Climate Action Plan 2012

STATE UNIVERSITY of NEW YORK AT OSVEGO

CUIL

Color, our future

TABLE OF CONTENTS



An aerial view of the SUNY Oswego Campus and the surrounding area.

TABLE OF CONTENTS

CONTENTS

President's Message
Strategic Directions
Our Commitment to Improving the World Environment3
Strategic Directions: Where Do We Want to Be?4
Campus Greenhouse Gas Emissions5
Environmental Sustainability9
Climate / Environmental9
Curriculum / Learning15
Community / Lifestyle
Results Tracking & Reporting21
Climate / Environment21
Curriculum / Learning
Community / Lifestyle
Communication / Engagement
Financing
Acknowledgements

PRESIDENT'S MESSAGE

I am pleased to present SUNY Oswego's 2012 Climate Action Plan. This plan represents our continued commitment to being a leader in sustainability and improving the world environment. With the combined expertise and creativity of the entire college community, this plan challenges us to develop innovative ways of advancing economic, social, and environmental solutions that will enrich the lives of our students, communities and the world.



This revised plan acknowledges our past successes: We have reduced our carbon footprint by 8% and significantly enhanced our sustainability related curricula. Our Climate Commitment and Environmental Sustainability Team has revitalized our focus on sustainability across campus. Student groups have engaged in meaningful activities both on campus and in the Greater Oswego community, and in September 2011 our efforts were rewarded with a Silver rating in the Association for the Advancement of Sustainability in Higher Education's Sustainability Tracking, Assessment and Rating System (STARS).

The exigent goals outlined in this plan are intended to develop a deeper awareness of environmental sustainability and technological developments. Attainment of these goals will require specific and measurable efforts aimed at protecting our vital resources. In tune with the elements of our strategic plan, *Engaging Challenge*, and SUNY's strategic plan, *The Power of SUNY*, we will inspire our faculty and students with enriched curricula to develop solutions for pressing world challenges. Through the continued integration of sustainability into the curriculum, project-based learning outside the classroom, and sharing of evidence-based best practices, we will promote the knowledge and effects of environmentally positive behavior.

Our goal continues to be the assurance that all our students are prepared with the intellectual capacity, the skills, and the ability to access technologies enabling them to innovate and adapt in an equitable, ethical and sustainable way. As we advance this plan, we will demonstrate measurable progress in environmental responsibility and take clear steps to develop a more sustainably literate and action-orientated campus and world community.

Deborah F. Stanley President CLIMATE ACTION PLAN 2012

PRESIDENT'S MESSAGE



Photograph taken by Charles Wainwright

• • •

Students, faculty, and staff gather near Glimmerglass Lagoon on SUNY Oswego's 150th birthday. Certified LEED Gold Student Townhouses Complex can be seen in the background.

STRATEGIC DIRECTIONS

OUR COMMITMENT TO IMPROVING THE WORLD ENVIRONMENT

As a signatory to the American College and University Presidents' Climate Commitment (ACUPCC), SUNY Oswego has made a commitment to improving the world environment. Building on our September 2009 Climate Action Plan (CAP 2009), our second generation CAP (CAP 2012) continues to advance sustainable energy source solutions, but also vitally expands the educational and community components of environmental sustainability at SUNY Oswego.

Our environmental sustainability efforts to date have been accomplished through building standards, research, partnerships, collaborations, committees and counsels, and environmental practices. We have made significant strides and recently have begun to align our efforts along a common VIEW of the path forward – one that stretches far beyond our university walls and property lines.

To advance this commitment, President Deborah F. Stanley established the Climate Commitment and Environmental Sustainability Team (Team) in 2010 and charged this Team with identifying pathways to integrate environmental sustainability into the cultural fabric of SUNY Oswego and increase collaboration with the community and region. In response, the Team developed a *Strategic Directions Roadmap (Roadmap)* to focus and align resources on a journey to engage students, faculty, staff, the local community, and the region in a more thorough appreciation for the interdependencies of social, economic, and environmental outcomes.

