



STUDENT SUSTAINABILITY COMMITTEE

Funding Application – Step 1

Please submit this completed application and any relevant supporting documentation by the deadline listed on the SSC website to Sustainability-Committee@Illinois.edu. The Working Group Chairs will be in contact with you regarding any questions about the application. If you have any questions about the application process, please contact the SSC at Sustainability-Committee@Illinois.edu.

General Information

Project Name: Illinois Solar Decathlon Deployable House

Total Amount Requested from SSC: \$40,000

Project Topic Area(s): Energy Education Food & Waste
 Land Water Transportation

Contact Information

Applicant Name: Jake Fava **Project Lead:** Jane McClintock
Unit/Department: Illinois Solar Decathlon
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Project Subteam Leads

Name	Department	Email	Subteam
Paul Kitchen	Architecture	paulak2@illinois.edu	Architecture
Mona Feng	Civil Engineering	mengf2@illinois.edu	Structure
Rohan Kalyani	Chemical Engineering	kalyani2@illinois.edu	HVAC/Energy Analysis
Turbold Baatarchuluu	Civil Engineering	baatarc2@illinois.edu	Engineering Lead
Sailesh Subashbabu	Electrical Engineering	subashb2@illinois.edu	PV/Electrical
Cathy Li	Civil Engineering	xli172@illinois.edu	LAHA
Megan Drew	Mechanical Engineering	medrew2@illinois.edu	Water
Corina Jurczyk	Civil Engineering	corinajurczyk@gmail.com	Water

(Rest of roster can be provided upon request)

Project Information

Please provide a brief background of the project, the goals, and the desired outcomes:

We're aiming to tackle the issue of homelessness from the approach of building portable and sustainable temporary housing solutions. Over the course of the semester, we will be designing and building a deployable sustainable home that combines innovative green technology with the design philosophies of tiny home construction. This home will represent innovative and widely applicable solutions for disaster relief and crisis intervention around the world. We hope building and actually implementing this house will draw attention to the problem of homelessness while also educating the community about the benefits of sustainable design.

Please provide a brief summary of how students will be involved in the project:

Illinois Solar Decathlon is already made up of 29 undergraduate and graduate students that are extremely well-versed in the intricacies and considerations that must go into the design process of building a full-scale sustainable home. Our six subteams, Architecture, Structure, HVAC/Energy Analysis, PV/Electrical, Lighting/Appliances/Home Automation (LAHA), and Water will all work together to apply their skills and knowledge to the deployable home's design. Due to circumstances with our current competition team, the workload for them will be somewhat reduced this semester, freeing up resources to work on this project.

Additionally, once the project is completed and officially rolled out, we hope to be able to situate somewhere that all members of the campus community can see and learn from it.

Please provide a brief summary of the project timeline:

At this time, we see it may be realistic to take the project from start to finish over the course of the semester. This may prove to be impossible as we get deeper into what the project will entail, but for a rough estimate of what we plan to implement:

Remainder of February – Early march: Work on design documents by taking inspiration from similar projects, getting feedback from groups that interact with an aid the homeless (including our contacts at local Park Districts), and finding ways to integrate innovative technologies (either through reaching out and getting quotes for equipment or through looking for sponsorship)

Mid-March: Finalize design documents and order materials.

Late March – April: Begin construction of the deployable home and potentially begin prototyping it in the community

Late April: Complete construction and share our findings, perhaps in the form of a display of some kind that showcases what we created and how it's significant.