

**Ball State University
Unit-level Sustainability Planning**

[as mandated in Goal IV_F of the 2007-2012 Ball State University Strategic Plan]

A Sustainability Plan

for the

Center for Energy Research/Education/Service
(CERES)

Submitted to
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Achievements to Date

The following are our short-form question responses within the categories of Governance and Administration, Operations, Curriculum and Research, and Community Service and Outreach. In developing these short-form responses, we are pleased to report significant achievements in these areas and have identified opportunities for further development/transformation.

[Provide brief descriptions for each affirmative or goal response]

Governance and Administration

Y **N** **Goal**

X **1.** The unit has standing committees to address issues of sustainability.

CERES staff have agreed to serve as a standing sustainability committee-of-the-whole; in addition CERES serves as the secretariat for COTE.

Y **N** **Goal**

X **2.** The unit gives assigned load and/or a staff position dedicated to sustainability initiatives.

This is the core nature of our mission and staff assignments. We have asked our CERES Operations Manager to serve as our defacto sustainability coordinator; this person will bring to the unit for discussion, requests received from students, staff and/or faculty colleagues that have implications for unit governance or administration.

Y **N** **Goal**

X **3.** The unit has established policies that encourage sustainability initiatives.

The CERES staff are aware of the university's adopted statement on sustainability (www.bsu.edu/sustainability) and we continue to encourage sustainability initiatives among the faculty colleagues, staff and students. In particular, we offer the CERES Research Fellowships which enable faculty to develop a deeper connection of their expertise to these issues.

Y **N** **Goal**

X **4.** The unit has sustainability integrated into its mission statement.

CERES will consider the possibility of integrating a more explicit statement on sustainability into its energy-focused mission statement during the next revision.

Y **N** **Goal**

X **5.** The unit maintains active membership in organizations engaged in promoting sustainability.

CERES staff, graduate assistants and student employees are aware of the university's Membership in the Association for the Advancement of Sustainability in Higher Education and everyone has been encouraged to logon to the AASHE Website (www.aashe.org) to make use of resources posted for member schools. (See list attached.)

Y **N** **Goal**

X **6.** The unit encourages and rewards research related to sustainability.

CERES engaged in sustainability-related research are championed through the Employee Performance Appraisal procedures. As noted above, we offer the CERES Research Fellowships which enable faculty and staff to develop a deeper connection of their expertise to these issues.

Y N Goal

- X** 7. The unit encourages and rewards the integration of sustainability issues into course material.

CERES staff in their dual roles of department faculty and unit staff are encouraged to include sustainability content in their course material delivered through academic departments; typical teaching assignments include:

ARCH 501/601 Sustainability Studio, ARCH 402/502 Daylectric™ Lighting Design Studio, ARCH 401 Comprehensive Design Studio, ARCH 272 & 273 Environmental Systems, ARCH 498 Vital Signs Elective (Honors Colloquium)

Operations

Y N Goal

- X** 1. The unit purchases/uses Energy Star Office and Telecommunications Equipment.

CERES requests information on Energy Star rated equipment through university when purchasing equipment.

Y N Goal

- X** **X** 2. The unit has policies to restrict paper use.

CERES does encourage duplex photocopying and printing, use of electronic distribution of meeting agendas, minutes and related documents. Nonetheless, there is room for improvement. Our goal is the investigation of office equipment that facilitates these practices. Another goal is more electronic distribution of material as needed.

Y N Goal

- X** 3. The unit uses recycled paper.

CERES uses the 30% recycled content paper made available through central stores.

Y N Goal

- X** 4. The unit recycles all materials accepted by the university system.

CERES uses the university's co-mingled recycling waste system; several recycling containers are located prominently in our departmental administrative offices.

Y N Goal

- X** 5. The unit has appropriate recycling bins throughout its offices.

All CERES offices have dual waste receptacles.

Y N Goal

- X** **X** 6. The unit has policies that encourage the use of teleconferencing capabilities to limit travel.

As more of a practice than a policy, CERES staff members participate in service capacities with professional organizations using teleconferencing connection; the limited CERES travel budget necessitates this consideration. The unit is investigating in-house capabilities for web-based conferencing.

Y N Goal

X X 7. The unit specifies hybrid electric vehicles for travel.

