The American College and University Presidents Climate Commitment - Sustainability @ WCC

"Sustainable development ... meets the needs of the present without compromising the ability of future generations to meet their own needs."

> - Report of the Brundtland Commission, Oxford University Press,1987

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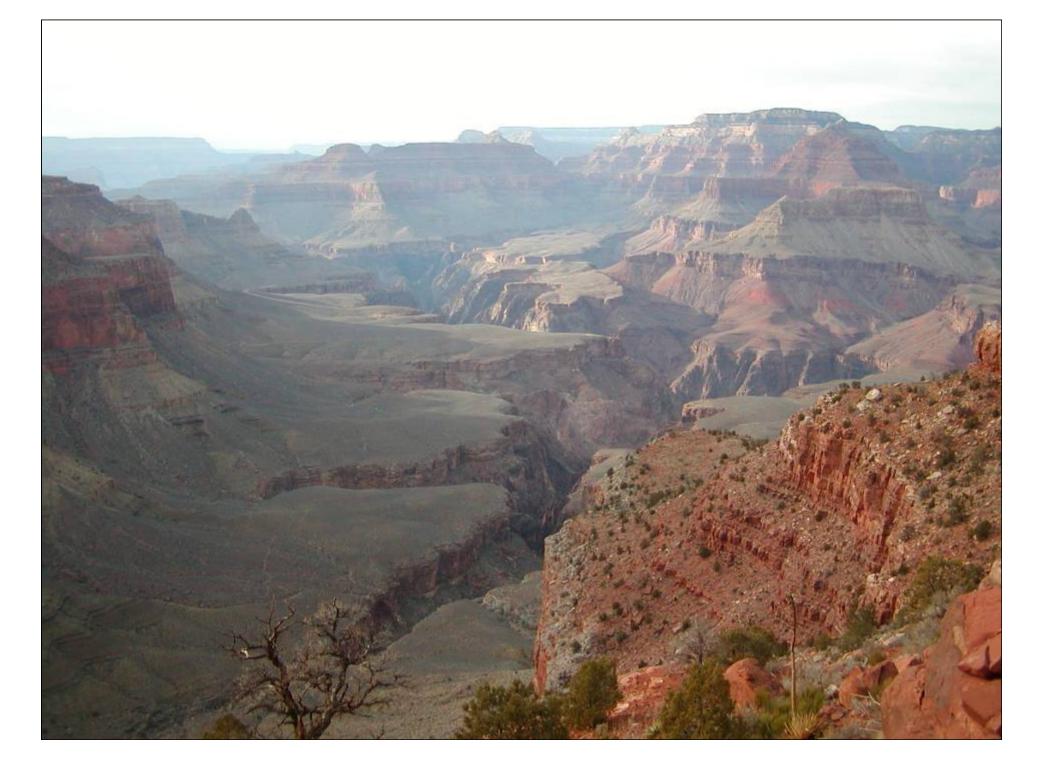