The *Roadmap* serves as our long-term goals document and answers the aspirational question "*Where do we want to be*?" CAP 2012 (and subsequent CAPs) identifies our short-term plans and tracks our progress against the long-term goals in our *Roadmap*.

Additionally, the *Roadmap* and CAP 2012 align with the college's strategic plan, as well as the strategic plan of State University of New York (SUNY). SUNY Oswego's *Engaging Challenge* identifies strategic directions and goals to advance the college, our students, faculty, and staff in addressing global challenges and offering solutions to build a better world, while SUNY's *the Power of SUNY* includes an energy smart initiative to reduce our dependence on fossil fuels and tackle the multifaceted challenges of sustainability. As a stakeholder and pillar in the community, SUNY Oswego will do its part to "Think Globally, Act Locally" to improve the world environment. "WHERE DO WE WANT TO BE?"

STRATEGIC DIRECTIONS

WHERE DO WE WANT TO BE?

Climate / Environment:

We will be wise stewards of natural resources and minimize our impact on the environment.

Curriculum / Learning:

We will nurture and develop intellectually empowered, responsible, and productive citizens capable of addressing local and global climate and environmental issues.

STRATEGIC DIRECTIONS

Community / Lifestyle:

We will lead, unite, and enrich the college and community in creating and maintaining a sustainable environment and lifestyle.

Communication / Engagement:

We will communicate the commitment and progress toward sustainability, engage stakeholders, and solicit partners in a collaborative and coordinated manner.

The Team developed the above four *Strategic Directions* to integrate environmental sustainability into the cultural fabric of SUNY Oswego. Further discussed in the following sections, these strategic directions include Goals that describe "*What we will do*" and Key Performance Indicators (KPIs) that will be the measure of "*How are we doing?*"

SUNY Oswego developed a greenhouse gas (GHG) emissions inventory for the campus in 2005 and updates it annually. Development of the GHG inventory was based on the organizational boundary of the college and includes emissions sources that are under the college's operational control. Specifically, we report GHG emissions from sources that are metered/measured by the campus and for which future emission reduction actions can be taken. The operational boundary for SUNY Oswego is defined by emission sources belonging to one of three scopes below:

- Scope 1: Direct emissions from natural gas and fuel oil-fired boilers, diesel emergency generators, oncampus diesel and gasoline vehicle fleets, and refrigeration (HFC-134a and HFC-22)
- **Scope 2:** Indirect emissions from purchased electricity
- **Scope 3:** Other indirect emissions from commuting employees/students and landfilled solid waste.

SUNY Oswego estimated GHG emissions for Scope 1, 2, and 3 sources using Clean Air-Cool Planet Campus Carbon Calculator (CACP Calculator), Version 6.7.

The CACP Calculator provides total GHG emissions for each GHG emission source and for the SUNY Oswego campus as a whole in units of metric tons of carbon dioxide equivalent (MTCO₂e). The total

campus-wide GHG emissions for the years 1990 through 2011 are provided below in **Figure 1**.

Reducing campus GHG emissions can be attributed to:

- Decreasing #6 fuel oil consumption from 112,737 gallons in 1990 to 49,692 gallons in 2011.
- Decreasing natural gas consumption from 302,129 MMBtu in 1990 to 295,158 MMBtu in 2011.
- Adding insulation in Sheldon Hall and Lee Hall.



It is noted that the electricity consumption has increased from 22,829,910 kWh in 1990 to 33,300,100 kWh in 2011. The reduction in GHG emissions from electricity consumption is attributed to a reduction in USEPA's eGrid emission factor that is used to estimate GHG emissions from purchased electricity. However, the following activities have reduced overall electricity consumption at the campus as the campus has grown over time:

- Replacement of some standard efficiency motors in HVAC systems with premium efficiency motors
- Higher efficiency compact fluorescent bulbs have replaced incandescent bulbs in all residence halls.

Ground source geothermal heating and cooling will be used to maintain the new Sciences Complex.

240 wells were drilled 499 feet deep to obtain energy from the earth and allow SUNY Oswego to rely less on fossil fuels.





