# 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)	

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.



**Moderator – Lorenze Legaspi** 



#### Almost 200 students in attendance.



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



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.





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

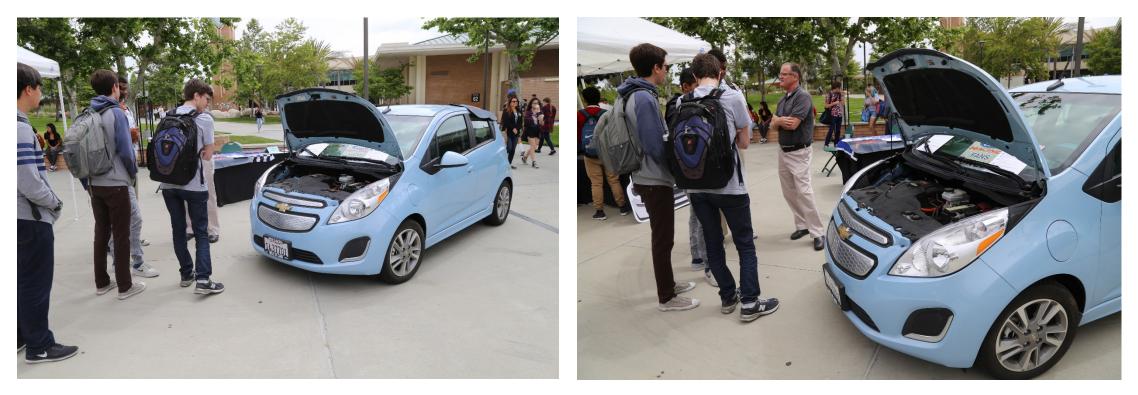


A student pleased with his plant purchase.





**Electric Vehicle demonstration - Automotive Technology at Cuyamaca College.** 

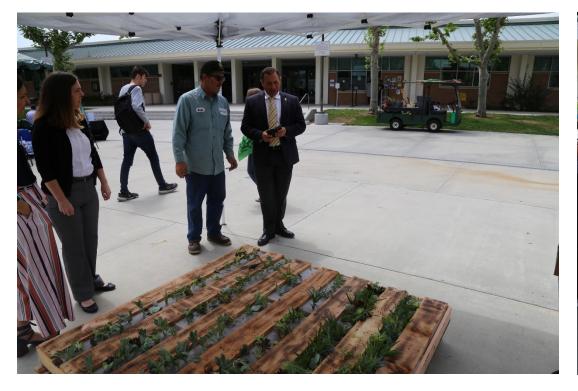


Living Wall demonstration and activity:

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



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



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



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



# Sustainability Resource Fair April 27, 2017 We hope

#### Education to empower.



#### We hope to make this an annual event.

- 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