CERES staff are encouraged to request hybrid electric vehicles when using the university fleet.

Y N Goal

X X 8. The unit shows preference for sustainable lodging for professional travel.

CERES may elect to set this as a goal in the next several years.

Y N Goal

X X 9. The unit uses washable dinner/service ware for its meetings/receptions.

CERES plans to request washable dinner/service ware for future meetings and receptions.

Y N Goal

X 10. The unit purchases/uses remanufactured office furniture.

CERES does not purchase or use remanufactured office furniture. However, the Center sometimes meets its furniture and equipment needs via University Surplus and Excess.

Y N Goal

X 11. The unit purchases/uses sustainable materials for office furnishings.

CERES does not purchase or use sustainable materials for office furnishings.

Y N Goal

X 12. The unit discourages the use of single-occupant automobile travel.

CERES has held open discussions about the importance of sustainability and staff are encouraged to carpool when possible for travel to conferences; one staff person walks in his daily commute to campus.

Y N Goal

X 13. Classroom, Office and/or Restroom lighting for the unit is controlled by occupancy sensors.

The CERES central office, computer lab and conference room are equipped with occupancy sensors.

Y N Goal

X 14. The unit's thermostats are set to minimize energy use for heating and cooling.

CERES will ask facilities personnel to check our thermostat settings to assure efficient energy use.

Curriculum

Y N Goal

- X 1. The unit has courses dedicated to issues related to sustainability.

CERES does not offer courses directly, but does staff and teach as well as provide support for courses listed above in the Governance and Administration item #7.

Y N Goal

- X X 2. The unit has courses with sustainability content.

Our staff supports, coordinates and/or teaches courses in the Clusterd Minors Program, Daylectric™ Lighting Design Studio, Environmental Systems Classes, Sustainability Design Studio, and Vital Signs Elective.

Y N Goal

- X 3. The unit has courses in which students are encouraged to address sustainability issues in their assignments.

See item #1 above

Y N Goal

4. The unit recognizes sustainability courses from other departments as legitimate electives for credit in its programs.

NA

Y N Goal

- X 5. The unit has dedicated sustainability courses that can be taken for credit as part of a major or minor outside of the unit.

We support, coordinate and teach ID400 a course entitled "Creating a Sustainable Future" which is integral to the award winning Clustered Minors in Environmentally Sustainable Practices at BSU. The unit also supports and provides advising services for the Interdepartmental Minor in Energy.

Research

Y N Goal

- X 1. Members of the unit have conducted research on issues of sustainability in their discipline.

Two of our staff have directly engaged research on sustainability;

Y N Goal

- X 2. Members of the unit have published on issues of sustainability in their discipline.

One staff member is completing a manuscript for a book on sustainability and three (3) of our staff have extensive publication on sustainability in refereed journal articles, refereed conference proceeding papers, and invited keynote presentations.

- Y N Goal**
X **3.** Members of the unit attend conferences that address issues of sustainability.

One staff member this year attended multiple conferences addressing Sustainability.

- Y N Goal**
X **4.** Members of the unit belong to associations dedicated to sustainability issues.

Three staff members hold membership in organizations that engage Sustainability.

- Y N Goal**
X **5.** The unit has hosted workshops on issues of sustainability.

CERES hosted one workshop last spring addressing issues of sustainability.

- Y N Goal**
X **6.** The unit has hosted conferences on issues of sustainability.

NA

However, three of our staff actively participated in the recent Greening of the Campus Conference VII hosted by Ball State University.

One of our staff members attended a workshop on sustainability.

Community Service and Outreach

- Y N Goal**
X **X** **1.** The unit engages in public and/or outreach activities that address issues of sustainability.

- Y N Goal**
X **X** **2.** The unit is in partnership with others in the community in the pursuit of sustainability.

Two of our staff and a large number of our students participated in the recent East Central Indiana Muncie/Delaware County Living Lightly Fair. COTE is another example; other links should be possible. Three of our staff are actively engaged in the White River Corridor Reclamation Project and four staff have actively participated in related sustainability outreach activities.

- Y N Goal**
X **3.** The unit participates in community events that address issues of sustainability.

Four of our staff have participated in tree planting efforts in cooperation with the Red-Tail Conservancy. Earth Day and Living Lightly are two more examples.

