

Morehead State University Sustainability Strategic Plan 2015 - 2020

Mission Statement:

Morehead State University is dedicated to preserving the natural environment and conserving resources for future generations. We encourage all students, faculty and staff to become much more engaged as a university community to create an environmentally sustainable campus and to promote a culture of social, economic and environmental responsibility.

Strategic Plan Vision:

The President's Sustainability Committee has envisioned the following strategic plan that will improve our campus sustainability by decreasing our carbon footprint, while increasing our campus and community education and engagement in sustainable practices. While this plan enables us to identify specific tactical priorities, it is best viewed as an organic process. Our institution will continue to measure progress, reassess priorities and reallocated resources in light of new developments, new technologies, evolving energy sources, and new world realities.

BACKGROUND:

Sustainability Committee Formation & Objective:

In August 2013, President Wayne Andrews formed a Sustainability Committee to look at ways to promote an environmentally friendly campus community. Initially, the committee was tasked with gathering data and forming an inventory of what Morehead State University has already accomplished to be more environmentally friendly. Then the committee conducted a study to determine the feasibility of joining the American College & University Presidents' Climate Commitment (ACUPCC) to go carbon neutral.

Carbon Footprint Calculation & Results:

The committee collected data necessary to complete the Clean Air – Cool Planet Campus Carbon Calculator. In March 2014, it was determined that the Morehead State University carbon footprint for 2013 was 34,176 equivalent carbon dioxide metric tonnes. The highest emission source was for purchased electricity at 22,160 eCO₂ metric tonnes. Scope 1 emissions from on campus steam generation, direct transportation, refrigerants, chemicals and agriculture emitted 10,524 eCO₂ metric tonnes. Scope 3 emissions from commuting, air travel, solid waste, wastewater and paper contributed 4,352 eCO₂ metric tonnes. Offsets from farm

composting, campus owned forested areas and trees reduced our carbon footprint by 2,860 eCO2 metric tonnes.

Committee Recommendations:

The committee decided that further research and planning was required before recommending the Morehead State University's President sign the American College & University Presidents' Climate Commitment (ACUPCC) in which the University would pledge to become carbon neutral by a target date in the future. Signing the ACUPCC would require the creation of an institutional action plan which would include a target date, goals and actions, curriculum and other educational restructuring and mechanisms to track progress on goals and actions. The committee decided the best plan of action was to ask the President to sign an Earth Day Declaration, drafted by the committee, in which the he would pledge support to work towards an environmentally sustainable campus. In addition, the committee would work to formulate a sustainability strategic plan to seek ways for the University to become more sustainable in all areas and research the possibilities for signing the ACUPCC in the future.

Committee Actions to date (Jan 2015):

- Completed first carbon footprint calculation & evaluations
- Increased awareness with website & social media formation, information tables & posters
- Joined AASHE, attended annual conference in October 2014
- Added 75 recycling bins to campus, extended the amount of recycled items collected including writing instruments, electronics, ink cartridges & batteries
- Participated in Recyclemania, Game Day Recycling Challenge, America Recycles Day
- Formed Tree Campus USA subcommittee

MSU Sustainability Strategic Plan

The strategic plan is divided into categories relevant to addressing specific carbon sources, education and outreach. Each category lists the clean air - cool planet scopes targeted. The categories have broad goals with specific strategies identified for each goal. Responsible committee members, departments and other stakeholders for each specific strategy are listed in parentheses.

Strategic Plan Timeline, Priority & Funding

Timeline: present to January 2020

Priority & Funding:

Priority for strategic plans will be determined by a combination of financial factors and the committee members and campus survey input.

Higher priority will be awarded to:

- 1) Grant funded projects,
- 2) Projects that produce savings without increasing the institutions capital or operating costs,
- 3) Projects incorporating strategies into existing department & construction budgets,
- 4) Projects that are the most cost effective in terms of dollars invested per ton of avoided greenhouse gas emissions,
- 5) Projects produced from fundraising activities.

