



# NAEB-NE Sustainability Institute

## Sustainability and Higher Education

# Importance for Sustainability

- Influences current and future leaders and professionals.
- Deeply influences K-12 education.
- Dedicated to new ideas, exploration and experimentation.
- Has critical mass.
- Has diversity of skills necessary.
- Crucial but overlooked leverage point in transition to sustainability.
- Large economic engine.



# Big Opportunity

- 4,314 U.S. Colleges and Universities<sup>1</sup>
- 18.0 million students<sup>2</sup>
- \$373 billion annual expenditures; 2.8% of the GDP<sup>2</sup>
- Higher education expenditures greater than the GDP of all but 26 countries in the world<sup>3</sup>

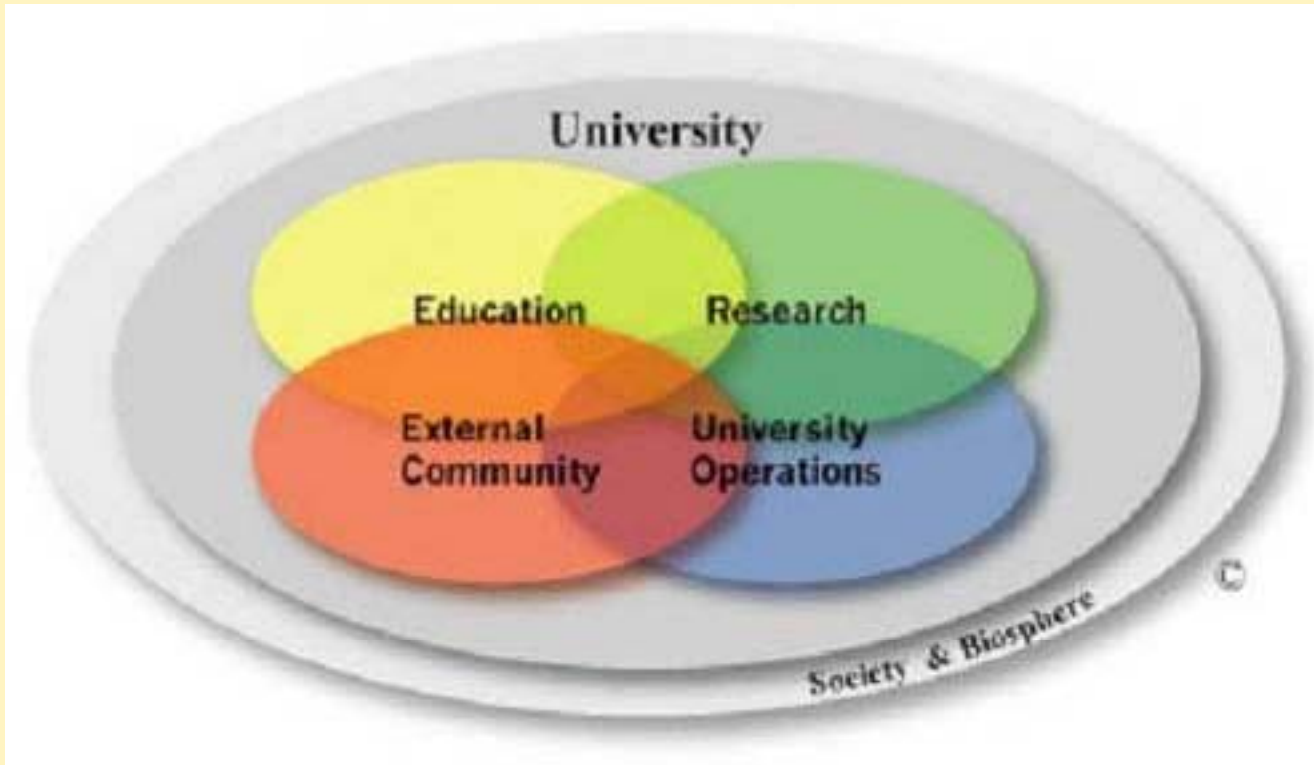
<sup>1</sup> From: *Chronicle of Higher Education, Almanac 2008-9*

<sup>2</sup> *Digest of Education Statistics: 2007, US Dept. of Education.*

<sup>3</sup> From: Dowling, Mike., "Interactive Table of World Nations," available from <http://www.mrdowling.com/800gdp.html>



# HE as an Integrated Community



# Higher Education Changes

- Interdependent and intergenerational “worldview.”
- Multi-disciplinary problem solving to creating.
- Systems thinking as a fundamental framework.
- “Knowing” to “learning” communities.
- Making the “*invisible*” “*visible*.”



