# Toward Sustainability.

a sustainable **Stonehill** 

2012 - 2018



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### **EXECUTIVE SUMMARY**

Stonehill College recognizes its unique opportunity to educate young adults who will one day develop the social, economic and technological solutions that improve sustainability and justice throughout this one world that we all share. The College aims to promote awareness of environmental issues in our community and around the world through community based learning, educational programs and events, and campus wide initiatives that will encourage environmentally friendly practices among students, faculty and staff. By integrating the practice of sustainability into everyday life at Stonehill, students and graduates are able to think, act and lead with courage toward the creation of a more just, compassionate and sustainable world.

In accordance with its mission, Stonehill College is committed to reducing its carbon and ecological footprints. This Sustainability Plan includes a comprehensive strategy with objectives that will establish institutional practices that promote environmental sustainability, which includes measures to increase energy and water efficiency while decreasing waste generation. Stonehill College set ambitious goals in this Sustainability Plan, including reducing energy intensity by 20% without purchasing renewable energy credits. The actions needed to achieve these goals are outlined in this Sustainability Plan. The preliminary targets set forth are as follows:

Resource	Goal: Reduction Below 2011
Energy Intensity	20%
Water Usage	20%
Greenhouse Gas Emissions	20%
Solid Waste	10%

Achievement	Goal
AASHE STARS Rating	Bronze in 2015
AASHE STARS Rating	Silver in 2018
Organic Food	25% by 2016
Locally Grown Food	25% by 2016
Recycling Rate	25% by 2018

### I. PURPOSE

The development of a Stonehill College Sustainability Plan was initiated in the fall of 2011 by Jeanne Finlayson, Vice President for Finance and Treasurer and Katie Conboy, Provost and Vice President for Academic Affairs, at the request of Father Mark T. Cregan, President of the College at that time. This document is intended to serve as a roadmap for the College in identifying:

- Programs and projects to pursue
- Timelines and performance metrics to measure and track
- Processes to guide continuous engagement, support and decision-making
- Defined roles and responsibilities to ensure effective and efficient implementation and accountability

## **II. BACKGROUND**

The sustainability movement in higher education is one of the most prominent student and institutional initiatives of the first decade of the 21<sup>st</sup> century. There is no evidence that it is a passing trend; rather, it this movement has expanded and now affects all elements of campus life. It is important to note that sustainability is not defined as synonymous with environmentalism. Today, most uses of and references to sustainability emphasize the concepts simultaneous economic, environmental, and social dimensions.

## Sustainability in Higher Education

Greenhouse Gases and Carbon Neutrality	As of the fall of 2012, 660 institutions have pledged to achieve carbon neutrality in the future under the American College and University Presidents' Climate Commitment. The majority of these institutions have developed climate action plans, which provide a roadmap for how each will achieve greenhouse reduction goals.
Sustainability Performance	As of the fall of 2012, 382 institutions have registered voluntarily for
Reporting	the Sustainability Tracking, Assessment & Rating System, which is a transparent, self-reporting framework for colleges and universities to measure their sustainability performance.
Sustainability Education	Advancing sustainability education through the development of dynamic and academically rich curriculum is a strong priority at many colleges and universities. The purpose is to prepare learners for living in a sustainable world and that explicitly help each learner deeply understand the interactions, interconnections, and the consequences of actions and decisions.
Solar Installations	U.S. higher education solar capacity increased 450% from 2008 to 2011. As of the fall of 2012, AASHE's Campus Solar Photovoltaic Installations database contained information on 436 solar photovoltaic installations on 282 campuses in 42 states and provinces. The total capacity at that time was 124,199 kilowatts, and the average capacity is 286 kilowatts.

**LEED Green Building** 

Leadership in Energy and Environmental Design (LEED) standards, developed by the U.S. Green Building Council, have transformed building at higher education institutions. In a sample size of 53 of these institutions, including the top 25 colleges in the 2011 U.S. News & World publication, all but 6 are committed to explicitly require that new design and construction projects achieve LEED-NC equivalency, at a minimum, but all of these schools have registered at least one project with the USGBC, intending to receive a LEED certification in the future.

**Funding** 

As of the fall of 2012, at least 33 colleges and universities are managing green revolving loan funds totaling \$65 million. These funds are typically used to fund environmental projects on campus that have strong returns on investment. The goal of an organization called the Sustainable Endowments Institute (SEI) is to increase this figure at U.S. colleges and universities to \$1 billion.

