcomes. We have countless courses with sustainability woven into their curricula, and just launched a new Bachelor of Science degree. Our research in renewable energy, sustainable water, arid lands agriculture, and adaptation to climate change is world-renowned. We also embrace sustainability in how we operate our campus, as our recent AASHE STARS® gold rating attests. Most importantly, we have fostered a true spirit of sustainability among our students, which they express in many ways, but none more significant than when, in 2010 their support for a \$24 per year sustainability fee was

approved to create the UA Green Fund. Each year a ten-member student Green Fund Committee solicits and reviews dozens of sustainability project proposals from staff, faculty, and students. Our committee selection process engages our graduate and undergraduate student presidents, department heads and faculty, and the entire student body. With up to \$400,000 to allocate per year, the committee has funded more than 35 projects in its first two years, including a new 75-seat sustainable consumerism course, a student-run composting program and campus community garden, energy dashboards for UA Residence Life's 'battle of the utilities,' statewide sustainability 'externships' with UA Cooperative Extension, and numerous on-campus energy- and water-conserving projects.

The success of the Green Fund spurred my interest in a revolving fund for larger energy efficiency projects, leading UA to join the Billion Dollar Green Challenge's Founding Circle in 2011. We will continue to use our Green Fund process to implement more projects that reduce our environmental footprint, educate our students, and reduce costs. Even more important, we will use the process to create collaborative, hands-on projects that engage our students, faculty, and operational and campus planning staff in the transformation of our campus as a living, learning laboratory for sustainability solutions. Coupled with our excellent academic programs, we believe this will provide our students with the skills and experience needed to lead the world toward a more sustainable future.

UNIVERSITY OF ARIZONA

TUCSON, AZ

PRESIDENT: Eugene G. Sander

IMPLEMENTATION LIAISON:
Joe Abraham, Director,
UA Office of Sustainability

SIGNED: April 2007

ACADEMICS

*Offers 200+ courses on environ-
mental studies and sustainability*

WASTE

*Recycles 35% of all waste—
up 5% from 2010*

RESEARCH

*Water Sustainability Program
combines 300 faculty and staff
across 10 colleges, 60 depart-
ments for water research and
technology development*



Weber State's Olympic-sized swimming pool is now heated exclusively by solar thermal panels that have been installed on the building's cool roof. Photo courtesy of Justin Owen

Revolving Fund Promotes Green Future at Weber State

By Norman C. Tarbox, Vice President of Administrative Services

WEBER STATE UNIVERSITY

OGDEN, UT

PRESIDENT: F. Ann Millner

IMPLEMENTATION LIAISON:
Kevin Hansen, Associate Vice President of Facilities & Campus Planning

SIGNED: May 2007

FINANCING
2011 energy and water projects produced \$527,000 in savings

ACADEMICS
Offer 77+ sustainability-focused courses across 25 academic departments

ENERGY
Saved 2,834,205 kilowatt hours of electricity in 2011, equivalent to taking 383 cars off the road

Weber State University (WSU) in Ogden, Utah, borders the foothills of the Wasatch Mountains. Those who visit marvel at the beauty of the campus and its relationship to nature.

The university community has long been committed to preserving and enhancing the quality of the environment and its facilities. A green revolving fund, established in 2009, has elevated energy efficiency and sustainability as a campus priority from the president on down.

The revolving fund was approved by the board of trustees that granted authorization for a “drawing account” of up to \$5 million for energy-conservation projects across campus. This account is essentially an internal loan of institutional reserves. Energy savings from the various projects will pay off the debt (plus modest interest) and reduce overall costs for the institution, improving financial strength and helping to keeping tuition costs as

low as possible. Once paid back, the funds may be used again for approved energy-savings projects.

The campus has plenty of places that will benefit from the money. As a quintessential ‘baby boomer’ campus, most of the buildings and infrastructure were built between the years of 1963–73. These facilities have now turned 40 years of age. The infrastructure is old and dated. Tremendous energy savings are available, but WSU has never had the up-front capital to make the investments needed to capture them. This program allows the university to do so at very favorable financing terms.

In all, WSU anticipates the revolving fund will facilitate \$9 million of energy-oriented capital during the seven years of its authorization.

The savings have already begun with the installation of 279 solar panels on four major buildings: the student union, campus gymnasium, residence

halls and an academic building with more installations planned. The campus also is replacing all interior and exterior lighting with high-efficiency fluorescents. The initiative will take three to five years and is approximately 25 percent complete.

Another major upgrade underway is to the 1.5-mile network of underground steam tunnels that are getting repairs and insulation to prevent energy loss during the transport process.

Since 2006, WSU has completed many energy efficiency projects that save more than 2,505,000 kilowatt hours of electricity annually. That translates into an annual reduction of 3,759,000 pounds of carbon dioxide.

With the aid of the revolving fund, Weber State University is committed to a 40-percent reduction in carbon dioxide emissions by 2027 with the goal of becoming carbon neutral by 2050.

William Paterson University’s Commitment to Sustainability

By Kathleen M. Waldron, President

William Paterson University in Wayne, New Jersey, is committed to environmental sustainability ideologically and academically, and our work is producing environmental and budgetary benefits.

We are proud to provide a positive example for our 11,500 students while leading by example for our surrounding community and beyond. To this end, our administrative team elected to become a charter member of the ACUPCC. Our faculty and students join us in our efforts to reduce the University’s carbon footprint and to enhance our eco-friendly practices through campus campaigns, as well as through our academic curriculum.

Building upon faculty strengths, the College of Science and Health is instituting a dedicated bachelor’s degree in environmental sustainability in fall 2012. The degree unites a number of our areas of tangible study and research, and includes

Our solar initiative, with phase one completed in 2010 and phase two beginning in spring 2012, ranks among the top ten largest installations at higher education institutions in the United States. Our conversion to smart buildings via upgraded energy management systems and our use of electric maintenance vehicles has vastly reduced our total energy consumption, as well as our energy costs.

courses in environmental science, biology, chemistry, mathematics, law, political science, and economics. Graduates will be prepared with the interdisciplinary skills needed for careers in sustainability to meet the growing demands in academia, business, and government.

William Paterson’s campus-wide solar panel installation is a dramatic and visible sign of this institution’s commitment to the environment. Our solar initiative, with phase one completed in 2010 and phase two beginning in spring 2012, ranks among the top ten largest installations at higher education institutions in the United States. Our conversion to smart buildings via upgraded energy management systems and our use of electric maintenance vehicles has vastly reduced our total energy consumption, as well as our energy costs. In the past decade, the size of the University’s physical plant has increased by 16.5 percent, while the electric

energy consumption was reduced by 30 percent and natural gas consumption by 50 percent. In addition to this significant reduction in carbon gas emissions, the University has saved more than \$17 million over the same time period through cost avoidance. Such cost savings have allowed us to continue to deliver high quality education while minimizing the expense to our students.

