



# Sustainability Master Plan

June 2012

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### **Thank You to the current and former members of the Sustainability Council**

- MaryAnn Baenninger, President of the College of Saint Benedict
- Bret Benesh, Assistant Professor, Mathematics
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## **CSB, Stewardship and Sustainability: A History**

The impact of humans on the environment is of growing concern around the world as awareness of the finiteness of resources becomes more apparent. Businesses, educational institutions, and homeowners are seeking ways to live and operate more sustainably. As a Catholic, Benedictine institution, sustainability is central to our institutional values and mission. Sustainability has been an overt concern at College of Saint Benedict for decades, and it has been formally supported by each president since an environmental statement was first issued in 1992 (attach).

### *American College and University Presidents' Climate Commitment (ACUPCC)*

In 2006, a collaborative group of college and university presidents recognized the importance of building sustainability into the very fabric of their institutions if they were going to successfully prepare students as future leaders for the 21st century. The result was the formation of the American College and University Presidents' Climate Commitment (ACUPCC). In joining this effort, colleges and universities pledge to exercise leadership in their communities and throughout society by modeling ways to reduce global warming emissions, and providing the knowledge and the educated graduates to lead society's efforts toward climate neutrality.

MaryAnn Baenninger, the President of College of Saint Benedict (CSB) and a charter member of the ACUPCC Leadership Circle, signed the ACUPCC in 2007 in support of the College's commitment to stewardship and sustainability. Consequently, the College is committed to making decisions and taking actions that are: ecologically sound, socially just, and economically viable today and for future generations. To institutionalize this effort, the college established a formal structure in 2007 to coordinate existing sustainability efforts and develop a comprehensive plan leading to climate neutrality in accordance with the requirements of the ACUPCC. The College Sustainability Council was created to guide this process. In addition, the College completed a master planning process that requires the development of this sustainability plan and mandates a commitment to building at LEED silver or an equivalent.

In 2008-2009, the Council conducted the carbon audit, commissioned an external audit of the campus recycling system, participated in the Sustainability Tracking Assessment and Rating System (STARS) pilot project, established ACUPCC implementation goals geared toward achieving climate neutrality by 2035, established a post-graduate fellowship to support campus sustainability work, and contributed to ongoing campus projects including planning for our first LEED-certified building. The Council also recommended that a permanent, professional staff position of Director of Sustainability be established in 2010-2011 as the first step in creating an Office of Sustainability to coordinate all sustainability-related work. The director's role would be to assume responsibility for CSB's implementation of the ACUPCC and all other sustainability efforts. The director would also determine the staffing and resources needed to fully implement all identified sustainability goals, and then work with the Sustainability Council, President, and Board of Trustees to determine how best to provide the staffing and resources to meet those needs.

In the summer 2010, CSB hired a Director and officially opened an Office of Sustainability on campus. In 2010, a mission statement for the Office of Sustainability was developed, the Sustainability Council (Council) reformed, and a formal mission and charge for the Council were developed.

## **Office of Sustainability**

### **Mission Statement**

Broadly defined, sustainability means meeting society's present needs without compromising the ability of future generations to meet their own needs. As a Catholic, Benedictine institution, the College of Saint Benedict accepts that all creation is a gift from God; in exchange we are expected to care for creation and provide stewardship for the entire community of life on Earth. Our commitment to this stewardship, by definition, incorporates the principles of sustainability: our actions should be ecologically sound, socially just, and economically viable today and should continue to be so for future generations.

Because of our commitment to the Benedictine tradition and the principles of sustainability, we will work to emphasize and embed these concepts into our educational mission, the operation of the physical campus, and our outreach to communities beyond the college.

### **The Sustainability Council**

#### **Council Charter**

As an institution committed to the Benedictine tradition and the principles of sustainability, we will work to emphasize and embed these concepts into our educational mission, the operation of the physical campus, and our outreach to communities beyond the college.

