



## 2014-2015 Post-Secondary Nominee Presentation Form

### ELIGIBILITY CERTIFICATIONS

#### College or University Certifications

The signature of college or university President (or equivalent) on the next page certifies that each of the statements below concerning the institution's eligibility and compliance with the following requirements is true and correct to the best of their knowledge.

1. The college or university has been evaluated and selected from among institutions within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
2. The college or university is providing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a compliance review.
3. OCR has not issued a violation letter of findings to the college or university concluding that the nominated college or university has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
4. The U.S. Department of Justice does not have a pending suit alleging that the college or university has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
5. There are no findings by Federal Student Aid of violations in respect to the administration of Title IV student aid funds.
6. The college or university is in good standing with its regional or national accreditor.
7. The college or university meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

### U.S. Department of Education Green Ribbon Schools 2014-2015

Public 4-Year     Public 2-Year     Private Non-Profit

Name of President/Chancellor: Dr. Tony Frank

(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

Official College or University Name: Colorado State University

(As it should appear on an award)

College or University Street

Mailing Address: 900 Oval Drive, Fort Collins, CO 80523

(If address is P.O. Box, also include street address.)

County: Larimer IPEDS Number\*: 126818

Telephone: (970) 491-1111 Fax: (970) 491-0501

Web site/URL: [www.colostate.edu](http://www.colostate.edu) E-mail: [presofc@colostate.edu](mailto:presofc@colostate.edu)

\*Integrated Postsecondary Education Data System

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

A handwritten signature in black ink, appearing to read "Tony Frank", is written over a horizontal line.

(President's/Chancellor's Signature)

Date: 12/17/14



### Nominating Authority's Certifications

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the college or university's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

1. The college or university has been evaluated and selected from among institutions within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
2. The college or university meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: Colorado Department of Higher Education

Name of Nominating Authority: Ms. Maia Blom

(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application and certify to the best of my knowledge that the school meets the provisions above.

*Maia E. Blom*

Date: 12/19/14

(Nominating Authority's Signature)

### SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS

Provide a coherent "snapshot" that describes how your college or university is representative of your jurisdiction's highest achieving green school efforts. Summarize your strengths and accomplishments in all three Pillars and nine Elements. Then, include documentation and concrete examples for work in every Pillar and Element.

### SUBMISSION

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to [green.ribbon.schools@ed.gov](mailto:green.ribbon.schools@ed.gov) according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509

Expiration Date: February 28, 2015

### Public Burden Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email [ICDocketMgr@ed.gov](mailto:ICDocketMgr@ed.gov) and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

# Colorado Green Ribbon Schools – Postsecondary Sustainability Award

## 2014-2015 Application

### PART IA: CONTACT INFORMATION

College/University Name: Colorado State University

Street Address: 251 Edison Drive

Website: [www.colostate.edu](http://www.colostate.edu) Facebook page: [www.facebook.com/coloradostateuniversity](http://www.facebook.com/coloradostateuniversity)

President/Chancellor Name: Dr. Tony Frank

President/Chancellor Email Address: Phone Number: (970) 491-6211

President/Chancellor Signature\*: 

Program Contact Name (if different): Carol Dollard

Program Contact Email: carol.dollard@colostate.edu Phone Number: (970) 491-0151

Program Contact Signature\*: 

*\*By signing this application, President/Chancellor and/or Program Contact assure that the information provided is accurate to the extent possible.*

#### School Demographics

<b>Basic Classification</b> <input type="checkbox"/> Public 2-year <input checked="" type="checkbox"/> Public 4-year <input type="checkbox"/> Private Not-for-profit <input type="checkbox"/> Private For-profit <input type="checkbox"/> Other _____	<b>How would you describe your school?</b> <input type="checkbox"/> Urban <input type="checkbox"/> Suburban <input type="checkbox"/> Rural <input checked="" type="checkbox"/> Multiple campuses	Total enrolled: <u>~30,000</u> Undergraduate Total: <u>~22,000</u> Graduate Total: <u>~3,600</u> Graduation Rate (150% of normal time): <u>65.2%</u> % Undergraduates Receiving Pell Grants: <u>24%</u> Average Institutional Net Price: <u>\$9,897 for Colorado residents</u>
<b>Minority-Serving Institution (check all that apply):</b> <input type="checkbox"/> AANAPISI <input type="checkbox"/> ANNH <input type="checkbox"/> HBCU <input type="checkbox"/> HSI <input type="checkbox"/> NASNTI <input type="checkbox"/> PBI <input type="checkbox"/> TCU		<b>Has your IHE received any awards for facilities, health or environment?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Award(s) and year(s): See application
		<b>Is your IHE participating in a local, state or national program which asks you to benchmark progress in in any or all of the Pillars?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Program(s): See application

## SUMMARY NARRATIVE

Colorado State University (CSU) has been a leader in sustainability since 1888 when our first campus farm started. Among our peers in higher education, CSU is a GOLD-rated university in the Association for the Advancement of Sustainability in Higher Education STARS (Sustainability Tracking, Assessment & Rating System); and currently holds the highest score of all 300+ universities reporting. STARS is a comprehensive sustainability metric encompassing social, financial, and environmental categories – all three legs of the sustainability triangle. Our leading STARS rating illustrates how CSU has embedded sustainability efforts across the entire university.

In the area of environmental and sustainability education, CSU has many outstanding examples including:

- The School of Global Environmental Sustainability (SoGES), where we focus on courses and research that provide a comprehensive understanding of the environment – an effort that is explicitly interdisciplinary. SoGES helps faculty embed sustainability in their curriculum, helps students graduate with enhanced sustainability literacy and promotes cross-disciplinary research in sustainability.
- The Global Social & Sustainable Enterprise (GSSE) MBA program is designed to educate students to become entrepreneurs of the future that see business opportunities through the lens of the sustainable triple bottom line.
- The CSU STEM Center facilitates collaboration among STEM disciplines to enhance teacher preparation and development programs. This program works with faculty, staff, students, and off campus organizations on STEM research and education and serves as an organizing point for STEM projects on campus.
- The Little Shop of Physics (LSOP) offers hands-on educational programs that engage K-12 students in physics and scientific experimentation. Undergraduate students take over 100 interactive exhibits to students to create a unique hands-on experience. Over 20,000 students experience the LSOP every year —not including the 8,000+ attendees at the annual LSOP Open House on CSU’s Main Campus.
- The Student Leadership, Involvement & Community Engagement (SLiCE) program at CSU provides a central location to enable students to participate in experiential and service learning opportunities in the local community and around the world. Every year SLiCE coordinates volunteers for Cans Around the Oval (the largest canned food drive in Larimer County).