# Education for Sustainability

- Integrated, interdisciplinary learning.
- “Lateral” and “vertical” rigor in learning.
- Ethics, values, and sustainability seamlessly integral to all disciplines.
- Collaborative and experiential learning.
- Practicing sustainability on campus and with communities.



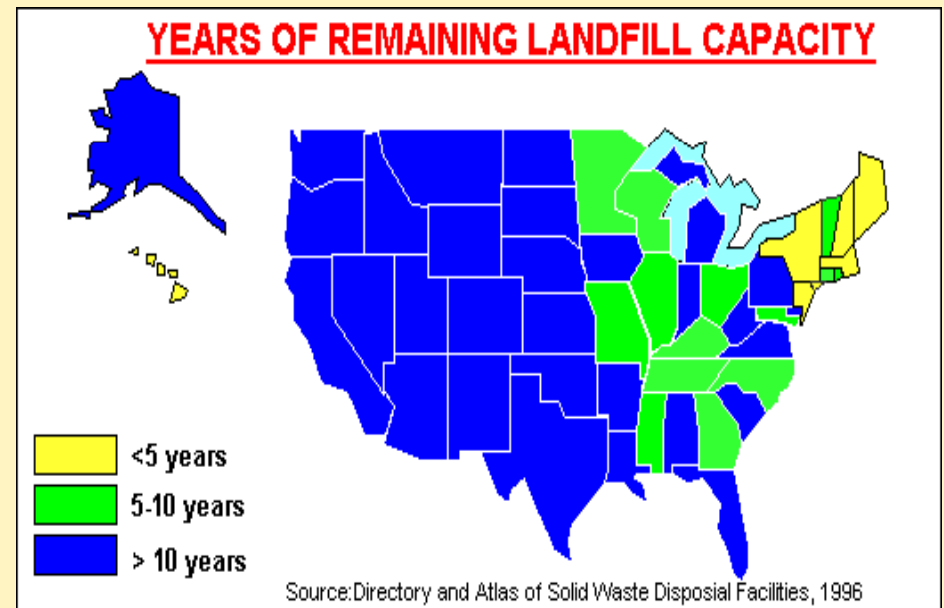
# Higher Education Stakeholders

- Administrators
- Faculty
- Operations & facilities managers
- Students
- Trustees
- Staff
- Higher Ed Associations
- Alumni
- Parents of students
- Communities
- Accreditation orgs.
- Future Employers
- Funders
- Professionals
- Future Generations
- World cultures
- Biosphere and all its species



# Why Sustainability Now?

We are the first generation capable of determining the habitability of the planet for humans and other species.