The Sustainability Council (the Council) will lead our efforts to become more sustainable by providing guidance and recommendations to the President, through the Chief Financial Officer (CFO) and the Director of Sustainability. Specifically, the Council will:

1. Offer guidance on sustainability planning and implementation efforts to those charged with implementation. This will include adherence to the tenants of the American College and University Presidents Climate Commitment.
2. Serve as the President's and the Cabinet's chief advisory body on issues related to sustainability.
3. Review policy recommendations which promote sustainability, including such areas as the conservation of resources, energy efficiency, waste reduction and recycling, emissions reduction, use of renewable energy sources, healthy and safe environmental practices, and the sustainable operation of college facilities.

4. Provide annual tracking and reporting to the campus community to assist in decision-making on sustainability initiatives.
5. Provide leadership in the development, review, and implementation of the college's Sustainability Master Plan.
6. Provide vision and encourage community participation in actively incorporating sustainability into the culture of the college through example, education and leadership.
7. Participate in decision-making related to energy use and consumption, sustainable building construction and renovation, and grant proposal development and fund-raising activities related to sustainability.
8. Serve as the liaison between campus groups dedicated to environmental responsibility and sustainability.

### **Council Membership**

The Council will be comprised of:

1. Two to four faculty representatives (including the Chair of the Environmental Studies Department)
2. The President's Chief of Staff (or designee)
3. The Dean of Students (or designee)
4. Two staff representatives
5. One monastic representative
6. The Chief Financial Officer
7. The Executive Director of Facilities
8. Two students, including one designated by the Senate
9. One or two St. Joseph community members
10. The Director of Sustainability, Chair
11. The Sustainability Fellow, Secretary

The Chief Financial Officer will appoint council members. Faculty and staff representatives will be appointed for two year terms. Student will be appointed for one year terms. Terms will begin on July 1<sup>st</sup> each year and conclude on June 30<sup>th</sup> of the following year.

The Council may invite guests from the campus community to serve on ad hoc committees or provide expertise to the Council as needed. The Council Chair may seek the mayor's input in selecting St. Joseph community representatives.

Ad hoc committees or sub-committees may be formed at the discretion of the Council. All committees will include a cross section of the campus community; the Director of Sustainability appoints the Chair.

### **Sustainability Master Planning Process**

The Council began plan development with a visioning process centered on the following question: *Envision a campus where sustainability is the norm. What do you see?* Council members shared, refined, and prioritized individual responses, identifying the following areas as priorities for inclusion in the SMP responsible consumption, sustainable facilities, transport, food & dining, partnership and outreach, grounds, and education/curriculum. The concepts of identity and equity were identified as overarching values that should be embedded into each of the other categories.

### **Quantification of Sustainability**

Two principle measures of sustainability will be used to benchmark and track program effectiveness; the Sustainability Tracking Assessment & Rating System (STARS) and the Greenhouse Gas Inventory.

#### **STARS**

The Association for the Advancement of Sustainability in Higher Education (AASHE) developed a comprehensive tool to enable colleges and universities to gauge progress towards sustainability in a number of areas. STARS provides a clear and thorough system by which CSB can benchmark current sustainability efforts, set goals for the future and track progress towards those goals. CSB participated in the piloting of this program. Stars ratings are ranked from highest to lowest; platinum, gold, silver, bronze, and reporter. In the spring of 2011, CSB earned a silver rating for the 2009-2010 academic year.

#### **Climate Neutrality, Greenhouse Gas Inventory and the ACUPCC**

Under the direction of the Sustainability Council, an initial greenhouse gas (GHG) audit was completed in the summer 2008. This represented the first effort to formally collect GHG data on campus and consequently suffers from significant data holes; in some areas, transportation, for example, few records exist so the results include some good-faith estimates that will be adjusted as future data become available.

The most challenging task before the Council was to set appropriate target for GHG reductions and place us on a realistic path toward the final ACUPCC goal of climate neutrality.