For the purposes of evaluating the reduction in GHG emissions since the completion of the CAP 2009, SUNY Oswego has also estimated the GHG emissions intensity for the campus. This allows for the evaluation of increases or decreases in GHG emissions with respect to changes in building structures and student populations. The CACP Calculator provides the GHG emissions intensity for the entire campus in units of MTCO₂e per gross square foot (MTCO₂e/GSF) and MTCO₂e per full time equivalent student (MTCO₂e/FTE). As shown in Figures 2 and 3, the emissions intensity varied from 1990 to 2006 and emission intensities in 2011 are less than those in 1990. The number of full time students increased from 6,945 in 1990 to 7,383 in 2011. The total building area on campus increased from 3,143,046 GSF in 1990 to 3,445,019 GSF in 2011. The decrease in emission intensity from 1990 to 2011 for the campus would indicate that increases in student population and GSF are typically not resulting in proportional increases in GHG emissions and that the campus is moving towards becoming more efficient in terms of fuel and electricity consumption.





©2001-2009 Clean Air-Cool Planet, Inc. All rights reserved.



SUNY Oswego also evaluated the relative contributions of the types of emission sources to total emissions intensity. **Figure 4** shows these contributions for years 2009 and 2011, respectively.

As shown in this figure, GHG emissions resulting from stationary combustion, purchased electricity, and commuting account for the majority of campus emissions. SUNY Oswego has targeted these areas for emissions reductions.



A 10 kW beta turbine has been installed on Lee Hall and is generating power.

CLIMATE / ENVIRONMENTAL

SUNY Oswego's strategy towards operational climate neutrality involves five key aspects:

- 1. Improve our operational efficiency to the extent practical (foremost action).
- 2. Reduce fossil fuel use through the development of campus geothermal systems.
- 3. Investigate and develop additional sources of energy for our community including solar, wind, and lake source geothermal systems.
- 4. Improve our lifestyles in terms of transportation and environmental conservation through community engagement and education.
- 5. Investigate options to manage our carbon footprint through sequestration and carbon credits.

Our President's Climate Commitment, the Team, and the *Roadmap* have outlined a path for the college to move forward in reducing our carbon footprint and providing leadership in sustainability for our community. The main climate goals include minimizing GHG emissions and designing programs and policies to optimize the use of natural resources. CAP 2012 assesses our accomplishments over the past two years, and describes our ambition to be a leader in sustainability and technological developments. Near-term strategies outlined below provide specific direction in improving our climate footprint.

Prior to the preparation of the CAP 2009, a Campus-wide Sustainability Study was conducted by C&S Engineers, Inc. to identify potential opportunities for reduction of GHGs from the campus operations. Each opportunity was evaluated utilizing performance indicators for environmental, economic, and societal/academic benefits (triple bottom line). Included in the evaluations were GHG reduction, first cost, payback, social advancement, and learning opportunities. The top opportunities were then evaluated further for implementation and synergies and plotted against the overall campus GHG emissions. If all of the selected strategies are implemented successfully, our campus could potentially reduce emissions by approximately 22% by 2015 and 36% by 2020. **Table 1** provides a summary of identified opportunities for reducing GHG emissions.



SUNY Oswego's Campus has expanded in size and population, but overall emissions per square foot are decreasing due to improved building efficiency.

Table 1 | Summary of GHG Emission Reduction Opportunities

Opportunity	Total Cost	Savings/Year	Annual MTCO₂e Reduction	Cost/MTCO₂e
Water Efficiency Improvements	\$39,238	\$30,395	198	\$198
Demand Controlled Ventilation	\$841,500	\$469,011	2,407	\$350
Lighting Upgrades (Bulbs & Sensors)	\$377,230	\$271,048	916	\$412
Ground Source Geothermal	\$43,069,725	\$2,104,266	14,789	\$2,912
High Efficiency Motors	\$53,645	\$32,785	112	\$479
Wind Generation	\$15,530,000	\$1,201,910	5,057	\$3,071
Cogeneration	\$9,200,000	\$792,325	1,074	\$8,566
Lake Source Geothermal	\$54,463,046	\$1,851,903	14,678	\$3,710
Solar Thermal (per building)	\$172,516	\$3,876	25	\$6,901
Solar PV (per 25 kW)	\$168,750	\$1,669	7	\$24,107

Source: Campus-wide Sustainability Study; July 16, 2010; C&S Engineers, Inc.