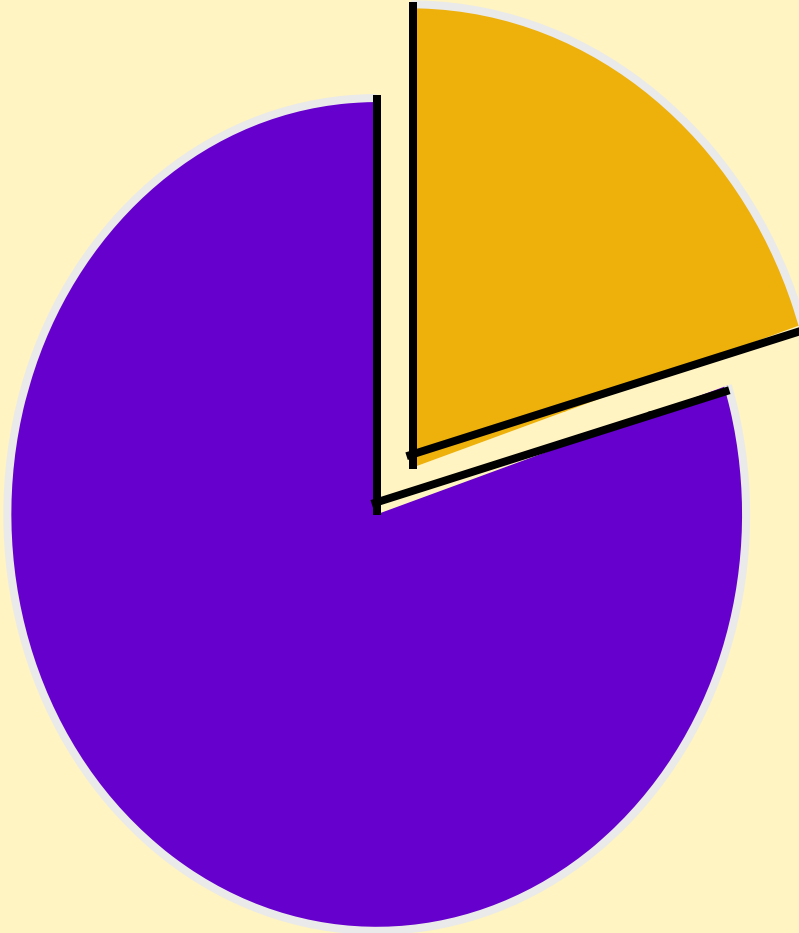


# Trends

- Students are demanding it.
- Donors are requesting it.
- Some prime contractors are requiring it.



# The imbalance



- 20% of the world's people consume
- 80% of its resources

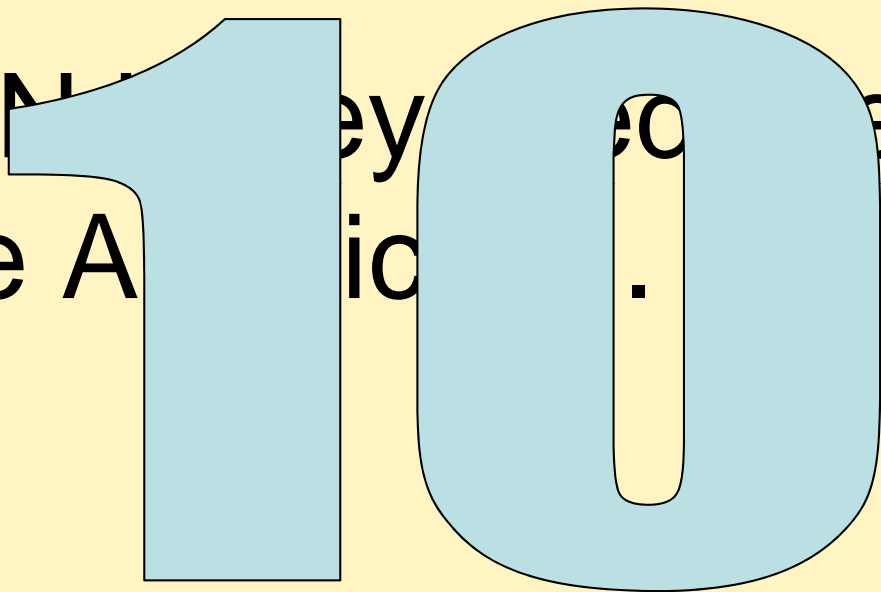
# Footprint

If everyone on Earth lived like the average Canadian, we'd need at least **THREE** Earths to provide all the materials and energy they use.



# The worst case

And TEM they do the  
average A ic .

A large, light blue number '100' is superimposed over the text. The '1' is a simple vertical bar with a small notch at the top. The '0' is a rounded rectangle with a vertical slit in the center. The '0' is significantly larger than the '1'.

# Sina Qua Non

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Communication is to sustainability  
as  
Location is to real estate



# American College and University Presidents Climate Commitment

- Voluntary effort.
- Establish a structure to develop and implement a program to comply with the ACUPCC.
- Complete emissions inventory within one year.
- A climate action plan that includes a target date and interim milestones for becoming climate neutral within two years.
- Take immediate steps to reduce greenhouse gas emissions by implementing at least two of a list of seven tangible actions.



# American College and University Presidents Climate Commitment

- Integrate sustainability into the curriculum and making it a part of the educational experience.
- Make the inventory, climate action plan, and progress reports publicly available.

<http://www.presidentsclimatecommitment.org/>



# American College and University Presidents Climate Commitment

- 55 members of NAEB-NE have signed.
- 28 additional have signed, but not NAEB-NE members.
- 566 total signatories.
- As of September 2, 2008.



# American College and University Presidents Climate Commitment

For sustainable operations:

- 40% Purchasing
- 40% Facilities
- 20% Residential Life

Green Purchasing is the next section.



# HEASC



Higher Education  
Associations  
Sustainability  
Consortium



# HEASC

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Higher Education Associations  
Sustainability Consortium:

An informal network of higher education associations with a commitment to advancing sustainability within their constituencies and within the system of higher education itself.

