# *Thank you for your commitment to green initiatives at the University of Illinois. One of the ongoing requirements listed in the terms of the funding agreement for your project is the submission of semesterly reports with key information about your project. In addition to this form, please provide additional financial documentation and/or progress photos if available.*

# *Please be as accurate as possible in describing the project (including possible setbacks or challenges in meeting the initial goals of the project). Not fully meeting your project's goals will not disqualify you from making future funding requests as long as your reports are as complete and accurate as possible. If you have any questions, please contact the Student Sustainability Committee, at* [*sustainability-committee@illinois.edu*](mailto:sustainability-committee@illinois.edu)*.*

**Project Name:** ***Electrical and Computer Engineering Building (ECEB) Interactive, Energy Education/Production/Use Display***

**Date of Report Submission:** 9/18/2020

**Project Purpose:**

ECEB is projected to achieve zero-net energy because of its super-efficient design and construction materials (It has already achieved LEED Platinum certification) when the installation of the building’s solar panels producing .3 megawatts of power is added to 1.2 megawatts, the ECE allotment from a planned second solar farm.

This display has three goals. The first is to teach students (3,000-4,000 pass through the lobby daily), faculty, and campus visitors (including 10,000 from Engineering Open House) about energy use while presenting relatable and significant ways they can reduce energy-consumption patterns.

The second is to show--in real time—energy produced by our solar installation (research panels funded primarily by the SSC and the remainder of the array) and ECEB’s allotment from the second solar farm, as well as energy used.

The third is to demonstrate ECEB's efficiencies and document its progress toward certification as the first zero-net status building on campus. The display will also validate the buildings’ LEED Platinum certification.

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| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  | | --- | | **Detailed Accounting of Expenditures to Date:** |   **NEC Multisync 75" Ultra High Definition 3840x2160 LED Monitor** 1 5139426 **$2,940.35**  Mfg. Part#: C751Q, UNSPSC: 43211902, Contract: IPHEC 1DGS1306 Computer  Peripherals iBuy (CN-00006509)  **NEC OLR-751 - touch overlay - USB** 1 5139534 **$2,244.70**  Mfg. Part#: OLR-751, NSPSC: 43211712, Contract: IPHEC 1DGS1306 Computer Peripherals iBuy (CN-00006509)  2 SeePoint Interactive Kiosk Systems $**8,294.60**   |  |  |  | | --- | --- | --- | | **3 Intel Compute** BOXSTK2M3W64CC | CDW Part: 3983691**Sticks $1,169.76** |  | $401.98 |   Facilities operation to install 75” screen and support for poster above **screen $1,146.21**  Poster showing ECEB is 100% solar powered is printed and installed above 75” screen **$218.00** |  | |

$15,795.62 has been spent to pay for the two kiosks and install and pay for the 75” screen and touch capability. We were able to use ECE department funds to pay F&S John Summers to find the building breakdown of circuits. A total of $1,500 has been promised to RSO students for programming the kiosks during the three years the equipment is under warranty. We are trying to get the money to them now. As soon as a banner number is supplied, this will be added to their account. The goal is to keep the kiosks current with announcements and other program changes. Two announcements were added last week: Friday Lights Our and the solar phone charger drawing for Energy Efficiency Day, October 6th. A solar phone charger is being ordered, pending approval from Payables. It will cost $70 or less. We will also have a drawing for Earth Day, April 22nd. A second phone charger will be given. We expect it to cost about the same as the first. We will have such drawings each year, for a total of three years, or longer, depending on funds available.

**Project Progress to Date:**

Kiosks have been installed and programmed for Engineering Open House 2021. The 75” touch screen has been installed with touch capability. Touch options include The large screen is currently displaying building efficiencies, drone views of the ECEB solar panels, and a wayfaring screen in a loop. Eventually, these will be accessible via touch buttons at the base of the screen, along with a building energy-use dashboard (from F&S) and hopefully, the building energy-use breakdown. We would also like to add atmospheric conditions to complement the building energy use information.

Please summarize your project’s progress in relation to the milestones and target dates listed in your original application.

**Student Involvement and Outreach to Date:**

A second group of students in iSEE and in computer science are involved in writing and programing the interactive program that will be shown in two kiosks. A student has also figured out and made graphs for the way the energy is used by ECEB.

**Marketing and Promotion Efforts to Date:**

What, if any, marketing and promotion efforts have you conducted so far?

**Additional Comments:**

The kiosks and 75” display screen were targeted to be up and running by Engineering Open House 2020. However, because of COVID there was a delay. New students have come onboard to complete and program the kiosks programing. The new target date is Thanksgiving 2020. The student working on the ECEB energy breakdown graduated. New students must be found to take over from where she left off. All the programs will be based on websites and displayed via FourWinds. Money from the grant is available to make the buttons in Four Winds for all three screens.

We have also allowed money for a sign above the touch screen. It will be printed just before the display is finished and is expected to be updated about every 4-6 months, as we have more information displayed.

There has also been a delay in getting the computer sticks properly programmed for the three screens, although this week Justin Hedrick from AV is working on getting it set up properly. The large screen has a computer running it. The goal was to insert a new one to match the lifetime of those in the kiosks.