CSU has been working for decades to reduce environmental impacts and costs of campus operations. Specific examples include:

- As signatories to the American College and University Presidents Climate Commitment (ACUPCC), CSU is committed to reducing campus carbon emissions to zero. Annual greenhouse gas emissions inventories and biannual Climate Action Plan updates provide the metrics and strategies to support progress toward this goal.
- An Energy Reserve Fund (ERF) established by Facilities Management in FY10 provides a revolving fund for campus energy and water efficiency projects. Typically \$750,000 to \$1 million in projects are funded annually – with utility savings coming back to replenish the fund.
- Efficiency projects have reduced water consumption on campus by 100 million gallons per year since FY00. Efforts have centered on reducing process water use in equipment like autoclaves, efficient fixtures, and conversion of the few remaining potable irrigation systems.
- CSU has placed in the top 5 percent in RecycleMania – an annual recycling competition among 600+ universities – every year since 2005.

- Commuter surveys show that over half the students on campus use alternative transportation to get to campus. The CSU Alternative Transportation Manager works with the campus community to improve on those already impressive numbers with faculty and staff, as well as students.

Health and wellness of the CSU campus community is core to having a successful organization. A few examples of efforts on campus include:

- Commitment to Campus (C2C) provides benefits to faculty and staff that range from exercise programs and nutrition classes to sports and cultural events on campus. In addition, lactation rooms across campus provide a clean and quiet place for nursing mothers.
- CSU is recognized as a Silver Bicycle Friendly University by the League of American Cyclists. A submittal currently in development has a target of achieving the Platinum level. These accolades illustrate CSU's broad commitment to make bicycling on our campus safe and comfortable for all.
- With nutrition labeling, vegetarian/vegan options, and a focus on local food, CSU's Housing & Dining Services works to bring sustainable foods to the campus community. The dining centers are available to faculty, staff, and students so the entire campus community can take advantage of the healthy food choices.

While this list is only the proverbial tip of the iceberg, it shows that CSU is committed to sustainability across nearly every aspect of what we do.

## **PILLAR I: REDUCED ENVIRONMENTAL IMPACT AND COSTS**

### **ELEMENT IA: IMPROVED ENERGY CONSERVATION/ENERGY-EFFICIENT BUILDING(S)**

Colorado State University (CSU) has a long history of embracing sustainability, certainly before it was commonly named as such. In more recent times, CSU has made a number of significant commitments and accomplishments that have structured our plans, path, and goals to advance sustainability throughout the institution. In 2001, CSU signed the Talloires Declaration – committing to sustainability in higher education and to incorporate sustainability and environmental literacy in teaching, research, operations, and environmental outreach. In 2008, CSU signed the American College and University Presidents Climate Commitment, committing CSU to become a carbon neutral campus. This commitment includes producing annual greenhouse gas (GHG) emissions inventories and to developing a Climate Action Plan (CAP) which provides the strategies for CSU to achieve climate neutrality by 2050. The CAP is updated biannually and is comprised of 16 strategies in five categories: Energy Efficiency, Behavior & Policy, Renewable Energy, Transportation, and New Technologies. While the CAP provides a baseline, it is a living document that will be revised and updated as we continue to reduce emissions from CSU operations.

CSU has an established energy management plan with staff dedicated and focused on continuous improvement of energy efficiency, energy conservation and is measured in the reduction of energy intensity per gross square foot as measured in kBtu/sf.

CSU utilizes a Master Plan – a living document that helps to guide smart growth of campus buildings and infrastructure. The plan is formally updated every 10 years – the next update is in progress with stakeholder input underway & publication planned for 2015. In addition to infrastructure master planning, Facilities Management staff prioritizes energy efficiency projects (implemented through the use of an Energy Reserve Fund), selects buildings for recommissioning, and optimizes conservation outreach to achieve energy and GHG emission reduction targets.

To highlight one extraordinary success, in FY14 a completed recommissioning project reduced annual electric energy consumption in one campus building by 32% which saves over 250,000 kWh/year compared to their baseline use. This was accomplished through a collaborative approach of recommissioning (building system tuning) and behavioral engagement. By making people more comfortable through the recommissioning process, the occupants were open to a variety of behavioral changes that added significantly to the overall savings. Note that those savings have been sustained for over two years. Very few capital dollars were expended and the project delivered total payback in just a few months. We are replicating this model in additional buildings and are expanding the recommissioning team with an additional FTE to advance this effort more quickly.

CSU's total built environment includes ~10.6 million gross square feet (gsf) on campuses across the state. Since FY10, total energy use per square foot on all of CSU campuses has dropped 10%. This reflects the success of our comprehensive efforts to improve efficiency, conservation and minimize the energy impacts of our growth.

As of October 2014, CSU has 17 LEED certified buildings, 13 for New Construction, 3 for Commercial Interiors, and one LEED for Existing Buildings Operation & Maintenance (EBO+M). These LEED projects, over a million gsf, represent almost 10% of the university total gsf. An additional five projects, expecting LEED certification by early 2015, will add over half a million gsf to our total of high performance buildings. While creating this "fleet" of high performance buildings, we have also been educating future green builders through the Institute for the Built Environment (IBE). Students hired by IBE have performed the LEED documentation efforts on a significant number of the LEED projects on campus and for private developers.

Currently, the only building on campus with an ENERGY STAR score is Summit Hall (a residence hall) which is our first LEED EBO+M building. ENERGY STAR is not often utilized as a metric for colleges and universities because many of the mixed building types on our campuses (office, classroom, and laboratory spaces) are not eligible for a score in the ENERGY STAR rating system.