**Organizational Support** 

The growth of the campus sustainability professional and office can only be seen as phenomenal. In 2005, there were fewer than 25 such offices/professionals. In 2011, the number is estimated conservatively at greater than 300.

Faith Leadership

The Catholic Coalition on Climate Change has published a toolkit for catholic universities and colleges that are pursuing sustainability initiatives. The toolkit, <u>Sustainability and Catholic Higher Education:</u> A Toolkit for Mission Integration, is organized around the five main principles of the Catholic Climate Covenant: pray, learn, assess, act and advocate.

Competitiveness

The Princeton Review and U.S. News and World Report rate colleges and universities on their institutional sustainability presumably because students and their parents are interested in these criteria as it relates to selecting a college.

Reputational Capital and Development

There are myriad anecdotal stories and high profile examples of philanthropy related to campus sustainability projects and initiatives.

## Sustainability at Stonehill College

Since its inception, Stonehill College has maintained a strong commitment to the College's social, community outreach and service learning missions. More recently, its mission has actively targeted sustainability in the areas outlined below.

Recycling and Waste

Students and Facilities Management have worked together over from FY14 to FY14 to provide additional recycling containers in more locations throughout campus. The college's diversion rate, which is the percentage of the campus' total waste that is diverted from disposal, increased to a 17% in FY10 from a rate of less than 10% in FY08. More importantly, the total quantity of waste generated on campus has been on the decline since FY10.

Supporting Local Agriculture

The Farm at Stonehill is a strong community project that serves environmental, social mission and educational goals. Initiated in Spring 2011, the Farm, which is part of the Mission Division, is a 1.5 acre sustainable, organic farm that grows and distributes produce to local organizations serving the needs of the disadvantaged. In addition to operating the Farm, the manager, Bridget Meigs, teaches a course as part of a learning community called Food Politics that is focused on food access and distribution issues. <a href="https://www.stonehillblogs.org">www.stonehillblogs.org</a>

Institutional Leadership

The Environmental Stewardship Council was established in 2009 to foster proactive environmentally sustainable policies, approaches and practices by the campus community, consistent with Stonehill College's mission, guiding principles, and student learning goals and outcome. The Council, chaired by Professor Susan Mooney, encourages student led initiatives and coordinates campus operational projects including the recycling program, access to Zipcar vehicles on campus, and Eco-Rep program in the residence halls.

In 2011, its institutional role was bolstered when the Council was asked to serve in advisory capacity to the Strategic Planning Committee. The Council is comprised of more than twenty faculty, staff and students representing multiple classes, departments and offices.

http://www.stonehill.edu/offices-services/stonehill-goes-green/membership/

Additionally, on Earth Day (April 22, 2012), Stonehill College became the 12<sup>th</sup> Catholic college to commit to the St. Francis Pledge of the Catholic Climate Covenant, which calls upon those who study, live and work at Catholic colleges to protect God's creation and to advocate on behalf of people in poverty throughout the world who are hardest hit by climate change., it's institutional role was bolstered when the Council was asked to serve in advisory capacity to the Strategic

Planning Committee. The Council is comprised of more than twenty faculty, staff and students representing multiple classes, departments and offices.

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Student Initiatives

Students, acting both individually and through groups such as Students for Environmental Action (SEA), Student Government Association (SGA), Activism Club, Residential Hall Eco-Reps, and Mindful Living House, have been successfully implemented initiatives involving dining hall improvements, banning of bottled water, and increasing recycling.

**Energy Usage** 

Despite the increase in the building square footage on campus – notably the addition of the Shields Science Center and new Residence Hall -- the total electrical usage has decreased slightly over the past three years.

In 2009 and 2011, two new buildings were constructed, which resulted in increased energy consumption. Both buildings were constructed with many energy efficient features and additional energy efficiency projects were completed in other buildings during this time period. As a result, the campus' energy intensity, which is the energy used per square foot, has decreased by 3.3% since FY05.

**Green Building** 

The New Residence Hall (2010) and the Shields Science Center (2009) incorporated many green building features including enhanced water and energy conservation and efficiency.