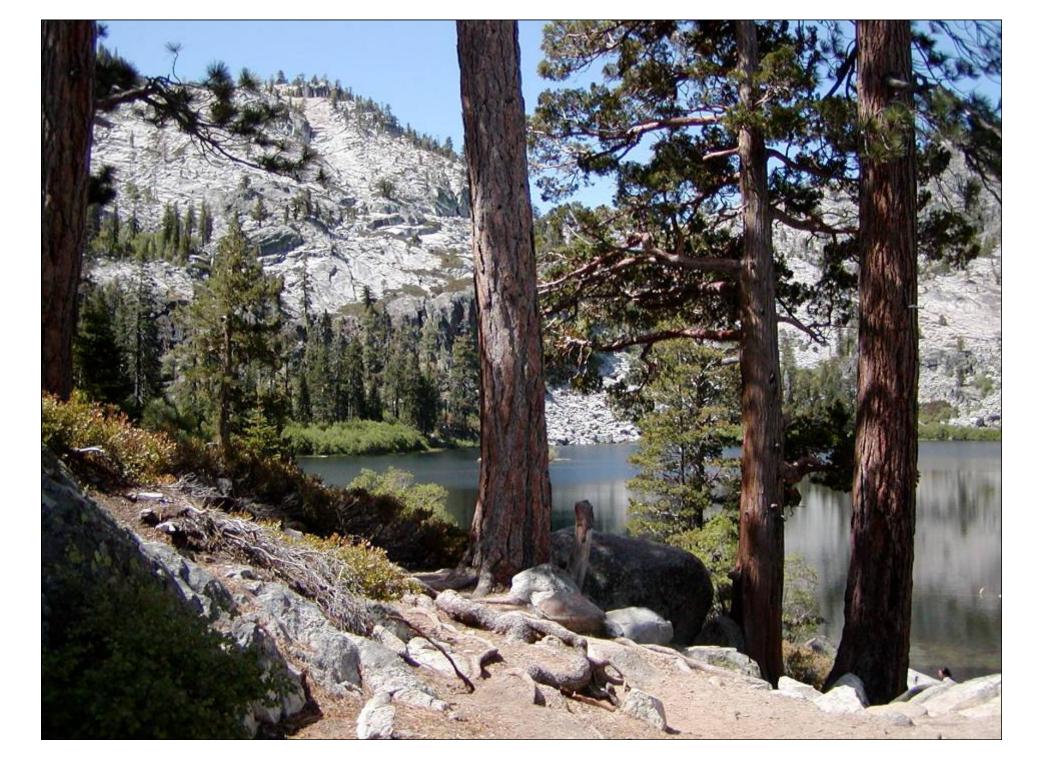


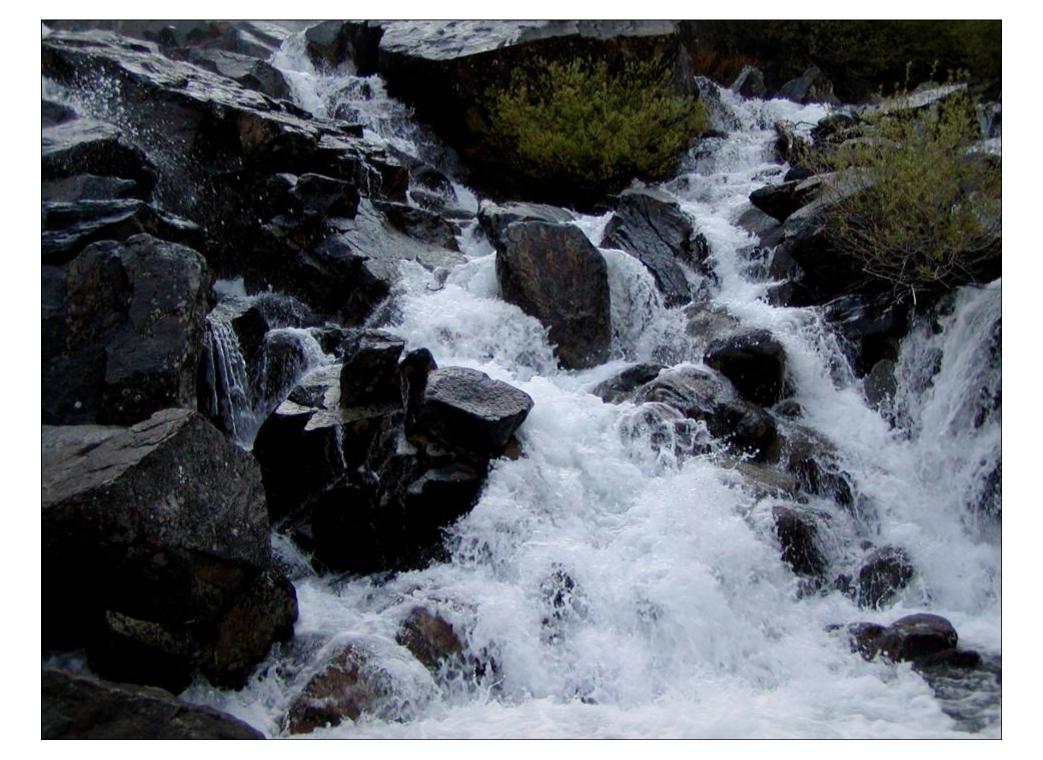
"Our decision about energy will test the character of the American people and the ability of the President and the Congress to govern this Nation.

