

Student Green Energy Fund Proposal Application Form

Section 1: Summary Information

Project Title:	USF Collins, Garage LED Lights – Phase II
Duration (months):	12
Total Budget (\$):	\$323,094
Requested SGEF Funds (\$):	\$303,094
Matching Funds (\$):	20,000.00
Proposed Starting Date:	September, 2017
PI Graduation Date (if applicable):	August, 2018

Section 2: Applicant Information

	Full	Unit/	Phone	Email
	Name	Department		
Principal	Adam	Undergraduate	727-417-1162	aburrell@mail.usf.edu
Investigator	Burrell	Accounting		
		Student/Muma College of		
		Business		
Investigator 1	Nadeem	Bachelor in General Studies	813-606-1444	Nfreajah@mail.usf.edu
	Freajah	Student / School of Geo		
		Sciences		
Investigator 2	John Pilz	Accelerated 3+3	727-452-0603	johnpilz@usf.edu
		Bachelor's/J.D. Program		
		with Stetson / Facilities		

		Planning		
Investigator 3	Benjamin Carr	Undergraduate Chemical Engineering Student / College of Arts and Sciences	240-723-2189	Benjamincarr@mail.usf .edu
Investigator 4	Frank Granda	Parking and Transportation Services	813-974-5963	fgranda@usf.edu

Section 3: Project Description

Describe the project, including goals and objectives, methods to be used to assess the outcome of the project, and how the results of the project will be communicated to the USF community and the sustainability of the project

Project background and purpose (reasons motivating request)

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 8 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 is aimed at improving the energy efficiency of the existing parking garages. The Collins 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. They have dedicated \$20,000 towards this project, should it be approved by SGEF.

Project activities (Max 250 words)

With funding from SGEF, this project will provide 487 light fixtures to the Collins Parking Garage. The light fixtures currently in use will be replaced with new fixtures that are scientifically proven to last longer while costing less to maintain (the majority of the lighting industry approves this as common knowledge). The lights and the fixtures that are replaced 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.

Project results (Max 500 words)

The benefits of this project are immediate, with the potential to dramatically reduce the energy consumption and carbon footprint of the Laurel and Collins parking garages. Over the course of 10 years, the project has the potential to save the school \$945,104.91 in combined savings, with \$902,061.05 coming from lighting and \$43,043.86 from yearly re-lamping savings.

Outcomes of the project (narrative)

The project is expected to serve as a testament to the funding of SGEF being well-spent, as people coming into the garage will notice the difference and an educational sign can be utilized to educate students on the importance of LED lights.

Annual Cost Savings

Return on Investment, %

Annual Energy Savings

Annual Green House Gas Reduction

Project Sustainability (Max 200 words)

\$51,218.93 saved per year

65% ROI

640,235 KWh saved per year

44.2 Metric tons of CO2 saved per year

Parking and Transportation Services (PATS) will be recycling the lights and fixtures that they can during this process, and they will be maintaining the fixtures. If fixtures break, they will fix them. PATS will be assuming full ownership of the LED lights, and all the responsibilities that come with the LED lights in the future. SGEF will have signage in the parking garages where the contribution was made, allowing students across the entire university to know that SGEF is ensuring that USF is taking measures to save where it matters most: efficiency.

Section 4: Additional Materials

Provide detail all activities and responsibilities including schedule for the project from start to finish, noting the general dates of major milestones and accomplishments.

Also provide details of expenditures for the project, including a brief statement describing the nature and necessity of the expense. Provide a schedule for the project from start to finish, noting the general dates of major milestones and accomplishments (These may be uploaded as additional files)

Detailed work plan/schedule of activities (Max 250 words)

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 Collins garage has the same layout as the Beard garage and the project will be a straight one to one replacement.

Budget breakdown and justification

Project Budget breakdown must follow the following format:

Category	Request from SGEF	Applicant	Total
		Contribution	
Personnel (include all	\$1,200 (Adam Burrell)		\$1,200 (Adam Burrell)
involved)			
Equipment	\$257,340.00		\$257,340.00
Supplies/Materials			
Contractual			
Construction		\$20,000 (from PATS)	\$20,000
Signage	\$2,000		\$2,000
Other (specify)	\$15,000 (Engineering)		\$30,000 (Engineering)
	\$27,554 (10%		\$27,554 (10%
	Contingency Fee)		Contingency Fee)
Total Project Cost	\$303,094	\$20,000	\$323,094

The \$257,340.00 is a quote from Himes Electric, the contractor from the Beard Garage LED project, that was received on 6/19/17. The quote includes all materials and labor.

ADDENDUMS

Here's our letter of support / matching funds:

From: Granda, Frank

Sent: Thursday, March 2, 2017 4:57 PM

To: Pilz, John

Cc: Mensah, Raymond

Subject: SGEF Proposal: LED Lighting Conversion Collins or Laurel Garage

Good afternoon John,

I've spoken to Mr. Mensah regarding matching funds for the Collins or Laurel Parking garage LED proposal and he is prepared to commit \$20,000.00 from Parking and Transportation Services.

Frank

Frank M. Granda

Operations Manager,

Parking and Transportation Services
University of South Florida
(813) 974-5963

4202 E. Fowler Ave., PSB 101 Tampa, FL 33620-6980

fgranda@usf.edu | usf.edu/parking



Here is the quote from Rob Schmidt with Himes Electric:

Rob Schmidt < Rob@himeselectric.com>

Jun 19 (10 days ago)

to me

Rough budget is \$257,340.00. That is assuming the same scenarios as the Beard parking garage where we are changing out one for one, changing the poles on top and adding the additional controls on the first floor.

Let me know if you have any questions.

Thank you, Rob Schmidt

Himes Electric 1040 Land O' Lakes Blvd Lutz, FL 33549 P: <u>813-909-1927</u>

C: 813-695-5748

From: Adam Burrell [mailto:aburrell@mail.usf.edu]

Sent: Thursday, June 08, 2017 3:10 PM

To: <u>rob@himeselectric.com</u>

Subject: USF Collins Parking Garage Light Information