The University continues to vigorously pursue energy efficiency initiatives and educational programs with the strong support of students, faculty, administrators, alumni, and community leaders.

WILLIAM PATERSON UNIVERSITY OF NEW JERSEY

WAYNE, NJ

PRESIDENT:
Kathleen M. Waldron

IMPLEMENTATION LIAISON:
Lou M. Poandl, Director of Physical Plant Operations

SIGNED: June 2007

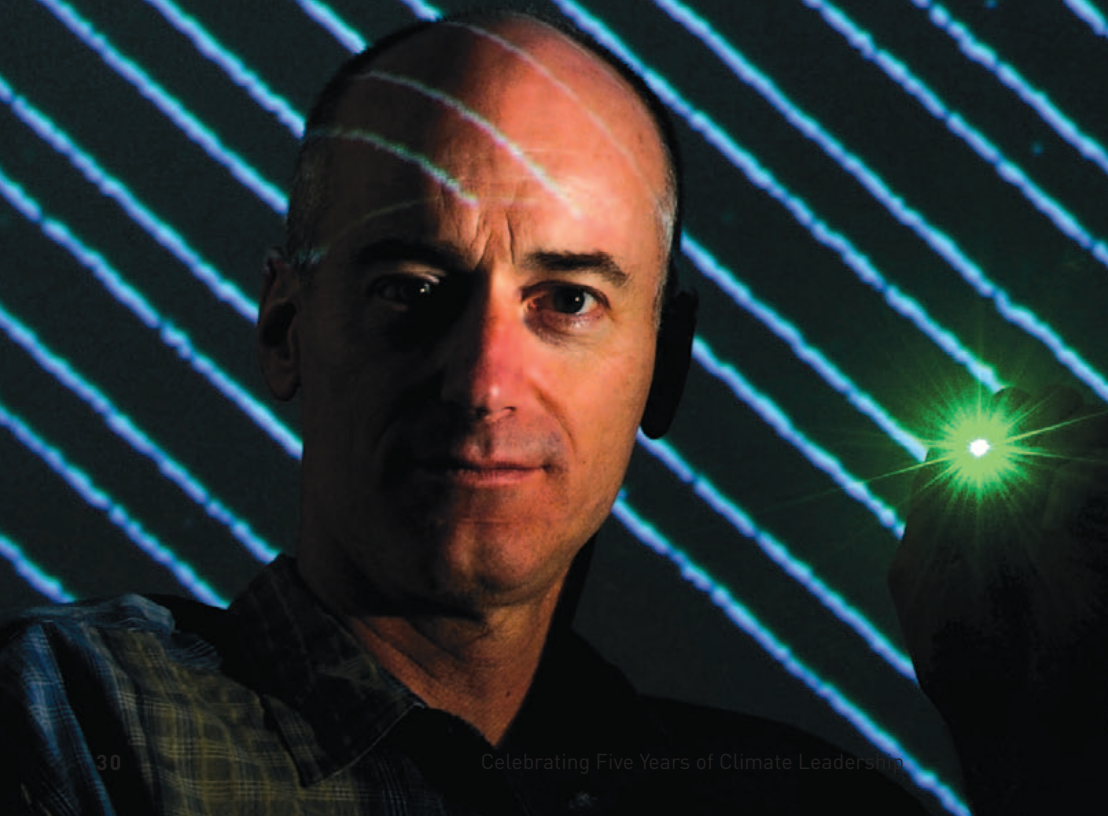
ACADEMICS
Include sustainability learning outcomes in General Education Requirements

FINANCING
Saved \$10.5M from 2002–2008 through energy reduction projects

GREEN BUILDING
Currently implementing Smart Buildings Project with American Recovery and Reinvestment Act funding of just over \$1M

Innovation

ACUPCC campuses are cradles of innovation. Through research, experimentation, and role-modeling solutions in operations these schools are putting cutting-edge practices to work in the areas of energy efficiency, green building, water conservation, food services, transportation, renewable energy, climate adaptation, and more. They are creating community partnerships to implement sustainable solutions beyond their campus boundary and to engage students in experiential service learning.



Cheating Diffraction:

Professor Reg Penner's research group at UC Irvine has developed a method for patterning nanowires—with a width of just 40 nanometers—using light with a wavelength of more than 300 nm. The goal is to recover new properties that are useful for capturing energy from the sun. *Photo courtesy of UC Irvine*

Bethany is a proud ACUPCC signatory. In fact, I've signed twice—as president of Bethany and previously at Wesley College.

Sustainability, Innovation, and Research at Bethany College

By Scott D. Miller, President

With the ACUPCC identifying workable campus projects to reach environmental objectives, participating higher education institutions can serve as innovative resource role models for colleagues on other campuses, as well as non-educational organizations committed to going green.

Because the Climate Commitment is really about meeting many individual sub-goals, here is where the classic tools of institutional research, experimentation, and operational role modeling come into play.

Call on faculty, staff, and students to help with the research. At Bethany College, campus engagement is critical to data collection about greenhouse gas (GHG) emissions. Working under faculty guidance, three students—an environmental science major and two political science majors—were instrumental in producing surveys and collecting data from the registrar, buildings and grounds, the finance

office, and other departments. The students fulfilled their senior project or professional internship requirements through the survey process, and established a model for sustainability of data collection in the future.

Experiment. The survey was the first comprehensive analysis of greenhouse gas emissions at Bethany. We learned a few things along the way. Data collection could be improved through better and timelier use of surveys, and some data are forthcoming as collection methods are reformed. More research remains, too, including in regard to possible uses for Bethany's 1,300 acres of forest. A forest inventory might provide the answer. Overall, we learned much throughout the course of this study that reveals opportunities for further experimentation to reduce GHG emissions in all areas.

Be a productive, visible role model. Bethany is a proud ACUPCC signatory. In fact, I've

signed twice—as president of Bethany and previously at Wesley College. The opportunity for all of us through the ACUPCC is to develop realistic models that lower the carbon footprint on our campuses, to recognize our unique challenges, and, importantly, to communicate our progress to inspire others. Because Bethany's single largest carbon source is our coal heating plant, any research-based solution must take into account ways of reducing or offsetting those primary emissions—an exciting prospect that may well prove to be inspiring to other campuses confronted with complex pollution problems.

Going green is largely about being innovative—a familiar challenge to educational institutions everywhere—with many tools conveniently at hand.

