

UF Sustainability Committee - Minutes

11/18/2021, 12:30-2:30

Virtual Zoom meeting

Attendees:

Members: Ariel Pomputius, Andrew Zimmerman, Jodi Chase, Flora Iff-Noel, John Duncan, Izzy McAlister, Leah Locascio, Allen Masters, Meredith Beaupre, Jessica-Jean Stonecipher, Matt Williams, Nancy Clark, Jeff Boissoneault, H el ene Huet

Guests/Non-Members: Corey Farmer, Hannah Ulloa, Marisa Hart, Alexis Irvin, Liz Storn, Scarlet Seymour, Mark Helms

Call to Order

Meeting called to order at 12:32 (**Ariel Pomputius**, Chair)

Approval of Minutes

- a. **Andrew Zimmerman** moved to approve the minutes from September 16, 2021. The motion was seconded by **Jodi Chase**.
- b. **Andrew Zimmerman** moved to approve the minutes from October 20, 2021. The motion was seconded by **Izzy McAlister**

Old Business

ESG (Environmental, Social & Governance) Criteria in UF Investing

- i. A draft recommendation to expand the commitment to sustainable investments at the University of Florida Investment Corporation (UFICO) was presented by **Ariel Pomputius** and **Jodi Chase**
- A discussion was held about several points in the recommendation. **John Duncan** asked who defines "higher standard". **Jodi Chase** suggested that it could be the Intentional Endowments Network (IEN). **Matt Williams** also suggested that the University could ask for a review of the policy by a group of faculty, staff and students, and the group could determine the standard used. **Leah Locascio** wondered whether we should be asking for UFICO to divest from fossil fuels, or to invest in whatever options are more sustainable. **Ariel Pomputius** replied that the hope is that by having more transparent ESG standards, they will eventually move that way. **Matt Williams** suggested that instead of recommending that UFICO become a member of the Intentional Endowments Network that it be recommended that UF become a member and UFICO engages through the UF membership.
- **Jodi Chase** and **Ariel Pomputius** will revise the language based on the questions and discussion and bring back for the December meeting.

Office of Sustainability Updates

The Office of Sustainability (OoS) hosted a successful "Listen & Learn" event Monday, November 8, and got positive feedback for draft the goals and strategies. Based on feedback heard at the Listen & Learn, OoS is planning a virtual "Lunch & Learn" event for staff and faculty to learn more about the CAP and provide feedback.

OoS is also offering CAP talk presentations, which are requestable presentations from our office open to classes, student orgs, depts, etc. More information is available on our website.

Central Energy Plant discussion with Mark Helms, Assistant Vice President for Facilities Services

Mark Helms is the assistant VP Facilities Services and has been at UF since 2016. A set of general questions and themes were provided to Mark ahead of time. Mark noted that as this process is out for solicitation with an Intent to Negotiate (ITN), he must be cautious about what he says. He hopes that this will be a productive, respectful discussion.

- What other options were considered for the plant?
- What are the opportunities for faculty, staff and student input into the design and process?
- How are we moving forward with solar for campus? What are the plans and projects to increase solar production on campus?

- How can UF achieve carbon neutrality given that this plant will use natural gas?

Timeline:

- Conversations about a potential cogeneration plant at UF have been happening since prior to Mark's hire.
- Energy at UF is a bit complicated. The Public Services Commission (PSC) requires us to purchase electricity from the provider for our service area, and we cannot do 3rd party power purchase agreements.
 - o In 1973, GRU leadership negotiated to carve UF out of their service area and give it to Florida Power & Light in exchange for property outside of UF. Overtime, the service area was bought by Progressive and then by Duke Energy.
 - For electricity, we are just the customer buying electricity
 - o In the 90s, Duke proposed building a co-generation plant for steam for UF needs
 - We do not get electricity from it – the electricity goes back into the grid
 - The plant is much larger than what is needed to produce steam for campus
 - Often the plant is venting steam because it is oversized
- Since 2014 Facilities Services has been working on campus energy master plan, specifically focused on steam
 - We need a steam source (not electrical)

Other options considered:

