

USF Student Green Energy Fund Council



Friday, November 17, 2017 – SVC 1073

Time: 3:00 pm – 4:30 pm

Meeting Minutes

In attendance:

Council Members (In alphabetical order)

Kebreab Ghebremichael, Nainan Desai, Barbara Bushnell, Sujit Chemburkar, George Philippidis, Raymond Mensah, Aladdin Hiba, Maria Rodriguez, Drew Templeton, Robin Rives, Gviana Goldberg, and Harold Bower (Chair)

Absent: Chris Marks (Alternate), Lynecee Romelus, Gviana Goldberg, and Brian Mwaliko (Alternate)

Observer(s): Melody Rainey and Gidi Hendrix (Observers)

First Order of Business:

Previous month meeting minutes approved.

Financial Update:

Cash balance as of 11/13/2017 is \$2,779,394. Active Projects RSA - prior year awards (\$1,922,243), Active Projects RSA - FY 17/18 awards (\$415,133), projected operational expenses (\$19,609) and the total projected expenses of (\$2,356,985) brings the projected available cash to \$422,409. The FY2018 remaining estimated fee collection is \$343,031. The 10% contingency (\$102,648) and a 5% reserve of (\$51,324) brings the projected available cash to award in FY2018 to \$611,469.

Public Comment

None.

Unfinished Business:

None.

New Business:

- **Tree Mapping Project Summary**

This proposal is requesting \$31,500 from the SGEF council to complete a tree mapping project that was started with funding from the Florida Forest Service. The Patel College of Global Sustainability has been able to inventory close to 10,000 trees on campus in the past 2 years and develop an interactive tree map via a web based mobile app called Open Tree Map. The inventory collects information such as diameter, height, species type, precise geographic location and an image of each

tree using different digital instruments. The data is then compiled and mapped on a digital platform. The interactive tree map then calculates the ecological benefits of the trees such as the energy conserved, storm water filtered, air quality improved, carbon dioxide sequestered and overall money saved. This information is then freely available to the public and can be used to demonstrate sustainability initiatives at USF and will be used as a tool for research and education. The overall goal is to continue this project with SGEF funds and inventory 100% of the trees on the USF campus.

The funding previously received from the Florida Forest Service was used to purchase the required instruments, consumables and employ students. This inventory project was completed at the end of March 2017 and would like to continue the work and develop a full inventory of trees on the USF campus. Much of the remaining work is a dense area around the botanical gardens and the northeast corner of the campus. The density and waterlogged nature of these areas will require students to work in pairs and it will take more time compared to the areas previously mapped. Therefore, it is expected to map these areas over a 2-year period with a group of students working an average of 10 hours a week. In addition to the inventory, this will also require fine tuning of the data and correction of any errors based on desktop work.

The proposal also plans to place tree plaques in selected locations to enhance education aspects of trees and to promote awareness among the USF community. This is beneficial to disseminate information of ecological benefits of trees and help protect and preserve the green areas of the campus.

A long-term tree mapping operation and maintenance of the database has already been discussed with Facilities Management staff, who has agreed to maintain the database once a complete inventory has been established. Shuang Hao, a landscape architect and arborist from Facilities Management, has been trained on how to use the Tampa Tree Map tool and data collection instruments. The staff has also been granted editor privileges to the tool that will allow the department to update the database when trees are removed or new trees are planted.

This project has a great return on investment in terms of facilitating campus tree management, enhancing sustainability reporting, and providing an excellent educational and research platform. It will improve USF's visibility among the nation's sustainable campuses. The funding from SGEF is to supplement the amount granted from the Florida Forest Service. SGEF can seize this opportunity to become a crucial funding partner and contribute to sustainability efforts on campus. A database that is supported by a visual description is a vital asset to the management of green areas on campus. This will become a cost-effective way of planning for the maintenance and expansion of tree cover. The council asked how many trees can be mapped in a session. There were concerns as to why two years would be necessary. Approximately 70 trees can be mapped in 4 hours; the two years is an estimate.

Council voted and approved as a proposal.

- **Laurel Garage LED Lights PH3 Proposal**

USF Tampa has the potential to dramatically reduce its energy consumption and greenhouse gas contributions by saving energy through amenities the university already has – parking garage lighting. The Beard Parking Garage is an eight story structure that previously used a lot of electricity but now has LED lighting thanks to the SGEF proposal upon which this proposal is based. USF has the ability to purchase lighting that will last longer and cost less over its lifetime. This proposal aims to improve the energy efficiency of the existing parking garages. The Laurel Parking Facility will have its current lights replaced with LED lights, dramatically decreasing the carbon emissions of the structure. After speaking with Parking and Transportation Services (PATS), it was discovered that they want to update the lighting. PATS does not have the funding needed to make the upgrades that SGEF is capable of doing now, but they are willing to maintain and replace the lights that break. PATS is also willing to contribute \$20,000 in matching funds and **return 50% of the actual utilities savings to SGEF per year for five years.** (Similar to the Collins Garage LED project)

This project will replace 533 pulse start light fixtures and 60 fluorescent light fixtures in the Laurel Garage with LEDs. The existing lights and the fixtures that are in good condition will be recycled by PATS. PATS will maintain and fix any of the LED lights that break after this project is finished, and PATS has assumed full responsibility. The estimated annual cost savings per year is \$54,048 with a 10 year return on investment of 15% and 600,530 KWh of annual energy savings. The annual Green House Reduction is estimated to be 447 metric tons of CO2 reduced per year.

