

**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

Department of Architecture

Submitted to
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Provost and Vice-President for Academic Affairs

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Foreword

This plan provides an overview of the Department of Architecture’s efforts to move toward sustainability in its operations and its interactions with those impacted by its academic, research, and outreach offerings. An attempt to benchmark the current status of sustainability-related accomplishments is presented along with key objectives to be considered for implementation in coming years.

Benchmarking Sustainability Initiatives

The following information was developed from faculty responses to a short-form questionnaire (executed in Fall 2007) dealing with sustainability in Governance and Administration, Operations, Curriculum and Research, and Community Service and Outreach. The Department is pleased to report notable achievements in these areas along with identified opportunities for further development toward more sustainable operations and educational impacts.

Governance and Administration

Y N Goal

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

Department faculty have agreed to create a standing sustainability committee elected from colleagues representing the key curricular areas in the department. The committee will include one (1) staff representative appointed by the chair and one (1) student representative appointed by the chair.

Y N Goal

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

The Department does not provide such an assigned load but has asked the assistant to the chair to serve as defacto sustainability coordinator; this person will bring to the sustainability committee, and ultimately the faculty, requests received from students, staff, and/or faculty that have sustainability implications for governance or administration.

Y N Goal

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

Departmental faculty are aware of the university's adopted statement on sustainability (www.bsu.edu/sustainability) and the sustainability committee will serve as a forum to actively encourage sustainability initiatives among Department faculty, staff, and students.

Y N Goal

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

The Department will consider the possibility of integrating a statement on sustainability into its mission statement during its next revision.

Y N Goal

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

Department faculty, staff, and students are aware of the university's Membership in the Association for the Advancement of Sustainability in Higher Education (www.aashe.org) and are encouraged to make use of resources posted for member schools. The Department and individuals are also members of other organizations and associations that promote sustainability.

Y N Goal

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

Faculty engaged in research related to sustainability are recognized through promotion, tenure and merit review procedures. This currently involves more encouragement than reward.

Y N Goal

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

Faculty are encouraged to include sustainability content in their course materials. There is no explicit reward structure for doing so.

Operations

Y N Goal

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

It is unclear to what extent this is the case. The Department will request information on Energy Star rated equipment available through university purchasing and make such rating a condition of selection whenever possible.

Y N Goal

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

The Department encourages electronic distribution of course materials, duplex photocopying and printing of hard-copy materials and electronic distribution of meeting agendas, minutes, and related documents. The policy is voluntary, not mandatory.

Y N Goal

- X 3. The unit uses recycled paper.

The Department uses 30% recycled content photocopy paper available through central stores.

Y N Goal

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

Recycling containers located in the Departmental common areas (and offices) provide a highly visible and easy means of using the university's co-mingled recycling waste system,

Y N Goal

5. The unit has appropriate recycling bins throughout its offices.

Offices throughout the Department have a dual waste receptacle for faculty and staff to separate garbage from co-mingled recyclable materials (paper, glass, plastics).

Y N Goal

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

In lieu of a formal policy, the very limited travel budget of the Department encourages this. Several faculty regularly participate in service-related teleconferencing connections.

Y N Goal

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

Faculty, staff, and students are encouraged, but not required, to request hybrid electric vehicles when using the university fleet.

Y N Goal

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

The Department may determine this to be a viable goal in the future. At this time there is not enough information available to make this a Departmental policy.

Y N Goal

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

The Department will request washable dinner/service ware for future meetings and receptions for which it is responsible.

Y N Goal

10. The unit purchases/uses remanufactured office furniture.

The Department does not purchase or use remanufactured office furniture. This option will be investigated.

Y N Goal

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

The Department does not purchase or use sustainable materials for office furnishings. This option will be investigated.

Y N Goal

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

Open discussions about the importance of sustainability have been held in the Department and faculty have been encouraged to carpool when possible for travel to conferences. Several faculty carpool, bike, or walk in their daily commute to campus.