<http://www.aashe.org/heasc/>



# HESAC History

- Formed in December of 2005.
- NAEP is a founding member.
- Facilitated by Second Nature and
- US Partnership for the UN Decade of Education for Sustainable Development.
- Thirteen members.



# HEASC Members

American Association of Community Colleges (AACCC)

ACPA-College Student Educators International (ACPA)

American Association of State Colleges & Universities (AASCU)

**Association of Higher Education Facilities Officers (APPA)**

Association for Advancement of Sustainability in Higher Education (AASHE)

Association of College & University Housing Officers International (ACUHO-I)

Association of College Unions International (ACUI)

Association of Governing Boards of Universities & Colleges (AGB)

National Association for Campus Activities (NACA)

**National Association of College & University Business Officers (NACUBO)**

**National Association of Educational Procurement (NAEP)**

National Intramural-Recreational Sports Association (NIRSA)

**Society for College & University Planning (SCUP)**

# Mission

To support and enhance the capacity of higher education to fulfill its critical role in producing an educated and engaged citizenry and the knowledge needed for a thriving and civil society.

# Purpose

Learn from each other.

Work together on joint projects.

Access the best practices in sustainability.

Advance education for a sustainable future.



# Why HEASC?

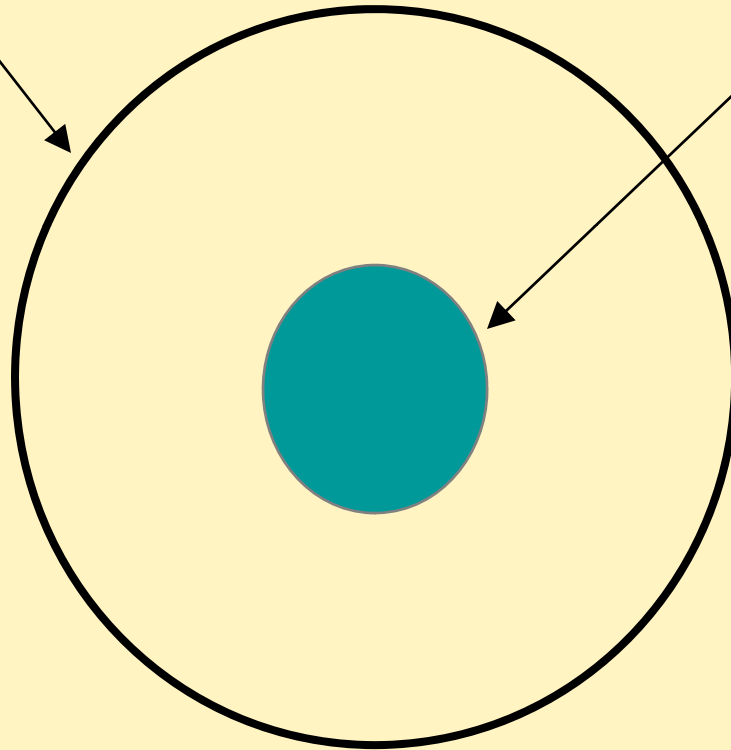
- It is strategic!
- It is educational!
- It is future-oriented!
- It is cost beneficial!
- It is the right thing to do!



# It is strategic

Circle of Concern

Circle of Influence



# It is strategic

- Global warming is happening.
- Population is increasing.
- Affluence and technology are exported heavily.
- The associations see themselves as part of the solution.



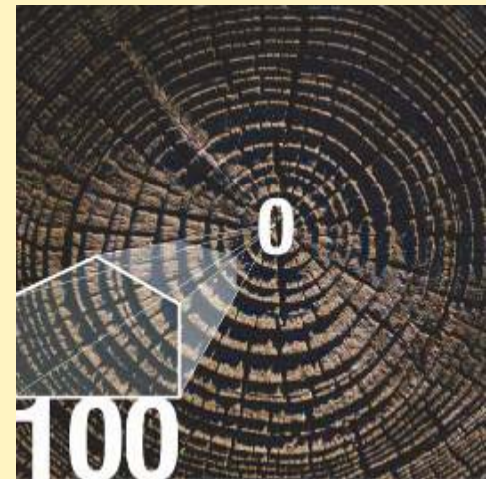
# It is educational

- Core missions are professional development and lifetime learning.
- There is a responsibility to bring information to the public.
- The media is interested in the who, what, where, when, why, and how of sustainability.