**Dining Services** 

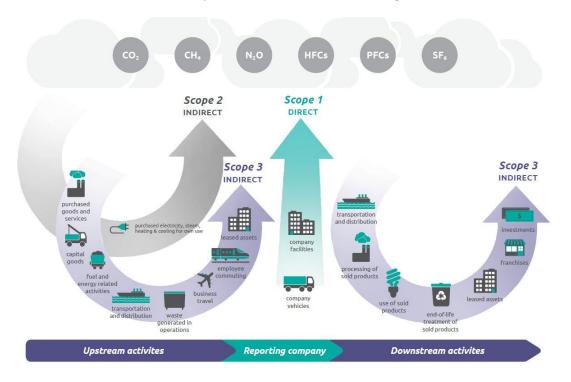
Stonehill College has worked successfully with its food service vendor Sodexo to implement sustainable practices in the dining halls, including waste reduction, trayless dining, purchasing locally grown food, reusable packaging, eliminating bottled water where possible, and offering more nutritious food options. <a href="http://www.stonehilldining.com/social.html">http://www.stonehilldining.com/social.html</a>

Transportation

In 2011, the College implemented an on campus car sharing program (<a href="http://www.zipcar.com/stonehill/">http://www.zipcar.com/stonehill/</a>), which offers students, faculty and staff the opportunity to utilize two fuel-efficient Zipcar vehicles. The program is designed to offer a cost-effective alternative to driving or maintaining a car on campus.

# Stonehill College's Emissions Inventory

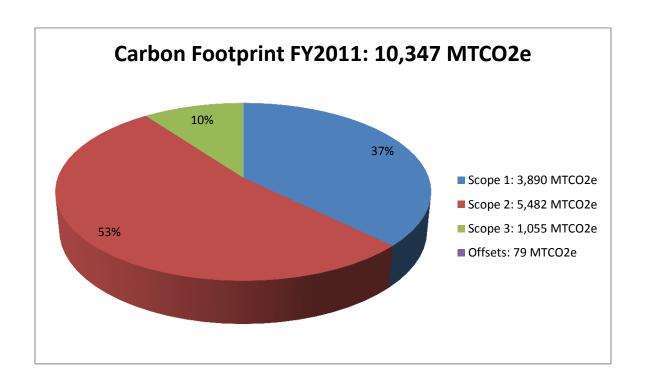
Stonehill College's carbon footprint accounts for greenhouse gas emissions (GHG) from a number of different sources associated with the institution's operations. These sources are categorized as Scope 1, 2 and 3 emissions. The World Resources Institute (WRI) defines Scope 1, 2 and 3 emissions in their Green House Gas Protocol as the "direct" and "indirect" GHG emissions from an institution's operations. Scope 1, 2 and 3 emissions as defined by the WRI are detailed in the diagram below.



Scope 1 Emissions	Scope 2 Emissions	Scope 3 Emissions	
Direct emissions from activities	Indirect emissions from utility	Indirect emissions from	
on the Stonehill College campus	energy production	transportation and waste	
		disposal	
Emissions from on-site	Emissions generated at	Emissions from vehicles driven by	
combustion of natural gas and	regional power plants	faculty, staff and student	
fuel oil for heat and hot water	associated with supplying	commuters	
systems	electricity to the College		
Emissions from College owned or		Emissions from solid waste and	
leased vehicles and equipment		waste water produced on campus	
Emissions from on-site use of		Emissions from office paper	
refrigerants and fertilizer		purchased by the College	
		Emissions from travel directly	
		financed by the College*	
*As of 2014, emissions from these sources are not included in the College's carbon footprint. However,			
methods for collecting this data are included as goals in this sustainability plan.			

Stonehill College's first Greenhouse Gas (GHG) inventory was conducted based on operations and activities fiscal year 2011, which began July 1, 2010 and ended June 30, 2011. This date was chosen because it was the first year the campus grew to its current size. The inventory was conducted because understanding and quantifying the GHG impacts of campus operations and activities is a fundamental element of a campus sustainability program. Additionally, Massachusetts regulations require any facility that directly emits greater than 5,000 tons of GHGs to report their emissions.

Stonehill College's greenhouse gas emissions in fiscal year 2011, Stonehill College directly released approximately 3,890 metric tons of GHGs as a result of fuel combustion associated with building heating systems and vehicles owned or leased by the College. The comprehensive GHG footprint of the college was 10,347 metric tons of GHGs, which includes carbon offsets purchased by or on behalf of the College, and Scope 1, 2 and 3 emissions as indicated in the table below.