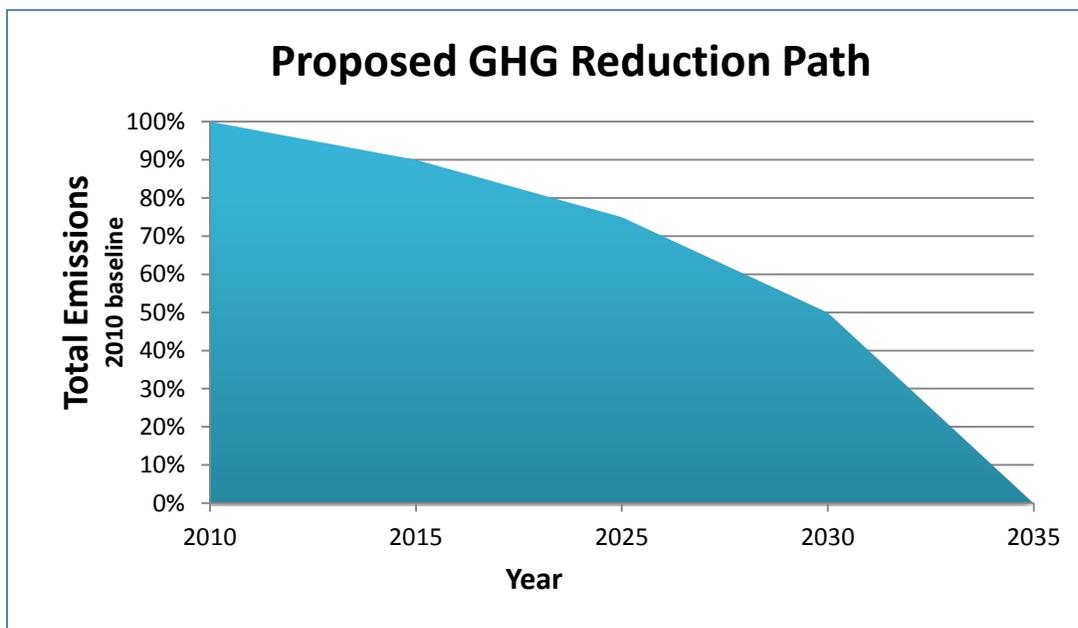
Climate neutrality is defined as achieving a state where the operation of an entity has zero-net emission of greenhouse gases. The key word here is “net.” Since most forms of energy, many materials and waste all contribute to GHG emissions; it is highly unlikely that any institution will be able to achieve zero absolute emissions of GHG without the purchase of offsets.

An offset is a quantified GHG reduction purchased and used to negate or cancel out an equivalent emission from the operation. The term *carbon* is used in this context interchangeable with GHG. This is done because although there are numerous types of GHG, the differential effect of each is converted into a common term of carbon dioxide equivalents (CO<sub>2</sub>e) based upon their relative effectiveness at

producing heat once released to the atmosphere. In turn, carbon dioxide can be related to the carbon portion of the compound using molecular weight ratios. In other words, because carbon dioxide is the most common GHG, it is the unit of measurement for all GHGs. A different GHG – methane, for example – is 23 times more harmful than CO<sub>2</sub>; a single unit of methane is counted as 23 units of CO<sub>2</sub>e. Therefore, the term *carbon offset* refers to a reduction in emissions of any GHG.

The International Panel on Climate Change (IPCC) has recommended reductions of 25%-40% below 1990 levels by 2020 and reductions of 85%-95% below 1990 levels by 2050. The Next Generation Energy Act (Minn. Stat. § 216H.02) established reduction targets for the State of Minnesota of 15% from 2005 levels by 2015, 30% by 2025, and 80% by 2050.

College of Saint Benedict plans to achieve climate neutrality by 2035. In setting a final goal of 2035 we believe we are being as aggressive as possible given the many unknown factors involved; the interim targets for 2015, 2025, and 2030 are intended to create momentum and accountability in the early stages of the process.



The purchase of carbon offsets is not feasible until sufficient, dedicated funding sources are identified. When feasible, CSB plans to purchase offsets from sources generated in close proximity in support of the local community and the State of Minnesota.

## Priority Areas for Implementing Sustainability

As noted above, the Council identified the following areas as priorities for inclusion in the SMP:

1. Food and Dining
2. Grounds
3. Partnership and Outreach
4. Responsible Consumption
5. Sustainability Education
6. Sustainable Facilities (Buildings and Energy)
7. Transportation

Priority areas are listed alphabetically-and all are considered equally important- Efforts in each will overlap with some or all of the other identified priority areas. In addition to these specific priority areas, the Council identified two overarching values that underpin all of CSB's sustainability efforts: equality and the community's collective sense of identity. In particular, this SMP strives to instill the following as we work as a community to make sustainability a part of our culture:

- Sustainability is a key part of our collective identity,
- The entire institution works towards this collective goal,
- Students, faculty, and staff actively engage in their surroundings, question unsustainable practices and seek more sustainable alternatives.