The project is expected to start with the filing of space impact form with PATS, and project planners will get the construction drawings completed. The bidding for the contractor with the best bid will occur, and then the project will commence construction once necessary permitting is secured. Installation should take 2 or 3 months, depending on how the University Administrators decide to proceed with installation. The Laurel Garage will be a straight one to one replacement. Therefore the project is requesting \$352,771.20 from the SGEF.

The council wanted to know if bidding is open to all vendors. The bidding process is limited to around five university approved vendors.

Council voted and approved the proposal.

*The SGEF received additional projects not included in the agenda. The council voted to approve hearing the projects.

- **Campus Rec CPT Boiler Budget Request**

On August 30th, there was a mandatory site visit with contractors to ensure there would not be any problems with piping or the construction locations. In the interest of safety for students and faculty, the boilers are required to be installed further out on the terrace than originally planned in order for the fire exit to be completely clear. This alteration means the project had to implement some more

structural support underneath the installation site. Facilities Management has contributed an additional \$10,000 on top of their original \$80,000 contribution, and the Campus Recreation Center has contributed \$30,000 toward the project in order to keep on schedule, but each had to take this money from their operation funds, which were not budgeted out for this project. The project is requesting additional funding of \$50,000 in order to reimburse (1) \$30,000 to REC, (2) \$10,000 to FM, leaving (3) \$10,000 for any contingencies, which will be returned to the Student Green Energy Fund if not used.

There was a comment made that the council would like to see these departments put “a little skin in the game” since this project benefits both Campus Recreation and Facilities Management. The concern is that both departments did not have funds budgeted for this expense and needed to pull from their emergency funds for the pool to operate as usual.

The council made a motion to approve fully funding the request with the contingency that the departments reimburse 50% back to the SGEF for the next 5 years based on the savings (or \$10,000 per year) and pending the approval from Facilities Management.

Council member Nainan Desai wanted to be on record that he was opposed to the motion.

Council voted and approved the proposal.

• **NBG Marketing Funds Project Summary**

This is a request to set aside \$4,500 for marketing materials to advertise Neutralize Bull Gas such as flyers, buttons, stickers, tabling, etc. Neutralize Bull Gas is an optional carbon offset donation aimed at one of the largest sources of carbon emissions at USF: commuters. NBG is live, however there is a need to increase awareness of the fund amongst students and faculty.

The specific marketing plans will be created through meetings with students and members from various USF departments, including SGEF, Student Affairs, and Planning. This request will not provide financial savings. However, marketing NBG provides emissions savings.

The Foundation requires that \$1,000 is donated within the year that a fund is opened.

Council voted and approved as a proposal.

• **CPH Cool Roof Project Summary**

Cool Roofs, also known as Reflective Roofs can prove to be a cost effective way of saving energy and meeting sustainability goals for a building. Analysis for this project of re-roofing for the CPH (College of Public Health) building on campus is carried out to produce data relevant to the trade-off in up front, laid in costs to use a white surfaced roofing product Derbicolor GP FR CR (Cool Roof) versus the standard darker gray surfaced product. CPH roof replacement is already a funded project and only the incremental cost to provide the roof layer is needed. A cool roof would reflect more sunlight (high reflectance) and release more absorbed heat (high emittance) than a standard roof, resulting in a cooler roof and building and eventually lead to reduction of the carbon footprint and energy as well as cost savings.

Some of the benefits includes:

1. Improvement of indoor comfort for spaces that are not air conditioned such as garages.
2. Decreases roof temperature that eventually extends roof service life.
3. Reduces local air temperature called the Urban Heat Island effect.
4. Reduce power plant emissions, including carbon dioxide, sulfur dioxide, nitrous oxides, and mercury, by reducing cooling energy use in buildings and reduction of HVAC equipment size and wear.

Also DerbiColor GP-FR-CR is an ENERGY STAR qualified roofing system and can help to reduce amount of air conditioning needed in buildings and reduce peak cooling demand. Facilities Management has agreed to maintain the roof, thus ensuring sustainability of the project and no further cost to SGEF. The project is requesting \$5,872 from the SGEF.

Council voted and approved the proposal.

Activities Updates

- **USF Carbon Offset Foundation Fund 590082**

The Neutralize Bull Gas project set up a foundation fund for students and faculty/staff to donate money to purchase carbon offsets. The fund (USF Carbon Offset fund 590082) was established and needs to be marketed. The foundation fund link is available on Parking & Transportation's website as of November 1, 2017. Other marketing idea strategies to promote the fund are welcomed.

Announcements

- **December SGEF Council Meeting**

The SGEF Council meeting for December will be cancelled due to the winter break.

- **SGEF Council Meetings**

The council would like to reschedule the day and time of the monthly council meetings. The chair will be polling the members for suggested times.

- **Earth Day**

Discussions with Student Affairs' event areas are currently underway to bring Earth Day back on campus. More information will be provided at the next meetings.

- **Netherlands Student finds SGEF**

A UCF student in the Netherlands is planning on implementing a similar green fund at UCF and contacted the chair for more information on the Student Green Energy Fund. The student was very impressed with USF's program. He also hopes to bring more sustainability back to his home country in Saudi Arabia.

Meeting adjourned at 3:57 pm.