The fact that Stonehill College's Scope 1 and 2 emissions make up a large portion of the carbon footprint is actually good for the College. In aggregate, 80% of the College's carbon footprint can be attributed to building-based utilities. This means the College has the opportunity to reduce its carbon footprint by reprogramming heating and cooling systems with more efficient sequences, replacing old equipment, and educating its community on energy conserving behavior changes. Scope 3 emissions are the most difficult to reduce due to the fact that commuting habits are difficult to change in a suburban area that lacks public transportation.

#### THE PLAN - THE ROAD AHEAD

#### Introduction

The Stonehill College sustainability plan covers the following fifteen program areas, organizational entities and functions. Some of these are established programs such as municipal solid waste and recycling, while others are new initiatives whose plans and goals should be defined by those managing the core area to ensure institutional support and accountability. The Sustainability, Tracking, Assessment and Rating System (STARS) initiative in particular, requires leadership and administrative support.

- 1. Academic Curriculum
- 2. Campus Sustainability Culture
- 3. Communication
- 4. Dining and Food Services
- 5. Endowment Investment
- 6. Energy Conservation
- 7. Green Building
- 8. Management to achieve Sustainability Goals
- 9. Procurement and Purchasing
- 10. Renewable Energy and St. Francis Pledge
- 11. Stewardship Council Roles and Responsibilities
- 12. Sustainability Management and Reporting
- 13. The Farm
- 14. Transportation
- 15. Waste Minimization & Recycling
- 16. Water Conservation

The goals and milestones are identified based on a combination of factors, which include the following;

- Points necessary in the STARS program to obtain of the Bronze rating at a minimum
- Performance information from peer institutions
- Performance goals for Massachusetts-based organizations and entities
- Expressed goals of department managers and the strategic plan

The goals identified in this plan are ambitious but achievable and are based on current technology, strong management and financial investment that is consistent with the College's criteria. The goals are in no way meant to be binding or unchangeable, and should be

## **Key Program Areas**

Academic Programs and Curriculum

**Description:** Stonehill College should work to more effectively integrate sustainability into the fabric of relevant coursework through the identification of sustainability focused courses and courses that include sustainability related topics within the course, and the definition of defined sustainability related outcomes as part of these applicable courses.

The criteria by which this process is conducted should be defined by Stonehill College faculty. There is broad flexibility to define sustainability and, as earlier described, sustainability need not be restricted to environmental themes. Following the development of the criteria by which the College will identify sustainability focused and sustainability related courses, faculty, or a committee of faculty members, should review courses against these criteria. Based on this assessment, faculty and administration may determine if any deficiencies or opportunities exist and make recommendations with respect to better integrating sustainability into the undergraduate academic experience.

**Goals:** Develop criteria to assess courses; Assess Courses against procedure; Make recommendations Achieve minimum of bronze rating of STARS based on self-assessment.

Campus Sustainability
Culture

**Description:** Stonehill College's effort to incorporate sustainability into its campus culture is in its infancy. In our judgment, the following areas should be prioritized:

- Community Outreach: Sustainability learning experiences outside
  the formal curriculum are important elements in developing
  sustainability literacy and a strong campus culture. Stonehill
  College has a strong community outreach program. Opportunities
  exist to reclassify or reframe existing community outreach projects
  or slightly modify existing projects to better align with
  sustainability language, mission and goals.
- Expressed Themes: Opportunities exist to align existing themes
   (e.g., solar energy project, St. Francis Pledge, Farm) with freshmen
   activities such as orientation and freshman reading. The Martin
   Institute's theme to further emphasize the sustainability
   commitment of the College also affords an opportunity to the
   College to further emphasize and/or discuss current themes on
   campus.
- Say What you Do; Do What You Say: The Eco-Rep Program, especially for freshman, should be expanded into every residence hall and resources made available to provide campus information to eco-reps (e.g., water and utility data), and resources made available to organize and participate in sustainability themed competitions and events
- **Sports and Zero Waste:** Opportunities exist to weave into the strong sports culture at Stonehill College's environmental themes

such as recycling, waste minimization, and solar energy.

