

The Board of Governors of the California Community Colleges

PRESENTED TO THE BOARD OF GOVERNORS

DATE: September 19-20, 2016

SUBJECT: Board of Governors Energy and Sustainability Award Program		Item Number: 4.2	
		Attachment: No	
CATEGORY:	College Finance and Facilities Planning	TYPE OF BOARD CONSIDERATION:	
Recommended By:	Moe Rodin	Consent/Routine	
		First Reading	
	Mario Rodriguez, Vice Chancellor		
Approved for	$\mathcal{S}_{1} \circ \cdot$	Action	
Consideration:	Erik Skinner, Interim Chancellor	Information	Х

ISSUE: This item announces the Board of Governors Energy and Sustainability Awards recipients for 2016, which recognizes outstanding community college achievements in energy and sustainability. Representatives from the eight district recipients will be presented their awards.

BACKGROUND: The Board of Governors Energy and Sustainability Awards were established in 2012 to honor leaders and exemplary energy and sustainability efforts at the California Community Colleges. The awards are presented on an annual basis in order to promote the ongoing efforts of community colleges on the path toward sustainability, and to maximize visibility and ensure high-level recognition of the recipients. The 2016 Board of Governors Excellence in Energy and Sustainability Awards are granted in the following categories:

- Excellence in Energy and Sustainability Proposition 39 Projects
- Excellence in Energy and Sustainability Faculty & Student Initiatives
- Excellence in Energy and Sustainability Sustainability Champion

The award winners in the category of Proposition 39 Projects are chosen based upon a points system for comparing cost savings, energy savings, and jobs created by Proposition 39 energy projects. The Faculty/Student Initiatives award is designed to recognize faculty and/or students who have excelled in developing sustainability initiatives for their college. The Sustainability Champion is chosen by the California Community Colleges Chancellor's Office based upon an individual's contributions to the community college system in the area of energy and sustainability.

RECOMMENDATION: The Board of Governors recognizes the recipients of the 2016 Board of Governors Energy and Sustainability Awards.

The 2016 Board of Governors Energy and Sustainability Awards Recipients

Excellence in Energy and Sustainability - Proposition 39 Projects

The following seven districts have demonstrated excellence in the energy and sustainability area with careful project planning resulting in energy and cost savings.

Best Overall District - Large:

Rancho Santiago CCD, Santiago Canyon College – Interior Lighting LED Retrofit

Santiago Canyon College performed an interior lighting LED retrofit in multiple buildings. The college replaced over 3,000 outdated T8 linear fluorescent fixtures in several campus buildings with LED retrofit kits. The project cost \$680,000 with Prop 39 funds paying for approximately \$550,000 and Investor Owned Utility rebates of just over \$130,000 which resulted in zero costs to the district. The college saw a reduction of more than 550,000 kilowatt-hours (kWh) and 203 kilowatts (kW) with a subsequent energy bill reduction of over \$115,000 annually. Additionally, construction of this project created over 2,300 hours of employment in the community.

Honorable Mention: Chabot-Las Positas CCD, Las Positas College – HVAC Retrofit

Las Positas College replaced the Building 2000 existing direct expansion (DX) cooling units with new Air Handler Units (AHU) that incorporate central plant cooling and heating. The college achieved additional energy and cost savings by including Variable Frequency Drives (VFD) on the new AHUs. The more advanced VFDs will allow for more control over the volume of airflow. The \$583,000 project was funded with \$386,000 of Proposition 39 funds, Investor Owned Utility rebates of almost \$9,000, and just over \$188,000 of district funds. This project will save the district over 612,000 kilowatt-hours (kWh) and 75 kilowatts (kW) with a subsequent energy bill reduction of almost \$80,000 annually. The construction for this project generated over 1,100 hours of employment for fulltime employees and 220 hours of employment for apprentice and trainees.

• Best Overall District – Small:

Solano CCD, Solano Community College – Exterior Lighting Retrofit

Solano Community College removed aged exterior metal halide and high pressure sodium lighting fixtures and replaced them with new LED technology. The approximately \$344,000 project was funded with \$160,000 of Proposition 39 funds, Investor Owned Utility incentive exceeding \$107,000, and an additional \$77,000 of district funds. The district will see a yearly reduction of at least 440,000 kilowatthours (kWh) with a subsequent energy bill reduction of almost \$40,000 annually. In addition, this project's construction generated 765 hours of employment within the community.