BETHANY COLLEGE

BETHANY, WV

PRESIDENT: Scott D. Miller

IMPLEMENTATION LIAISON:
Ted Williams,
Director of Physical Plant

SIGNED: June 2009

COMMUNITY

Through cooking oil donations, dining services produced 800+ gallons of biofuel for 5 local farms

ACADEMICS

In addition to core majors, interdisciplinary program includes Environmental Science and Environmental Studies

FINANCING

First school in Great Plains region to join the Billion Dollar Green Challenge, committing \$100,000 to revolving loan fund



Left: This 3,300 kilowatt array, located on Colorado State University’s Foothills Campus, generates five million kilowatt hours annually and spans 30 acres. *Photo courtesy of Dan Bihn.*
Right: The Student Recreation Center at Colorado State University has undergone a complete renovation. The cost of energy within the renovated building is less than before despite an addition of 75,000 square feet. *Photo courtesy of Becca Wren*

Colorado State University a Pacesetter in Environmental Education

An interview with Diana Wall, University Distinguished Professor and Founding Director of the School of Global Environmental Sustainability

COLORADO STATE UNIVERSITY

FORT COLLINS, CO

PRESIDENT: Anthony A. Frank

IMPLEMENTATION LIAISON: Carol Dollard, Facilities Manager

SIGNED: June 2008

SOLAR

When completed, Foothills Campus Solar Array will provide 1/3 of that campus’s annual electricity load

ACADEMICS

CSU’s College of Business launched Center for the Advancement of Sustainable Enterprise in May 2010

RESEARCH

Two solar scientists received \$2.5M from NSF, Abound Solar to reduce cost of solar-powered electricity

What is the mission of the School of Global Environmental Sustainability (SoGES)?
The School of Global Environmental Sustainability is an umbrella organization encompassing all environmental education and research across the eight colleges at Colorado State University (CSU). Created in 2008, the School positions CSU to address the multiple economic, environmental, and societal challenges of global sustainability through broad-based research, curricular, and outreach initiatives.
We champion the initiative needed to meet a gap in environmental education at the university—to ensure that every student at CSU receives at least one course, program, or experience in the environment—given the emerging energy, atmospheric, ecological, agricultural, and societal issues of the future. Collaboration and innovative thinking are themes that trickle down through our research programs to support dynamic forums for engagement with new ideas and disciplines.

Do you see an opportunity for all research universities to have a similar school?
Yes, and some of them already have similar opportunities for their students and faculty. Sustainability education is no longer just about the traditional environmental curriculum. We are integrating opportunities and learning outcomes that cover the full spectrum of problem solving that will be needed now and in the future. We need to train our students to succeed in areas that are critical to our economy as well as important to the survival of our global ecosystems.
From a research perspective, the School gets faculty out of their silos to merge disciplines in a way that wasn’t done a decade ago. Having expertise from different perspectives approach a problem as a cohesive unit is the most efficient way to create real-world solutions for these critical problems.

How do you see an initiative like the ACUPCC being able to accelerate the reorientation of curriculum and research to address climate and sustainability issues?
The ACUPCC is highlighting many of the initiatives occurring across campuses nationwide, which is helping to spur additional innovation and critical thinking about how universities behave as sustainable organizations. At CSU, for example, we take pride in a three-pronged approach of creating a sustainable campus environment, educating our students, and taking our cutting-edge research and commercializing it where appropriate so that those products can address some of the biggest environmental challenges we face. Prieto Battery, for example, is one such CSU spinoff company that could commercialize a non-toxic battery technology up to 1,000 times more powerful and 10 times longer lasting and cheaper than traditional batteries. The development of this technology—by chemistry Professor Amy Prieto—could revolutionize the transportation, communication, and energy storage industries.



Left: Students engineer smart bike share infrastructure into bikes at Georgia Tech. Ford Motor Company presented a \$50,000 check to support a project between Georgia Tech and Emory. Tech students developed a device to attach to shared bicycles that enables them to be reserved and locked remotely. **Right:** Georgia Tech’s student groups drive demand for 50,000 electric cars on Atlanta’s roads. ECE Rush, an event for new students in the Electrical and Computer Engineering program, helps to promote the department and showcase clubs affiliated with it. *Photo courtesy of Georgia Tech*

Student Involvement in Competitions and Projects Produce Sustainable Solutions

By Marcia Kinstler, Sustainability Director, Environmental Stewardship

Georgia Tech’s commitment to sustainability is represented across campus in the ways students, faculty, and staff incorporate sustainable living and creativity into their academic, personal and philanthropic lives. Student competitions and projects are no exception.
Georgia Tech and its Bicycle Infrastructure Improvement Committee earned the distinction of Partner of the Year from the Atlanta Bicycle Coalition for 2011 for the addition of bike racks and lanes, a partnership enabling the sale of refurbished bikes on campus and the launch of viaCycle, a bike-sharing program partly funded by a Ford Fund Grant. Founded by students and young alumni, viaCycle secured more than \$200,000 in grants, prizes and contracts before its launch; it also garnered more than 200 users in just two months.

The student startup Sanivation earned \$40,000 from Startup Chile to develop its solar-powered latrine that removes toxins from waste in underdeveloped countries and remote areas, making the waste safe to use as fertilizer. Sanivation, which includes students from Tech’s Engineers Without Borders and the Georgia Tech Research Institute, was also a finalist in Tech’s annual Ideas to SERVE competition that challenges students to solve social or environmental problems and awards \$10,000 in prizes to multiple recipients. Tech’s Business Plan, Ideas to SERVE, and Inventure Prize competitions attract hundreds of entries each year in the realm of sustainability.
Georgia Tech earned first place in creativity, presentation, and coordination, and second place overall, in the international competition “Building the Tower

of Babylon: What on Earth is Sustainability?” Architecture students created installations made from campus recyclables to reflect the tragedy of consumption behavior.
Tech’s Solar Jackets earned first place and \$5,000 in a City of Atlanta case competition for a proposal to get 50,000 electric vehicles on Atlanta’s roads in two years. The Engineers for a Sustainable World chapter earned more than \$2,000 from its national organization and Sun-Edison to construct a solar-powered beverage cart for use at campus events.
The annual graduate student research and innovation conference added \$15,000 in awards for research focused on forest bioeconomy. Tech students at all levels continue to pursue sustainable living in their research and extracurricular involvement.

GEORGIA INSTITUTE OF TECHNOLOGY

ATLANTA, GA

PRESIDENT: G.P. “Bud” Peterson

IMPLEMENTATION LIAISON: Marcia Kinstler, Sustainability Director, Environmental Stewardship

SIGNED: April 2007

ACADEMICS

Sustainability in both core curriculum and upper level courses

TRANSPORTATION

Selected by EPA as one of the “Best Places for Commuters” for its environmentally responsible transportation options

WATER

Use of reclaimed, non-potable water saves 5,000+ gallons of water each week from being diverted into Atlanta’s sewers

In its quest to make Western North Carolina a sustainable place to work, live, and do business, the college partners with a multitude of public and non-governmental organizations, businesses, and individuals.



