THE UNIVERSITY OF ARIZONA
OFFICE OF SUSTAINABILITY
CAMPUS SUSTAINABILITY FUND

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Environment & Natural Resources 2
1064 E. Lowell St., Room N495
PO Box 210137
Tucson, AZ 85721-0137

sustainability.arizona.edu

Project Alteration Requests (PARs)

Project Managers are responsible for adhering to the terms of their proposed project and ensuring that project expenditures are in line with the approved budget, as outlined in the Letter of Agreement.

Project Alteration Requests (PARs) should be submitted when the scope of a project changes. This includes:

- Moving funding between categories in an amount that is greater than 5% of the total budget (if the amount is less than 5% of the total budget or under $500, a PAR is not required);
- Significant changes to the scope of the overall project that was proposed and approved, even if financial changes are not requested.

Please complete this document and send it back to the CSF Coordinator, Louli Ziels, at louliziels@arizona.edu. Your responses will be shared with the Committee, they will vote to approve or disapprove the project changes, and the PAR will then be sent out for signatures to finalize the project changes.

1. Please explicitly describe the alterations you are requesting to be reviewed.

We had originally planned to support a graduate student on this project, along with their tuition. That student would have conducted more manual measurements of soil moisture and temperature throughout each of the growing seasons, summarized data collected by undergraduates, and coordinated undergraduate schedules. Because of a requirement by our Director of the School of Geography, Development & Environment for the graduate student who was supposed to support this project to serve as a Teaching Assistant for a course, we were left without a person to fill this role. Instead, we are proposing to spend these funds previously allocated to a graduate student and tuition remission to support an additional undergraduate student and to operational costs. We have hired a work study student, providing federal funds to reduce the cost to the Sustainability Grant for including this student support. Additionally, we propose to use funds for operational costs: Increase Plant materials expenses from $400 to $2,400; increase PV panel temperature sensors from $2,232 to $7,620; add TOMST soil moisture and temperature sensors of $5,010.95.

2. What is the rationale for the request?

The rationale for the removal of the graduate student tuition and salary are described above.
Operational costs:
a. Increase Plant materials expenses from $400 to $2,400: We have found that we are needing to replant the crops more often than anticipated because (1) we are using student volunteers to plant, and

we are finding that quality control is not as strong as we had hoped, and (2) there seems to be a squirrel that is eating seedlings. We are tracking germination success after initial planting and then reseeding or replanting after giving each season of plants time to germinate. We are also planting some perennial shrubs along the western edge of the experimental area because we are finding that the high winds that hit this area are creating anomalously harsh conditions for control and agrivoltaic plants.

b. Increase PV panel temperature sensors from $2,232 to $7,620: We are requesting additional funds to make up for inflation-based increases in the cost of the sensors since the time of our proposal and to increase the replicates of PV panel temperature sensors. Our initial measurements have suggested that panel-to-panel variation can be quite large, and having additional replicate sensors will boost confidence in our PV only vs. Agrivoltaic PV panel dataset.

c. Add TOMST soil moisture and temperature sensors of $5,010.95: We are requesting these funds to purchase additional soil moisture and temperature sensors that will allow us to measure the multiple crop species across AV and control research areas. The graduate student would have made these spatially extensive measurements using a hand-held soil moisture and temperature probe, so we need this new way of capturing this dataset. Sensors will be downloaded weekly by undergraduate students, and Barron-Gafford will train them out to visualize, interpret, and run statistical tests on the datasets.

3. Are the proposed changes consistent with the original intent of the proposal?

Yes. The proposed changes are consistent with the original intent of the proposal. The new expenses are simply new ways of meeting the original goals with additional undergraduate students and tools rather than a graduate student.

4. Attach a proposed budget sheet to match these changes, if applicable.

[signature]	Oct 27, 2026
Project Manager	Date
Louli Ziels Louli Ziels (Oct 28, 2026 10:17:24 PDT)	Oct 28, 2026
Campus Sustainability Fund Staff	Date