Figure 5 below shows the GHG reduction trajectory utilizing the selected strategies. As part of the preparation of the CAP 2012, the GHG reduction opportunities listed in **Table 1** were re-evaluated based on potential start dates. As shown in **Figure 5**, it is estimated that a 22% reduction in total GHG emissions could be achieved by 2015 and a 36% reduction in total GHG emissions could be achieved by 2015 and a 36% reduction in total GHG emissions could be achieved by 2020. New York State's goal is 80% reduction by 2050. SUNY Oswego pledged carbon neutrality by 2050. For the campus to reach carbon neutrality by 2050, a combination of green electrical power purchases and carbon-offset purchases may be required. However, energy efficiency advancements are expected to continually evolve in building systems, heating and cooling applications, building infrastructure, and renewable energy opportunities. SUNY Oswego will continually assess these advancements as part of campus master planning, new buildings and renovations, and general operations, maintenance, and repair. Energy efficiency advancements will be reviewed and incorporated in subsequent CAP updates.



CAP 2009 provided a recommended schedule for implementation of the emissions reductions measures listed in **Table 1.** As part of CAP 2012, SUNY Oswego has evaluated the progress and status of these measures. **Table 2** provides a summary of the near-term strategies, status of implementation, and the plans for continued implementation over the next 2 to 5 years for energy conservation/renewable energy.

Table 2 | Energy Conservation/Renewable Energy Opportunities - Status ofIdentified Near-Term Strategies

Energy Conservation / Renewable Energy Opportunity	Status	2 to 5 year Implementation Plan
Install demand controlled ventilation systems for academic buildings.	Design details for the new sciences building and the renovations for the School of Education have included demand control ventilation systems.	Continue to develop design standards for demand control ventilation. Implement this strategy as part of a campus-wide performance contract.
Replace standard efficiency motors with premium efficiency motors in HVAC systems.	As part of routine maintenance, motors are replaced with premium efficiency. Only premium efficiency motors are used in new construction.	Continue to develop design standards to utilize premium efficiency motors. Implement this strategy as part of a campus-wide performance contract.
Replace fluorescent light bulbs with higher efficiency light bulbs.	Lighting efficiency is a key design element in new construction. Some classrooms were outfitted with light emitting diode (LED) lamps.	Continue to develop design standards to maximize the efficiency of lighting. Continue to implement the use of LED lamps in buildings. Implement this strategy as part of a campus-wide performance contract.
Install lighting occupancy sensors in buildings.	New construction and renovation projects utilize sensors for lighting.	Continue to install occupancy sensors in the buildings. Implement this strategy as part of a campus-wide performance contract.
Replace shower heads in dorms with low flow fixtures.	The Village student housing project was completed with low flow fixtures.	Develop a plan to implement low flow fixtures in remaining residence halls.
Install additional insulation on three buildings.	Has been implemented as part of renovations to Sheldon Hall and Lee Hall.	Continue to maximize the efficiency of building shells during renovation projects.

Table 3 provides a summary of the near-term strategies, status of implementation, and the plans forcontinued implementation over the next 2 to 5 years for energy conservation/renewable energy.

Table 3 | Energy Conservation/Renewable Energy Opportunities - Status ofIdentified Near-Term Strategies

Energy Conservation / Renewable Energy Opportunity	Status	2 to 5 year Implementation Plan
Renovate three existing buildings with geothermal heat pumps, increased insulation and high efficiency lighting.	The new Sciences Complex and School of Education Renovations are being completed with the emphasis on maximizing efficiency and minimizing carbon footprint. A ground source geothermal system and solar photovoltaic (PV) cells are being implemented with these projects.	Continue to plan for the use of geothermal systems for heating and cooling as part of new construction and renovations. Continue to renovate buildings and designs systems to utilize more efficient means of operation.
Complete a re-evaluation of GHG reduction opportunities.	New	
Develop Key Performance Indicators (KPIs) to demonstrate progress and report to the college on an annual basis.	New	
Explore viability of renewable energy sources, such as wind power, with regional partners.	New	

Table 4 provides a summary of the long-term strategies, status of implementation, and the plans for continued implementation over the next 5 to 10 years for energy conservation/renewable energy.