In FY14, CSU consumed ~154 million kWh of electricity across all campuses. This electricity consumption comprises 54% of CSU's GHG emissions – due to the high percentage of coal in the local electricity generation mix. CSU's original Climate Action Plan was written in FY10; therefore, that is our baseline year for GHG emissions. Since FY10, CSU has reduced total GHG emissions by 2%. More significant progress in absolute terms has proven challenging given extensive campus growth and *increases* in our local electric utility emissions factor (an element out of the university's control). Note: CSU's GHG emissions normalized for growth (MTCO<sub>2e</sub>/gsf) has dropped 12% since FY10.

In an attempt to better manage the electricity portion of our GHG emissions, CSU has pursued many renewable energy projects. CSU owns seven individual solar PV arrays which total 260 kW producing over 350,000 kWh of clean electricity per year. CSU is also a site host to a 30 acre, 5,300 kW solar PV array on our Foothills Campus which is producing over 8.5 million kWh of clean electricity per year. On an annual basis, the energy produced by this solar plant provides 30% of the electricity needs of the entire Foothills Campus (about one million gsf of buildings). Further, by June 2015, CSU and Namaste Solar will complete the installation of another 1,200 kW of solar PV with the lease of six campus rooftops through the Fort Collins Utilities Solar Power Purchase Program.

CSU has operated a small biomass boiler on the Foothills Campus since 2009 – a demonstration project in partnership with the Colorado State Forest Service which utilizes wood chips from forest thinning and pine beetle kill areas. While small (1.5 MMBtuh rating), this installation has served as a great learning

opportunity for students, future foresters (through a local community college partnership), and Facilities staff in the operation of wood chip boilers. A study is ongoing to determine the feasibility of installing a much larger biomass boiler.

In September 2013 CSU, in partnership with Juwi Wind, installed a meteorological tower at the Eastern Colorado Research Center near Akron, CO, to investigate a utility scale wind energy project. Students in the Department of Mechanical Engineering help to monitor and evaluate the wind data to determine the viability of the site. Wind data collected over a 24 month period will help determine the feasibility of developing a ~30 MW wind farm with the intention of wheeling the electricity directly to the Fort Collins area campuses. This is a long-term investigation with potential hurdles and constraints at many levels. However, should these challenges be overcome, CSU could reduce its overall carbon footprint by more than 30% through this single project by meeting the electricity needs of the Fort Collins area campuses with clean electricity from this site.

Each year, Housing & Dining Services (HDS) purchases more than 3 million kWh of green power for all public areas of the department. HDS actively engages the 7,000+ students living on campus utilizing 14 student Eco Leaders, who encourage participation in various programs throughout the academic year including the annual Green Warrior Campaign (a resource conservation challenge) – engaging ~1,800 students in 2013.

### **ELEMENT IB: IMPROVED WATER QUALITY, EFFICIENCY, AND CONSERVATION**

Water is a valuable resource, especially in the semi-arid west. As a result, CSU is committed to conserving water and has been actively implementing and researching state of the art ways to accomplish water conservation. Since FY00, we have decreased potable water use by 21% (over 100 million gallons/year), while campus gsf and populations have increased. Projects to reduce potable water use have included:

- Retrofitting of 42 laboratory autoclaves with water-saver kits
- Aspen Hall utilizes an innovative greywater system, capturing water from sinks and showers to then be used for toilet flushing. Student researchers monitor this installation.
- Low-flow shower heads are used in all residence halls
- Through remodeling and updates we are replacing toilets and urinals with low-flow models (earning CSU recognition from Fort Collins Utilities with a 2014 Water Catcher Award).
- Worked with Fort Collins Utilities to install over two hundred aerators on faucets on the Main Campus
- All CSU dining centers have installed pulpers – significantly reducing the amount of water used to clean plate scraps.
- Per student and employee requests, CSU has installed 34 water bottle-filling stations to date (every new freshman in a residence hall is given a reusable water bottle at move-in).

CSU is situated on nearly 5,000 acres of land, including the Main Campus, South Campus, Foothills Campus, an agricultural campus, and a mountain campus (Pingree Park). CSU also has 4,600 acres of agricultural research centers, Cooperative Extension offices, and Colorado State Forest Service district and field stations. More than 90% of the water used by CSU for outdoor irrigation is raw (untreated) water. CSU has used raw water for irrigation since the 1960s and CSU strives to use it efficiently. For example, CSU has a computer-controlled irrigation system that is used to turn off zones when there is sufficient rain. In addition, special valves on the system can sense when there is excessive flow due to a broken sprinkler head or pipe and will close off that part of the system. CSU is a recognized Tree Campus USA by the Arbor Day Foundation, and maintains both a campus tree care plan and an integrated pest management plan to maintain the Fort Collins-based campus grounds in an

environmentally sustainable manner.

CSU has constructed wetland projects for bioremediation and conservation. Each project provides a learning experience, while exhibiting sound environmental practices. The most innovative is next to the University Greenhouses – serving as bioremediation of greenhouse wastewater runoff. This project was designed and constructed as a partnership between a landscape architecture class and Facilities Management. CSU has also installed one green roof above the Microbiology Study Lounge. When the space was first constructed, the budget did not allow for a green roof, but the building was designed to hold the extra load. A few years later, a postdoc student in the Department of Horticulture and Landscape Architecture conducted the first studies of plant species that would do best in green roofs utilizing moveable planting trays. Once her studies were completed, CSU planted a permanent roof garden.