Luther College Gardens, operated by student workers with the support of college staff, produce a portion of the produce for the college’s food service. More than 20 percent of the food served on campus is produced within 150 miles of campus. Photo courtesy of Luther College

Building a Sustainable Community Across Western North Carolina

By Rose H. Johnson, President and Preston D. Jacobsen, Sustainability Analyst

HAYWOOD COMMUNITY COLLEGE
CLYDE, NC
PRESIDENT: Rose H. Johnson
IMPLEMENTATION LIAISON: Preston D. Jacobsen, Sustainability Analyst
SIGNED: May 2007

RESEARCH
Research and Demonstration House funded by US Forest Products Laboratory to research sustainable design
ENERGY
Biofuels Program produces biodiesel to use for campus mowers and vehicles
COMMUNITY
Environmental Biology Class installed two wildlife habitats in local community

Haywood Community College (HCC) has a short yet robust history dating back to 2006 of demonstrating sustainable technologies in the classroom, college operations, and community initiatives. In its quest to make Western North Carolina (WNC) a sustainable place to work, live, and do business, the college partners with a multitude of public and non-governmental organizations, businesses, and individuals. These relationships elevate sustainable practices on campus and in the greater community.

HCC’s commitment to the ACUPCC as a charter signatory in 2007 brought greater focus to its leadership in sustainability. Recognizing the importance of reducing community wide carbon emissions, it partnered with the Haywood County Chamber of Commerce to certify local businesses for their sustainable practices. The ecological development of private land gained

significance when the college joined forces with Haywood County, private developers, and Region A Southwestern NC Planning and Economic Development Commission to model low impact development. The college simultaneously created an associate degree in Low Impact Development. Partnering with the US Forest Service Wood Products Research Laboratory, the college constructed the local Habitat for Humanity’s first green home. This led to building a Sustainable Research Demonstration House on campus to exemplify green construction practices and technologies. Other examples include wetlands and native grass reclamation projects on campus and in the community, biofuel production using recycled oil from the local public schools, installation of solar panels on campus and in the community, and training workers from a community action agency

to retrofit homes of low income residents to make them more energy efficient. The college is also a leader in Code Green, an initiative to instill sustainability in North Carolina’s 58 community colleges and their communities. HCC hosts many opportunities such as “Renewable Energy Demo Days” for the public to learn about renewable energies. Local renewable energy firms inform and demonstrate the latest and most environmentally sound products available in WNC. Plus, the college recently used a grant from Advanced Energy Corporation to install an electric vehicle recharging station on campus. HCC promotes and practices sustainability across the campus and within the community.

From a Commitment to a Strategic Plan — Luther College’s Journey Toward Carbon Neutrality

By Richard L. Torgerson, President

The decision I made five years ago to become a charter signatory of the ACUPCC transformed Luther College’s efforts to combat climate change. Shortly after that decision, as Luther personnel began brainstorming ways to make the ACUPCC pledge truly institutional, it became apparent that the only way to do so was to integrate the content into our (then forthcoming) five-year strategic plan. The college did just that and, in the years since, has made significant strides toward carbon neutrality. The strategic plan recommendation to “reduce Luther’s carbon footprint by 50 percent,” for example, pushed the college to not only erect a 1.6 megawatt GE wind turbine expected to generate a third of the school’s annual electricity but also develop plans to power its 100-student Baker Village residential complex with a solar photovoltaic array

that, when complete, will be the largest in Iowa. While among the most impactful, these are far from the only innovative steps Luther has taken to reduce its carbon footprint since 2007. Ask any of our 2,500 students about the vast variety of locally produced foods at campus eateries — 20 percent of all food served on campus is sourced locally — or the myriad energy-conserving features in Sampson Hoffland Laboratories, among the first LEED gold-certified buildings in the state. These green initiatives, as well as a host of others now woven into the fabric of campus life, are tied to the strategic plan recommendation to “model stewardship and sustainability in all college operations” in order to reduce Luther’s environmental impact and mitigate its operational costs. Likewise, the strategic plan recommendation to “make sustainability a part of every student’s

learning experience” spurred the development of faculty workshops on integrating sustainability into the curriculum, student internships promoting green practices in the surrounding community, and a “peer-to-peer” program fostering sustainability literacy on campus. These are just a few of the ways Luther provides its students with the skills and knowledge to lead society in a more sustainable direction. In 2011 Luther was one of eight institutions to earn an “A” on the Sustainable Endowments Institute’s College Sustainability Report Card. Though honored by this recognition, we’re not about to rest on our laurels. It’s our goal to be a model of sustainability — not a mirror of our culture’s unsustainable practices. I’m heartened by the progress we’re making, but we know we still have a ways to go.

LUTHER COLLEGE
DECORAH, IA
PRESIDENT: Richard L. Torgerson
IMPLEMENTATION LIAISON: James B. Martin-Schramm, Professor of Religion
SIGNED: June 2007

GHG REDUCTIONS
Purchased 8 hybrid vehicles to replace regular sedans in vehicle fleet, reducing GHG emissions by 24,000 lbs/year
WASTE
Students installed 7 worm-composting bins to raise awareness and to use at campus’s gardens
ACADEMICS
ACM FaCE Project, led by Luther, convenes select faculty across schools to integrate sustainability into undergraduate curriculum



Left: A surgical team member places a laparoscopic surgery tool used in robotic surgery into a collection bin for re-processing. *Photo courtesy of Steven Garlock / SUNY Upstate Medical University.* **Right:** Nurses at Upstate University Hospital and Upstate Golisano Children’s Hospital use “Computers on Wheels”—mobile units that can be wheeled to a patient’s bedside, improving patient care, communication, and safety. Units like this one also greatly reduce the use of paper records. *Photo courtesy of William Mueller / SUNY Upstate Medical University*



An Innovative Sustainability Strategy That Puts Patients First

By David R. Smith, President and John B. McCabe, Chief Executive Officer

SUNY UPSTATE MEDICAL UNIVERSITY

SYRACUSE, NY

PRESIDENT: David R. Smith

IMPLEMENTATION LIAISON: Thomas K. Pelis, Assistant Vice President for Facilities and Planning

SIGNED: February 2009

WASTE

Saved over \$1M by repurposing medical devices from 2010–2012, reduced use of “blue wrap” by 23% since 2009

ENERGY

Light bulb replacements at Institute for Human Performance use 90% less energy, save \$5,000 per year

COMMUNITY

Produce from student-tended community garden used in nutrition education programs at local elementary schools

As an academic medical center, Upstate Medical University faces unique sustainability challenges. We have four colleges, dozens of classrooms, 350 research labs and almost 800 hospital beds among our hospitals.