An overall vision, related policies, specific measurable goals, and strategies for reaching those goals are outlined below for each priority area. Goals and action items are laid out according to specific timeframes as follows:

**Short Term:** September 2011-June 2013

**Medium Term:** July 2013-June 2015

**Long Term:** July 2015 and beyond

## Sustainability Master Plan Acceptance, Implementation and Effectiveness Tracking

### SMP Acceptance

The Sustainability Council will accept the policy by majority vote. The policy will then be shared with the appropriate campus constituencies, including: the CSB Cabinet, the CSB Student Senate, the Faculty Senate, the administrative and support staff assemblies, and the CSB Building and Grounds Committee.

Once this has been achieved, the Office of Sustainability with the Sustainability Committee will oversee the implementation and updates to the SMP.

### **SMP Implementation**

Implementation of the action plans for each priority area is the responsibility of working groups composed of members of the Sustainability Council. It is the responsibility of these working groups to identify internal and external partners and to oversee the implementation process for each identified action item and the overall goals.

### **Tracking Program Effectiveness - Review and Revision**

The Office of Sustainability will be responsible for gathering data, annual reporting and managing the ongoing implementation of the SMP including review of progress and program revision. During the spring semester each year, sustainability staff will review progress towards the goals set out by the SMP. During that process, the group will also determine specific objectives for the upcoming year. A report will be made to the Sustainability Council of this annual process including recommendations on objectives for the upcoming school year.

Every two years, the sustainability staff and the Sustainability Council will collaborate to formally review the SMP and modify the SMP as needed to ensure that it continues to align with the overarching goals laid out by the college. Major revisions will be voted upon by the Sustainability Council prior to modifying the SMP.

## **Action Plans by Priority Area**

### **Food and Dining**

**Vision: The College of Saint Benedict will have flavorful, nutritious food that was produced with minimal environmental impact.**

#### **Goals**

1. Increase the purchase of locally and organically produced food by 2% annually by cost.
2. Decrease food waste generated by 2% annually by weight.
3. Increase student awareness of the origins of their food and the environmental, social and economic impacts of choice.
4. Eliminate the use of plastic service ware and packaging for take away foods.

#### **Existing Actions/Strategies**

1. Tray less dining in Gorecki.

#### **Proposed Strategies**

1. When food is available locally, dining facilities will purchase it locally 90% of the time.

2. Eliminate the use of plastic service ware and packaging for take away foods.

### **Strategies and Action Items**

#### **Short Term (September 2011-June 2013)**

1. Work with Culinary Services to successfully go trayless in Gorecki.
2. Define what is meant by “local” and then:
  - a. Develop a list of food producers that meet that definition
  - b. Identify which of these producers we already use
  - c. Identify those that we can begin to use
  - d. Identify the gaps
3. Track food waste and publicize the data including:
  - a. Type of foods most typically wasted
  - b. Cost of food waste disposal method
4. Research options for food waste management (food to people, food to hogs, composting) to determine:
  - a. If food to hogs is our best option overall
  - b. How can we begin to develop a food to people donation program
  - c. The appropriate food waste management method
5. Brainstorm the logistics of moving towards a more seasonal menu and educational awareness strategies for the campus community.
6. Quantify the number of meal choices available and publicize the findings. Explore the impact of reducing the number of options provided.
7. Identify disposable containers used at Good 2 Go, McGlynn’s and O’Connell’s and develop a strategy to replace those items with reusable ones.
8. Where disposable items are necessary, purchase disposable items that can be successfully recycled or composted within CSB’s system.

#### **Medium Term (July 2013-June 2015)**

1. Develop an implementation strategy for shifting toward a more season-based menu.
2. Complete the transition from the use of disposable containers to reusable ones.

Others to be developed in annual assessment on progress of short term efforts.

#### **Long Term Goals (July 2015 and beyond)**

To be developed in annual assessment on progress of short and medium term efforts.