### **ELEMENT IC: REDUCED WASTE PRODUCTION AND IMPROVED RECYCLING AND COMPOSTING PROGRAMS**

Recycling at CSU began several decades ago and continues to make tremendous progress since receiving an initial grant in 1990. CSU adopted a single stream recycling system in 2008, now recycling over two million pounds of material every year. In FY14, CSU had a recycling rate of over 63%. CSU has placed in the top twenty percent in RecycleMania – a national recycling competition among more than 500 colleges and universities – each year since 2005. During the RecycleMania competition, CSU holds an on-campus competition to engage ~6,000 students living on campus in waste reduction efforts. The residence hall with the best recycling rate is awarded the coveted RecycleMania travelling trophy. In addition, the annual waste audit is conducted during this competition. 24 hours of “waste” from a single resident hall is dumped onto the campus plaza where students, faculty and staff don plastic booties, gloves and aprons to sort the pile into compost, recyclables, and determine the amount of “true trash”. While not a glamorous job, it is critical for everyone to understand what makes up our daily “trash”. Several years ago, the predominance of organic material noted during the waste audit led directly to the establishment of the Housing & Dining Services (HDS) composting program.

Resident hall dining centers also conduct biannual plate-waste audits – to learn how to increase diversion and minimize food waste. Almost all (93%) of the CSU dining centers food waste is now diverted from the landfill via the HDS composting program. Every day 2,000 pounds of pre-consumer food waste and animal bedding are added to an in-vessel Earth Flow composter. This composter serves as a living lab for Soil and Crop Science students who help study the process and “perfect the recipe” to create top-quality compost.

In FY14, over 200,000 pounds of post-consumer food waste from the HDS dining center pulpers was delivered to the City of Fort Collins wastewater treatment plant to be processed in their anaerobic digester where methane generated is burned to create heat used at the plant. In addition, HDS partners with a local company to collect ~27,000 pounds of used cooking oil each year for recycling. In addition, CSU Grounds crews chip and mulch ~900 cubic yards per year from campus tree trimmings – to be reused in our landscaping.

Recycling figures above *do not* include the items collected through the annual Leave It Behind program – when students move out of residence halls at the end of the academic year. Over 18 tons of items were left behind in May 2014 and resold at a community yard sale – all revenue generated helps to fund the HDS Eco Leaders program.

The university hosts several near-zero waste events on campus throughout the year including:

- Ram Welcome, a picnic serving over 8,000 students and family members that achieved a 91% diversion rate in 2013.
- The President's Picnic serves the entire campus community and achieved a 99% diversion rate in 2013.
- GameDay Recycling Challenge, a friendly national competition for colleges and universities to promote waste reduction at football games. At the October 2014 Ag Day Celebration and CSU home football game, 71% of the total event waste was diverted from the landfill through recycling and composting.

CSU has an adopted Environmentally Responsible Purchasing Policy to support campus sustainability by providing guidelines, information, and resources for procuring products that will minimize negative impacts. The Policy applies to both goods and services. CSU is an EPEAT Education Purchaser and our strategic partner, HP, is listed as an EPEAT Manufacturer. Best practices listed in the ERP encourage at least 30% post-consumer waste (PCW) content in office paper and 100% PCW recycled paper content in uncut papers (janitorial supplies). Both the paper towels and toilet paper used on the CSU campuses meet the 100% PCW recycled paper content. CSU's custodial services select cleaning products from a list of Environmentally Preferred Products.

Under the supervision of the Environmental Health Services (EHS) and Facilities Management departments, CSU meets and strives to exceed all regulatory standards applicable to the institution. The EHS Chemical Management Unit – Hazardous Waste Division (CMU-Haz) is dedicated to ensuring proper management and disposal of all hazardous wastes generated by research, teaching and facilities operations at CSU. This commitment allows CSU to meet its compliance obligations concerning federal, state, and local regulations pertaining to the management of chemical hazardous waste. CMU-Haz provides assistance for the disposal of hazardous waste generated at CSU. Responsibility for compliance with hazardous waste regulations begins with the individual researchers and employees who generate the waste material, and continues through the transportation and disposal process. CSU's Integrated Solid Waste team, EHS, and Central Receiving each play a role to collect and recycle light bulbs, ballasts, printer cartridges, batteries, paints, and other (regulated or) hard to recycle items.

#### **ELEMENT ID: USE OF ALTERNATIVE TRANSPORTATION, TO, DURING AND FROM SCHOOL**

CSU has invested in alternative transportation with the goal of reducing vehicular GHG emissions. Parking and Transportation Services (PTS) budgets \$1,000,000/year from parking revenue for staff, education, transit and infrastructure to help reduce single occupancy vehicle commuting and work-day trips.

In 2014, the student government of CSU, the Associated Students of Colorado State University collaborated with PTS to provide \$760,000 of additional transit services for campus users. The new transit routes provide a last-mile cross-campus shuttle while providing connections to our satellite campuses. These new routes allow our students and employees to travel between campuses without the need of a personal vehicle. Further, PTS provided financial support and land for the new MAX bus system in Fort Collins that serves the heart of our Main and South Campuses. Lastly, this collaboration with our local transit system provides all students and employees with a free, annual transit pass.

PTS has made numerous investments to enhance bicycle commuting for our campus users. We have taken trail counts on campus with over 1,300 peak-hour commuters on our shared use trails. Our campus has already invested in over 15,000 bike parking spaces, a regional bicycle corridor (Mason Trail), a student-run bike repair room (the Spoke), and cutting-edge bicycle-only (separated) trails. At the Spoke – students only have to pay for the parts used if they participate and help with their bicycle repairs. A

Bicycle Master Plan will soon identify future infrastructure improvements and standards to make CSU a safer environment for commuters while elevating our standing with the League of American Cyclists from Silver (2011) to a targeted Platinum rating (2015). For this academic year, PTS has also funded two student-led programs, RamBassadors and RamGuards to provide daily (onsite) education and traffic control to help encourage bicycle commuting by encouraging safe travel behavior on our campus. PTS has also invested in education programs to include Bike to Work Day, Bike to Breakfast, Winter Biking Skills, Follow My Ride GoPro Contest, and the Get Back on the Bike (a peer encouragement and skills program for employees over the age of 50).

PTS also creates an annual travelshed map to calculate the distance from home addresses to the university for all members of the campus community. The mapping effort helps the university set vehicle miles travelled reduction goals for our students and employees while helping to calculate the transportation portion of the greenhouse gas emissions for the university.