Accountability & Measures:

Accountability:

Committee members & departments assigned to specific strategies (noted next to each goal/strategy) will be responsible for ensuring that those strategies:

- 1) are researched thoroughly, especially using any information gained from our Association for Advancement of Sustainability in Higher Education (AASHE) membership,
- 2) reported to the committee for information sharing and input,
- 3) consider input from the campus community surveys & suggestions,
- 4) instituted based on the lowest possible financial commitment by the University

Measure of progress:

- Sustainability Tracking, Assessment & Rating System (STARS):
Measures: Education & Awareness, overall sustainability compared to other campuses
Timeline: every 3 years
Who: Holly Niehoff, Office of President, various departments and energy management system needed for data collection
- Carbon Footprint Calculations using clean air – cool planet calculator:
Measures: Scope 1, 2 & 3
Timeline: annually, starting at Jan 2015
Who: Holly Niehoff, various departments and energy management system needed for data collection
- Campus Surveys:
Measures: The campus community's sustainability knowledge and attitude
Timeline: Survey faculty and staff once every 5 years, complete a freshman and senior knowledge and attitude study annually
Who: Center for Environmental Education

Energy: (Addressing Scope 1 & 2 sources including on campus stationary and purchased electricity)

Goal 1: Increase building energy efficiency by 25%

Strategy 1: All major renovations and new construction must meet LEED Standards

Strategy 2: Upgrade energy efficiency of equipment when replaced

Strategy 3: Require newly purchased computer technology to meet EPEAT standards

Strategy 4: Investigate low cost landscape and day lighting opportunities

Goal 2: Increase the amount of renewable energy on campus

Strategy 1: Conduct an analysis of renewable energy on campus

Strategy 2: Incorporate solar energy into outdoor lighting fixtures

Strategy 3: Investigate the purchase of renewables in energy market

Strategy 4: Conduct an analysis of biofuel potential at the University Farm

Goal 3: Reduce campus energy consumption through conservation

Strategy 1: Raise awareness of campus energy consumption and energy conservation through annual participation in Campus Conservation Nationals and the purchase of an Energy Dashboard web service

Strategy 2: Improve building scheduling to reduce consumption during summer camps & classes

Strategy 3: Implement a computer shut down program during winter break that allows for updates before staff and students return

Strategy 4: Investigate the potential energy reduction and financial savings of an energy conservation vacation over winter break that would extend the shutdown by one additional week

Strategy 5: Develop a tip & suggestion area on website for energy conservation

Strategy 6: Encourage space sharing for lecture halls, meeting rooms, offices, etc.

Strategy 7: Conduct a lumen output survey for classroom and hallways to reduce over lighting

Goal 4: Complete MSU carbon footprint calculation annually

Strategy 1: Simplify the annual data collection reporting needed for the calculation

Strategy 2: Produce an online summary of carbon footprint statistics and results annually

Strategy 3: Produce an annual report by March 1st for the following year data and present it to the committee at the March meeting

Goal 5: Acquire carbon footprint offsets

Strategy 1: Seek University partnerships and donations of forested land that can be used for academic study and long term preservation following the ACUPCC Voluntary Offset Protocol

Strategy 2: Become a Tree Campus to protect and increase our campus offsets

Strategy 3: Increase the number of trees on campus property

Transportation: (Addressing scope 1 & 3 including direct and indirect transportation)

Goal 1: Develop infrastructure to encourage cycling and walking

Strategy 1: Develop campus bicycle program

Strategy 2: Provide dry/indoor storage space for bicycles

Strategy 3: Improve outdoor bicycle racks

Strategy 4: Develop an educational campaign for pedestrian right of way and bicycle safety

Strategy 5: Evaluate pedestrian patterns

Goal 2: Reduce faculty, staff and students commuting and promote reduced fuel consumption

Strategy 1: Develop an incentive for commuters to ride share

Strategy 2: Coordinate with the city bus system to increase use – campus bus stops, online schedule, kiosk with route and schedule, scanner to use student ID's