Honorable Mention: Hartnell CCD, Hartnell College – Campus Wide Exterior and Area LED Lighting Retrofits

Hartnell College performed an exterior and area lighting retrofit at multiple locations of their main campus. The college replaced old fluorescent, metal halide, and mercury vapor lighting fixtures with more efficient LED fixtures. The district only paid \$64,000 out of the total \$332,000 of project costs, with Prop 39 covering \$236,000 and an Investor Owned Utility incentive of \$32,000. The district will see an annual savings of at least 132,000 kilowatt-hours (kWh) and a subsequent energy bill reduction of almost \$16,000 per year. Furthermore, the construction for this project created over 720 hours of employment in the community.

• Retrofit Project:

Long Beach CCD, Long Beach City College – HVAC Zone and Fan Static Pressure Reset

Long Beach City College implemented a central plant optimization project at their Liberal Arts Campus (LAC) and Pacific Coast Campus (PCC) chiller plants. The scope of the project involved installing new controls systems, new VFDs on existing condenser water pumps, and installing a new 900 ton centrifugal chiller at the LAC campus with an automatic chiller sequencer to achieve best operating efficiency. The \$515,000 project was funded with nearly \$217,000 of Proposition 39 funds, Investor Owned Utility rebates of approximately \$171,000, and \$127,000 of district funds. The district will see a yearly reduction of over 713,000 kilowatt-hours (kWh) and 155 kilowatts (kW) with a subsequent energy bill reduction of almost \$92,000 annually. The construction for this project generated over 1,200 hours of employment for fulltime employees and eight hours of employment for apprentice and trainees.

Honorable Mention: North Orange County CCD, Cypress College – Interior Lighting Retrofit

Cypress College replaced over 8,600 interior lighting fixtures with newer more efficient LED fixtures. By installing more advanced equipment, the district was able to reduce the total number of required lighting fixtures by over 1,600. Installation of the new 7,000 LED fixtures cost \$500,000 with zero cost to the district. Prop 39 funds contributed roughly \$355,000 with the Investor Owned Utility incentive adding an additional \$145,000. This project will save the district over 607,000 kilowatt-hours (kWh) and 220 kilowatts (kW) with a subsequent energy bill reduction of almost \$80,000 annually. The construction for this project generated over 1,200 hours of employment for fulltime employees and 170 hours of employment for apprentice and trainees.

Board of Governors Faculty/Student Initiative Award: Maria Elena "Nena" Anguiano, Director Butte College MESA Program, Butte-Glenn CCD

The Board of Governors Faculty/Student Initiative Award winner for 2016 is Maria Elena "Nena" Anguiano, Director of Butte College's MESA Program. Ms. Anguiano is the visionary behind the success of the sustainability efforts of Butte College's Math Engineering Science Achievement (MESA) program. As the Director of Butte College's MESA program, Ms. Anguiano has worked to implement nearly a dozen grant-funded research programs, education and outreach efforts, and valuable internship opportunities that benefit Butte College students. Examples of her success include, but are not limited to, the following: REGen - research and education related to biomass conversion to alternative fuel development and biochar creation and carbon sequestration; SEA - research and education related to solar energy creation including internship opportunities with local solar energy designers, and; MESA Talk - subject matters presented in a "TED Talk" format by MESA students on substantive issues of sustainability. Her efforts through Butte College's MESA Program have not only given her community huge benefits in science and technology education, but have also had a tremendous positive impact in the field of sustainability and energy efficiency.

Board of Governors Sustainability Champion: Ken Albright, Director Facilities Planning & Management, Butte-Glenn CCD

The Board of Governors Sustainability Champion for 2016 is Ken Albright, Director of Facilities and Management for Butte-Glenn Community College District. Mr. Albright has performed a remarkable job moving Butte-Glenn Community College District toward greater sustainability and energy efficiency. As Director of Facilities Planning and Management, Mr. Albright has overseen numerous innovative projects aimed at reducing energy usage and the associated greenhouse gas emissions of the district's multiple campuses. Under Mr. Albright's leadership and guidance, the district has implemented complex Monitoring-Based Commissioning (MBCx) projects to large scale on-site Photovoltaic (PV) solar generation projects. The efforts of Mr. Albright and his team have thus far lead to hundreds of thousands of dollars in energy and maintenance cost savings annually and with future plans to ensure that Butte-Glenn CCD remains one the most sustainable districts in the community college system.

In addition, Mr. Albright has been a leader among his peers in the area of energy efficiency as a long-time member of the CCC/IOU Energy Efficiency Partnership Management Team, and as the founder of the Far North Facilities Officers Summit. With his demonstrated successes in fostering sustainability at the local, regional, and state levels, Mr. Albright has truly demonstrated himself as worthy of the Board of Governors Sustainability Champion for 2016.