# It is future-oriented

- Ecological economics teaches the benefit of total costs of ownership vs. first costs.
- Good stewardship today means dwindling resources can be made available longer and for more people.
- Life cycle assessment supports best value purchases in lieu of the old low bid system.
- If the Feds can do it why can't higher education?



# It is cost beneficial

- Higher education associations are here for the long term.
- Operating costs are rising dramatically.
- Why reinvent the wheel?



# It is the right thing to do!

- Social justice is a real issue.
- Socially responsible investing is a very real issue.
- Spiritual leaders are endorsing the sustainability movement.
- Many asked “Is the local environment better today than it was when I was a child?”



# 3 Year Goals for HEASC Members

- Teach The Natural Step principles in each association.
- Develop the capability for each organization to teach and apply the principles in their operations.
- Get locally sourced/sustainably grown food.
- Develop convention site selection/operation tool.
- Promote paperless office or use of recycled paper and soy-based inks as the default for publications.
- Carbon neutral conferences.
- Carbon neutral operations.

# Benefits

- Reduced redundancies in planning and products.
- Increased quality and synergies on projects.
- Ongoing support community.
- Ongoing availability of sustainability expertise.
- Capacity building for all HEA's to make sustainability a foundation of the association.

# Specific Subset of Actions

- Make the invisible “Visible.”
- Single name badge for all organizations.
- Continuous exchange of knowledge and information.
- Access to best practices of any sectors in operations, etc.
- Ongoing transparency and advertising.

# HEASC Benefits from NAEP

- NAEP is the strategic partner which can most immediately and effectively translate sustainable development principles to the campus and the local community.
- Consortium purchasing opportunities for their organizations.

HEASC 2006 Sustainability Luncheon: Washington, DC  
Open to higher education associations (HEAs).  
See "Upcoming Events."



Julian Keniry of the Campus Ecology Project addresses assembled association leaders at APPA headquarters in Alexandria, Virginia at the HEASC founding meeting. Images by Terry Calhoun

### In this issue ...

**1. Welcome to HEASC** - New national effort to advance sustainability in higher education is launched.

**2. Feature Stories**

- ▶ "Campuses That Confront Global Warming Reap the Rewards," by Julian Keniry
- ▶ "The Great Leap: Scenes from China's Industrial Revolution," by Bill McKibben

**3. Consortium News**

- ▶ Student-led effort combats global warming.
- ▶ HEASC coordinators pitch in on HEA sustainability programs.

**4. Member Highlights**

Several HEAs are doing important work on sustainability through their associations. Check out what HEASC members have to say about what they have done and plan to accomplish on sustainability.

**5. Upcoming Events**

- ▶ HEASC Sustainability Luncheon
- ▶ The Campus of the Future: A Meeting of the Minds
- ▶ AASHE 2006: The Role of Higher Education in Creating a Sustainable World
- ▶ Campus Sustainability Day IV

**6. New Resources**

**7. About HEASC**

### 1. Welcome to HEASC New National Effort to Advance Sustainability in Higher Education is Launched

Welcome to the first quarterly newsletter of the Higher Education Associations Sustainability Consortium ([www.aashe.org/heasc](http://www.aashe.org/heasc)). HEASC is an informal network of higher education associations (HEAs) with a commitment to advancing sustainability within their constituencies and within the system of higher education itself.

HEASC was formed by leaders of several HEAs to support and enhance the capacity of higher education to fulfill its critical role in producing an educated and engaged citizenry and the knowledge needed for a thriving and civil society. These organizations recognize that fulfilling their mission in the 21st century requires a broader, systemic, collaborative approach to their own work and that of the constituents they serve. The societal challenges to create vibrant, secure communities and strong economies while preserving the life support system on which we all depend are



# Greening HEASC Meetings



**Hotel & Facilities**



**Food**



**Offsets**



**Materials & Giveaways**



**Transportation**

# Green Association Meetings

- Doing Good All the Way Around!

- Provide leadership within higher education.
- Enhance competitive advantage and reputation.
- Demonstrate commitment to corporate responsibility.
- Save money by conserving resources.
- Present positive opportunities for marketing & public relations.
- Open up new or niche markets.