### **Grounds**

**Vision:** The College of Saint Benedict will use a sustainable approach to beautify and manage the landscape environment in support of the Benedictine value of sense of place, maintaining the landscape

in a sustainable manner while, at the same time, provide sufficient green space for recreation and events. Native flowers, grasses and gardens that reflect Minnesota's landscapes and require minimal watering, cultivating food and fruits on College-owned land for use by the college community and to educate consumers about local food production are identified priorities.

### **Goals**

1. Incorporate sustainability principles into the College's landscape master plan.
2. Reduce the need for fossil-fuel powered equipment by 10% by 2014 by replacing with electric and/or manual tools where possible without unduly sacrificing efficiency.
3. Reduce the use of chemicals for fertilizer and ice melt by 25% by 2020.
4. Increase the square footage of natural areas including prairie and native plants by 12% by 2015.
5. Reduce the need for irrigation by 25% by 2020.
6. Implement the use of gauges for the irrigation system.

### **Existing Strategies**

None

### **Proposed Strategies**

1. 40% of native species for each new planting area
2. Replace 20% of existing vegetation with native species as plants need to be replaced.
3. Plant at least one tree for every tree cut down
4. Water retention system for irrigation
5. Irrigation based on need rather than timers

### **Strategies and Action Items**

#### **Short Term (September 2011-June 2013)**

1. Work with facilities to appoint a sustainability designee to the committee responsible for the landscape master plan.
2. Poll groups who would be affected by a substantial change in the College's approach to landscaping including residential life, events personnel, sports teams, the local community, and others as identified.
3. STRONGLY recommend the incorporation of sustainability principles into the College's landscape master plan.
  - a. Increase natural habitat, the use of native species, prairie restoration, and food production area.
  - b. Improved storm water control
  - c. Encourage biodiversity by creating livable habitats
  - d. Convert unused lawn space to low maintenance landscaping (preferably native)
  - e. Create a turf management plan that balances sustainability with the ability to grow and maintain turf grass that can sustain heavy use. Decrease machine maintenance (lawn mowing, etc.)

- f. Place trees and shrubbery in areas that do not interfere with natural light patterns to help keep Building heating and cooling needs down
4. Analyze current use of chemicals for melting ice. Identify alternatives including availability, pricing, and effectiveness. Make recommendations to the Grounds department based on this work.
5. Develop an avenue for information sharing on the landscape master plan, use of chemicals, and watering strategy via the sustainability web pages.
6. Develop an Adopt an Area Program whereby campus groups (dorms, offices, clubs, teams, etc.) accept responsibility for maintaining designated areas on campus. Provide education for these groups so areas are tended with care and some wisdom -- perhaps even use of environmental studies students, internship and experiential learning opportunities or others with landscape sense to help plan the revised gardens/commons areas, etc.
7. Develop a strategic plan for producing food on campus (how, where, when, who)
  - a. Explore the option of working with the monastery and Common Ground Garden.
  - b. Explore the areas identified by landscape master plan assessment

#### **Medium Term (July 2013-June 2015)**

1. Implement the strategic plan for food production on campus.
2. Continue effort to reduce the use of fossil-fuel powered equipment.
3. Launch the Adopt and Area Program.

#### **Long Term Goals (July 2015 and beyond)**

1. Increase the number of groups involved in the Adopt an Area program by 2% over 2015.

Others to be developed in annual assessment on progress of short and medium term efforts.

#### **Partnership/Outreach**

**Vision:** Improve CSB's long term sustainability through the intentional cultivation of strategic partnerships and outreach internally, locally, nationally and internationally. This includes caring for environment and people, expanding others' awareness of the College and the College's awareness of others. This will increase opportunities to serve and educate on sustainability related issues as avenues to support and advance the college's commitment to the Benedictine values. Specifically, CSB will foster:

- A strong and growing commitment to internal sustainability.
- A strong and growing partnership between the City and the College.
- A strong and growing partnership with alumnae involved in sustainability-related professions.
- Active pursuit of sustainability-related research by faculty and students.
- Sustainability-related study abroad programs

**Scope:** Internal partners, City of St. Joseph, local and statewide communities, organizations, businesses, education institutions, international partners.