Table 4 | Energy Conservation/Renewable Energy Opportunities - Status ofIdentified Long-Term Strategies

Energy Conservation/Renewable Energy Opportunity	Status	5 to 10 year Implementation Plan
Implementation of alternate energy/power systems, such as wind energy, lake source geothermal, and cogeneration. Continue implementation of new high efficiency buildings with geothermal heat pumps.	Investigate the feasibility, economics, and potential partners to develop plans for effective implementation strategies. Continuing to be a campus priority during new construction and major renovation projects.	
Investigate feasibility of solar PV and thermal hot water heating and, if cost effective, implement.	PV cells are being implemented in current projects at Rice Creek and the New Sciences Complex. To date, solar hot water systems have not been tried at the college.	

Students now have the option to live in LEED Gold certified apartments while still remaining a resident on campus.



The New Student Townhouse Complex at SUNY Oswego



CURRICULUM / LEARNING

Building on SUNY Oswego's learner-centered premise, curriculum and learning will continue to evolve through new course development focusing on sustainability, and through inclusion of sustainability elements and activities existing courses. We will continue to encourage and support student engagement activities including student/faculty research, individualized research, independent study, student groups advocating for reduction of our carbon footprint, and student and community member conversations on environmental impacts. The ultimate goal for future developments is to increase sustainability literacy of the college community, which will help reduce Oswego's carbon footprint.

According to our *Roadmap*, "We will nurture and develop intellectually empowered, responsible, and productive citizens capable of addressing local and global climate and environmental issues." To this end, we have established the Curriculum Academic Steering Committee, which advocated and received approval for the sustainability minor in 2011. In addition to inventorying the sustainability and the UN sponsored Principles of Responsible Management Education were adopted. Furthermore, working with the Office of Business and Community Relations, energy and sustainability workshops have been offered both on and off campus.

Table 5 provides a summary of the near and long-term strategies, status of implementation, and the plans

 for continued implementation over the next 2 to 10 years for curricula development and student learning.

Table 5 | Curricula Development and Student Learning Near-Term and Long-Term Strategies

Curricula Development and Student Learning	Status	2 to 10 year Implementation Plan
Develop a speaker series to engage students, faculty, staff, and the community in sustainability.	Planning for initiation in Fall 2012 is beginning.	Near-Term: Establish a schedule of several speakers for 2012-2013. Long-Term: Develop partners and funding opportunities for the expansion of this series.
Increase emphasis on sustainability in courses, internships, co-op opportunities to improve sustainability literacy of graduates.	Sustainability Minor approved.	Near-Term: Promote the new sustainability minor. Increase number of courses with sustainability components. Provide opportunities and incentives to faculty for incorporation of sustainability content in existing courses. Long-Term: Develop partners and funding opportunities for the expansion sustainability grants and courses.
Develop assessment procedures for sustainability literacy.		Near-Term: Assess learning outcomes in current courses with sustainability content. Long-Term: Create a process for assessing the sustainability literacy of every graduate.
Facilitate community learning opportunities and programs.	Sustainability Fair	Near-Term: Expand the Sustainability Fair and the speaker series. Long-Term: Host professional development workshops related to sustainability and LEED. Explore potential P-12 certification opportunities.

"SUNY Oswego mounted a new teacher-training effort last summer to deliver lessons of energy stewardship to young schoolchildren."



Fourth-grade teachers test electric motors they built at one of Oswego's energy institutes.

• • •

SUNY Oswego's first GENIUS Olympiad was held in 2011 and gathered students from 34 different countries.



