

## CSC meeting Notes 3/4/19

### **Attendance:**

Voting members: Renee Bahl, David Lea, Katherine Foster, Jemm Unger Hicks, Henning Bohn, Janet Walker, Eric McFarland, Sangwon Suh, Roland Geyer, Derek Musashe, Mark Brzezinski, Garry MacPherson, Kirby Bartlett

**Non-voting members:** Katie Maynard, Amorette Getty, Mo Lovegreen, Jordan Sager, Jessica Schmitt

### **Announcements:**

- **Edible campus farm** - had their soft opening last week and hosted a volunteer day for 40 fraternity members last Sunday
- **CHESC** - call for proposals is going out within a few days
- **Eco Nerd Night presentation** – The new deal meets the green new deal At rock fire grill on March 4th (Bren grass will be playing)

### **Updates:**

- **Carbon off-set workshop** – Barbara Haya will be coming on April 8<sup>th</sup>, they will be at the next CSC meeting. If you have ideas to work on the carbon offsets please bring them forward. David Lea gave his example of the Rincon flair
- **Scooters** - David Lea attended the scooter summit-SBCAG did a great job putting this on. Keynote from Francie Steffan from Santa Monica, and they had an industry panel with 7 reps. This is just at the beginning – so don't judge it yet, there are more changes coming. Lot of viewpoints to date. Some representatives from local governments were more open.
- **GCLC update at LBNL** – Highlights: Sempra energy wants to go carbon neutral on their gas by 2045, fossil free fossil fuel. John Elliott, LBL sustainability officer, all electric buildings - Hopes we can do this on our campus (solar, heat pumps, etc.)
- **Sangwon Suh-trip to Rowanda** - energy featured in new York times, produce cook stoves, 3.5 use solid fuels indoors, and generates pollutants that kills 2m people per year. = 4.5 packs of cigarettes per day. They provide low carbon emission option for cook-stoves –reduces emissions by 90%. Wood pallet saves them money per months and provide stock and free cooking stoves to customers. Global challenge and they are asking Sangwon to do life cycle costing. Charcol and woody biomass is what they are using now. (\$15-\$20/mo for cost of charcoal). This would be a cultural shift working with contracts they are unfamiliar with. World Bank is giving Thermal activity to run fan is what

they are looking into. Induction cook-stove is the most efficient – Sangwon is looking into leapfrogging the technology to see if this is possible  
Global projects where there is a research connection for GHG Reductions

**Renee-Min.** Any comments – approved

**Presentation and Discussion:**

- **Green Labs Action Plan**

Katie & Amorette presented on how LabRATS adapted the plan to address feedback from the December meeting of CSC, reviewed the vetting process, and highlighted other updates to the plan since December. Please see the slides for the details: [https://docs.google.com/presentation/d/1ZnWll-GYWNhhf3G7JGm8-jRjtApZO7X6G6Q7jv23e7l/edit#slide=id.g46c8737086\\_12\\_0](https://docs.google.com/presentation/d/1ZnWll-GYWNhhf3G7JGm8-jRjtApZO7X6G6Q7jv23e7l/edit#slide=id.g46c8737086_12_0) A full copy of the plan can be seen here:

<https://docs.google.com/document/d/1jS57sDYdzll24KVYfug741K-kWxO5Sp4TkuCp62cMuk/edit>

Copies of the executive summary were handed out at the meeting.

The deadline for the final version of the plan was extended to May for all campuses.

Plan will be updated on a 4 year cycle

Goal of setting campus specific targets

Added in high, medium, and low priority goals,

Added in costs and impacts

Added tables at the beginning of each section to make the plan quicker to skim.

Costs and quantifiable impacts (added detailed table-added in costs for high priority goals)

Added in executive summary with key points –details are in appendix

Amorette-

Review of the 9 highest priority goals:

4 energy

2 water

1 waste

2 engagement

Note: A question was raised whether the intention of the plan was to include both research and teaching labs. LabRATS clarified that the intention was to include both research labs and the operations of teaching labs. Curriculum is

of course not included in the scope of the plan. LabRATS will clarify the wording of the plan to address this confusion.

David Lea asked about number of undergraduate students who are touched by research laboratories and it was about 30% to 40% of the student body goes through a teaching laboratory or participates in a research laboratory. This is a rough estimate to give a sense of scale.

Sangwon-were does the money come from – Katie-it is an unfunded mandate. The efforts that we have prioritized are low to no cost or we already have the funding to at minimum complete a pilot. Implementation strategies that have a significant cost which we do not have a clear funding source for were considered to be less feasible and deprioritized within the plan. LabRATS has traditionally been able to fund its programs with its existing operating budget from the UCSB Sustainability budget or through grants. We plan to continue this approach at this time.

**Energy**-Top three for energy are lab ventilation items-the lab ventilation working group is working on these three.

Incentive the procurement of more energy efficient lab equipment (Sangwon brought up the disconnect between the start-up and the energy budget)

Sangwon is interested in delving in deeper on this one.

Mark Brzezinski – startup money to incentivize we may be able to take advantage of

David Lea-asked if she could quantify the items on page 2 of the executive summary

Derek Musashe asked for a separate graph with the energy profile, each color coded if X is implemented it takes away XX chunk of the pie

Katie Maynard noted that most of the actions with substantial and defined energy savings are noted in the tables. A wedge chart may be challenging for LabRATS to produce at this time given that for many of our medium and low priority energy projects we are still estimating the energy savings. LabRATS' approach is also focused on combining many different strategies, several of which would produce modest energy savings, to add up to a whole that would have a more substantial impact. These smaller slices of a wedge chart may be hard to see in that format. Katie will work with Amorette to determine if we could develop a chart that would meet the need.

**Water**-2 areas-elimination of soft plumbed single pass systems and water efficiency retrofits to autoclaves

May consider looking at eyewash stations (per a suggestion to assess the feasibility of this from EH&S) to see if we have too many as they have to test

the annually – this currently isn't included in the plan. A CSC member recommended also looking at emergency showers in the laboratories.

**Waste**-Addressing plastics 3-7 in the labs

**Engagement**-no questions or feedback on this part

Check footnote on denominator for table on costs and quantifiable impacts.

This was checked after the meeting and the denominator was correct.

Additional details have been added to clarify the units and year that the data was pulled from.

Jordan Sager suggested globally changing night set-back as an overarching savings program. LabRATS clarified that night-time set backs are already included as an implementation strategy in the plan. LabRATS will further quantify what the impact would be to expand it to more buildings.

Derek Musashe asked about publications in this area-Amorette has been working on peer reviewed articles on raising the temperature in ultra low temperature freezers and on the plug load study LabRATS collected data for last year.

Financial section – wants to know if kWh are per year – add this in

In water Section-can this be standardized to annual as well?

### **Action Item**

- **Green Labs Action Plan Vote**

Motion: Chancellor's Campus Sustainability Committee supports the current draft of the plan with the understanding that Academic Senate and Budget and Planning will review the plan prior to the plan being submitted to the Chancellor for review and final approval. Recommended edits from Academic Senate and Budget and Planning will be incorporated/addressed prior to the Chancellor's review. If any major edits are incorporated after the CSC vote, the plan will return to CSC for consideration of the significant changes.

Sangwon Suh motion to approve, Derek Musashe –second

Henning Bohn abstained until Academic Senate has an opportunity to weigh in, everyone else voted in favor