View results

Respondent

5 Arlene Vespa

16:35 Time to complete

Instructions:

Please adhere to the session word counts. Project leads must attend one SSC working group meeting post step 1 application submission. If you have any questions about the application process, please contact the SSC at <u>Sustainability-Committee@illinois.edu</u>.

1. Have you attended a working group meeting and presented your project to the committee before this application? The SSC requires attendance at a working group meeting to remain eligible for SSC funding. If you have not attended a working group meeting, please do so and then continue the application.

Linked below is our calendar with all of our working group meetings <u>https://studentengagement.illinois.edu/student-sustainability/ssc/calendar/</u>

- Yes
- O No
- 2. Please enter the dates of the working group meetings you attended. As a reminder, the working group meetings are structured as followed:
 - Energy + Transportation and Infrastructure working group.
 - Food & Waste + Land, Air, and Water working group.
 - Education and Justice working group.
 - *

10/26/2023

3. Project Name: *

Steven S. Wymer Hall (Wymer Hall) Formerly the South Campus Center for Interdisciplinary Learning (SCCIL), renamed Steven S. Wymer Hall at the Board of Trustees meeting on March 30, 2023.

4. Total Funding Requested From the SSC. *

\$500,000 We understand the SSC limits annual funding to any one project to 1/3 of their annual budget, or 1/3 (2m+/-) = \$666,667. Gies and the project team recommend dividing funding into multiple trances such as \$100,000 and \$400,000 OR \$100,000, \$200,000 and \$200,000. SSC awarded the project \$100,000 in the Spring 2023 cycle.

5. Date of application. *

11/7/2023

6. Project Lead Full Name: *

Arlene Vespa

7. Project Lead University Email Address. *

vespa2@illinois.edu

8. Project Abstract: (In less than 100 words, briefly describe the project.) *

A state-of-the-art building to prepare Illinois students for futures of purpose and impact and a partnership between Gies Business and campus, this hybrid educational facility will house collaboration spaces, traditional and flexible classrooms, informal learning environments, content creation studios, academic offices and support spaces. This project has deep green aspirations, seeking grant funding for a \$7.1 million district-scale geothermal field providing heating and cooling for the building, a campus first, with expansion potential to surrounding facilities. The project is targeting LEED platinum certification with aspirations to achieve net zero energy and net zero carbon within its first year of operation.

9. Project Category *

Education & Justice

Energy

Food & Waste

🔵 Land, Air & Water

Transportation & Infrastructure

10. Do you have a change in team members? *

🔵 Yes

No

Project Questionnaire:

Student Sustainability Committee Funding Application Step 2 (Preview)

11. Any press releases or educational/promotional materials involving the project must acknowledge SSC funding. How will you bring awareness and publicize the project on campus? In addition to SSC, where will information about this project be reported? *

The Project team wishes to collaborate with the SSC to publicize the Project and its impact on campus. We also believe that the Project's story will have relevancy at a regional and national scale based on the Project's deep green aspirations.

In the budget, several concepts are included, though there is room for further exploration with the SSC.

Both Gies and the Provost office will acknowledge the support of SSC in news and media coverage, included in website information, and on signage throughout the building. Facilities and Services also maintains an archive of certified campus buildings on the Illinois Climate Action Plan (iCAP) web portal to which this Project is expected to be added.

Communicating the college sustainability story is a priority, incorporating both physical signage and digital engagement. Realtime monitoring of the geothermal system, as well as energy demand will be put on display. Gies and the University will partner with the Student Sustainability Committee to engage students and amplify these initiatives.

Embedded throughout the project, there will be opportunities for potential student engagement and interaction with high performance, healthy features — all visible and tangible to the students. However, we understand invisible engineering strategies can have the highest impact on emission reductions. Our aim is to make as many of these "behind-the-scenes" engineering operations visible for teaching and instructional opportunities.

12. Other than the project team, who will have a stake in the project? Please list other individuals, groups, or departments affiliated directly or indirectly by the project. This includes any entity providing funding (immediate, future, ongoing, matching, in-kind, etc.) and any entities that benefit from this project.

Please attach letters of commitment or support below *

Campus groups that have a stake in the Project include the following:

- Facilities and Services (F&S)
- The Center for Innovation in Teaching and Learning (CITL)

Funding sources include the following:

• Gies philanthropy efforts by the Dean and Gies Advancement team have gained support from a wide range of donors. Alumnus, Steven S. Wymer, has generously provided a gift of \$25m in support of the Project.

• The remaining Project costs will be covered through financing and repayment by Gies and the Provost office.