### ***INNOVATIVE PRACTICES AND/OR PARTNERSHIPS***

CSU would like to highlight three programs that represent engagement, partnership, and impact through environmental education, reducing environmental impacts and acting with sustainability in mind. These examples illustrate our efforts involving individuals and organizations, on our campuses and beyond.

First, engagement and outreach is what we do as an institution. CSU is classified as a Carnegie Engaged University in Curricular Engagement & Outreach and Partnerships. CSU is also a member of the Engagement Scholarship Consortium. And, as a land-grant university, CSU is the proud home of Colorado State University Extension – whose system of county offices puts Extension resources within easy reach of Colorado's 64 counties. CSU faculty and staff with expertise in agriculture, horticulture, range, forestry, water, health promotion, financial literacy, business management, community development and 4-H youth-development are all part of Extension's effort to bring the latest information to the people of Colorado. Just a few of the programs related to sustainability offered by Extension include: Water Quality & Water Saving Education, Native Plant Masters, Nutrition Education, and Clean & Renewable Energy. Extension has also developed a Colorado Energy Master program similar to the Master Gardener program – to train volunteers to provide energy efficiency information to a larger audience. These energy and natural resources programs involve more than 24,000 people/year.

Second, the Institute for the Built Environment (IBE) provides direct emissions reductions for CSU through its work on several CSU LEED building projects – including our first LEED EBO+M certification at Summit Hall. Yet, IBE is so much more; founded in 1994; IBE is an interdisciplinary research and education center for environmentally responsible building design and construction. Each year graduate students from a variety of disciplines (construction management, interior design, and landscape architecture for example) work for IBE on projects both on and off campus to hone their skills and certifications. In addition to a graduate emphasis in sustainable building, IBE works with industry professionals to offer coursework, training and design charrettes, provides LEED consulting services, and conducts research. IBE will launch a new Integrated Sustainability Management certificate program in February 2015 – to utilize expertise from leading research and practitioners to show students how to implement change across an organization.

Third, CSU and Veterans Green Jobs created the Veterans Green Jobs Education initiative on Veterans Day in 2009. CSU is the first four-year university to partner with Veterans Green Jobs to provide green educational opportunities to veterans. An MOU established a formal relationship between CSU and the Denver-based, non-profit organization, Veterans Green Jobs, for the purpose of encouraging and enhancing opportunities for military veterans to attend the university, both at the undergraduate and

graduate levels. The initiative promotes academic disciplines that provide post-educational career opportunities for veterans in the green jobs sector, both in Colorado and nationally. CSU's Adult Learner and Veterans Services boasts many accolades including being designated a Military Friendly institution by GI Jobs for the past 5 years – an honor placing CSU in the top 15% of universities supporting veterans returning to college. In the 2010-2013 timeframe, there was an 89% increase in the number of student veterans on campus.

## **PILLAR II: IMPROVED HEALTH AND WELLNESS**

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### **ELEMENT IIA: AN INTEGRATED CAMPUS ENVIRONMENTAL HEALTH PROGRAM**

Colorado State has a robust environmental health management program involving the entire campus community from Housing & Dining Services to the Veterinary Teaching Hospital. Most of these programs are led by Environmental Health Services (EHS). EHS is a professional multidisciplinary team, dedicated to the promotion of environmental, occupational health, and safety services through education, consultation, monitoring and planning in response to present and future needs of CSU. To help promote environmental health and wellness EHS fosters partnerships among the university, the community, and government entities.

CSU has very robust programs supporting regulatory requirements both inside and outside our buildings. Specifically, CSU abides by all laws regarding mercury, pesticides, tobacco and other hazardous substances. CSU works to ensure proper management and disposal of hazardous waste. In addition, through a reuse program, EHS aims to make sure any chemicals that could possibly be reused get redistributed on campus.

In the area of maintaining a healthy outdoor environment, CSU strives to manage a healthy and aesthetic landscape while minimizing negative impacts on the campus community. CSU owns a total of 2,200 acres in the Fort Collins area, of that 1,500 acres (68%) is undeveloped. The remaining 700 acres of land is managed by the Outdoor Services Group which strives to limit the application of insecticides to control insect populations, and employs both Integrated Pest Management (IPM) and Plant Health Care practices to that end. Core Principles of CSU's IPM include: managing to acceptable pest levels, preventative cultural practices, including selection of best varieties for pest resistance, monitoring of pest populations, mechanical controls, and biological controls, including the use of beneficial insects, and other organisms, and finally the responsible use of pesticides.

In order to reach a broader audience with these best practices, the Colorado Environmental Pesticide Education Program provides accurate and updated training to pesticide applicators and employers throughout Colorado in both private and commercial categories. This program is part of the Department of Bioagricultural Sciences and Pest Management in the College of Agricultural Sciences. Students and employees of CSU can also access this comprehensive information about IPM. The program maintains current pesticide applicator study guides as well as a database of media material for pesticide application training and education.

Over the past 18 months, a group of faculty and staff initiated a Green Labs effort outlined as part of a \$4.4 million NSF-EPA grant awarded to CSU. The translation of the grant research products to the marketplace is facilitated by close interactions with CSU's technology transfer group CSU Ventures, and the pharmaceutical industry. Research results are integrated into teaching and outreach efforts, ranging from green chemistry demonstrations for K-12 students, to course development, to new research opportunities for undergraduate students, to systems-based training for all junior researchers. Incorporation of sustainable chemistry practices into day-to-day lab work is a key feature of the

program. These outreach efforts benefit by partnerships with CSU's School of Education, Facilities Management, and CSU's Chemistry Club. The broader Green Labs effort intends to reduce energy consumption, water usage, and the associated environmental impacts of both primary research and laboratory teaching and learning, without compromising laboratory safety protocols.

In the area of maintaining a healthy indoor environment, all CSU operated buildings are subject to a comprehensive indoor air quality (IAQ) plan. All incidents of contamination or concern are managed by the IAQ Management Group. CSU promptly addresses IAQ concerns by taking reports both online and over the phone. EHS also provides a Fume Hood Certification program in research facilities on all campuses. Proper operation of fume hoods maintains a safe and healthy environment for students and researchers. There are over 700 fume hoods on CSU campuses inspected and certified annually by EHS. Fume hood function and hygiene are among the inspection criteria. All new fume hood installations must be commissioned or certified by EHS before use.