This difficult effort will be the "moral equivalent of war," except that we will be uniting our efforts to build and not to destroy."

- President Jimmy Carter, April 18, 1977























"What we do in the next two to three years will determine our future."

-I.P.C.C. chairman, Rajendra Pachauri, November 2007









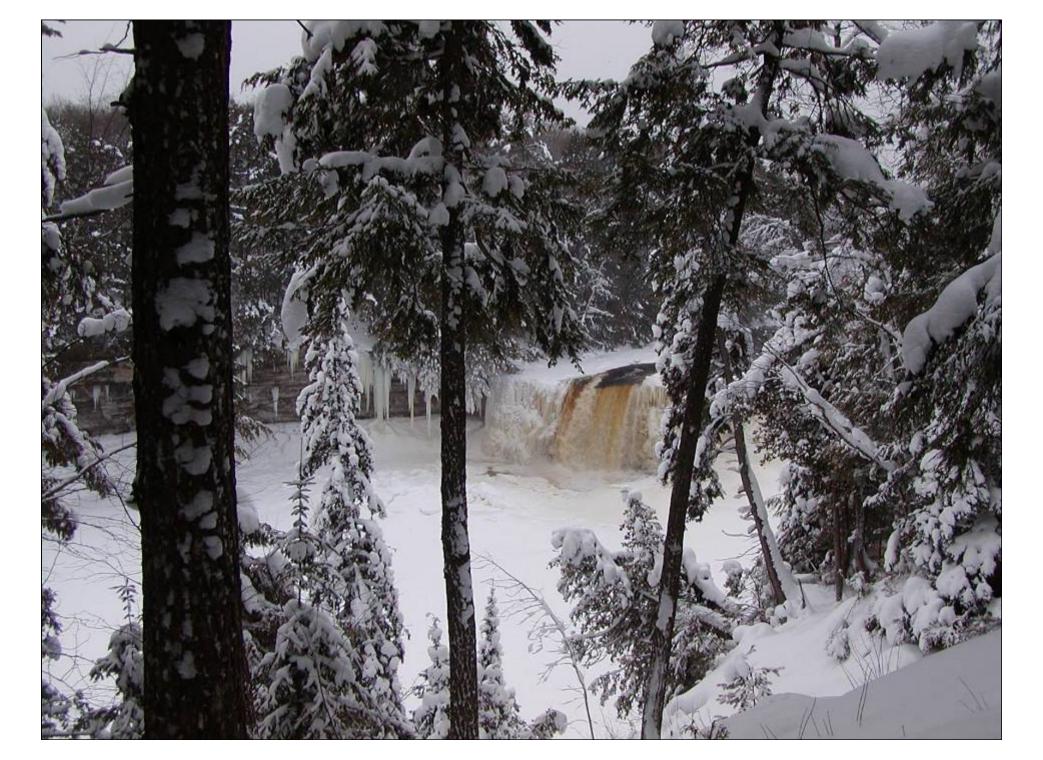






















The Climate Change Challenge: Mobilizing to Save Civilization¹

- Global warming melting ice, rising seas
- The end of oil, rising food prices
- Water tables dropping, lakes disappearing
- Disappearing forests, cropland and rangeland
- Disappearing fisheries, extinction of bird, amphibian and mammal populations
- Growing population, poverty, hunger, disease
- Increasing numbers of "failed states", threatening world order
- "Tipping points" from which recovery is unlikely

Plan B, 3.0 Lester Brown, Earth Policy Institute

Hope... is not the same as joy that things are going well, or willingness to invest in enterprises that are obviously heading for success, but rather, an ability to work for something because it is good...

- Václav Havel 1986

The Opportunities:

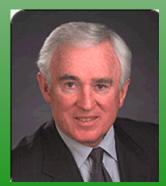
- 1 million plug-in, 150 mpg hybrid cars, built in American factories, by 2015
- Supply 25% of U.S. electricity from renewable sources by 2025
- Increase energy efficiency by 50% by 2030
- Weatherize one million homes annually
- Install millions of solar photovoltaic roofs
 and water heaters
- Invest \$150 billion to build a clean energy future and create five million new jobs

American College and University Presidents Climate Commitment

- A nationwide effort by American colleges and universities to address global warming
- 562 signatories as of 8/18/2008
 - Arizona State, Bryn Mawr, Case Western Reserve, Cornell, Clemson, Colorado State, Duke, Middlebury, Oberlin, Ohio State, Rice, U of Colorado, U at Buffalo, Syracuse, U of California, U of Wisconsin...