In addition to 9,500 employees, Upstate has 1,600 students on campus. A half-million patients and visitors come through our doors each year. We never close.

As a 24/7 operation, our hospitals account for 75% of Upstate’s energy usage and solid waste generation.

Upstate embraces an aggressive, holistic approach to sustainability, always with patient care and safety as the priority.

We have many sustainability successes, and these behind-the-scenes innovations are good business: they save money, reduce waste and save natural resources.

Here’s a “Top Five” list of clinical innovations at Upstate:

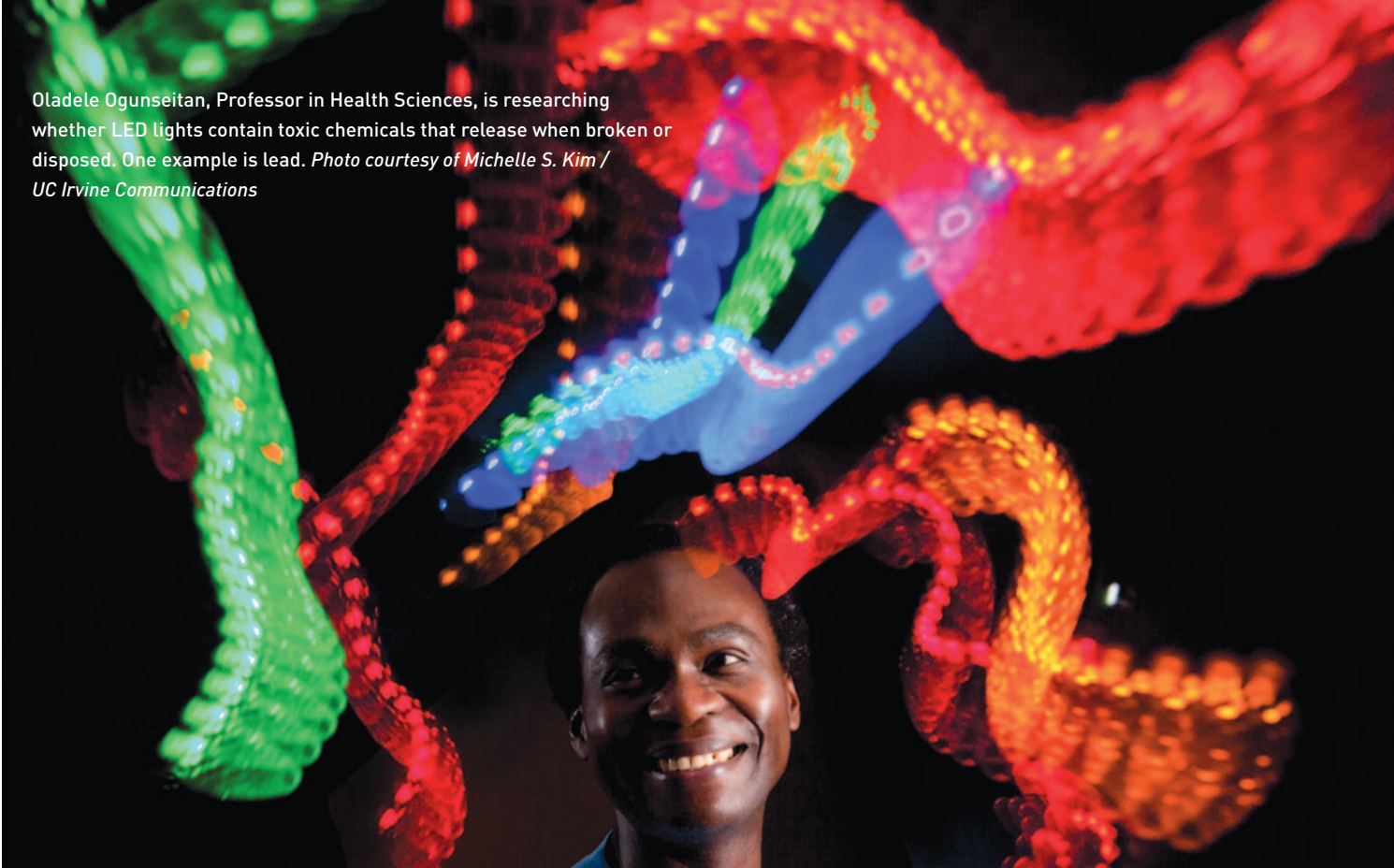
- Reprocessing 40,000 single-use devices a year — compression sleeves, oximetry probes, titanium clamps, tourniquet cuffs, and more.
 - Reducing the use of polyethylene wrap by 23% (60,000 wraps) from sterile storage and removing 25,000 plastic containers from the waste stream.
 - Phasing out paper records, which will save 100 tons of paper annually and provide faster and more accurate patient records.
 - Using mobile computer terminals that accompany patients from the Emergency Room, to Admitting, to the bedside.
 - Working with a local vendor to recycle our printer cartridges and cell phones. This diverts four tons of waste and generates \$18,000 a year for our children’s hospital.
- The investment in these and other sustainability efforts saves

almost \$600,000 a year and diverts 95 tons from the waste stream.

As we commit to reducing our carbon footprint to near zero by 2050, we’ll be considering initiatives such as “green” roofs, bioswales, zip cars and car-pooling.

Our vision has a human touch, of course. We especially look forward to the healing garden at the Upstate Cancer Center, opening in 2013.

This holistic, patient-centered approach to sustainability — and everything else we do at Upstate — sets us apart. It’s good business. And it’s even better health care.



Oladele Ogunseitan, Professor in Health Sciences, is researching whether LED lights contain toxic chemicals that release when broken or disposed. One example is lead. *Photo courtesy of Michelle S. Kim / UC Irvine Communications*

Opportunity + Needs = Results

By Michael V. Drake, Chancellor and Wendell C. Brase, Vice Chancellor, Administrative and Business Services

About 2005, University of California, Irvine (UC Irvine) facilities managers took a skeptical look at what was increasingly touted by developers as “smart building” technology: the use of occupancy sensors to control heating, ventilation and air conditioning (HVAC), as well as lighting. UC Irvine knew it could do better.

By 2008, the campus recognized that while modern laboratories employed direct digital controls and variable volume air delivery and exhaust, these systems had merely replicated the functions of the pneumatic systems that had been in use for 70 years, albeit with more precise control. Moreover, gains in energy efficiency design standards had plateaued. Because of this, UC Irvine opted to challenge what were then considered industry best practices. This coincided with the University of California’s decision to become an ACUPCC signatory and the attendant need

for UC Irvine to make a sizable reduction in its carbon footprint.

