

Clean Energy Fund Recommendations | Submitted February 2019

Submitted by the Socially Responsible Investment Advisory Council to Richard Cate, VP for Finance

This document serves as an appendix to the recommendations made regarding the fall 2018 Clean Energy Fund Forum, submitted and approved in January 2019.

During the deliberation process following the Fall 2018 Clean Energy Fund Forum, the SRI Advisory Council voted to fund three of the seven proposals presented at the forum (Covered Bike Parking, Energy Action Seminar, and Solar Garden Shed). The group delayed voting on the Green Labs proposal presented by Michael Lane, Director of Instrumentation and Technical Services, and requested more information before moving forward to a vote.

Green Labs Proposal

In a meeting on February 7th, the SRI Advisory Council voted to recommend funding for the Green Labs proposal at \$38,798 for a pilot program designed to increase the efficiency of refrigerators and freezers on campus. This decision came after a discussion requested by the SRI Advisory Council between Elizabeth Palchak, Sustainable Funds Coordinator; Rich Wolbach, Energy Manager; and Dr. Gordon Jensen, Assistant Dean of the College of Medicine. Dr. Jensen agreed to support the outcomes of the Green Labs pilot by training his staff to conduct routine maintenance if the pilot shows the expected increase in energy efficiency of these appliances. Most of the freezers and refrigerators on campus are housed within the College of Medicine. Moving forward, Dr. Gordon Jensen has also agreed to purchase high efficiency freezers and refrigerators, based on Rich Wolbach's recommendations. The next step of this effort will involve Dr. Richard Galbraith, the Vice President of Research, and will work towards a campus-wide policy related to the routine maintenance and efficiency of these appliances. Dr. Jensen has expressed his support for this campus-wide initiative. Mr. Lane's research suggests that savings of "at least 10%" are achievable and expected through the implementation of this pilot program.

Proposal Recommendations

Funded: Covered Bike Parking

Name of presenter: Abby Bleything, Jim Barr (both of the Office of Transportation and Parking Services and Facilities) and several students

Proposal summary: This concept of covered bike parking at several strategic locations on campus was originally proposed Spring 2018 by Richard Watts. The CEF Infrastructure Committee asked Abby to move this forward and present a more comprehensive plan. Abby and Jim presented a two-phase plan 1) commissioning a firm to investigate feasibility and 2) construction of parking facilities. The proposal emphasized an inclusive and thoughtful process, involving stakeholder groups across campus (especially students) to determine the best locations. This project aligns with the University's Active Transportation Plan.

Funding request: Phase 1: \$18,700, Phase 2: \$131, 000.

Recommendation: Members expressed strong support for the project, but decided to fund only Phase 1. They recommend that Abby and Jim move forward and return to the group after conducting the initial feasibility study. **Recommendation for full funding of Phase 1 of the project at \$18,700.**

Energy Competition in Resident Halls

Name of presenter: Marty Gilles and Dan Kirk, students

Proposal summary: Students proposed installing “smart meters” on dorm floors in various dorms on campus to deliver real-time feedback on energy use to students and provide the data for an inter-dorm competition. The initial budget was a broad estimate after conversations with Packetized Energy and Physical Plant. During the forum presentation, it became clear that very little research had been conducted to determine the feasibility of the idea and that installing smart meters on dorm floors would be very difficult given the arrangement of electrical meters in campus buildings and the technology required to create floor-level electricity use data.

Funding request: \$4,800 + \$180/week for compensation for EcoReps

Recommendation: During the forum presentation, the proposers displayed a limited understanding of what was necessary for the project to succeed. **Given the limited amount of research that was conducted and the clear gaps in understanding of the proposer, the SRIAC took a unanimous vote for no funding.** The members encourage the proposers to find a partner that can support deeper development of this idea and the crucial research needed to understand what is required for this project.

EcoPower Fitness

Name of presenter: Gabriella Ostrov, Emma Radeka, Dan Kirk

Proposal summary: These students proposed buying three fitness bikes that generate electricity and “send it back to the grid”, for installation in the Athletic Center. This builds on a proposal brought forward by Greg Bates, the director of the Athletic Center and not funded. The technology has improved since the original funding proposal.