- Y N Goal**
 X **X** **4.** The unit has initiated community endeavors in pursuit of sustainability.

Three of our staff members are actively engaged in the White River Corridor Reclamation Project; also, our unit has been actively engaged with

Habitat for Humanity for several years.

Existing conditions as baseline (data as available)

In preparing our short-form responses to the questions in the previous section, we accumulated the following data sets. These comprise the numerical underpinnings specific to our **Sample Department**.

A List of Academic Offerings

Topical Sustainability Lectures

Environmental Systems, LEED Vital Signs, CAP Building Tours

Topical Sustainability Modules

NR Module, Nuckolls, Garbage Game, Solar Envelope Studies

Sustainability Courses

We teach several courses including ARCH 501 Sustainability Studio, ARCH 402/502 Daylectric™ Lighting Design, ACH 498 Vital Signs.

Sustainability Programs

The Clustered Minors in Environmentally Sustainable Practices and the Interdepartmental Minor in Energy are both programmatic initiatives which reach across the full campus.

Sustainability Concentration

NA

Sustainability Degree Offerings

NA

Sustainability Immersive On-and Off-Campus Experiences

Grad Assistantships linked to our daylighting testing services.

Existing conditions as baseline (data as available)

A List of Faculty, Staff and Student Activities

Professional Academic Organizations

CERES staff currently hold membership in:

<i>AASHE</i>	<i>Association for the Advancement of Sustainability in Higher Education</i>
<i>ACSA</i>	<i>Association of Collegiate Schools of Architecture</i>
<i>ARCC</i>	<i>Architectural Research Centers Consortium</i>
<i>ASES</i>	<i>American Solar Energy Society</i>
<i>SBSE</i>	<i>Society of Building Science Educators</i>
<i>SBIC</i>	<i>Sustainable Buildings Industry Council</i>
<i>ULSF</i>	<i>University Leaders for Sustainable Future</i>
<i>USPESD</i>	<i>US Partnership for Education for Sustainable Development</i>

Professional Staff Organizations

<i>AIA</i>	<i>American Institute of Architects</i>
<i>HEASC</i>	<i>Higher Education Associations Sustainability Consortium</i>
<i>USGBC</i>	<i>US Green Building Council</i>

Student Associations and Clubs

NA

Hybrid Fleet Vehicle Use

CERES routinely requests use of the hybrid electric vehicles and E85 vehicles.

Hybrid Electric Shuttle Bus Use

CERES makes use of the university hybrid-electric shuttle buses.

Bicycling

CERES staff members do not currently bicycle to campus; but have in the past

Carpooling

CERES staff members do not currently carpool to work; but have in the past.

MITS Bio-Diesel Bus Use

CERES staff members know they can ride the MITS bio-diesel bus service at no expense and have in the past.

Conference Travel; Carbon Offset Purchases (and others...)

Web conferencing and phone conferencing have been used.

Existing conditions as baseline (data as available)

A List of Operational Commitments in the Building(s) We Occupy

Building Use: Lamps, Occupancy Sensors, Waterless Urinals

- *Down lamps in some of our spaces use T-8 fluorescent bulbs in highly reflective housings;*
- *Our main offices, conference room, and computer lab have been outfitted with motion sensors to turn lights off when unoccupied.*
- *Waterless urinals have been installed in the men's rest room off the CERES lobby.*

Material Use/Recycling: Paper, Water, Cartridges, Cans, Glass, Wet Garbage

- *CERES uses 30% post consumer content and 100% recycled content recycled paper.*
- *CERES uses recycled toner cartridges in their printers.*
- *CERES uses the university co-mingled recycled waste system.*
- *Duplex printing of letters, reports and meeting minutes is used when feasible.*

Food Use/Recycling: Local Sourcing, Washable Dinnerware

- *The last two (2) Greening of the Campus Conferences sourced the breakfast, lunch and dinner menus from 100 Indiana farms participating in a "Farm to Campus" supply chain.*
- *CERES uses washable coffee cups more frequently than waste generating paper, plastic and Styrofoam materials.*

Goals

Given our assessment of where things stand, we have identified the following goals for our unit.

Governance and Administration

Integrate a statement on sustainability into the departmental mission statement.

