

Sustainability Committee

July 12, 2017

Renewable Energy Proposals

	Sunpower	Borrego	
	GCCCD	Grossmont Only	Cuyamaca Only
System Size	6.688.1 kW	3,837.6 kW	
Yield	1,793.3		
Offset Percentage	90%	75%	
Degradation Factor	0.25%	0.50%	
Estimated Avoided Cost	\$77,753,501 – 30 years	\$20,822,675 – 30 years	
Gross Expenses	\$32,976,931	\$14,736,934	
O&M Cost	\$2,734,445	\$2,719,008	
Finance Strategy	Cash Purchase with CREBS (\$24,725,400)	Cash Purchase with CREBS (\$11,009,726)	

Sustainability Resource Fair

April 27, 2017

An event to promote education and career development in sustainability.

Panelist Discussion:

- Art Villanueva – Founder of Cool2Zero, Iteros, Cleanspark LLC
- Owen Barrett, Co-founder/CEO of Lumeo
- Kristi Byers, American Institute of Architects
- Raejean Fellows, Electric Vehicle Association of San Diego
- Cindy Meng, UCSD Student, Engineers for a Sustainable World



Panel Discussion

Opening Remarks – Dr. Nabil Abu-Ghazaleh



Students heard from industry leaders about getting involved, aligning passion with work, and the importance of policy in achieving sustainability in society and business.



Sustainability Resource Fair

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Moderator – Lorenze Legaspi



Almost 200 students in attendance.



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Twenty one vendors attended to discuss industry, education, and internships.



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Students learning about Kurapia, a hybrid, drought friendly, turf alternative.



Park Ranger from San Dieguito River Park discussing wildlife with Kelly, Grossmont Grounds and plant specialist.



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Sustainable Earth Alliance (SEA, the Sustainability Club) discussing propagation and raising money for the club.



A student pleased with his plant purchase.



Sustainability Resource Fair

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Electric Vehicle demonstration - Automotive Technology at Cuyamaca College.



Sustainability Resource Fair - April 27, 2017

Living Wall demonstration and activity:

- Plants and soil donated by Ornamental Horticulture at Cuyamaca:
- Structure designed and constructed by Grossmont Facilities and Operations.
- Planted by Student Attendees.



Sustainability Resource Fair

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**Grounds Specialist, Marty Hipwell
discussing plant wall with President Abu-
Ghazaleh**



**Park Rangers discussing natural resource
preservation with Terri Warnick, Gafcon
Project Coordinator**



Sustainability Resource Fair

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Chiller Plant discussion and tour lead by project manager Keith Cole.



Sustainability Resource Fair

April 27, 2017

We hope to make this an annual event.

Education to empower.



- **Successes**

- Two student internships to date
- Vendors were pleased with the event
- Enormous participation and support from Facilities Department, Grounds, Maintenance, Operations

- **Improvement Potential**

- GCCCD Student engagement
- Academic representation
- Increase in demonstration/hands on activities for attendees

Fall Initiatives

1. Daily Conservation

- A. Request for all faculty and staff to “turn off” an area when they leave
- B. Waste Minimization through:
 - i. Water bottle refilling station maps
 - ii. A contest for refillable water bottles
 - iii. Sodexo to switch to compostable materials

2. Communication

- A. Digital “packet” at the start of the Fall semester: includes summaries of different sustainability initiatives on each campus which should encourage participation and support
- B. Energy waste “hotline”
- C. Weekly sustainability tips

Lumeo

- Lumeo is a “Lighting as a Service” provider company committed to increasing adoption of LED technology.
- They offer LED lighting upgrades through on-bill financing at 0% interest in partnership with utility companies
- The on-bill financing is an energy services contract (which means public agencies can sole source the project and it does not have to be bid out)
- What sets them apart is the semester-long internships they provide to students.

Lumeo Projects

- Each electric meter for a public agency is offered \$250,000 and on-bill financing with 0% interest through the utility
- Each project must have a maximum payback period of 15 years
- GCCCD would be eligible for \$500,000 between the two campuses
- Lumeo conducts a full energy audit and works with energy managers to identify the best space for lighting upgrades
- Lighting is installed
- GCCCD received any rebate available through SDG&E

Lumeo Offers Students Semester-Long Internships

- Over the course of a semester Lumeo teaches students
 - How to conduct a lighting audit
 - How to calculate lighting hours
 - How to complete a financial analysis
- Works with Students to prepare and deliver recommendations
- Nearby Schools with Completed Lumeo Projects
 - UC San Diego
 - UC Santa Barbara
 - UC San Diego Unified