Funding request: \$5,614

Recommendation: After extensive deliberation and further research, it became clear that the technology is not as revolutionary as the company depicts but has the potential charge cell phones and small devices during use. Members wondered if this was a type of “greenwashing” by the company. Nonetheless, the potential for educational opportunities exist if students are educated on the value of electricity during bike use. However, conversations with Greg uncovered that though he is excited and willing to include the bikes in the *new* Athletic Center – to be finished in 2021 – he has no room in the current building for new bikes. **The group voted unanimously to not fund the proposal and instead encourage Greg to return with the proposal in two years when construction is closer to finished and use of the bikes is imminent.**

Funded: Energy Action Seminar

Name of presenter: Mark Usher, Lyman-Roberts Professor of Classics and The Environmental Program and seven other faculty members from across the college

Proposal summary: This proposal is very similar to the Energy Action Seminar funded twice in the past (and proposed by Richard Watts). This new proposal extends responsibility for the seminar across seven new departments at the university and extends the reach to eight faculty members. The proposal requests the funding to host ten speakers on energy issues each year with one “high impact” speaker per year, who would be higher profile and more expensive.

Funding request: \$45,000

Recommendation: After raising questions for Mark regarding the person responsible for the seminar and encouraging the hiring of graduate interns, **the group moved to fund the seminar at \$30,000 and voted and passed the motion unanimously.**

Funded: Garden Solar Shed

Name of presenter: Mark Starrett, professor in CALS

Proposal summary: Funding is requested to buy materials and build a demonstration garden shed with solar panels on campus. The solar panels would charge electrical lawn and garden equipment and be located near the greenhouse near Jeffords Hall. Mark has already gained the support of the UVM

Landscape Advisory Committee and asked for input on the exact location and impacts of the shed. The proposal includes the purchasing of the rechargeable tools. Student interns would help care for the shed, already part of the educational garden and could be used by other courses on campus. Campus Planning had not been consulted, but Mark emphasized a thorough stakeholder engagement process to generate support and build collaboration.

Funding request: \$14,050

Recommendation: Members passed a unanimous motion to fund the shed fully.

Still under discussion: Green Labs – Refrigerator and Freezer Maintenance

Name of presenter: Michael Lane, Director of Instrumentation and Technical Services

Proposal summary: Michael Lane presented a very thorough proposal, built from an earlier proposal funded by the CEF, to request funding for a pilot program establishing maintenance schedules and educational material to increase the efficiency of 996 refrigerators and freezers in labs across campus. Research indicates that routine maintenance can reduce energy use by at least 10%. Funding is largely for the staff labor associated with the initiative.

Funding request: \$38,798

Recommendation: During extensive deliberations about this project, questions were raised related to the College of Medicine's role in maintaining freezers and refrigerators after regular maintenance. Members were also concerned about increasing the involvement of student interns in the project as an educational and employment opportunity. The group is strongly considering funding this initiative but was unable to come to a final vote at the last meeting of the semester. **The group would like to invite the Dean of the College of Medicine or another representative from the Dean's Office to have a conversation about replacing the freezers and refrigerators moving forward. SRIAC would like assurance that this work will continue. The group also plans to invite Rich Wolbach to a meeting in 2019 to further discuss plans for the appliances. The group has not yet voted on this proposal but plans to at the first or second meeting of the semester in 2019, following the relevant conversations.**

UVM Sustainable Transportation Initiative

Name of presenter: Louis Kiley, outside consultant; Proposal submitted by others including: David Kestenbaum, Gioia Thompson, Jim Barr, Caylin McCamp, Abby Bleything, Heather Matthews

Proposal summary: The group proposed an 8-week timeline including educational training and outreach. A training video will target students who request a parking pass on campus, highlighting transportation alternatives and negative impacts from driving to encourage bus use, walking and biking. This proposal originally came to SRIAC in spring 2018 and was not funded due to limited evidence of behavior change as a result of this type of training. This new proposal emphasized the importance of a sustained campaign

using stickers, posters and other methods to increase visibility of the ‘sustainable transportation’ campaign.

Funding request: \$16,200

Recommendation: Questions arose again (as in the spring) about the potential for behavior change with this approach – the proposers did not cite research or evidence that the idea would reliably modify the behavior of people requesting parking permits. **The members voted unanimously – with one member abstaining – not to fund the proposal.** The group acknowledged that the idea has merit, but needs further development to warrant funding.