**Goals:** Develop criteria to assess community outreach as central to sustainability; Make recommendations for improvements, as necessary; Expand sustainability theme/resources in freshmen orientation; Provide some funding/resource support for Eco-Rep program and integrate with revolving loan fund/project initiative; Expand eco-rep program to all residence halls; Based; Participate in ongoing water conservation competition; Begin participating in Recyclemania; Create water and energy competitions among dorms.

Communication

**Description:** The Stonehill College Goes Green website needs a facelift and a repurposing to better cover the sustainability activities – not just environmental — at the College. This website should be the primary site for coordinating and communicating sustainability related information to the Stonehill College community and the outside world. As stated later, the website should be the responsibility of the Stewardship Council in concert with key departments and players, such as The Farm, Energy, Dining Services, and Purchasing. In addition to the website, the following actions are recommended:

- Continuation of the student blog
- Development of an incoming package for students at orientation that describes key sustainability goals and describes how to get involved and expectations
- An annual sustainability report published by the Stewardship Council that includes data, initiatives, stories and programs

**Goals:** Update website; Develop incoming package for students; Issue Annual Report.

Dining/Food Service

**Description:** While great progress has been made in dining services, two areas deserve focus: connecting the Farm with Dining around the theme of "knowing your food"; and ensuring that the food purchase policies and practices will generate in the dining service category of the AASHE STARS rating system.

**Goals:** Assess STARS performance for Dining Services and work with Sodexo to create plan to generate points for minimum of bronze rating; achieve minimum of bronze rating; 25% of food meet sustainable criteria – grown and/or processed within 250 miles; 25% meet third party certifications; Increased use of 3<sup>rd</sup> party certified food products, such as USDA certified organic, Marine Stewardship Council, Blue Ecolabel, Fair Trade.

**Endowment Investment** 

**Description:** Look at investment portfolio; develop an approach/criteria that integrates investments in companies, organizations and funds that are aligned with St. Francis Pledge (e.g., companies with GHG reduction plans, funds with ties to community investments) Assess against investment strategies/portfolios. Confer with other mission institutions and St. Francis Pledge signatories. This is an internal process with no expectation that specifics associated with the College's investment practices will be

disclosed. STARS does assign points for having a committee on socially responsible investment and positive sustainability investments

**Goals:** Create a Committee on Socially Responsible Investment and benchmark peer institution strategies and policies.. Develop a process or criteria for positive sustainability investments consistent with the College's mission, commitments and financial investment strategy. Begin implementing the strategy.

**Energy Conservation** 

**Description:** With the hiring of a new energy manager, and the creation of an energy dashboard management system in 2010, the new energy manager and the facilities department should develop a comprehensive plan that includes specific projects to achieve financial and environmental goals.

Goals: Conduct annual Greenhouse Gas Inventory using the energy dashboard, as well as from other sources such as transportation not otherwise captured previously; reduce energy consumption (MMBTU) by a minimum of 20% by FY18 from FY11 baseline with focus on electricity usage; Provide absolute and normalized energy usage information to Stonehill College community via the Environmental Stewardship Council, Eco-Reps and Marketing on at least an annual basis; energy manager develops energy management plan.

**Green Building** 

**Description:** Green building is the practice of creating structures and using processes that are environmentally responsible and resource-efficient throughout a building's life-cycle from siting to design, construction, operation, maintenance, renovation and deconstruction. This practice expands and complements the classical building design concerns of economy, utility, durability, and comfort. Green building is also known as a sustainable or high performance building. As noted earlier, Stonehill College's newer building are greener than previous buildings, but they are not certified to any green building standards. This is primarily due to the cost of "commissioning" the buildings to demonstrate performance at desired levels. However, the benchmark at peer institutions – and certainly leading colleges and universities – is to construct or operate buildings that are certified to third party standards.

**Goal:** Any new building on campus should be certifiable to LEED Silver at a minimum, based on green building policy. Certification is encouraged but College may opt to forego these additional costs.

Formalize a green building and renovation policy that prescribes – in advance of actual building projects – commitment to green building standards for existing or new building and provides guidelines for future decision-making before aspirational goals get value engineered out of the project.

Management

**Description:** Stonehill College's effort to identify, track and manage campus-wide sustainability into its campus culture is in its infancy. In our judgment, the following areas should be prioritized as the College moves from project management to institutional management.