Laboratories, which accounted for two-thirds of the energy consumed within Irvine’s academic core, became an obvious focus, and the campus launched what was to become its *Smart Labs Initiative*, a comprehensive energy-savings program that has proven instrumental in safely reducing energy consumption by 50 percent in both new and retrofitted laboratories.

When the campus set out to cut its laboratory energy use in half—double the performance required under California’s Title 24 energy efficiency standards—the outcome was uncertain. Facilities engineers knew, however, that it would take more than a single technology to achieve the desired savings. They developed a comprehensive program that integrates state-of-the-art real-time air quality sensing, reduces exhaust stack airspeeds, reduces duct

and plenum airspeeds and losses, sharply reduces lighting power-density, includes efficient heat exhaust for equipment, eliminates energy-robbing HVAC acoustic attenuators, and other factors.

For its efforts, UC Irvine is now receiving nationwide recognition as it shares its problem-solving expertise with other campus, private-industry, and government labs. Smart Labs are a centerpiece of UCI’s participation in President Obama’s Better Buildings Challenge, aimed at making commercial buildings 20 percent more energy efficient by 2020 and accelerating government and private-sector investment in energy efficiency. UCI is on track to show a 20 percent decrease in electrical usage from 2010 to 2012 and expects to achieve 40 percent savings on the main campus by 2020—twice the President’s objective.

UNIVERSITY OF CALIFORNIA, IRVINE

IRVINE, CA

CHANCELLOR: Michael V. Drake

IMPLEMENTATION LIAISON: Wendell C. Brase, Vice Chancellor, Administrative & Business Services

SIGNED: March 2007

GHG REDUCTIONS

Reduced CO₂e emissions from over 162,000 metric tons in 2007 to 157,000 in 2010

RESEARCH

Center for Global Environmental Change Research links climate researchers across UC campuses

ACADEMICS

Undergraduates may choose from 28 sustainability-themed courses to satisfy core requirements

The ACUPCC's Founding Signatories

The ACUPCC originated from planning sessions among a group of college and university presidents, Second Nature, ecoAmerica, and AASHE in 2006. Twelve presidents became founding signatories and launched the ACUPCC in 2007 by inviting their peers to join the initiative.



Loren J. Anderson
President Emeritus
Pacific Lutheran
University



Michael M. Crow
President
Arizona State University



Nancy S. Dye
President Emeritus
Oberlin College



Jo Ann M. Gora
President
Ball State University



David Hales
President Emeritus
College of the Atlantic



Bernard Machen
President
University of Florida



Gifford Pinchot III
President
Bainbridge Graduate
Institute



Kathleen Schatzberg
President
Cape Cod Community
College



Mary Spilde
President
Lane Community
College



Douglas Treadway
President Emeritus
Ohlone College



Darroch Young
Chancellor Emeritus
Los Angeles Community
College District



Paul J. Zingg
President
California State
University, Chico

What motivated you to become one of the founding signatories of the ACUPCC in 2006?

“Universities are stewards of the future, and to shape that future we must show leadership. It was the right thing to do. By acknowledging and taking on these complex problems, we demonstrated meaningful leadership to our students. Sustainability advances the agenda of all universities: the betterment of the human condition.”

Jo Ann M. Gora

“We became active in the foundational discussions of the ACUPCC because we realized that the impact of working together with other colleges and institutions would be far greater than actions by individual colleges, and because we valued the opportunity to learn from the actions of others.”

David Hales

“I view global climate change as a serious threat to human well-being and the natural world. I believe universities should lead in addressing this threat by educating students, serving as examples of sustainability, and applying their scientific expertise to causes and solutions.”

Bernard Machen

“Cape Cod Community College had been committed to environmental stewardship long before I came to the College in 1998—with both the curriculum and the facilities operations. Signing on to the ACUPCC was an obvious next step—reaching ever farther.”

Kathleen Schatzberg

What are your hopes and goals for the ACUPCC over the next five years?

“My hope is that more and more colleges and universities will see real reductions in carbon dioxide emissions and that more and more graduates will step forward as environmental leaders.”

Loren J. Anderson

“The ACUPCC is doing a great job of improving the environmental impact of school campuses. My hopes are that ACUPCC creates an equally strong program for improving the integration of climate change issues into the curriculum of every school.”

Gifford Pinchot III

“My hope is that current members are making significant progress so that we demonstrate our commitment and the power of working collectively. I would like to see more colleges and universities understand and embrace our leadership role in sustainability and climate action. Working collectively I would like to see the ACUPCC and higher education have a positive impact on federal policy.”

Mary Spilde

“I have three hopes for the ACUPCC. First, that the organization will move college and university presidents to provide the leadership necessary to respond to climate change and insist on a national response to this challenge. Second, that measures of sustainability have been so completely integrated into capital outlay projects and organizational operations that they are now ordinary, instead of extraordinary. Third, that in our zeal, we do not commit our institutions to activities that are not fiscally or scientifically sound and as a result tarnish the efforts for climate control.”

Darroch Young

How do you maintain both your personal and institutional drive towards sustainability?

“What we do flows out of who we are. I believe in the necessity of building a sustainable future. That belief is foundational to my personal commitment. ASU has embraced sustainability as part of our collective value system, and we incorporate our values into everything we do as we fulfill our mission.”

Michael M. Crow

“Oberlin is proud to be one of the founding signatories of the ACUPCC, and proud that Nancy Dye, my predecessor, made addressing climate change a focal point of our campus and town. That spirit continues today in the pioneering Oberlin Project and in our work with the Clinton Climate Initiative.”

Marvin Krislov

(current President of Oberlin College)

“I maintain my drive toward sustainability through daily personal practice as well as introducing new programs and maintaining them at the colleges where I serve. I am currently in Shanghai, China where I lead a new college including transformation to a ‘green’ campus.”

Douglas Treadway

“Our University’s commitment to sustainability speaks to the heart of our work and responsibility: to teach our lessons well, especially through the compelling force of good institutional example. This commitment translates our professed values into lived ones and urges our graduates always to try to do the same.”

Paul J. Zingg

Resources & Support



Each of the 677 signatories has a public profile on the ACUPCC online Reporting System. Institutions' reporting statuses, GHG inventories, Climate Action Plans, and Progress Reports are public and freely available.

The Presidential Fellows Program

The Second Nature Presidential Fellows Program is a team of retired college and university presidents who provide support, encouragement, and consultation for all aspects of ACUPCC implementation. The fellows offer their experience, networks, and knowledge in order to broaden and deepen the impact of campus and community sustainability efforts. They combine an understanding of change management with executive experience, as organized around their passion for sustainability leadership.