Y N Goal

13. Classroom, office and/or restroom lighting for the unit is controlled by occupancy sensors.

The Department will request that all restrooms, offices, and classrooms be outfitted with occupancy sensors (where appropriate).

Y N Goal

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

The Department will ask facilities personnel to check thermostat settings to assure effective operation with efficient use of energy.

Curriculum

Y N Goal

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

We offer one(1) course dedicated to sustainability, entitled "_____".

Y N Goal

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

Three (3) courses in the Department's undergraduate curriculum and one (1) course in the graduate curriculum address sustainability as a substantive part of the course content. Several more courses address sustainability issues to a lesser extent.

Y N Goal

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

Several Department faculty have developed specific course assignments that address sustainability within their course structure.

Y N Goal

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

The Department will consider allowing students to take ID250 and/or ID400 as creditable to our current degree offering(s).

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.

The Department offers a course entitled "_____ " which is integral to the award-winning Clustered Minors in Environmentally Sustainable Practices at BSU.

Research

Y N Goal

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

Two (2) Department faculty have directly engaged in research dealing with sustainability.

Y N Goal

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

One (1) faculty has published a book on sustainability, and three (3) faculty have published extensively on sustainability concerns 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.

Four (4) Department faculty have (to date in this academic year) attended conferences addressing sustainability. Four (4) faculty have also attended workshops on sustainability. The Department plans to host such a workshop.

Y N Goal

X 4. Members of the unit belong to associations dedicated to sustainability issues.

Eleven (11) Department faculty hold membership in organizations that actively engage sustainability. All BSU faculty are also de-facto individual members of the Association for the Advancement of Sustainability in Higher Education (AASHE); the Department will continue to encourage colleagues to register on the AASHE website (www.aashe.org) to obtain an individual password to use the members-only resources. [Note: the web site recognizes the e-mail extension bsu.edu as that of a member.]

Y N Goal

X X 5. The unit has hosted workshops on issues of sustainability.

The Department hosted one (1) workshop last spring addressing issues of sustainability.

Y N Goal

X 6. The unit has hosted conferences on issues of sustainability.

CERES has coordinated the ongoing Greening of the Campus Conference series hosted by Ball State University.

Community Service and Outreach

Y N Goal

X 1. The unit engages in public and/or outreach activities that address issues of sustainability.

Three (3) Department faculty are actively engaged in the White River Corridor Reclamation Project and four (4) faculty have actively participated in other sustainability related outreach activities.

We support student involvement in outreach through the Business Fellows Program, working with the following community organization(s):

Y N Goal

X 2. The unit is in partnership with others in the community in the pursuit of sustainability.

Two(2) Department faculty and a large number of Architecture students participated in the recent East Central Indiana Muncie/Delaware County Living Lightly Fair.

Y N Goal

X 3. The unit participates in community events that address issues of sustainability.

Two(2) Department faculty and one(1) staff have participated in tree planting efforts in cooperation with the Red-tail Conservancy.

Y N Goal

X **4.** The unit has initiated community endeavors in pursuit of sustainability.

Three (3) Department faculty are actively engaged in the White River Corridor Reclamation Project; the Department has been actively engaged with Habitat for Humanity for several years.

Baseline of Existing Conditions

In preparing the short-form responses to the questions addressed in the previous section, the Department found that there was substantial confusing among faculty and staff as to what are the current Department activities related to sustainability. A key goal of the sustainability committee for the coming year is the development of a definitive baseline of such activities that can be shared with faculty, staff, and students in the Department of Architecture. The following information provides a sense of the current state of sustainability efforts in the Department.

A List of Academic Offerings

Topical Sustainability Lectures

A number of public lectures in the Emmens series presented in the College during Fall 2007 dealt with sustainability-related topics. These lectures were well attended by Architecture faculty and students. Several Architecture faculty are presenting in the upcoming Focus the Nation Program. It is harder to indicate the extent to which lectures on sustainability are incorporated into the daily course routine within the Department.

Topical Sustainability Modules

This area must be benchmarked by the Department.