Another unique example of how CSU is focused on making sure our campus community has a healthy indoor environment is in bed bug control. With students coming here from literally all over the globe, occasional bed bug incidents are inevitable. HDS has purchased a heat treatment unit and trained an internal team to operate it. Thus, we treat bed bugs without chemicals and work diligently with students to explain the heat process and make sure that the student's personal belongings are treated appropriately.

In addition to all of the programs mentioned above, EHS also offers extensive education, training, outreach, and support for all CSU employees and students regarding: biosafety, ergonomics, occupational hazards, laser safety, research radiation control, explosives research & safety, hearing protection, respiratory protection, construction industrial safety, and more.

## **ELEMENT IIB: HIGH STANDARDS OF HEALTH AND WELLNESS**

Housing & Dining Services (HDS) is committed to the nutritional well-being of the students and staff of the CSU community. Food choices and diet are an important part of student's daily lives and are crucial for health and well-being for everyone. HDS has the responsibility of providing nutritionally balanced food choices, along with accurate information and resources so that each individual can make the best dietary decisions for themselves on a daily basis.

The Eat Well @ CSU nutrition program encompasses a number of ways that nutrition information is provided to students. Through nutrition classes, the Nutrition Calculator, displays in dining halls, and easy-to-identify nutrition labels and brochures, information is provided to students so that they can make informed dietary decisions. All menu items are appropriately labeled with vegan, vegetarian, eat well, local product, and contains nuts labels. Gluten-free items are located in the designated gluten-free zones. The online menu system allows students to sort food choices by the following categories: Vegan, Vegetarian, Eat Well, Gluten-Free, Local Product, and/or Contains Nuts before they arrive at the dining center. Additionally, through this system, foods containing allergens such as wheat or soy are labeled. HDS strives to provide students with healthy and sustainable food options whenever possible. More than 26% of the food served in the dining centers is organic or locally grown and/or supplied. This is up by 6% as compared to the previous year's purchase of local and organic food. Local products include milk, eggs and dairy products, breads, meat, sauces, pasta, and seasonal produce when available. Organic items include soy milk, tofu, and a variety of vegetables and fruits.

Just to make sure we are meeting the needs of our constituents on campus, DIG (Dining Insight Group) is a student feedback forum that invites students with meal plans to provide feedback on new and

existing menu items and recipes to Dining Services several times a semester. Students also have the opportunity to voice opinions about dining programs and sustainable dining through this forum, feedback cards in our dining centers, via social media, and on our website. In addition to DIG and these feedback options, we routinely meet with individual students and student groups to discuss and review dining proposals. In FY14, Dining Services worked with the Fair Trade and Palm Oil Free student organizations to inventory all of the items in our express locations to make a guide to label items that do not contain palm oil and items that are fair trade certified. We found a deficit in chocolate bars and worked with the student organizations to introduce a Fair Trade, Organic, and Palm Oil free chocolate bar brand that has sold quite well.

CSU's Horticulture program sponsors a Community Supported Agriculture (CSA) program open to the community. This CSA provides members a wide variety of local organic produce. The farm is tended by CSU students who are passionate about organic agriculture and who want to share it with the local community.

A student group on campus is seeking to certify CSU as an official "Fair Trade University" partner. A resolution was recently approved by the Associated Students of Colorado State University (student government), and is awaiting Administration approval. It is anticipated that by early 2015, CSU will achieve Fair Trade University Certification.

The Aspen Grille is a student-operated restaurant located in the University Club, in the Student Center. Conceived and designed by students, the Aspen Grille offers real-world experience to students in the Hospitality Management Program within the Food Science and Human Nutrition Department. The Aspen Grille maintains its certification by the Green Restaurant Association and focuses on local/sustainable food sources, including an on-campus, student-operated greenhouse. One of the Aspen Grille's new partners, Harvest Farms, is located just north of Fort Collins. Part of the Denver Rescue Mission, Harvest Farms offers rehabilitation to those in need, through farming. The Aspen Grille menu also offers meats provided by Colorado's Best Beef, breads crafted by the Aspen Baking Company, desserts from Fort Collins-based I d'Eclair! pastry, and socially conscious coffee roasted by Cafe Richesse, a CSU alumnus-owned company.

The Kendall Anderson Nutrition Center is a nutritional center on campus that provides service learning opportunities and training for students in the department of Food Science and Human Nutrition, while enhancing the health of the community through nutrition outreach, collaboration, and research. The Kendall Anderson Nutrition Center offers students and employees nutrition programs for weight loss and diabetes as well as services such as nutrition coaching, gluten-free living, heart healthy cooking, and sports nutrition.

CSU also offers a wide variety of health, exercise and wellness opportunities for employees. These are included as elements of the Commitment to Campus, a CSU program to provide benefits to faculty on staff that range from exercise programs and nutrition classes to sports and cultural events on campus. In addition, lactation rooms across campus provide a clean and quiet place for members of the campus community that are nursing mothers.

To ensure all students have meaningful outdoor experiences, CSU has incorporated a robust Outdoor Program (OP). OP encompasses the climbing wall at the Student Recreation Center and offers over 50 different trips, clinics, and events throughout the year aimed at providing students with the skills to experience outdoor recreation opportunities throughout Colorado. Trips and clinics include rock climbing, ice climbing, mountaineering, backpacking, fishing, snowshoeing, skiing, and camping. Trip

instructors guide students in many aspects of the outdoor experience such as learning to rock climb at Horsetooth Reservoir in Fort Collins, or a winter snowshoe trek to high alpine lakes beneath 13,000 ft. mountains.

The Outdoor Experiences program at CSU provides additional outdoor adventures in both the fall and spring semesters. Examples of previous Outdoor Experience trips include trail building at Grays and Torreys Peaks, introduction to ice climbing, and outdoor immersion programs.