**Sustainability Plan** – The Plan should be approved by the President and/or

the Board of Trustees

**Strategic Plan** – The College's Strategic Plan should either reference this Sustainability Plan, when finalized, or identify selected key themes and projects and weave them into the next Strategic Plan

**Use of STARS** – As referenced earlier, one of the real benefits of the STARS is that it assists a College or University self-organize, plan, and execute sustainability programs and projects as directed by its framework. There is, however, a significant workload that could benefit greatly from an employee (e.g., many small colleges use a recent college grad) to assist in coordinating projects, gathering and organizing records to demonstrate performance and compiling the submittal to AASHE.

**Departmental Goals** – Multiple departments are now involved in sustainability related projects. Sustainability, as described in this roadmap, should be incorporated into departmental (e.g., facilities, residential life) and staff goals, as appropriate.

**Environmental Stewardship Council** – As described in a later section, the Environmental Stewardship Council should play an important role in managing some of the key elements of sustainability on campus.

**Goals:** Incorporate sustainability goals into the next iteration of the Strategic Plan; Incorporate sustainability goals into next fiscal year departmental goals and performance reviews; Environmental Stewardship Council manages the Green Fund; incorporates this final plan into its action plans and provides annual report to ensure accountability; Conduct updated STARS gap analysis; Provide funding to support a consultant or staff to assist in managing the STARS rating process; Commence project and program improvements for the purpose of achieving STARS points and providing validating documents

Procurement and Purchasing **Description:** While the Purchasing Office has been active on numerous environmental initiatives (e.g., double-sided copying, Zip car, recycling, paper), the College could benefit from policies, clear standards and accountability from suppliers and departments.

Goals: Formalize current policies regarding purchase of energy star appliances and green cleaning products. Identify clear commitments to recycled paper supplies from WB Mason, or applicable vendors, and ensure conformance; Use STARS guidance Formalize policy to use paper products that contain recycled content and are FSC certified. Work with applicable vendors, to increase the recycled content of stationary and to ensure recycled content standards of paper products will generate points under STARS. Ensure that collateral printed materials use FSC certified materials and meet Stonehill College's. Develop a vendor code of conduct for environmental and social responsibility that comports with Stonehill College's social and environmental values. Integrate St. Francis pledge issues into code.

Renewable Energy & St. Francis Pledge

**Description:** The College has already made significant infrastructure and mission-based commitments by working with Power Management to plan to install a large (2.7MW) photovoltaic facility on 13.5 acres behind Clock

Farm that will generate an expected 3.24 million kilowatt hours of electricity and sell it into the grid providing the College significant financial savings; and signing in April 2012 the St. Francis Pledge and the Catholic Climate Covenant (see <a href="http://catholicclimatecovenant.org/the-st-francis-pledge/">http://catholicclimatecovenant.org/the-st-francis-pledge/</a>). The challenge is now to construct the solar field and develop a plan for the pledge.

**Goals:** Conduct interconnection study with plan to build; Install 2.7MW photovoltaic renewable energy facility on campus; Create an interdisciplinary committee to develop an action plan for how the College will meet its commitments under the St. Francis Pledge. Reduce greenhouse gases 20% through energy conservation, renewable energy installations or purchase of credible RECs.

Stewardship Council – Roles and Responsibilities

**Description:** The Stonehill Environmental Council has existed since 2008. Its mission is to foster proactive, environmentally sustainable policies, approaches, and practices by the campus community that are consistent with Stonehill College's mission, guiding principles, and student learning goals and outcomes. The council includes two faculty members, two students--including the president of Students for Environmental Action (SEA)--and at least one representative from each administrative division of the College. It's website is <a href="http://www.stonehill.edu/x14431.xml">http://www.stonehill.edu/x14431.xml</a>

Goals: Consider revising the name to the Stonehill Sustainability Council. Continue to support and encourage student and departmental projects on campus, as appropriate. Obtain support, or in-kind services, to update and maintain a revised website to serve as the central repository of campus sustainability information, plans and communications; Use this sustainability roadmap as the action plan for the College and align the Council's activities, as appropriate, with this plan. Finalize the method that the Council will manage (e.g., advisory committee, review submittals, make selections, evaluate projects) a Stonehill Green Fund; Issue Summary Annual Report on performance, activities and progress based, in part, on STARS data; Issue annual recommendations to Senior Administration relying on this Stonehill Sustainability Report as the basic roadmap.