Sustainability Courses

*As a sample...ID250 Introduction to Sustainability
ID400 Creating A Sustainable Future¹*

Sustainability Programs

The Department participates in the Clustered Minors in Environmentally Sustainable Practices program that constitutes an initiative that reaches across the entire campus. Students may obtain these minors as a complement to the academic degree they are pursuing.

Sustainability Concentration

A Concentration in Sustainability is currently offered as a 15-credit hour sequence in the graduate program of the Master of Architecture Professional Degree.

Sustainability Degree Offerings

The Department offers no named "sustainability" degree.

Sustainability Immersive On-and Off-Campus Experiences

The Department supports student and faculty involvement in such activities. The extent to which these experiences currently include substantive sustainability components is unclear.

¹ part of the Clustered Minors in Environmentally Sustainable Practices

Faculty, Staff and Student Activities

Professional Academic Organizations

Architecture faculty currently hold membership in:

<i>AASHE</i>	<i>Association for the Advancement of Sustainability in Higher Education</i>
<i>ULSF</i>	<i>University Leaders for Sustainable Future</i>
<i>USPESD</i>	<i>US Partnership for Education for Sustainable Development</i>
<i>HEASC</i>	<i>Higher Education Associations Sustainability Consortium</i>
<i>USGBC</i>	<i>US Green Building Council</i>
<i>AIA</i>	<i>American Institute of Architects</i>
<i>ASES</i>	<i>American Solar Energy Society</i>
<i>ASHRAE</i>	<i>American Society of Heating, Refrigerating and Air-Conditioning Engineers</i>
<i>IESNA</i>	<i>Illuminating Engineering Society of North America</i>
<i>SBSE</i>	<i>Society of Building Science Educators</i>

Professional Staff Organizations

Architecture staff currently hold membership in:

<i>ACE</i>	<i>American Council on Education</i>	<i>SCUP</i>	<i>College and University Planners</i>
<i>AACU</i>	<i>Association of American Colleges and Universities</i>	<i>ACUI</i>	<i>Student Unions</i>
<i>AACC</i>	<i>American Association of Community Colleges</i>	<i>ACPA</i>	<i>Student Life</i>
<i>AASCU</i>	<i>American Assoc. State Colleges and Universities</i>	<i>NACUFS</i>	<i>Nat. Assoc of C and U Food Services</i>
<i>ACUHO</i>	<i>Housing Officers</i>	<i>ACEED-I</i>	<i>Events and Conference Directors</i>
<i>NAEB</i>	<i>Educational Buyers</i>	<i>NACS</i>	<i>Campus Stores</i>
<i>APPA</i>	<i>Facilities Directors</i>		
<i>NACUBO</i>	<i>Business Officers</i>		

Student Associations and Clubs

Student clubs and organizations within the Architecture program include:

<i>AIAS</i>	<i>American Institute of Architecture Students</i>
<i>ASLAS</i>	<i>American Society of Landscape Architecture Students</i>
<i>EGB</i>	<i>Emerging Green Builders (US Green Building Council)</i>
<i>EAT</i>	<i>Environmental Action Team</i>
<i>NRC</i>	<i>Natural Resources Environmental Management Club</i>
<i>SSC</i>	<i>Students for Sustainable Campus</i>

Hybrid Fleet Vehicle Use

Faculty awareness and use of this resource are to be benchmarked.

Hybrid Electric Shuttle Bus Use

Faculty and student awareness and use of this resource are to be benchmarked.

Bicycling

Faculty and student use of this option is to be benchmarked.

Carpooling

Faculty and staff use of this option is to be benchmarked.

MITS Bio-Diesel Bus Use

Faculty and student use of this resource is to be benchmarked.

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

Faculty awareness and use of this option is to be benchmarked.

Operational Commitments in the Building We Occupy

Building Use: Lamps, Occupancy Sensors, Waterless Urinals

Opportunities to minimize the use of energy and water in Architecture Department-related building spaces will be benchmarked, and recommendations for implementation made. This effort will need to be coordinated with overall planning by CAP users of the Architecture Building.

