*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:** green source building panels

**Total Amount Requested from SSC:** $75,000

**Project Topic Area(s):** [x] Energy [x] Education [x] Food & Waste

 [x] Land [ ] Water [x] Transportation

# Contact Information

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**Project Team**

|  |  |  |
| --- | --- | --- |
| **Name** | **Department** | **Email** |
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| Jay Hayek | Natural Resources | jhayek@illinois.edu |
|   |   |   |

# Project Information

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

The goal is to create an opportunity to develop sheet goods like osb and particle board from locally harvested material. By using local material to create these goods, the carbon footprint of transportation as well as hazardous chemicals typically used in the development stages are now being erased from the process. Material exploration can be advanced with different wood and resin recipies to create a greener alternative to wood sheet goods.

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

Students will be involved by procuring the cut off materials as well as the unused branches to go through a chipper. Students will develop a robust collection system for both the LT40 as well as the Lucas mill to harvest as much saw dust as possible at the milling location while shop vaccum bags can be collected for saw dust in the architecture woodshop. Students will be involved in the development process and curing processes of the sheet goods.

Please provide a brief summary of the project timeline:

Initial stockpiling of saw dust in the shops, as well as the wood chips could start upon acceptance of the grant. The hydraulic press would require added wiring and redirected power, we could expect anywhere between six and twelve months for the press machine to arrive, get properly installed and become operational. I anticipate about a month to two months to fully understand the system before being at full operational capacity. A complete timeline of approximately one and a half years would be appropriate to make the complete process flow in the fashion desired. After the process starts, sheet production will be based on material availability.

Additional comments

The goal of creating a self sustaining material stock pile in relationship to local renewable resources creates a major advantage in future green designs produced by university of Illinois architecture students. It allows agriculture and biological engineering to expand their wood sciences lab arsenal of exploratory tooling, and Natural Resources students can develop a better understanding of conservation of resources, material characteristics, and proper harvesting of materials to ensure positive environmental impact as well as safe practice.