# We Can Make a Difference!

## Green Association Meetings

- Recycle.
- Use locally grown food.
- Reduce water consumption and waste.
- Laundry.
- Make handouts available digitally via the web.
- Plan events with public transportation or alternative use vehicles.
- Use post consumer recycled paper and soy ink.
- Serve condiments in bulk (e.g., cream & sugar)
- **Participate in an Offset Program...**

# What is a Carbon Offset Program?

An economic way to balance or neutralize carbon dioxide emissions of your event by funding projects that remove or do not add carbon dioxide to the atmosphere.

# How?

- Increase energy efficiency of buildings, factories & transportation.
- Generate electricity from wind, solar or geothermal.
- Put waste energy to work via co-generation.



# Carbon Offset Program Benefits

- Easy & affordable.
- Helps fighting climate change.
- Reduce air and other forms of pollution.
- Improve animal habitats.
- Improve watersheds and water quality.
- Reduce soil erosion.
- Preserve biodiversity.
- Protect endangered species.
- Create jobs.
- Stimulate demand for clean energy products.
- Stimulate investment into clean technologies.
- Save money.
- Improve energy security by reducing oil imports.

# Carbon Footprint of this CHEMA Meeting

All Total CO2 Combined	
37,437.67	Total Pounds of CO2 for Driving
124,693.04	Total Pounds CO2 for Flying
2,701.04	Total Pounds of CO2 for Hotel Rooms
<b>164,831.74</b>	<b>Total Pounds CO2 for All</b>
<b>74.77</b>	<b>Total Metric Tons of CO2</b>
<b>118</b>	<b>Total MWh Required to Offset</b>

Pounds of CO2 per MWh:	<b>1,392</b>
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# What to do with the money?

- 118 MWh @ \$12.00/MWh = \$1416
- \$1416 / 60 attendees = \$23.60 per person contribution
- Where does our contribution go?
  - Purchase of a Renewable Energy Certificate
  - Choices are abundant!
    - Wind, solar or hydro energy investments.
    - Tree planting / sequestration investments.
    - Alternative vehicle investments.
    - Local and global.

# Carbon Footprint Calculators

- [www.carboncounter.org](http://www.carboncounter.org)
- [www.conservation.org](http://www.conservation.org)
- [www.climatetrust.org](http://www.climatetrust.org)
- [www.carbonfund.org](http://www.carbonfund.org)
- [www.climateincrisis.net](http://www.climateincrisis.net)
- [www.nature.org](http://www.nature.org)

# Related Organizations

- AASHE

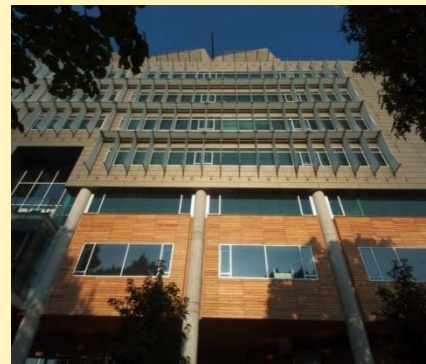
- <http://www.aashe.org>

- ACUPCC

- <http://www.presidentsclimatecommitment.org/>

- ULSF

- <http://www.ulsf.org>

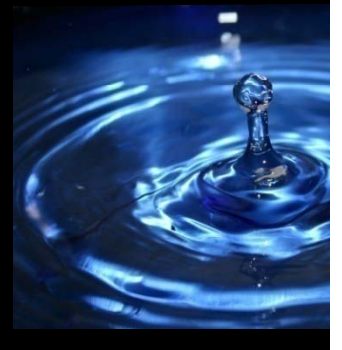


# AASHE

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- 200 institutions
- Professional development
- Resources
- Weekly newsletter

[www.aashe.org](http://www.aashe.org)



# AASHE Benefits

- Staff training in sustainability.
- Participation with other members in projects.
- Opportunity to inform a legislative agenda.
- Opportunity to shape legislation.
- Access to resources we could never afford.