COMMUNITY / LIFESTYLE

CAP 2009 established a goal for SUNY Oswego to set a new direction for the college as a catalyst for thoughtful transition in the way the community and the region use and protect vital resources. The college desires to be recognized for its leadership in engaging members of the college, the community, and the region in strategic and resource planning and developing local and regional relationships that leverage learning, research, and service in ways that benefit all members of our community. The *Roadmap* developed in 2011 identified two primary goals in reaching the strategic direction to lead, unite, and enrich the college and community in creating and maintaining a sustainable environment and lifestyle:

- 1. Advocate sustainable social behaviors and lifestyles by:
 - a. Promoting nutrition, exercise, and life balance
 - b. Promoting health and safety
 - c. Promoting community service.
- 2. Lead the development of sustainable community programs by:
 - Partnering with local and regional officials to build consensus and make sustainability initiatives a reality
 - b. Providing educational resources.

A key factor in reaching the goals of the CAP is the involvement of the Greater Oswego community, including local leaders, schools, hospitals, the City of Oswego, Oswego County, and transportation providers.

SUNY Oswego's Green Team gathered 230 college students at Canale's Restaurant and raised \$1,858 for a pledge that 30% of revenue would be applied towards energy improvements.

• • •



Encouraging students to walk or ride bikes promotes good health and reduces transportation emissions.



 Table 6 identifies the activities and near and long-term strategies to meet our community/lifestyle goals.

Table 6 | Community/Lifestyle Near-Term & Long-Term Strategies

Community / Lifestyle Opportunity	Status	2 to 10 year Implementation Plan
Develop programs to promote health & safety of the college community.	Nutritional campus meals are provided. Fitness centers and intramural and recreation programs are ongoing.	Continue to expand and develop programs to enhance the quality of life of the college community.
Partnering with local and regional officials to build consensus and make sustainability initiatives a reality.	Hosted Sustainability Fairs and working with "Greening Oswego County."	 Near-Term: Increase engagement of students, faculty, staff, and the community. Implement another student Citizens Academy. Workshops on sustainability at Sustainability Fair. Find a champion to lead the community in continuing the Science Cafes. Identify faculty/staff to work with the Oswego Green Team in planning the Sustainability Fair. Include workshops on sustainability topics as part of the Sustainability Fair. Long-Term: Involve community leaders to assist in programming the Citizens Academy, Science Café and Sustainability Fair in local communities. Investigate potential P-12 learning communities.
Regional Transportation	Completed Transportation Demand Management Study in September 2010.	Near-Term: Include a Forum on regional transportation issues as part of the Sustainability Fair and campus-wide Quest event (named after our quest for knowledge).
Develop a means to communicate with the community, announce events, and celebrate successes.	Through listserve 200 to 250 members collaborate using the SUNY Oswego GoGreen Resource list and Student Sustainability list. The Sustainability page on SUNY Oswego's website is being updated.	Continue to develop a sustainability website as a method to allow community members to initiate and discuss ideas.
Develop KPIs to demonstrate progress and report to the college on an annual basis.	New	

CLIMATE ACTION PLAN 2012

ENVIRONMENTAL SUSTAINABILITY



• • •

"We envision a future where intentional learners with clear understanding of the interdependencies of social, economic and environmental challenges invent a better world and are prepared to address the root causes of societal issues."

President Stanley - 2009 CAP

RESULTS TRACKING & REPORTING

The charter for the Presidents' Climate Commitment and Environmental Sustainability Team includes tracking our progress and celebrating our successes. The ACUPCC and New York State (NYS) have annual reporting requirements, but these provide a partial picture of sustainability activity and progress at SUNY Oswego. Our *Roadmap* was developed to provide clear direction for our campus and includes several KPIs that will be developed to track our progress. In addition, SUNY Oswego completed the STARS program in 2011 and will use several of these criteria to monitor our progress relative to all of higher education.

SUNY Oswego will be implementing KPIs over the next two years. From the *Roadmap*, KPIs have been identified for each Strategic Direction as outlined below.

