Attendees…

**Xinlei Wang**, Professor of Agricultural and Biological Engineering

**~~Mike Larson~~**, Director of Utility Production, Facilities & Services

**Tim Mies**, Deputy Director of Operations, Energy Farm, Energy Biosciences Institute

**Yu-Feng Forrest Lin**,Hydrogeologist, Illinois State Geological Survey - Prairie Research Institute; Clinical Professor, Department of Civil and Environmental Engineering; Research Professor, Department of Natural Resources and Environmental Sciences

**Catherine Yee**, Student Member

**Jack Morrissey**, Student Member

**John Flanagan**, iSEE Campus Sustainability Intern

**Morgan Johnston**, Associate Director of Facilities & Services

1. **Call to order**
2. **Approval of minutes from last meeting**

Approved!

1. **Open issues**
2. **Updating the EGEN objectives project page**
* **Morgan**: Ximing Cai has come in as Associate Director for Campus Sustainability and is very interested in fully updating the iCAP portal. He wants to emphasize the iCAP portal and share information with faculty who may be able to develop learning around these projects. Students are being tasked with updating the iCAP portal pages including the EGEN objective project pages. **John** will share most recent revisions with students in charge of this. EGEN team was the only SWATeam to pursue iCAP portal updates – go team!
[Since the writing of these notes, **John** has met with and passed along all EGEN iCAP revisions to Shuang Chen]
1. **Review focus topics EGEN SWATeam (see attached document)**
* **Tim**: Biomass use at Energy Farm does not produce steam, it produces hot water as part of a hydronic system. Pushing at the state level to make the burn permit more flexible would allow the testing of biomass burning at Abbott. This would reduce the need to pre-approve projects which typically results in long lag times.
1. **New business**
* **New team ideas for this semester**
* **Other**
* **GEOTHERMAL ON CAMPUS**

**Forrest**: Overall utilities master plan doesn’t consider implementation of geothermal energy.

**Morgan**: A scenario of converting to geothermal was explored, but the price is almost 3x greater than other cases.

**Forrest**: A past ISTC project considered open-loop systems. Underground water in our area cannot support open-loop systems. We can learn from this mistake, closed-loop systems should be considered. Seeking to use ground source heat pump (GSHP) in a new building could prove the viability of this technology in NEW construction. For instance, this could have been considered for the Siebel Design Center.

**Morgan**: Perhaps there are other opportunities to explore this on campus, i.e. MEB extension…

**Xinlei** worked on Champaign-Urbana MTD administration building to implement solar and GSHP (and filter on bus) - MTD received stimulus money.

**\*\*Xinlei’s** and **Forrest’s** expertise can be useful in a meeting outside of EGEN to strategically help the university make a decision on how to implement this technology

* **Morgan**: The Sustainability Council met Monday and discussed two recommendations from EGEN team. We are awaiting formal notes but some insights into what was discussed include:
	+ Putting rooftop solar has extremely high maintenance cost
	+ Want to see something with larger impact: $/unit of land
	+ Solar farm most cost effective way to increase solar
	+ Some guidelines currently exist on how to do rooftop solar
	+ F&S capital planning already look at opportunities for each building to implement solar. How do we keep this as a principle?
	+ Funding for new construction comes from department, i.e. School of Business for BIF. What’s the best bang for the buck? This discussion was started.
	+ Power Purchase timeline: looking into expanding beyond 10-year agreement, determining the current status on renewables, Evan will do follow-up letter to give to Chancellor and notes will be up on portal.
1. **Adjournment**

John will send out doodle poll to explore options to change meeting time that better accommodates each other’s schedules. The next meeting will be the week of March 27th.

Focus topics for this years SWATeam - Clean Energy Ideas

* Expansion of on campus solar.
Setup meeting with Niharika Kishore to discuss her.
Development of building standards that require roof designs that can accommodate solar panels for all new construction.
* Clean energy PPA.
Develop a recommendation to explore pricing for another clean energy PPA.
* Carbon capture
Setup meeting with Kevin O’Brien to hear about the ISTC projects.
Setup meeting with Sally Greenburg to hear about sequestration at ADM.
* PetaScale
Repurpose waste heat instead of venting. Can this be sent cost effectively to the State Farm Center.
Provide a recommendation that offsets be pursued for Petascale emission in order to meet the FY18 goals established in the iCAP.
* Air Permit - Could we pursue a more flexible air permit that would allow the campus to test burn various biomass options at Abbott.
Setup meeting with F&S Environmental compliance to provide an overview of the campus Title V air permit, and review the options for burning biomass on campus.