### **Goals**

1. To strengthen and build on internal relationships at the College
2. To strengthen and build on the existing relationship between the College and the monastery, the City of St. Joseph and local businesses and organizations to improve and strengthen the community to the benefit of all.
3. To expand CSB's connections statewide and nationally through partnering with alumnae, businesses and other higher education institutions.
4. To expand CSB's sustainability initiatives internationally through the College's study abroad programs.

### **Existing Strategies**

None

### **Proposed Strategies**

None

### **Strategies and Action Items**

#### **Short Term (September 2011-June 2013)**

Evaluate existing partnerships and opportunities, identify new partners, develop a strategy and plan for expanding long term.

1. Designate a point person in the Office of Sustainability to oversee.
2. Work with Admission to include sustainability education in admission publications (website, *Sustainable CSB!* mailings, acceptance letter) as an asset to promote the college and attract students.
3. Develop an intentional program that supports and encourages faculty to pursue scholarship and research in sustainability.
  - a. Identify faculty who are already involved and work with them to flesh out ideas on how to pursue sustainability-related research.
  - b. Identify faculty who may be interested if the opportunity presented itself.
  - c. Formally present options including funding to faculty and staff (Professional Development Grants, loan fund, green fund, other?).
4. Develop an intentional program that supports and encourages staff to pursue education in sustainability.
  - a. Identify staff are already involved in this.
  - b. Identify staff who may be interested if the opportunity presented itself.
  - c. Hold an educational event geared towards staff annually.
  - d. Identify and promote off-campus opportunities for staff to learn more about sustainability. (Funding may be available through Professional Development Grants)

5. Strengthen College connections to the monastery.
  - a. Identify existing connections and avenues by which those can be strengthened
  - b. Identify ways to increase CSB volunteerism to the monastery.
6. Strengthen College connections to the City.
  - a. Identify what connections currently exist, the nature of those connections, and how they can be strengthened.
  - b. Identify new paths with potential to strengthen ties (monthly article in the *Newsleader*, volunteerism)
  - c. Identify local service organizations, the nature of the College's relationship with them, if any, and avenues to build those relationships (speaking engagements, membership)
  - d. Actively support the Co-op, Millstream Art Festival, St. Joe Pride Day, etc.
  - e. Host a CSB Open House once per year for community. This may include tours of facilities and grounds, presentation on sustainability, student/faculty research etc. Invite clubs, organizations, and leaders in the community. Hold in summer?
7. Work with the alumnae office to build up the Green Fund, identify alumnae working in sustainability-related fields and evaluate the potential for partnering with them (presentations, internships, support).
8. Strengthen sustainability education internationally
  - a. Continue participation in the short term study abroad program to Ecuador that already includes a greenhouse project.
  - b. Identify other existing study abroad programs that could include a sustainability focus.
  - c. Develop coordinated efforts to partner with the service-learning and education abroad offices to partner.

#### **Medium Term Goals (July 2013-June 2015)**

To be determined by work of the first two years.

#### **Long Term Goals (July 2015 and beyond)**

To be determined by work of the first two years.

### **Responsible Consumption**

**Vision:** Cultivate a culture where all community members are cognizant of the impact of their actions on others and the environment; a place where we value spending time with one another.

#### **Existing Policies**

1. EnergyStar requirement for purchase of appliance and computer equipment.
2. Prohibition of the sale of plain bottled water on campus and the use of college funds to purchase plain bottled water.
3. Printing Policy (charges for printing in excess of 500 sheets per semester)
4. Guidelines for temperature standards in buildings.

### **Proposed Strategies**

1. Departments to develop annual sustainability-related goals.
2. Limiting the number of small appliances (fridges, space heaters, TVs, etc.) in residence halls and offices.
3. Institution-wide standard for use of green cleaning products.
4. Integrate CSB's commitment to sustainability into job descriptions across all sectors.

### **Goals:**

1. Instill energy conservation into the culture of the institution as a fundamental value and priority through the development and implementation of an Energy Conservation Program.
2. Change or retrofit energy systems to make campus physical operations more energy efficient.
3. Reduce waste related to trash, printing, food, time, and expense.
4. Increase the percentage of materials recycled annually.
5. Annually track perception and knowledge of sustainability through an online survey.