The Presidential Fellows have connected with hundreds of their colleagues across the country at conferences, via phone and email, and during campus visits, playing a key role in helping signatories fulfill their commitment and growing the network. They work closely with the ACUPCC Steering Committee and enhance Second Nature's ability to support the network in a variety of ways—from designing events and fundraising, to conceptualizing new initiatives and providing thought leadership in the form of books, blog posts, plenary speeches, and executive consultations on education for sustainability.



Mitchell Thomashow Judith A. Ramaley Diana Van Der Ploeg

The ACUPCC Reporting System
rs.acupcc.org

For collective initiatives like the ACUPCC, public reporting ensures that institutions are fulfilling their shared commitment to one another, provides a common reporting and support framework, and contributes to the collective learning of the network and general public.

The ACUPCC Reporting System was launched in January 2008. Initially developed by AASHE, the system is an online repository for signatories' Implementation Profiles, Greenhouse Gas Emissions Inventories, and Climate Action Plans.

In early 2011, Second Nature assumed the management of the system and developed the Climate Action Plan Progress Report. In January 2012, the first group of signatories submitted updates on their progress to the Reporting System, further demonstrating the cumulative impact of this collective network. *(For more on the Progress Reports, see The Network's Progress & Promise, page 6.)*

Peer Support
presidentsclimatecommitment.org/resources/peer-support

Second Nature administers several peer networks that provide more personal support in fulfilling the commitment, including:

The Implementation Liaison (IL) Support Committee
presidentsclimatecommitment.org/il-support-committee

This committee provides peer-to-peer support to individuals responsible for implementing the ACUPCC at signatory institutions. It is comprised of campus sustainability experts who are available for peer-to-peer conversations to share their experiences and ideas, leveraging the ACUPCC network to accelerate collective learning on climate solutions.

Presidential Fellows
presidentsclimatecommitment.org/presidentialfellows

The Second Nature Presidential Fellows serve as mentors and ambassadors to support the ACUPCC. They support signatory presidents by checking in on progress, helping to identify barriers and solutions, sharing experiences, providing advice, and making strategic connections. *(See sidebar for more.)*

Select Committees
presidentsclimatecommitment.org/select-committees

As the need arises, Second Nature convenes select committees to address the challenges and timely topics that ACUPCC signatories encounter in their fulfillment of the commitment. Since 2007, these committees have included:

- ACUPCC Voluntary Carbon Offset Protocol Committee
- Education for Climate Neutrality and Sustainability Committee
- Transportation Task Force
- Higher Education Climate Change Adaptation Committee
- Financing Sustainability Committee
- Academic Committee

Resources on the ACUPCC Website
presidentsclimatecommitment.org/resources

Second Nature — in coordination with national experts and partner organizations — has produced a multitude of resources to support institutions in meeting their commitment. In celebration of the ACUPCC's fifth anniversary, Second Nature re-launched the Resources & Support section of the ACUPCC website in January 2012. The website offers multiple browsing options, including topic (Climate Action Planning, Financing, Leadership, and more) and type (publications, webinars, videos, case studies, and more).

Workshops & Webinars
presidentsclimatecommitment.org/resources/webinars
(for archived webinars)

ACUPCC workshops and webinars support signatory institutions in meeting the goals of the commitment. Hundreds of individuals have taken part in these events, and countless others have accessed webinar and workshop materials archived online. Topics have included Energy Performance Contracting, Crafting Your Climate Action Plan, Sourcing Local and Sustainable Food, Climate Literacy, and much more.

Publications
presidentsclimatecommitment.org/resources/publications

Working with experts from ACUPCC institutions and partner organizations, Second Nature has developed a series of practical publications addressing many of the interrelated aspects of fulfilling the goals of the Commitment. In-depth reports covering key topics such as the academic component of the commitment, organizational leadership, carbon offsets, green building, financing mechanisms, and climate adaptation are available to signatories at no cost, as are executive briefing papers on climate science, public reporting, institutionalizing sustainability, and more.

Partners & Allies
presidentsclimatecommitment.org/resources/partners-allies

Second Nature has leveraged relationships with dozens of organizations to support ACUPCC signatories. Partners and allies include: American Association of Community Colleges, AASHE, the American Meteorological Society, American Indian Higher Education Consortium, Bioneers, Clean Air-Cool Planet, the Clinton Climate Initiative, ecoAmerica, Hispanic Association of Colleges and Universities, National Association of College and University Business Officers, National Wildlife Foundation Campus Ecology Program, the R2o Regions of Climate Action, the Sustainable Endowments Institute, the United Negro College Fund, the US Green Building Council, and many others.



The ACUPCC website hosts hundreds of resources that support every aspect of a signatory's journey toward fulfilling its commitment. From traditional publications and articles, a video series featuring leaders in the network, to discounts offered by partner organizations, these resources are always free to ACUPCC institutions.

Thanks To Supporters

We are grateful to the numerous foundations, nonprofits, corporations, schools, and individuals whose generous financial support has helped make the ACUPCC a success since 2007.

Leadership Level Signatories

- Alamo Colleges (2011–12)
- Allegheny College (2010–11, 2011–12)
- Aquinas College (2010–11, 2011–12)
- Arizona State University (2009–10, 2010–11, 2011–12)
- Ball State University (2011–12)
- Bunker Hill Community College (2011–12)
- Cape Cod Community College (2010–11)
- Central Community College (2011–12)
- Chatham University (2010–11)
- Colby College (2011–12)
- Cornell University (2010–11)
- Frostburg State University (2011–12)
- Furman University (2010–11)
- Houston Community College District (2010–11, 2011–12)
- Lane Community College (2011–12)
- Middlebury College (2011–12)
- Morgan State University (2010–11)
- North Lake College (2010–11, 2011–12)
- Northern Arizona University (2010–11, 2011–12)
- Pomona College (2010–11, 2011–12)
- Portland State University (2011–12)
- Southern New Hampshire University (2010–11)
- Spelman College (2011–12)
- Syracuse University (2011–12)
- The Evergreen State College (2010–11)
- The New School (2011–12)
- Tulane University (2010–11, 2011–12)
- Unity College (2010–11, 2011–12)
- University of Arizona (2011–12)
- University of Arkansas, Main Campus (2011–12)
- University of California, Riverside (2010–11, 2011–12)
- University of Cincinnati (2011–12)
- University of Minnesota, Morris (2011–12)
- University of Montana, Missoula (2010–11, 2011–12)
- Western Michigan University (2011–12)

2011–12 Foundation Partners (as of May 2012)

THE KRESGE FOUNDATION



Foundation Partners Have Included:

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| Merck Family Fund | The Prentice Foundation |
| Rockefeller Brothers Fund | The Ron & Tia Moir Charitable Trust |

Corporate Program Partners (as of May 2012)

As corporate supporters of the American College & University Presidents’ Climate Commitment, we congratulate signatories on their remarkable progress. We believe it is important for colleges and universities to provide students, faculty, and staff with a comprehensive understanding of sustainability and to demonstrate ways of sustainable living for the rest of society. Our organizations and all of society need graduates with a thorough understanding of the health, social, economic and environmental facets of sustainability for societal success. We think it is important for students in all fields of study to have a comprehensive understanding of sustainability in order to be successful and competitive in the rapidly changing global economy. We encourage all colleges and universities to become active ACUPCC participants and to implement the Commitment as quickly and comprehensively as possible. We believe that a productive partnership between the private sector and higher education is critical in helping to make this a reality and are proud to be part of this important effort.