- The current plant is the most viable solution for UF today given that we need steam
 - o We did consider what Stanford did – electrifying boilers to generate steam
 - This would greatly increase our electricity needs & since we still buy from Duke (which still has coal in their grid), this would increase our carbon footprint
 - o We have looked at solar – we use approximately 80 MW of power at peak load on campus
 - this would go to 150 MW if we were electrifying boilers
 - 1000 acres, \$1.5 billion
 - Doesn't get into battery storage, etc.
- We are going with a Public Private Partnership (P3) to make sure that we aren't being shortsighted or overlooking other options that would be better
 - o We have specified turbines to be used that will use hydrogen as a fuel when it becomes available

Opportunities to engage:

- When the partner comes on board, they have been required to engage with Gainesville residents and government as well as faculty and staff

How can we achieve carbon neutrality?

- When the new plant comes online will reduce our greenhouse gas emissions 25% as calculated by the Office of Sustainability
- Solar – we are limited to 4MW (2MW/connection to the grid) by the PSC, but are actively looking for ways to increase the amount of solar currently installed on campus
- Many of the universities that have achieved neutrality, all have better grids
 - o We don't have that option with any of the local providers
 - We could buy RECs to "feel better" about ourselves
- We're 4+ years in to master planning the best solution today

Questions

Izzy McAlister asked about the suggestion in the League of Women Voters editorial about using individual heating and cooling units at the building, and whether that means that the building would be missing the benefits provided by a district energy system? **Mark** replied that a district or distributed energy system like we have at UF provides reliability and efficiency since the system links together different plants, reducing the need for redundancy at each building and reducing the equipment needs across the system. As part of this energy master planning, we will be going from approximately 20 chiller plants to 7, which reduces both maintenance and energy usage.

Jeff Boissoneault asked about RECs and whether they provide an economic pressure to expand renewables across the country? **Mark** responded that while that is technically true, right now many RECs are priced below a point that will make a difference, for example wind farm recs out of Texas for 55 cents/MW. Unfortunately, what Duke can do in our area is very limited by the PSC, so it would be hard for them to improve our current electricity grid even with financial pressure. For example, Duke recently proposed an 80MW solar farm in Alachua that we were a supporter of and would benefit from, but the PSC said no to the solar farm. Additionally, if there was a way to get 30MW of solar in Gainesville or at UF, you'd still have to have backup power and support from your electrical utility. **Matt** also mentioned that there are several benefits that other states have that we don't such as Renewable Portfolio Standards and third-party power purchase agreements (PPAs). Groups have been trying to address these issues for 20 years at the legislative level.

Jeff asked about transitioning to hot water instead of steam. **Mark** replied that 99% of our buildings actually heat with hot water – we send steam through the central loop to converters in the buildings that then change it to hot water. Unfortunately, it would be very expensive to transition all of the piping from large steam pipes to smaller hot water pipes, although we are doing it for one area – the Holland Law area.

Finally, **Jeff** asked about how the future costs of natural gas are being modeled given the volatility and changes in the energy system. He is concerned that costs may go way up and make this plant not financially viable. **Mark** replied that this is something they are very concerned about. UF is working very closely with the Florida Gas transmission (FGT) line, allowing us to buy directly and not be restricted by a local provider. UF has also been working with FGT about their future plans for green natural gas and for hydrogen. They are doing a lot of research into it.

Mark noted that there may be funding from the infrastructure bill we can tap in to help create a micro-grid which would create resilience in the face of emergencies and allow us to keep the power on for key facilities. **Mark** also noted that we have looked at using our wastewater treatment plan to create green natural gas, but we don't have enough waste to make it work at this time.

Mark also noted that we have about \$3.5 million in energy savings that we're putting into a revolving loan fund to invest right now. UF is also looking at different solar thermal and thermal storage options across campus. Given the size of this project, UF is doing working to make the plant as efficient and flexible as possible.