CSU's Pingree Park Mountain Campus exists to serve CSU, the community, and the surrounding region for academic field studies, educationally focused conferences, and mountain research. The Warner College of Natural Resources holds undergraduate academic classes at Pingree Park during the summer months. Some Natural Resources majors require field study immersion at Pingree Park. For example, Natural Resources 220 is a four-week ecology field course and Forestry 230 is a two-week program for Forestry majors. Other Pingree Park courses include fire ecology, tree identification, wildlife discoveries, orienteering, mountain pine beetle, meteorology, history of Pingree Park and high ropes course experience.

Additionally, Pingree Park hosts Eco-Week in collaboration with the Poudre School District. Eco-Week is an extraordinary opportunity for Northern Colorado fifth and sixth graders to learn about various topics related to the Rocky Mountain ecosystem by getting a three day total immersion experience in this remote alpine setting.

## **PILLAR III: ENVIRONMENTAL AND SUSTAINABILITY EDUCATION**

### **ELEMENT IIIA: INTERDISCIPLINARY LEARNING ABOUT THE KEY RELATIONSHIPS BETWEEN DYNAMIC ENVIRONMENTAL, ENERGY AND HUMAN SYSTEMS**

In 2008, CSU established the School of Global Environmental Sustainability (SoGES). SoGES promotes and administers curricular products designed to increase student literacy in environmental sustainability and to enhance professional development and leadership in sustainability. By establishing SoGES, CSU made a formal commitment that "every student will have a transcriptable experience (course, seminar, field experience, internship) related to environmental studies before graduating from CSU." CSU is dedicated to graduating the most environmentally literate population of students, and well-prepared students in environmentally related majors, in the country.

The curriculum of SoGES endorsed courses focus on a comprehensive understanding of the environment, upon which sustainable human actions can be based. Endorsed courses are explicitly interdisciplinary and recognized as having content that advances the SoGES mission. Interdisciplinary implies that at least 30% of the course will address interconnections among elements of sustainability. Students who participate in the SoGES curriculum will be able to determine solutions to problems that have developed from human interactions with the environment. Further, SoGES has identified six primary areas of sustainability research. These are (but not limited to): climate change and energy; food security; environmental institutions and governance; sustainable communities; land and water resources; biodiversity, conservation, and management.

CSU currently offers nearly 1,000 sustainability-focused or related courses, across all eight colleges. Out of 55 university departments offering academic courses, 50 provide sustainability-focused or related classes. A new course development initiative has recently begun, offering faculty resources and training to transform existing courses or create new courses to include facets of sustainability. In addition, those

receiving grants are awarded funding to attend a conference to further hone their sustainability curriculum development.

In recent years, a broad range of CSU departments have added new sustainability-focused or related courses, minors, majors, and graduate degrees. These interdisciplinary and innovative programs of study provide training to the next generation of decision makers to help solve complex sustainability issues. For example, the College of Business offers an MBA program, the Global Social & Sustainable Enterprise (GSSE), which is based on the core belief that entrepreneurial and innovative enterprises can and should be a powerful force to provide solutions to the global challenges of our time. The GSSE MBA program provides international entrepreneurs with advanced business skills to build global enterprises that achieve sustainability with results focused on the triple bottom line of economic, social and environmental performance.

### **ELEMENT IIIB: USE OF THE ENVIRONMENT AND SUSTAINABILITY TO DEVELOP STEM CONTENT, KNOWLEDGE AND THINKING SKILLS**

CSU has many centers and institutes who regularly engage in STEM education and outreach from pre-kindergarten through graduate school and all the way to public outreach. Most relevant here are the College of Natural Sciences Education & Outreach Center (EOC), the Little Shop of Physics (LSOP), the Environmental Learning Center (ELC), the Natural Resources Ecology Laboratory (NREL), and the Community Collaborative Rain, Hail and Snow Network (CoCoRaHS).

The EOC has several programs that use environmental sustainability as a unifying context for STEM content. These include the GetWET Observatory, the only groundwater-surface water educational facility in the Rocky Mountain Region. Each semester approximately 400 high school, community college, and CSU students perform hands-on experiments at the on-campus site. The activities incorporate technology and math while bolstering science and geography skills. The EOC has a growing library of STEM-based kits to be used as curricular extensions. Many of these kits focus on how STEM fields play a critical role in our understanding, use, and conservation of energy and water.

LSOP in partnership with the Department of Atmospheric Sciences, has developed a large-scale outreach program that focuses on climate change. The LSOP seeks to find creative ways to share the wonder of science with people of all ages, backgrounds and interests; present a unique hands-on experience to a diverse range of K-12 students; involve undergraduate students in significant and meaningful service; and share ideas and insights with current and future teachers. The program even hosts the annual Weather and Science Day for the Colorado Rockies at Coors Field in Denver which reaches ~16,000 K-12 students at once!

The ELC is an effective training facility for future environmental educators while also providing camps and school break workshops for community youth. Their passion is engaging the Hispanic community in environmental stewardship. The NREL is a world-class ecology research lab that has a strong emphasis on environmental literacy at the K-12 and university levels using STEM approaches. CoCoRaHS is a national citizen science program that leverages STEM disciplines to help connect citizen scientists to the environment.

### **ELEMENT IIIC: DEVELOPMENT AND APPLICATION OF CIVIC ENGAGEMENT, KNOWLEDGE AND SKILLS**

With a variety of leadership and community engagement programs, the Student Leadership, Involvement & Community Engagement (SLiCE) office at CSU provides an important link between students and

their surrounding communities. SLiCE brings together student organizations, student leaders and student volunteers under one banner; making our campus a better community and a more involved place. Being involved in SLiCE programs allows students to enrich their academic and social experience at CSU. With 12 highly committed professional staff members and nearly 30 student staff members with a variety of expertise, SLiCE serves as a source for involvement and learning of all kinds.

The Institute for Learning and Teaching (TILT) offers a service-learning program to support the development of meaningful, active, hands-on learning experiences that promote academic excellence while serving genuine community needs. The program provides support for faculty interested in integrating service-learning into teaching, research, service and extension. Student leaders are developed within the field of service-learning while meeting community-identified needs and cultivating community partnerships. The service-learning program disseminates models of service-learning excellence to stakeholders within and beyond CSU.