CLIMATE / ENVIRONMENT

- GHG emissions
- Total energy and renewable energy
- Water use and water consumption
- Solid waste generation and diversion including recycling
- Public and alternative (non-SOV) transportation use
- Percent local purchase (within 250 miles)
- Percent green suppliers

CURRICULUM / LEARNING

- Major/minor degree programs
- Number of courses with sustainability content
- Internships, co-op opportunities, and authentic learning programs



RESULTS TRACKING & REPORTING

- Extended learning programs
- Involvement in research projects
- Participation in residence life, campus life, and auxiliary services
- Sustainable methods of course delivery (hybrids, COIL)
- Number of corporate/community/non-governmental organization partners
- Sustainability literacy
- Office of Research and Sponsored Programs

COMMUNITY / LIFESTYLE

- Service hours
- Faculty/student sustainability participation passports
- Resources provided or donated
- Participation in health related programs
- Reportable safety incidents

COMMUNICATION / ENGAGEMENT

- Number of stakeholders reached
- Number of stakeholders engaged
- Participation in events award programs
- Number of publications on sustainability
- Sustainability literacy score

On an annual basis, SUNY Oswego will prepare a report outlining status and progress of the KPIs.





FINANCING

In signing the Presidents' Climate Commitment, the college administration has demonstrated our willingness to invest in near-term and long-term strategies to meet our commitments. Balancing the "triple bottom line" of social, economic, and environmental responsibility guides our financial decisions. As a campus, it is our role to be leaders and establish examples for our community to consider, meet, and/or exceed.

Moving forward with our efforts and commitments toward a sustainable future, the college has multiple financial options available to implement. Sustainable financial planning prioritizes cost-effective emissions mitigation measures, maximizes the educational benefits to our community, and uses creative financing techniques to make serious climate action a reality.

Projects, measures, and programs that reduce GHG emissions can be financed by a variety of funding mechanisms including:

- Self-financing performance contracts through state agencies and partnerships
- Funding from government, foundations or business partners grants
- Receiving energy efficiency and renewable energy incentives
- Funding from our partner state agencies such as State University Construction Fund (SUCF) and The Dormitory Authority of the State of New York (DASNY) for capital improvements
- Operating funds
- Fundraising and Alumni donations
- Funding from student donations such as class gifts

FINANCING

The college is currently proceeding with efforts associated with each of these funding sources. Some examples include:

- New York Power Authority (NYPA) funded performance contract
- SUCF funded LEED Silver or better projects with the Science, Engineering, Innovation complex and the School of Education.
- DASNY funded LEED Gold Townhouses
- New York State Energy Research and Development Authority (NYSERDA) funded capital improvements
- Operationally funded green products
- Grant and operationally funded educational and faculty professional development programs.



A scholarship has been set up to send children in need to SUNY Oswego's Rice Creek Field Station for summer learning.

• • •

Two technical writing and literacy classes conducted a student survey and identified that 60% of the surveyed residents would support a voluntary "Green Fee" to help increase sustainability awareness.

ACKNOWLEDGEMENTS

CAP 2012 represents the diversity of engagement by college operations, administration, faculty, and students to integrate environmental sustainability into SUNY Oswego's culture and improve the world environment. SUNY Oswego would like to thank the following individuals, teams, and organizations for their support and assistance in completing this document.

CLIMATE CHANGE AND ENVIRONMENTAL SUSTAINABILITY TEAM

Kim Armani (Metro Center)		
Judith Belt (School of Education)	SUNY Oswego Interim Provost	
Tim Braun (College of Liberal Arts & Sciences)	Lorrie Clemo	
Mike Colucci (Student Spring 2012)	Students	
Mike Flaherty (Auxiliary Services)	Jason MacLeod (Fall 2012)	
Eric Foertch (Health & Safety)	Nicholas Pike (Fall 2012)	
Rick Kolenda (Administration)	Campus Concept Committee	
Lisa Langlois (School of Comm., Media & the Arts)	Climate Academic Steering Committee	
John Moore (Facility Design & Construction, Co-Chair)	Facilities Services Department	
Becky Nadzadi (Campus Events)	Office of Institutional Research	
Bettsy Oberst (Alumni Office)	Office of Public Affairs	
Larry Perras (Small business Development)	Operational Sustainability Team	
Casey Raymond (College of Liberal Arts & Sciences, Co-Chair)	Oswego Alumni Association	
Barbara Shaffer (General Library)	O'Brien & Gere	





STATE UNIVERSITY of NEW YORK AT OSSOEGO