# ACUPCC





AMERICAN COLLEGE & UNIVERSITY  
PRESIDENTS CLIMATE COMMITMENT

# Solutions

HOME | ABOUT | THE COMMITMENT | WHY SIGN? | SIGNATORIES | SUPPORTERS | NEWS & EVENTS | **SOLUTIONS** | PRESS ROOM | FAQs | CONTACT

## Solutions

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### Resources

To help institutions implement the American College & University Presidents Climate Commitment and achieve climate neutrality, we have gathered key resources on the following topics:

- [Overview & Examples of Climate Action Plans](#)
- [Academics](#)
- [Energy](#)
- [Green Building](#)
- [Greenhouse Gas Emissions Inventories](#)
- [Transportation](#)
- [Procurement](#)
- [Recycling and Waste Management](#)
- [Carbon Offsets](#)
- [ACUPCC Implementation Progress Reports](#)



## Resources

### Supporting Documents

#### [The Commitment](#) (PDF)

*The American College & University Presidents Climate Commitment document (2 pages)*

#### [A Call for Climate Leadership](#) (PDF)

*A more in depth discussion, including the background of the initiative, a roadmap to climate neutrality, and illustrative examples of existing, successful actions from campuses around the country (16 pages)*

# ULSF

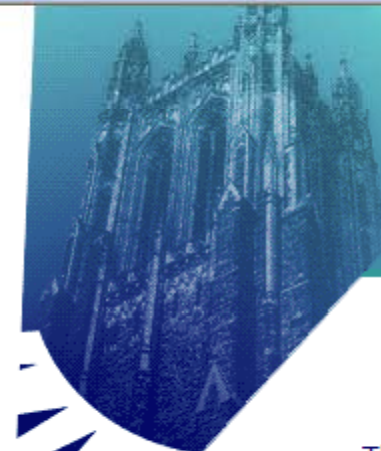
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ULSF

Association Of  
UNIVERSITY  
LEADERS  
FOR A  
SUSTAINABLE  
FUTURE



About ULSF

Talloires Declaration

Projects & Research

Publications

Resources

## Welcome

The Association of University Leaders for a Sustainable Future (ULSF) supports sustainability as a critical focus of teaching, research, operations and outreach at colleges and universities worldwide through publications, research, and assessment. ULSF is the Secretariat for signatories of the Talloires Declaration (1990), which has been signed by over 350 university presidents and chancellors worldwide.

Click here for the:

[>Sustainability Assessment Questionnaire](#)

[>UN Decade of Education for Sustainable Development](#)

ULSF | [Contact Us](#)

# NAEP Resource Center

- Publications
- Press Releases
- Link to AASHE resources
- Link to NAEP resources
- Sustainability websites of members

• <http://www.naepnet.org/Microsites/sustainability/sustainability.html>



### Sustainability

- Sustainability Home
- Roamin' With Yeoman
- Sustainability Blog
- Renewable Energy
- Green Building
- Green Purchasing
- Energy Efficiency Studies
- Climate Change
- Sustainability Events
- Recommended Reading List
- Resources
- Contact Brian Yeoman



### Welcome to NAEP's Sustainability Web Pages



Hi, I'm Brian Yeoman, your guide to Sustainability, one of the many topics that NAEP represents. Read our story for more information.

### WHAT'S HOT NOW

- Carbon Neutral
- Climate Change: Campus Climate Challenge
- BuildingGreen Top 10
- Private Sector Tops Green Power List
- Top 10 College and University Partners

### NEW! The ACUPCC Checklist! [Click HERE to download](#) (PDF Format)

This checklist was developed to help HEASC members streamline a process of supporting and updating the progress of the ACUPCC to your constituents. The 6 item checklist ranges from posting the ACUPCC logo (link) onto your organizations website to becoming a role model of the ACUPCC in your own operations.

### ALSO NEW! The ACUPCC Recruitment Letter! [Click HERE to download](#) (Word Format)

The recruitment letter can be sent to both presidents and non-presidents of your member organizations. In addition, here is the link to the ACUPCC Ambassadors webpage <http://www.presidentsclimatecommitment.org/html/ambassadors3.php>. Here you will find information on how to be an Ambassador, as well as General resources including the top 10 reasons why to sign the PCC.



Sustainability refers to development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

[For more details click here.](#)

- ↳ Independence from the Corporate Global Economy
- ↳ Top Green Business Stories of 2006
- ↳ Sustainable and Responsible Investing
- ↳ Profits from Idle Cars? First, Think Like an MBA

### Government Higher Education Non-Profit P

- High-Efficiency Toilets to Get WaterSense Nod
- Centre for Sustainable Design
- Oak Ridge National Laboratory
- Oak Ridge National Laboratory's (ORNL) Support of FEMP
- Brookhaven National Laboratory
- DOE Combined Heat and Power (CHP) Initiative
- DOE/CHP for Buildings
- DOE Cooling, Heating and Power for Buildings

# Next

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## Green Purchasing