Ariel Pomputius wondered about how if we moved towards electrifying our system instead of using a central energy plant, our carbon footprint would increase in the short term, but over the lifespan of the proposed energy plant, could we expect our energy grid to get cleaner and our carbon footprint to ultimately go down more? **Mark** discussed the Stanford University example of moving away from fossil fuels and how when Stanford did it, they benefitted from the very clean energy grid in California that we do not have here in Florida. **Mark** also noted that the lifespan of the plant is at least 30 years and likely more, and the turbine lifespan is approximately 25 years. At each major maintenance interval, UF would update the technology and upgrade some of the units to make sure that the plant is efficient.

Jessica-Jean Stonecipher noted that the fact that this is the best option feels disheartening, and wants to know how we can avoid being in the position to take the "best option at the moment" over cutting edge renewable energy the next time we need to make a big upgrade like this? **Mark** replied that we are actively encouraging more smart minds to come to the table, and it is still an option that this WON'T be the plan that goes forward. UF is trying to be as open minded as possible. **Mark** also mentioned that there are still issues to be worked out with solar and other renewable energy sources, such as energy storage, disposal of used technology (turbine blades, solar panels), etc. **Jessica-Jean** also asked what do we need to be doing to have better energy infrastructure in Florida. **Mark** replied that we need to be encouraging all the state producers to have better grids. **Jessica-Jean** also wanted to know how do we make changes to the limitations on solar that the Public Service Commission has put on us? **Mark** replied that there are discussions happening around that area.

Andrew Zimmerman asked about whether faculty experts were consulted when developing the plan. **Mark** replied that Prabhir Barooah and other faculty are working on research for a hydrogen generator project and some other projects as well. **Andy** also asked why for so many faculty, staff and students this the first time we've heard about the Central Energy Plant. **Mark** replied that in general, leadership has been keeping it quiet, and now that it is in the ITN process with Procurement, we are not allowed to talk as much about it.

Mark ended by asking everyone to please send any questions to him (through Liz or Ariel) so they can be discussed openly. He also reiterated that the best way to reduce our carbon footprint is to reduce our energy usage across campus.

Old Business

Central Energy Plant

- i. Voting
 1. We will have anonymous votes through the poll function on Zoom on:
 - language
 - whether it will go to the Infrastructure Committee
 - whether it will go to VP Curtis Reynolds
 2. Note that guests will not be able to vote
 3. We will do a simple majority for voting
 4. We will allow people to abstain from voting
- ii. **Jeff** proposed adding an amendment indicating that we are unaware of any proactive action being taken to avoid being in this position in the future and we are limited in our options because of the regulatory constraints on solar and renewable energy in Florida.
- iii. **Izzy** asked whether this amendment will include information about the restrictions that prevent us from having solar, etc. as this may be an area where it would be good to see community action moving forward. **Jeff** replied that yes, this was his intention.
- iv. A discussion was held about where the recommendation should be sent and whether it should be worded as a recommended resolution or a recommendation. The two pathways in discussion include sending as a recommendation to VP of Business Affairs Curtis Reynolds or as a draft resolution to Infrastructure Council and then to Faculty Senate. The discussion included which pathway might be the most effective and how long it might take to get before Faculty Senate, with the realization that it might not be until 2022. **Matt** clarified that Mark Helms reports to VP Curtis Reynolds, and VP Reynolds reports to COO Dr. Charlie Lane who reports to President Fuchs. Matt also noted that committee votes from the various Joint Committees typically go to VP Reynolds for approval or denial. Matt also said that our office has not been involved in a draft resolution coming from one of the Joint Faculty & Staff committees, so this is new territory for us.
- v. Due to time constraints and concerns about draft language of the amendment it was removed for the time being.
 1. Vote on whether to send the draft resolution as written to the Infrastructure Council
 - a. 8 voted yes, 1 abstained
 - b. We will put this forward as a draft resolution
 2. Vote on whether to send this as a recommendation to VP Curtis Reynolds
 - a. 6 voted yes, 2 voted no, 2 abstained
 - b. Jeff will revise as a letter and bring to the December meeting and we will vote on the language at the next meeting.
 - c.

Meeting Adjourned

Meeting adjourned at 2:35pm by Motion: **Hélène Huet** and seconded by **Jodi Chase**