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

Opportunities to minimize the use of virgin resources and better manage wastes in Architecture-related building spaces will be benchmarked, and recommendations for implementation made.

Food Use/Recycling: Local Sourcing, Washable Dinnerware

Opportunities related to these areas in Architecture-related functions will be benchmarked, and recommendations for implementation made.

Goals

Given the Department's assessment of where things currently stand, the following are identified as goals for the Department of Architecture.

Governance and Administration

Create a standing sustainability committee to coordinate information gathering, information dissemination, and goal setting.

Provide staff assistance to document sustainability activities that can provide a better benchmark for future efforts.

Integrate a statement on sustainability into the departmental mission statement.

Explore rewards for faculty/staff/students to actively engage sustainability issues.

Establish a Web page to present Department sustainability initiatives to faculty, staff, students, and the general public.

Operations

Request information on Energy Star rated equipment through University purchasing.

Request washable dinner/service ware for Architecture-related meetings and receptions.

Document locations that would benefit from occupancy sensors and request their installation. Likewise for waterless urinals.

Ask facilities to check thermostat settings for effective and efficient operations.

Curriculum

Allow students to credit ID250 and/or ID400 toward current degree offerings in our department.

Explore additional Departmental course offerings with an emphasis on sustainability.

Develop a catalog of sustainability-related course components within the Department.

Adopt the 2010 Challenge relating to climate change.

Research and Scholarship

Host a Departmental workshop on sustainability.

Expand the number of faculty attending conferences that address issues of sustainability – by means of institutional encouragement and rewards.

Expand participation by faculty in research related to sustainability – by means of institutional encouragement and rewards.

Encourage students (particularly honors students) to work with Department faculty on sustainability-related research and projects.

Catalog Departmental efforts in this area that relate to sustainability.

Community Service and Outreach

Expand participation by faculty in the Business Fellows Program.

Expand community outreach through broader participation in the available and developing program opportunities.

Catalog Departmental efforts in this area that relate to sustainability.

Implementation Plan

The Department has aligned action items within the 5-year cycling of the Strategic Plan and anticipates, given resources, being able to move forward in the areas described below.

2008 Objectives

Required Resources

<p>Governance and Administration</p>	
<p><i>Create a standing sustainability committee to coordinate information gathering, information dissemination, and goal setting.</i></p>	<p><i>Nominal staff time for data collection and participation.</i></p>
<p><i>Provide staff assistance to document sustainability activities that can provide a better benchmark for future efforts.</i></p>	<p><i>5 hours per week on average.</i></p>
<p><i>Integrate a statement on sustainability into the departmental mission statement.</i></p>	<p>-----</p>
<p><i>Explore rewards for faculty/staff/students to actively engage sustainability issues.</i></p>	<p><i>unknown</i></p>
<p><i>Establish a Web page to present Department sustainability initiatives to faculty, staff, students, and the general public.</i></p>	<p><i>nominal staff time</i></p>
<p>Operations</p>	
<p><i>Request information on Energy Star rated equipment through University purchasing.</i></p>	<p><i>nominal</i></p>
<p><i>Request washable dinner/service ware for Architecture-related meetings and receptions.</i></p>	<p><i>nominal</i></p>
<p><i>Document locations that would benefit from occupancy sensors and request their installation. Likewise for waterless urinals.</i></p>	<p><i>Nominal for investigation; capital budget for installation</i></p>
<p><i>Ask facilities to check thermostat settings for effective and efficient operations.</i></p>	<p><i>nominal</i></p>
<p>Curriculum</p>	
<p><i>Allow students to credit ID250 and/or ID400 toward current degree offerings in our department.</i></p>	<p>-----</p>
<p><i>Explore additional Departmental course offerings with an emphasis on sustainability.</i></p>	<p><i>0.25 FTE</i></p>
<p><i>Develop a catalog of sustainability-related course components within the Department.</i></p>	<p><i>nominal</i></p>
<p><i>Adopt the 2010 Challenge relating to climate change.</i></p>	<p>-----</p>