Strategy 3: Provide more covered bus stop areas on campus, with signage to make them highly visible

Strategy 4: Develop compact car preferred parking areas & charging stations

Strategy 5: Allow non-essential personnel the option of telecommuting, working from home, or adjusting daily hours to reduce the number of days they commute to campus

Goal 3: Increase university vehicle fuel efficiency

Strategy 1: Purchase more electric vehicles

Strategy 2: Replace schedule for older vehicles

Strategy 3: Develop no idling policy for campus vehicles

Goal 4: Increase carbon offsets for University related travel

Strategy 1: Educate the campus community about travel carbon offset purchases through our website and develop a self-reporting tracking system for University employees and students to report their personal carbon offset purchases for University commuter travel

Strategy 2: Develop a policy and tracking system for offsetting all emissions related to institution-funded air travel

Waste: (Addressing scope 3 – including solid waste, paper use, recycling, composting)

Goal 1: Increase the percentage of waste that is recycled to 50%

Strategy 1: Conduct two waste audits

Strategy 2: Implement best practices for recycling container placement and design

Strategy 3: Equalize the opportunity for recycling across campus

Strategy 4: Raise awareness of recycling benefits and encourage behaviors that reduce, reuse and recycle on campus. Participate annually in the Recyclemania competition. Offer prizes and incentives for participation.

Strategy 5: Use recyclable, reusable or compostable serving materials in dining services, concessions and special event catering.

Strategy 6: Move from 30% to at least 50% recycled content paper requirement

Goal 2: Implement a campus composting program

Strategy 1: Purchase equipment needed to compost waste

Strategy 2: Coordinate with food services to compost campus food waste

Strategy 3: Raise campus awareness of composting benefits, provide where and how to compost information.

Strategy 4: Utilize compost in the grounds operations.

Goal 3: Reduce the overall waste stream on campus by 20%

Strategy 1: Promote reusable food and beverage containers by offering discounts and other incentives

Strategy 2: Replace or retrofit water fountains with hydration stations

Strategy 3: Create a tray less cafeteria

Strategy 4: Promote donating non-University owned items during move-out days

Water, Wastewater, Storm water, Landscaping & Grounds: (Addressing scope 1 & 3 including fertilizer, chemicals, solid waste, waste water)

Goal 1: Decrease impervious surfaces by 25%

Strategy 1: Utilize pervious surfaces for sidewalks and parking lots

Strategy 2: Remove some paved/concrete areas by the bell tower to create more green space

Goal 2: Decrease campus stormwater runoff by 25%

Strategy 1: Develop a plan to reduce campus stormwater runoff

Strategy 2: Construct storm water planters

Strategy 3: Limit the use of curbing

Strategy 4: Implement low impact designs

Goal 3: Utilize native plant species

Strategy 1: Create a Tree Campus Subcommittee and become a certified Tree Campus through Arbor Day

Strategy 2: Eliminate the use of invasive plant species

Strategy 3: Incorporate native plants to address storm water issues

Goal 4: Reduce the amount of fertilizer and other chemical usage

Strategy 1: Plant native plants requiring less fertilizer applications

Strategy 2: Utilize University compost to increase soil nutrients and health

Strategy 3: Substitute Green Seal chemical custodial cleaners wherever possible

Strategy 4: Incorporate greener, eco-friendly, alternative chemicals in all laboratory and art classes whenever possible

Strategy 5: Continue to dispose of old hazardous chemicals that are no longer usable through the annual hazardous chemical removal process

Goal 5: Reduce the amount of water usage which will reduce the amount of waste water.

Strategy 1: Install low flow faucets/fixtures where possible, repair leaks promptly

Strategy 2: Educate campus on the importance of water conservation and reporting water & wastewater leaks immediately through social media & website

Education, Outreach & Endowment: (STARS – Sustainability Tracking, Assessment & Rating System)

Goal 1: Evaluate our campus sustainability progress through a comprehensive STARS report every 3 years

Strategy 1: Compile required data for STARS from various departments every 3 years

Strategy 2: Complete a comprehensive report outlining all data and scoring with an online link to access the report on the Earthwise Eagles website and AASHE/STARS website

Strategy 3: Use the data to gauge our progress internally and in competition with other higher education institutions.