Sustainability Management and Reporting Description: In order to achieve the College's sustainability goals, there must be a plan, resources and accountability built into the system.

Participation in the STARS program will be useful to the College in (a) providing a management framework to guide decision-making; (b) serve as a valid assessment and reporting tool to the campus community, College applicants and the outside environmental community that rates colleges and universities. The Sustainability Tracking, Assessment & Rating System™ (STARS) is a transparent, self-reporting framework for colleges and universities to measure their sustainability performance. A brief summary of the STARS program is included at Appendix I. A Gap Analysis of Stonehill College's potential STARS rating was conducted in 2010 and is included here as Attachment II. Of the four levels (certified, bronze, silver, gold, and platinum) available, it is believed that at a minimum Stonehill College will be able to achieve a bronze level rating.

The Farm

Transportation

Waste Minimization and Recycling

**Goals:** Evaluate and commit to STARS. Collect data and submit self-assessment to AASHE. Receive STARS certification/rating. Continue to uphold, if not improve STARS rating.

**Description:** The Farm has been a very successful sustainability program from various perspectives (e.g., community outreach, awareness, student involvement, mission focused). Opportunities exist to further integrate this program into the fabric of the Stonehill College experience.

Goals: College hosts a professional development class for faculty interested in integrating the Farm project and/or Food Justice issues into their class. Expand research opportunities at the Farm (e.g., SURE Program) – Examples might include aquaponics, tillage experiments, covercrop experiments and season extension work. Expand the Farm acreage. Provide produce for meals prepared at Dining Services. Start a Community Supported Agriculture (CSA) program through which members of the Stonehill College community can participate. Every student interacts with the Farm in some meaningful way

- Volunteer or work at the Farm
- Eat farm grown produce in dining hall
- Compost from Farm used to grow produce used in Dining Services
- Participates in an agriculture or farm-focus class or enrolled in a class that visits the Farm during their 4-years.

**Description:** Stonehill College should take a comprehensive and thoughtful review of transportation programs – including parking areas, parking permits, bicycling, buses, and current fleet – with an eye toward the College fully accounting for the financial and environmental costs associated with faculty, staff and students use of vehicles. At a minimum, the College should ensure that policies and parking fees are aligned with transportation goals.

Goals: Develop a plan to diversify the Stonehill College fleet to include "alternative" vehicles such as hybrid gas, hybrid diesel, plug-in, 100% electric and alternative fuel. With the growth of Stonehill College, assess institution's compliance with MA DEP regulations that prescribe vehicle reduction plans for organizations with more than 500 full time employees. Develop a policy regarding purchase/lease of vehicles by administration, and departmental vehicles -- e.g., vehicles leased for administrative personnel shall be alternative vehicles, such as hybrid vehicles. Expand bicycle sharing program on campus. The Energy Management plan should include transportation goals in additional to facility/operation goals. Review parking permit program and consider price structure (to incorporate offsetting GHGs from fees) and ensure that faculty and staff permits are current. Reduce GHGs from transportation and fleet vehicles by 25% based on revised policies and purchase of less polluting vehicles - from 2007 data.

**Description:** Stonehill College should continue to pursue programs and projects that minimize the generation of solid waste and maximize the reuse or recycling of materials. Any plans should also contemplate and

prioritize "reduction" (e.g., paper purchases, use of plastic bottles) as an element of a plan and factor that into the communication of performance metrics about recycling (e.g., reduction in purchases of paper may hinder the achievement of elevated recycling rates)

**Goals:** Participate in Recycle Mania; Implement comprehensive food composting program (food prep and food waste) in Dining Services; Unveil first zero waste sporting event and develop plan for future events; Reduce waste by 10% from FY11 data; Improve recycling rate of consumer products (e.g., does not include scrap metal, construction materials) to 25%.

Water Conservation

**Description:** Stonehill College should continue to more accurately monitor water usage and pursue projects that minimize water consumption for operations. We encourage the Facilities Department continue to work with faculty, staff and especially students on behavioral projects with respect to minimizing water usage (e.g., reducing shower time).