### **Strategies and Action Items**

#### **Short Term (September 2011-June 2013)**

1. Draft a Sustainability Pledge based on that used by the Athletic Department in 2010-11; use it to educate faculty, staff, and students.
2. Investigate the availability and viability of sweatshop free athletic and college clothing and equipment.
3. Implement a streamlined recycling system. Track materials recycled and materials landfilled. Use the data as a tool to educate.
4. Develop and implement a comprehensive Energy Conservation Program campus-wide.
5. Revitalize, promote and publicize the Ride Share board or equivalent.
6. Investigate the use of vending machine misers.
7. Continue and expand the student Swap Shop.
8. Complete the conversion to low flow toilets and showerheads.
9. Develop a survey related to commuting by faculty, staff, and students to be used as a baseline.
10. Investigate options for reducing the impact of college-related travel.
11. Evaluate the potential to shift billing for heating and cooling to reflect usage.

#### **Medium Term (July 2013-June 2015)**

Will be developed and incorporated during the annual SMP review based on the short term goals.

#### **Long Term Goals (July 2015 and beyond)**

To be developed in annual assessment on progress of short and medium term efforts.

### **Sustainability Education**

**Vision:** CSB will work to develop an education initiative, including faculty, staff, students, and the community that systematically builds understanding of sustainability and implementation of sustainable processes; a curriculum that broadly infuses sustainability across disciplines so that CSB graduates have a basic knowledge of the important role sustainability plays in their chosen profession.

### **Goals**

1. Provide annual sustainability-related professional development opportunities for staff beginning in 2012.
2. Faculty development opportunities in sustainability will be offered annually.
3. Institutionalize the “Blue Stem Project,” modeled on the Ponderosa and Piedmont Projects for faculty training in the inclusion of sustainability in course curricula.
4. Students will have the option to achieve a sustainability certification as part of their academic experience by the 2015-16 academic year.
5. 20% of professors are offering sustainability-related content in their courses by the 2015-16 academic year.

### **Existing Strategies**

None

### **Proposed Strategies**

None

### **Strategies and Action Items**

#### **Short Term (September 2011-June 2013)**

1. Establish a system to track and promote sustainability focused and related courses and the percentage of students enrolling in these courses.
  - a. Work through the Dean’s Office and Department Chairs to establish a baseline for the number of courses that already relate to sustainability.
  - b. Establish a baseline for the class of 2010 to quantify what percentage of the class took a sustainability- related course.
2. Begin the process to develop a certification program (branch of ILCP?) including the purpose and goals of such a program. Identify requirements, partners for success, and marketing strategies.
3. Develop faculty outreach from the Office of Sustainability including:
  - a. First Year Seminar courses (FYS)
  - b. Offers to teach sustainability-related materials in classes
  - c. Development of a Resources to Faculty webpage which includes a list of sustainability related research projects
4. Develop the Blue Stem Project for faculty training and launch in May 2012 with the goal of 20 participants.
5. Provide a sustainability-related education/training event for staff annually.

### **Medium Term (July 2013-June 2015)**

1. Assess the effectiveness of the Office of Sustainability outreach efforts to the FYS classes and the Resource page for faculty.
2. Evaluate the effectiveness of the Blue Stem Project and determine how to improve it. Implement these changes and re-offer.
3. Finalize the certification program and implement.

### **Long Term Goals (July 2015 and beyond)**

To be developed in annual assessment on progress of short and medium term efforts.

### **Sustainable Facilities (Buildings and Energy)**

**Vision:** CSB will operate energy efficient facilities, providing healthy indoor air quality for students, faculty and staff. This will include design and construction with the focus on ensuring buildings last 100 years, maximizing energy efficiency, promoting net zero energy consumption where possible, and utilizing renewable materials with the lowest impact and life cycle cost practicable.

#### **Goals**

1. Use of lifecycle analysis to guide new building construction and renovations.
2. Repurpose/reuse buildings wherever possible.
3. Reduce our dependence on fossil fuel by developing a renewable energy policy and installing some type of renewable energy system in all newly constructed buildings beginning in 2014.
4. Maximize energy conservation through incentives and technology. Provide real-time energy use data to students, faculty and staff.