As mentioned earlier, The Little Shop of Physics (LSOP) at CSU is a hands-on educational program aimed to engage K-12 students in physics and scientific experimentation. Offering school visits, teacher workshops, everyday science shows, podcasts, and much more, the LSOP has grown into a dynamic science outreach program that works with teachers, schools, and students of all ages. Undergraduate students take over 100 interactive exhibits via bus to allow students a unique hands-on experience. Over 20,000 students get the LSOP experience every year, not including the 8,000+ attendees at the annual LSOP Open House on CSU's Main Campus. LSOP visits schools all over Colorado, South Dakota, New Mexico, Wyoming, and Nebraska.

Today's new economy demands an entrepreneurial base and a multi-layered strategy that improves the efficiency of CSU's outreach mission by capitalizing on the creativity of students. The New Economy Venture Accelerator (NEVA) offers comprehensive venture incubation services to start-ups from across the university, and was initiated in the Center for the Advancement of Sustainable Enterprise (CASE), at CSU's College of Business. NEVA's mission is to cultivate start-up student ventures from CSU, and began with a particular focus on those that have the potential to perform on an integrated bottom line, providing social, environmental and financial returns. Students and their ventures leave NEVA with experiences unlike any other found in a Business College.

Through all of these programs, 85% of CSU students participate in some kind of community service while attending CSU.

In addition to programs listed above, extensive sustainability research and partnerships throughout the institution serve to investigate, educate, promote, and collaborate:

- Fort ZED, a city of Fort Collins, CSU, and local business community effort to develop a zero-energy district
- ClimateWise, a city of Fort Collins initiative to reduce GHG emissions – CSU was a charter partner in 2000 and has been a recognized Platinum partner since 2009
- CSU Powerhouse Energy Campus, home to numerous research and policy centers, laboratories and start-ups. The Powerhouse building represents a new model of collaborative space that fosters interaction and cooperation among researchers, students, departments, partners and sponsors, combining efforts to grow the impact, reach, and reputation of energy education and research at CSU
- CSU has an active partnership with Drive Electric Northern Colorado, a national effort for communities to develop electric vehicle ecosystems that will make individual and fleet ownership of electric vehicles simple, convenient, attractive, and cost effective.

## ***PARTICIPATION IN GREEN SCHOOL PROGRAMS AND/OR AWARDS FOR ENVIRONMENTAL AND SUSTAINABLE EFFORTS***

CSU is a member of the Association for the Advancement of Sustainability in Higher Education and was a FY09 pilot participant in the Sustainability, Tracking, Assessment & Rating System (STARS), a transparent, self-reporting framework for colleges and universities to measure their sustainability performance. STARS is the most comprehensive assessment of sustainability for higher education, and equally serves as a guiding benchmarking system. The STARS 2.0 framework assesses four categories: Academics, Engagement, Operations, and Planning & Administration. Under STARS 2.0, over 1,000 individual responses are included - demonstrating the comprehensiveness of this reporting tool. CSU has submitted three STARS reports: as a pilot, under STARS 1.0 in August 2011, and under STARS 1.2 in February 2014. CSU will submit a fourth report in December 2014 under the updated version 2.0. CSU currently has a Gold rating and holds the highest score of any reporting institution in the country. We are proud of this achievement and feel strongly that our STARS score reflects the comprehensive efforts throughout our institution. CSU anticipates receiving the first in the nation platinum score with the December 2014 submission.

In August 2014, CSU was named in the Princeton Review 2015 Green Honor Roll. The Princeton Review evaluates 861 colleges and only 24 schools were selected for the Green Honor Roll. CSU was also just listed in Sierra Magazine's "Cool Schools". CSU appears in the 11<sup>th</sup> position on the list of 175 universities. From the Sierra Club website: "The colleges at the top of our annual "Cool Schools" ranking are so dedicated to greening every level of their operation—from energy usage to recycling to food sourcing to curriculum—that sustainability has become woven into their very culture." Colorado State University would like to thank you for your time and thoughtful consideration of this application for a 2014-2015 U.S. Department of Education Green Ribbon Schools Postsecondary Sustainability Award.



Students in Professor Christopher Myrick's Introduction to Fishery Biology class catch grass carp that have spent the summer in the CSU Lagoon. The carp are moved to a deeper pond for the winter. CSU currently offers over 1,000 sustainability-focused or related courses, spanning across all eight colleges. Out of 75 University departments offering academic courses, 73 provide sustainability-focused or related classes.



The Fort Collins and Colorado State University community enjoy a free breakfast, bike check-ups and other goodies at one of the breakfast stations on the Oval during the annual Bike to Work Day. Eighty percent of CSU students register a bike to commute to campus. More than 50 percent bike as their primary form of transportation to campus.



CSU's Horticulture program sponsors a Community Supported Agriculture (CSA) program open to the community. Produce is also sold at a weekly farmers market on campus. Both of these programs provide a wide variety of local organic produce. The farm is tended by CSU students who are passionate about organic agriculture and who want to share it with the local community. The Plant Environmental Research Center (PERC) area has been in operation for 42 years, and the greenhouses are celebrating their 65th year. The grounds are free and open to the public any day during daylight hours.



CSU's Pingree Park Mountain Campus exists to serve CSU, the community, and the surrounding region for academic field studies, educationally focused conferences, and mountain research. The Warner College of Natural Resources holds undergraduate academic classes at Pingree Park during the summer months. Some Natural Resources majors require field study immersion at Pingree Park. Pingree courses include fire ecology, tree identification, wildlife discoveries, orienteering, mountain pine beetle, meteorology, history of Pingree Park and high ropes course experience.



This 100-kilowatt solar PV array installed at Braiden Hall in October 2014 is the first of six that will adorn the rooftops of CSU buildings as part of a joint project between CSU and the City of Fort Collins. The five remaining solar PV arrays will be added to CSU buildings by June 2015. These new installations will bring the total to 14 solar PV arrays on campus equaling more than 6,700 kilowatts and producing over 10 million kWh of clean electricity.