Goals: Continue to make available water usage information through the dashboard to relevant departments, eco-reps and the Stewardship Council; Continue to support inter-residence hall competitions with actual and/or estimated water usage data; Continue to improve smart landscape watering systems as the sight of sprinklers in the rain is a source of tremendous doubt by faculty, staff and students about the College's environmental sensitivity and commitment. Develop a plan in FY14 budget to install additional water meters on campus, as appropriate; Evaluate efficacy and costs of gray water systems in future buildings or for major renovations, such as residence halls; Reduce absolute water usage by 10% from FY11 usage. Reduce absolute water usage by 20%.

# **APPENDICES**

Listing by Project Areas – Top Four Goals

	Goal #1	Goal #2	Goal #3	Goal #4
Academic Curriculum	Develop criteria to assess courses as sustainability focused and sustainability related	Assess courses against Stonehill College criteria	Make recommendations, as appropriate,	Achieve minimum of bronze rating for this category
Campus Sustainability Culture	Reframe community outreach as element of sustainability mission	Expand sustainability them/resources in freshman orientation	Provide further support for Eco-Rep Program and expand program	Participate in natural resource conservation competitions
Communication	Revise, update and maintain Sustainability website	Develop incoming package for incoming freshman	Issue Annual Report	Maintain strong communications on sustainability topics
Dining/Food Services	Work with Sodexo to create plan to achieve minimum bronze rating under STARS	Achieve goal of 25% of applicable food meets locally grown criteria	Achieve goal of 25% of applicable food meets third party certifications	Achieve minimum of bronze rating for this category
Endowment Investment	Create a Committee on Socially Responsible Investment and benchmark peer institutions	Develop a process or criteria for positive sustainability investments consistent with Stonehill College's mission	Begin implementing strategy	Achieve minimum of bronze rating for this category
Energy Conservation	Update annual Greenhouse Gas (GHG) inventory	Energy manager develops energy conservation plan	Reduce energy consumption by 20% by FY18 from FY11 baseline data	Achieve minimum of bronze rating for this category
Green Building	Develop formal green building/renovation policy approved at senior level	Implement policy	Achieve LEED certifiable building for at least one building on campus	Achieve minimum of bronze rating for this category
Management – to achieve Sustainability Goals	Incorporate sustainability themes and goals into College's Strategic Plan	Use STARS as guiding framework to guide identification and management of sustainability programs and projects	Incorporate sustainability goals into departmental goals and professional staff reviews	Provide funding or staff support to effectively develop STARS submittal and performance achievements

Procurement & Purchasing	Formalize green purchasing policies  Complete	Work with vendors to achieve defined standards and ensure accountability Create	Use recycled paper and FSC certified papers for all collateral printed materials Reduce GHGs by 20%	Achieve minimum of bronze rating for this category  Achieve minimum of
Renewable Energy/St. Francis Pledge	interconnection study and install ~2.7 MW renewable energy – solar field facility on 13.5 acres of campus	interdisciplinary committee to develop plan to meet St. Francis pledge	by 2018	bronze rating for this category
Stewardship Council Roles and Responsibilities	Consider revising name to Sustainability Council	Enhance Communications including revised website and annual report	Manage Green Fund process and selection	Continue to inform Strategic Plan Committee and senior administration with recommendations and revisions and insights into the implementation of this plan
Sustainability Management and Reporting	Evaluate STARS (e.g, updated gap analysis) and commit to being a signatory to STARS	Implement measures to meet STARS rating thresholds	Achieve STARS rating	Continue to upgrade programs based on continual improvement and peer institution progress.
The Farm	Host professional development class for faculty interested in weaving Farm themes into classes	Expand Farm – research and acreage	Work with Sodexo to provide produce to Dining Services	100% of students "connect" to the Farm in one way or another
Transportation	Develop a plan to diversity the Stonehill College fleet	Develop policy regarding purchase, lease and use of vehicles	Review parking program and policies and set goals for GHG reductions	Achieve minimum of bronze rating for this category
Waste Minimization & Recycling	Participate in RecycleMania	Implement comprehensive food composting program	Reduce waste by 10% and achieve 25% recycling rate on campus.	Achieve minimum of bronze rating for this category
Water Conservation	Continue to make available water usage information to residence halls and expand (e.g., water meters) as necessary	Evaluate opportunities to improve smart landscape water systems and use of graywater systems in campus buildings	Reduce absolute water usage by 20% by 2018	Achieve minimum of bronze rating for this category