Strategy 4: Pay the annual STARS fee and AASHE membership fee after our first report so that we can advertise our score and use the bronze, silver, gold or platinum seal

Goal 2: Survey the campus community's sustainability knowledge and attitude

Strategy 1: Survey faculty and staff once every 5 years

Strategy 2: Complete a freshman and senior knowledge and attitude study annually

Goal 3: Increase students environmental education course content

Strategy 1: Develop a listing of courses with environmental content

Strategy 2: Track the enrollment numbers

Strategy 3: Provide professional development for faculty and staff

Strategy 4: Evaluate the feasibility of a Sustainability degree program

Goal 4: Provide outdoor connections for students

Strategy 1: Create more outdoor learning spaces

Strategy 2: Develop nature programs that incorporate outdoor connections and knowledge

Strategy 3: Incorporate nature based outdoor activities into the wellness program

Strategy 4: Establish MSU's existing outdoor assets as a preserve and create signage for the areas

Goal 5: Increase student awareness about sustainability and provide information on campus sustainability efforts

Strategy 1: Set up an information table for new student orientation

Strategy 2: Provide an Earthwise Eagle logo sustainability welcoming gift to new students with information on campus sustainability, website & social media

Goal 6: Provide community outreach for sustainable practices

Strategy 1: Partner with Sustainable Morehead and other community organizations to increase awareness of sustainability and best practices.

Strategy 2: Develop an annual Earth Day Fair with other community partners that incorporate local food, sustainable living workshops, and sustainable vendors

Strategy 3: Link sustainable community businesses and organizations to the Earthwise Eagles website, including upcoming events and opportunities

Strategy 4: Network and attend local, regional & national conferences, webinars, workshops & meetings related to sustainability in higher education

Goal 7: Increase availability of sustainable or recycled products at the bookstore

Strategy 1: Offer a sustainably produced or recycled product alternative for most items commonly sold in the bookstore

Strategy 2: Develop and apply a small Earthwise Eagles sticker to those products so they are easily identified

Strategy 3: Consider using a percentage of profit from these items to fundraise or provide giveaways for contests, fairs & volunteer work related to sustainability.

Goal 8: Obtain grant funding and seek volunteer help & donations

Strategy 1: Seek grant funding for projects that support the reduction of scope 1, 2 & 3 carbon emissions

Strategy 2: Seek grant funding or local partnerships that support the education and awareness goals and strategies of the committee

Strategy 3: Seek volunteer help & donations from campus and the community for the annual earth day fair, Recyclemania, campus conservation nationals, restoration and cleanup projects and other sustainability projects. Maintain an email list of volunteers willing to help with this effort and contact them as needed

Strategy 4: Create fundraising activities that support sustainability on campus

Goal 9: Establish a policy in support of climate and sustainability shareholder proposals in connection with endowment investments

Goal 10: Annual Recognition

Strategy 1: Include a sustainability report at convocation

Strategy 2: Institute an annual environmental steward award

Links:

Association for the Advancement of Sustainability in Higher Education (Aashe):

<http://www.aashe.org/>

American College & University Presidents Climate Commitment (ACUCPCC) Voluntary Offset Protocol:

http://www.responsiblepurchasing.org/purchasing_guides/carbon_offsets/policies/ACUCPCCVoluntaryCarbonOffsetProtocol_Nov08.pdf

Campus Carbon Calculator: <http://campuscarbon.com/>

Campus Conservation Nationals: <http://www.competetoreduce.org/>

Earthwise Eagles: <http://www.moreheadstate.edu/earthwise/>

Recyclemania: <http://recyclemaniacs.org/>

Sustainability Tracking & Assessment Rating System (Stars): <https://stars.aashe.org/>

Tree Campus USA: <http://www.arboday.org/programs/treecampususa/>