<p>Research</p> <p><i>Host a Departmental workshop on sustainability.</i></p> <p><i>Expand the number of faculty attending conferences that address issues of sustainability – by means of institutional encouragement and rewards.</i></p> <p><i>Expand participation by faculty in research related to sustainability – by means of institutional encouragement and rewards.</i></p> <p><i>Encourage students (particularly honors students) to work with Department faculty on sustainability-related research and projects.</i></p> <p><i>Catalog Departmental efforts in this area that relate to sustainability.</i></p>	<p><i>\$ 2000</i></p> <p><i>\$ 5000</i></p> <p><i>unknown</i></p> <p><i>nominal; support for research expenses would be positive</i></p> <p><i>nominal</i></p>
<p>Community Service and Outreach</p> <p><i>Expand participation by faculty in the Business Fellows Program.</i></p> <p><i>Expand community outreach through broader participation in the available and developing program opportunities.</i></p> <p><i>Catalog Departmental efforts in this area that relate to sustainability.</i></p>	<p><i>nominal</i></p> <p><i>nominal; reallocate interests</i></p> <p><i>nominal</i></p>

2009	Action Items	Resource Needs
	Governance and Administration <i>Further integrate the Departmental sustainability committee into the culture of the Department.</i>	-----
	<i>Ask faculty to purchase carbon offsets for conference travel.</i>	\$20 per trip
	Operations <i>Explore further improvements to the Architecture Building facility operations.</i>	unknown
	Curriculum	
	<i>Offer an additional new course in sustainability.</i>	.25 FTE
	Research	
	<i>Expand the number of faculty attending conferences that address issues of sustainability.</i>	\$ 5000
	<i>Expand participation by faculty in research related to sustainability.</i>	----
	Community Service and Outreach	
	<i>Expand participation by faculty in the Business Fellows Program.</i>	-----
	<i>Expand community outreach through broader participation in appropriate programs.</i>	----

2010	Action Items	Resource Needs
	Governance and Administration	
	<i>Ask faculty to purchase carbon offsets for conference travel.</i>	\$20 per trip
	Operations	
	<i>Request washable dinner/service ware for all Department meetings and receptions.</i>	----
	Curriculum	
	<i>Offer two additional courses in sustainability:</i>	.25 FTE and .25 FTE
	Research	
	<i>Expand the number of faculty attending conferences that address issues of sustainability.</i>	\$ 5000
	<i>Expand participation by faculty in research related to sustainability.</i>	-----
	Community Service and Outreach	
	<i>Expand participation by faculty in the Business Fellows Program.</i>	-----
	<i>Expand community outreach through broader participation in appropriate programs:</i>	\$ 1500

2011	Action Items	Resource Needs
Governance and Administration		
	<i>Require faculty to purchase carbon offsets for conference travel.</i>	\$20 per trip
Operations		
	<i>Require washable dinner/service ware for Departmental meetings and receptions.</i>	----
Curriculum		
	<i>Host a major lecture series on sustainability.</i>	\$ 15,000
Research		
	<i>Expand the number of faculty attending conferences that address issues of sustainability.</i>	\$ 5000
	<i>Expand participation by faculty in research related to sustainability.</i>	----
Community Service and Outreach		
	<i>Expand participation by faculty in the Business Fellows Program.</i>	----
	<i>Expand community outreach through broader participation in appropriate programs.</i>	\$ 1500

2012	Action Items	Resource Needs
	Governance and Administration	
	<i>Require faculty to purchase carbon offsets for conference travel.</i>	\$25 Per trip
	Operations	
	<i>Further explore operational improvements to the Architecture Building.</i>	unknown
	Curriculum	
	<i>Establish a Sustainability Certificate Program</i>	1.0 FTE
	Research	
	<i>Expand the number of faculty attending conferences that address issues of sustainability.</i>	\$ 7000
	<i>Expand participation by faculty in research related to sustainability.</i>	-----
	Community Service and Outreach	
	<i>Expand participation by faculty in the Business Fellows Program.</i>	----
	<i>Expand community outreach through broader participation in appropriate programs.</i>	\$ 1500