2011–12 Corporate Program Partners (as of May 2012)

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For information on how you can support the ACUPCC, contact Second Nature at 617-722-0036, info@secondnature.org, or visit www.presidentsclimatecommitment.org/supporters.

Thanks To Supporters

The following 165 ACUPCC signatory institutions have financially supported the ACUPCC by contributing membership dues for four consecutive academic years, from 2008–09 to 2011–12:.

Allegheny College	Harford Community College	Santa Fe Community College
American Public University System	Harvey Mudd College	Seattle University
Antioch University, Los Angeles	Haverford College	Sewanee: The University of the South
Aquinas College	Hocking Technical College	Smith College
Arizona State University	Houston Community College District	South Dakota School of Mines and Technology
Berea College	Illinois College	South Suburban College
Berry College	Jamestown Community College	Southwestern College, Kansas
Bowdoin College	Juniata College	Springfield College
Bunker Hill Community College	Kankakee Community College	State University of New York, Binghamton
California State Polytechnic University, Pomona	Keystone College	State University of New York, Geneseo
California State University, Bakersfield	Lewis & Clark Community College	State University of New York College, Oswego
California State University, Monterey Bay	Life University	State University of New York Empire State College
Cape Cod Community College	Luther College	Stetson University
Carleton College	Macalester College	Syracuse University
Cascadia Community College	Madison Area Technical College	The City College of New York
Case Western Reserve University	Maricopa Community College District	The Community College of Baltimore County
Central New Mexico Community College	Massachusetts College of Art and Design	The Evergreen State College
Centralia College	Massachusetts Maritime Academy	The Ohio State University, Columbus
Chabot-Las Positas Community College District	Massasoit Community College	Tulane University
Chatham University	McDaniel College	Unity College
Clark University	McLennan Community College	University of Arkansas, Main Campus
Coe College	Medical University of South Carolina	University of Baltimore
Colby College	Mercer County Community College	University of California, Davis
College of Menominee Nation	Montana State University, Bozeman	University of Central Florida
College of Saint Benedict	Mount St. Mary's University	University of Central Missouri
College of the Atlantic	Naropa University	University of Colorado, Colorado Springs
Columbus State Community College	New York University	University of Denver
Dakota County Technical College	Norfolk State University	University of Idaho
Delta College	North Lake College	University of Louisville
Dickinson College	North Shore Community College	University of Maine, Augusta
Drake University	Northern Arizona University	University of Maine, Fort Kent
Eastern Connecticut State University	Northern Essex Community College	University of Maryland, Baltimore
Eastern Iowa Community College District	Oberlin College	University of Maryland, Baltimore County
Emerson College	Ohio University	University of Maryland, College Park
Emory & Henry College	Ohlone College	University of Maryland, University College
Framingham State University	Oregon State University	University of Massachusetts, Dartmouth
Franklin College of Indiana	Paul Smith's College of Arts & Sciences	University of Miami
Frostburg State University	Portland State University	University of Minnesota, Rochester
Furman University	Prescott College	University of Minnesota, Twin Cities
George Mason University	Purchase College, State University of New York	University of New Mexico
Georgian Court University	Richland College	University of North Texas
Gettysburg College	Rider University	University of Pennsylvania
Goshen College	Robert Morris University (Illinois)	University of Portland
Goucher College	Roger Williams University	University of Rhode Island
Grand Rapids Community College	Rowan University	University of Richmond
Green Mountain College	Roxbury Community College	University of South Carolina, Aiken
Guilford College	Salem State University	
Hamilton College	Santa Clara University	

University of South Carolina, Columbia
University of Southern Maine
University of Washington
University of Wisconsin, Oshkosh
University of Wisconsin, River Falls
University of Wisconsin, Stevens Point
University of Wisconsin, Stout
Villanova University
Virginia Commonwealth University
Warren Wilson College
Washington and Lee University
Washtenaw Community College
Weber State University
Wentworth Institute of Technology
Wesley College
Western Technical College
Western Washington University
Wheelock College
Willamette University
Wilson Community College
Winona State University
Worcester State University
Yeshiva University

Back cover photos, clockwise from top left:

Student Reed Ojala-Barbour '11 stands beneath a nearly 400 year-old Garry oak tree on the Pacific Lutheran University campus. Ojala-Barbour worked with campus staff and faculty to preserve the native oak trees on campus and develop the Fred L. Tobiason Outdoor Learning Center. *Photo courtesy of Pacific Lutheran University*

A Spelman student participates in the annual Earth Day activities at Spelman College. *Photo courtesy of Spelman College*

The Morris Arboretum Horticulture Center, the University of Pennsylvania's first LEED Platinum building, features a ground-source heat pump that provides heat and air-conditioning, photovoltaic panels for on-site generation of renewable energy, and other sustainable elements including geothermal wells, green roofs, and rainwater cisterns. *Photo courtesy of the University of Pennsylvania*

The University of Missouri, Kansas City Student Union sports many green features including day lighting, support for multi-modal transportation options, recycling and composting, a state of the art green roofing system, and more. *Photo courtesy of Kristen Hellstrom*

“The ACUPCC has been of tremendous assistance to Historically Black Colleges and Universities and other minority-serving institutions in the process of establishing sustainability initiatives and comprehensive climate action plans for our campuses. There is no question that the outcome will be cost savings that can be deployed to reduce the cost of an education for our students.”

Harry L. Williams, President, Delaware State University

“We are in the middle of one of those rare moments when the right thing to do is also the economically smart thing to do.”

Kathleen Schatzberg, President, Cape Cod Community College

“For all of the idealism associated with higher education, we are really ferociously competitive with one another. It’s a rare instance, indeed, when we can find a subject or a topic or an initiative that enables us to drop those competitive barriers and actually collaborate. The Climate Commitment has done just that.”

David E. Shi, President Emeritus, Furman University





www.presidentsclimatecommitment.org

Second Nature is the lead supporting organization of the American College & University Presidents' Climate Commitment. Additional support is provided by the Association for the Advancement of Sustainability in Higher Education (AASHE).



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