ACUPCC Michigan Signatories

- Albion College
- Delta College
- Grand Rapids Community College
- Grand Valley State University
- Jackson Community College
- Kalamazoo College
- Lake Michigan College
- Lansing Community College
- North Central Michigan College
- St. Clair Community College
- Washtenaw Community College



The ACUPCC Commitment

- Global warming is real and is largely caused by humans.
- Global emission of greenhouse gases must be reduced by 80% by 2050 or sooner.
- Colleges and universities must exercise leadership in their communities and throughout society
 - by modeling ways to eliminate global warming emissions
 - by providing the knowledge and the educated graduates that will help achieve climate neutrality.
- Campuses that address the climate challenge will
 - better serve their students
 - meet their social mandate to help create a thriving, ethical and civil society.

Develop a plan to achieve climate neutrality as soon as possible

- 1. Create a **task force** to guide and implement the plan, including staff, faculty, student, and administrator representatives.
- 2. Complete a **comprehensive inventory** of all greenhouse gas emissions.
- 3. Develop an **action plan** for becoming climate neutral
- 4. Make climate neutrality and sustainability a part of the **curriculum** for all students.

We are on our way to meeting the Presidents Climate Commitment

- Recycling
- Energy management
- LEEDs building standard
- Low carbon transportation
- Native plant landscaping
- Student Activities
- Environmental Committee
- Sustainability in the curriculum

Recycling

- Recycling totals for 2006:
 - 40 tons of mixed paper
 - 40 tons of cardboard
 - 4.7 tons of cans and bottles





• Technotrash' recycling – CDs, DVDs, tapes, ink jet cartridges, cell phones, transparencies

• Other recycling and reuse – Styrofoam, shipping boxes, pallets, lost clothing, computers, used equipment and furniture



Educating Students, Staff and Faculty







Oh say, can you recycle

Join students all across America competing in RecycleMania, the ten-week recycling competition.

For more information please visit: of www.recyclemaniacs.org

Energy Efficient Operations

- Adjusting thermostats (76 °F summer / 68 °F winter)
- Energy efficient variable speed pump and fan motors
- Energy efficient fluorescent lights and ballasts
- · Waterless urinals and dual-flush toilets
- Turning off building and parking lot lights after hours
- Room occupancy sensors









Building to LEED standards

• Fitness Center – LEEDs Gold certified



• TI Building renovation – aiming for LEEDs Silver





- Reduced pesticide use
- Improved water retention
- Increased biological diversity
- Reduced goose pollution

Zero Waste Events

- Cheers Picnic
- Your next event?





Student Activities



Phi Theta Kappa service projects



Recycling Art Contest

Environmental Lecture Series – Fall 2008

(Please send students!)

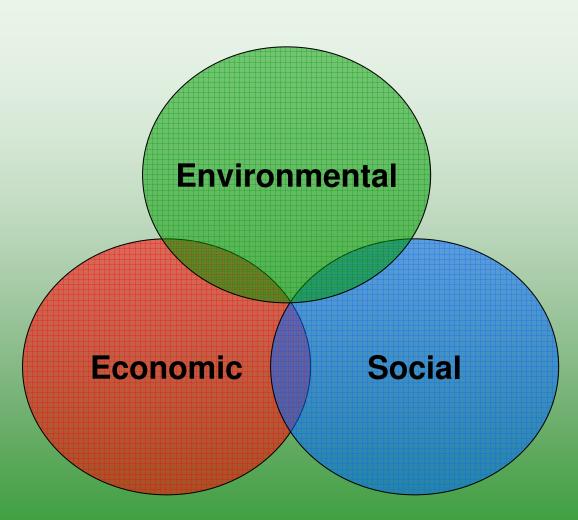


Educating ourselves and the community since April 19, 2001

Earth Day at WCC



Triple Bottom Line





Connecting with the Community





Career Watch

CareerFocus

The Future is **BRIGH** Turns out that what's good for the earth is good for the economy



from solar panel installation, to wind power technician of established professions such as engineering, business and agriculture.