#### **Existing Policies**

1. Sustainable Building Policy
2. Set point standards for heating and cooling

#### **Proposed Policies/Strategies**

1. Building guidelines for new construction and renovations.
2. Internal Air Quality standards.
3. Vendor/contractor requirements to follow our sustainable building guidelines and standards.
4. Specific percentage of energy needs provided by renewable sources.

### **Strategies and Action Items**

#### **Short Term (September 2011-June 2013)**

1. Develop Sustainable Building Guide for New Construction and Renovation Projects

- a) Develop and adopt a set of guidelines to require that building designs incorporate sustainable and energy efficient strategies that are important to the CSB community. This guide will help the third-party designers understand what is important to CSB, and may help future construction projects deliver more energy efficient buildings.
  - b) Require all projects on campus to follow these guidelines.
  - c) Draft vendor/contractor guidelines and standards.
  - d) Develop a comprehensive list of local vendors and contractors who meet the guidelines and standards. Draft and vet a renewable energy policy.
  - e) Investigate the feasibility of wind, solar and other renewable energy sources and make recommendations.
    - o Develop and begin implementing a plan for a community based solar array on campus including identification of which buildings are appropriate and identification of community partners.
    - o Solar energy capture and transfer for powering electric vehicles.
    - o Investigate innovative ways to finance solar and wind energy on campus.
2. Investigate the viability of a community based solar array system.

#### **Medium Term (July 2013-June 2015)**

1. Implement the community based solar array project if research indicates.

Will be developed and incorporated during the annual SMP review based on the research conducted from September 2011-June 2013.

#### **Long Term Goals (July 2015 and beyond)**

To be developed in annual assessment on progress of short and medium term efforts.

### **Transportation**

Transportation includes the College's vehicle fleet, on campus vehicles, business air travel, and The Link (transport between the College and St. John's University). According to the "College of Saint Benedict Greenhouse Gas Inventory Report, 2009-2010" issued December 2010, faculty/staff and student commuting and the CSB campus vehicle fleet accounted for 24.33% of total CSB GHG emissions in 2010.

**Vision:** Zero carbon transportation within 10 years -- including transportation between the two campuses.

#### **Goals**

1. Reduce transportation related greenhouse gas emissions, including business air miles, commuting, campus vehicles, and The Link by 2% by 2018.
2. Reduce the use of fossil fuels used by the campus fleet by 2% by 2018.

3. Reduce the number of cars on campus by 2% by 2015.
4. Minimize individual trips by car between the two campuses.
5. Fine tune the system for tracking faculty, staff, and student commuting miles and develop a reduction goal.
6. Promote safe biking on campus and between campuses.

### **Existing Strategies**

None

### **Proposed Strategies**

1. Replacement of all vehicles with electric vehicles or the most efficient vehicle available by a specific date or as they need to be replaced.
2. "Tax" all air travel for college business and place funds in an account for use to purchase support efforts to reduce reliance on fossil fuels.

### **Strategies and Action Items**

#### **Short Term (September 2011-June 2013)**

1. Inventory the campus fleet to determine age, use, emissions per year, and timeframe for replacement.
2. Using life cycle analysis, research alternatives to fossil fuel--based cars and buses including availability, cost, environmental impact, greenhouse gas emissions, etc.
3. Improve the system by which greenhouse gas emissions related to faculty, staff, and student commuting are calculated.
4. Poll faculty and staff to determine the current number of electric vehicles used. Determine the quantity of recharge stations that makes sense short and long term.
5. Inventory the length of commuter trips made by faculty/staff and students.
6. Brainstorm and analyze methods to incentivize students to ride the Link and faculty and staff to car pool and/or reduce commuting (parking charges, no charge for electric vehicle or car pool, preferred parking spaces, Rideshare, ZipCar, etc.)
7. Research sustainable sources of energy (solar, wind) related to producing electricity for vehicles.
8. Evaluate the Green Bike Program; support and expand.
9. Open the LINK to use by St. Joseph residents.

#### **Medium Term (July 2013-June 2015)**

Will be developed and incorporated during the annual SMP review based on the research conducted from September 2011-June 2013.

#### **Long Term Goals (July 2015 and beyond)**

To be developed in annual assessment on progress of short and medium term efforts