Operations

Continue to request information on Energy Star rated equipment through University purchasing.

Ask facilities personnel to check thermostat settings.

Paperless/paper reduction electronic communication practices are to be increased.

Curriculum

CERES has long term plans for creating a sustainability certificate and related instructional modules.

Research

Expand the number of staff attending conferences that address issues of sustainability.

Expand participation by faculty in research related to sustainability.

CERES current Daylighting testing service is a platform for funding and student scholarship.

Community Service and Outreach

Expand participation by staff in the Business Fellows Program.

Expand community outreach; CERES current Daylighting testing service is a tool for this.

Public Service Presentations, Newspaper Articles, Earth Day Participation

Implementation

We have aligned specific action items with the 5-year cycling of the Strategic Plan and anticipate being able to move forward in the respective categorical areas, as described below.

2008	Action Items	Resource Needs
	<p>Governance and Administration</p> <p>Operations <i>Request information on Energy Star rated equipment through University purchasing.</i></p> <p><i>Ask facilities personnel to check thermostat settings.</i></p> <p><i>Expand paperless practices.</i></p> <p>Curriculum</p> <p>Research <i>Expand the number of staff attending conferences that address issues of sustainability.</i></p> <p><i>Expand participation by staff in research related to sustainability.</i></p> <p><i>Secure funding for Graduate Student Assistantships.</i></p> <p>Community Service and Outreach <i>Expand participation by faculty in the Business Fellows Program.</i></p> <p><i>Expand community outreach.</i></p>	

2009	Action Items	Resource Needs
	<p>Governance and Administration <i>Integrate a statement on sustainability into the departmental mission statement.</i></p> <p><i>Request that staff purchase carbon offsets for conference travel.</i></p> <p>Operations</p> <p>Curriculum</p> <p><i>Support the offering of the following new course in Sustainability through the department of architecture: Energy Performance Simulation and Modeling</i></p> <p>Research</p> <p><i>Expand the number of staff attending conferences that address issues of sustainability.</i></p> <p><i>Expand participation by staff in research related to sustainability.</i></p> <p>Community Service and Outreach <i>Expand participation by staff in the Business Fellows Program.</i></p>	

2010	Action Items	Resource Needs
	<p data-bbox="186 268 631 296">Governance and Administration</p> <p data-bbox="186 338 938 365"><i>Request that staff purchase carbon offsets for conference travel.</i></p> <p data-bbox="186 447 342 474">Operations</p> <p data-bbox="186 585 354 613">Curriculum</p> <p data-bbox="186 724 318 751">Research</p> <p data-bbox="186 793 824 854"><i>Expand the number of staff attending conferences that address issues of sustainability.</i></p> <p data-bbox="186 896 792 957"><i>Expand participation by staff in research related to sustainability.</i></p> <p data-bbox="186 999 656 1026">Community Service and Outreach</p> <p data-bbox="186 1037 813 1098"><i>Expand participation by staff in the Business Fellows Program.</i></p> <p data-bbox="186 1140 532 1167"><i>Expand community outreach.</i></p>	

2011	Action Items	Resource Needs
	<p>Governance and Administration</p> <p><i>Request that staff purchase carbon offsets for conference travel.</i></p> <p>Operations</p> <p>Curriculum</p> <p><i>Host a lecture series on Sustainability.</i></p> <p>Research</p> <p><i>Expand the number of staff attending conferences that address issues of sustainability.</i></p> <p><i>Expand participation by staff in research related to sustainability.</i></p> <p>Community Service and Outreach</p> <p><i>Expand participation by staff in the Business Fellows Program.</i></p> <p><i>Expand community outreach.</i></p>	

2012	Action Items	Resource Needs
	<p>Governance and Administration</p> <p><i>Request that staff purchase carbon offsets for conference travel.</i></p> <p>Operations</p> <p>Curriculum</p> <p><i>Establish a Sustainability Certificate Program</i></p> <p>Research</p> <p><i>Expand the number of staff attending conferences that address issues of sustainability.</i></p> <p><i>Expand participation by staff in research related to sustainability.</i></p> <p>Community Service and Outreach</p> <p><i>Expand participation by staff in the Business Fellows Program.</i></p> <p><i>Expand community outreach.</i></p>	