Co-author James P. Hendrix predicts that the growth in green jobs

with programs in everything Renewable energy and environmental consciousness are affecting where the jobs and money flow in to newer, greener versions a number of significant ways. An economic analysis conducted by the Rand Corporation and the University of Tennessee estimates that

25 percent of the country's energy demand could be tapped from renewable energy sources by 2025.

jobs currently exist in the industry from technicians to engineers to managers.

Solar

Solar power also is taking off with many new opportunities for engineers to develop new products and for trained installers to put a products to work. Sove

Partners in Sustainability - WCC Bookstore

- Environmentally friendly products – recycled office supplies, water bottles, coffee mugs, cloth shopping bags
- Reducing plastic bags by asking customers if they want one
- Special displays of environmental books
- Environmental Committee
 participant



WCC Environmental Committee

- Maryam Barrie
- Rachel Barsch
- Keith Bearup
- Victoria Bennett
- John Bruckner
- Clarence Burgen
- Damon Flowers
- Philip Geyer
- Mary Gmeiner
- Ian Griffin
- Judith Hommel
- Melanie Jorgensen
- Bethany Kennedy
- Michael Koen
- Diane Laboda
- Gregory Laycock

- Laura Lyjak
- Dale Petty
- Mark Rabinsky
- Cheryl Ruszkiewicz
- Ronald Schebil
- Diana Sepac
- Eleanor Shelton
- Catherine Smillie
- Kathleen Stadtfeld
- Kathleen Strnad
- David Thomas
- Larry Whitworth
- Barry Wilkins
- YOU !

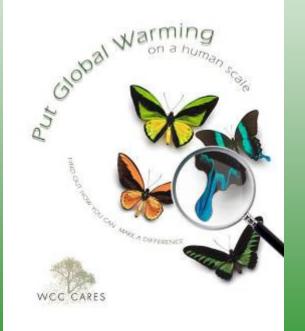


Integrating Sustainability into the Curriculum

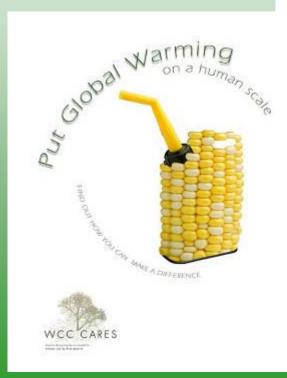
- Geothermal heating and cooling HVAC
- Poetry on the environment English
- Sound for Forever Wild concert Music
- Nature photography exhibit Photography
- Recycling metal scraps Machine Tool
- Reusing manila folders for 3D models CAD
- DNR fire maps for area calculations Math
- Electric Motorcycle Electronics
- Share what YOU are doing!



PHO 220 Advanced Studio Techniques



Don Werthman & Dennis Guastella



Mike Bowdish





Joe Adams

ELE 199 Residential Solar Installation

GLG 199 Earth Science Service Learning

BIO 267 Winter Field Study

CUL 199 Local Organic Food Preparation Fritten

CCC 299 Solar Car Fabrication





PHY 199 Applied Solar Physics

PTA 199 Outdoor Therapeutic Exercise



PSY 299 No Child Left Inside

- Add Sustainability to the college Mission & Values
- Bike, bus or car pool to work
- Recycle my ow Wehat @an da Doadd, bottles, cans, Styrofoam
- Refuse extra bags and packaging
- Buy and use 100% post consumer recycled paper
- Make two-sided copies (
- Reduce my document m
- Replace old printers with of the second print
- Re-use paper, envelopes, folces instead of buying new

"Look alive.

Here comes

- Use more electronic documents and less paper
- Turn lights and equipmer
- Turn off or hibernate my
- Use energy saving mode
- Use a re-usable coffee m
- Use waterless urinals / us
- Talk about Climate Chan

I leave the room ot in use



when appropriate dents and colleagues

ches on each side

wo-sided printing



"I am only one; but still I am one. I cannot do everything; but still I can do something. I will not refuse to do the something I can do."

- Edward Everett Hale