**Energy iCAP Team Meeting**

Wednesday, February 10th, 2021

9:00 am via Zoom

*Members in attendance: Bill Rose (Co-Chair), Andy Stumpf (Co-Chair), Paul Foote (Staff), Sushanth Girini (Staff), Tim Mies (Staff), Sushanth Girini (Staff), Tugce Baser (Faculty) Marcela Vega Munoz (Faculty), Brinn McDowell (Student), Peter Davis (Student), Matthew Gold (Student), Kimmy Chuang (Clerk), Mike Larson (Non-Voting Member)*

Meeting

**Building Envelope Pilot Project Update**

* Plan will be to do the Transportation Building
* There will be 2 vendors one who will use infrared and the other is the Indoor Climate Research & Training who will be doing the blower door test and running a training session with people from F&S who will be involved
* Planning is underway. It will be best to do both tests simultaneously
* Planning to start in March. Bill will make sure to contact Stacy Gloss to keep students informed and engaged.

**Modeling for Energy Code Compliance**

* Kimmy will wait until the end of the day for Brad to respond. If Kimmy receives no response, she will send the recommendation to the iWG.

**Comprehensive Energy Plan**

* Waiting for approval from administration to validate the new Utilities plan, so Rob Roman's participation is pending their approval until he can share the information.
* The utilities budget is on the order of magnitude of $60 million. Most of those are state funds. So we don't know if the $7 million is auxiliaries who pay their own bills. But the entire energy enterprise is in the $60-70 million range.
* In order to get to zero GHG by 2050, we will need to invest more money into projects than what we actually have saved.
* Mike pointed out that there is still low-hanging fruit that will have payback and that we still haven't picked all of them

* The new Siebel Design Building right next to Huff Hall is basically a glass building. State energy code requires that buildings can't have more than 35% glass. That gives the budget for what the building is allowed to use in terms of energy, and the architects are responsible for the design. But even if it does have a lot of glass, it has to perform like one who doesn't.
* Architecture group within F&S that oversee what architects deliver to campus. They just don't yet have the authority to do stop these buildings from going up. Architecture delivery process ignores the quality, which requires compliance with state law.
* Possibly we should organize a seminar to reach out to these executives.
* Morgan White arranged a meeting with us and the Director of F&S, Mohammed, and we recommended that we need another model of the Siebel Design Center and, ideally, we would tweak the model. However, it wasn't ever done.

**Collaboration with Engineering Council**

* College of Fine Arts does have a Sustainable Design major, so they should also be concerned about something like the Siebel Center going up without modeling. But there seems to a cultural divide between Architecture, Engineering, and Design.
* Possibly opportunities to overcome this divide would be to mention this at the SSLC and encourage Engineering Council to collaborate more with Architecture and Design.
* Engineering Council would also be a good resource to reach out to for student involvement on building models.

**Updates on Energy Efficiency Projects (Labs & Residence Halls)**

* Matthew and Peter will attend Engagement meeting in March

* Brinn gave a presentation about her work on the possible energy savings in her lab. She calculated that 208kw/hr can be saved in just one lab with minimal adjustments and excluding refrigeration, which we already know has a big impact.
* For example, benchtop hotplates can be put on outlet timers instead of being on the entire night.
* A Green Labs position needs to happen. A lot of universities are more ahead on green lab protocols.
* Brinn is going to try the actual changes she calculated using numbers from My Green Labs to her lab spaces on campus to make it more personal. Then, we will make it into a recommendation. Kimmy and Brinn can work together to draft the recommendation.
* We would send recommendation to OVCR who has heard this pitch is important before… They found funding for a Green Labs position, but directors haven't put it under their purview
* DRS performs lab inspections, but they didn't want to participate because they focus more on safety. Each department has their own Safety Officers who would have to collaborate.

**Space Regulation**

* What spaces do we fully condition? What spaces do we not? We should make use of the under-use of space. Distance-learning and distance-work is going to have an impact on what space usage.
* We're hoping finance changing will get people to tighten up. Turner Hall researchers are open to discussions with vacated spaces.
* Because OSHA requirements, we have to still supply utilities to buildings that have nobody in them. We're trying to safe and healthy, instead of efficient.
* Colleges are now being called on to economize in space because they have pay for their own individual utilities. Colleges will be responsible for their own energy.
* There's not yet a clearly viable plan on how the budget will be billed. The capital required for this plan is large.
* Stanford, who is in very different climate, converted from steam to hot-water and their bill was upwards of a billion dollars. Heat recovery chillers will not be able to heat our campus during winters like ours. $260 million will be required to abandon steam to hot-water, but hot-water boilers still need energy.