The Project is leveraging a novel "Public Private Partnership" structure. In simplistic terms, this means that the University is working with several private sector entities (both for profit and not-for-profit) that will assist in delivering the Project. As part of the transaction, the University will sign a 30-year lease for the improvements. The geothermal component will be on University land outside of the proposed ground lease area. The benefits, resulting in reduced utility costs, accrue directly to the Office of the Provost and the Gies College of Business.

13. Please attach any letters of commitment or support here along with any other supplemental media that will support your application (presentations, pictures, etc.)

- 2023-01-23 UIUC SCCIL Wymer Site Utlity P Arlene Vespa.pdf
- 2023-11-07 SSC Energy Working Group memo Arlene Vespa.pdf
- SSC-Step2-Supplemental-Budget-and-Timeline Wy Arlene Vespa.xlsx
- UI Wymer Hall SSC Presentation 2023-10-26-com Arlene Vespa.pdf
- 14. How does this project impact environmental and social justice? 250 word max *

N/A

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15. Where is the project located, does it require Facilities and Services permissions? *

Located at 503 East Gregory in Champaign, Wymer Hall will be constructed between Business Instructional Facility and Huff Hall. The geothermal field will be located on a portion of the Military Axis. It will consist of 70 wells located between Krannert Art Museum to the south, the Business Instructional Facility to the north, Sixth Street to the east and the Siebel Center for Design to the west. The geothermal system is designed to be expandable, with the ability to be connected to other buildings, allowing for multiple phases. This strategy and approach could also be leveraged at other campus areas adjacent to similar green spaces and quads.

In February 2021, the Project completed the Site Selection Process as outlined by the University Office of Capital Programs & Real Estate Services. Parking lot E12 (503 East Gregory in Champaign) was chosen by the Site Selection Committee and confirmed by the Chancellor's Capital Review Committee.

The Project held its ceremonial groundbreaking on April 14, 2023 and formally commenced construction on May 8, 2023. The Project, including the geothermal component, is scheduled to be completed by January 2025.

16. Is this project student led? *

- O Yes
- No

17. If applicable, have you received approval from Facilities & Services and/or site manager? *

- Yes
- 🔵 No
- 🔵 N/A

18. Do you have a plan for ongoing funding beyond SSC? (SSC does not guarantee ongoing financial support) *

- Yes
- 🔵 No

19. Beyond SSC, do you have sources contributing funding or support (ex. staff time, external grants, etc.) to this project? *

- Yes
- 🔵 No

20. Have you applied for SSC funding previously? *

- Yes
- 🔵 No

21. Project Timeline:

(SSC funding agreements remain active for two years. List your project's proposed end date.) *

2021 February – Building site approved 2022 March – Concept design approved 2022 September – Board of Trustees approved 2023 April – Groundbreaking ceremony 2023 May – Begin Construction 2025 January – Construction Complete 2025 August – First classes held in new building

22. Provide a detailed project description:

(In 400 words or less, describe your project. What does your project hope to accomplish? What are your project's deliverables?) *

Having commenced construction in May, Steven S. Wymer Hall (Wymer Hall), will be a four-story building with deep green aspirations to expand the new campus paradigm to inspire future campus improvement projects using geothermal exchange, thermal storage, and optimized building designs.

Introduction

A state-of-the-art building to prepare Illinois students for futures of purpose and impact and a partnership between Gies Business and campus, this hybrid educational facility will house collaboration spaces, traditional and flexible classrooms, informal learning environments, content creation studios, academic offices and support spaces. This project has deep green aspirations, seeking grant funding for a \$7.1 million district-scale geothermal field providing heating and cooling for the building, a campus first, with expansion potential to surrounding facilities. The project is targeting LEED platinum certification with aspirations to achieve net zero energy and net zero carbon within its first year of operation.

Project Description

Steven S. Wymer Hall will provide an advanced, high-tech facility with programming space for learners on campus as well as advanced studio space for serving online students and courses. Wymer Hall will:

- Provide expanded studio space and recording capabilities to serve online courses and programs throughout campus.
- Facilitate experiential learning and group work, as well as offer collaborative spaces for campus students.
- Support enrollment growth with additional and much-needed larger classroom spaces for the south campus.

• Provide needed office space for faculty and support staff in Gies College of Business that have increased to serve growing online programs.

Building space for achievement and growth

Located in the heart of south campus, Wymer Hall will be home to spaces that will enable learners – both on campus and online – to achieve their potential. At just under 100,000 square feet, it will include:

Classrooms

- 1 200-seat auditorium
- 2 80-seat classrooms
- 4 60-seat classrooms

Studios

- 2 sound stages
- 5 blackbox studios
- 6 control booths

Offices and meeting rooms

• 18 meeting and collaborative rooms of varying sizes

• 84 offices

The leading-edge online teaching studios will bring the educational power of the University of Illinois to the world. Classrooms and gathering spaces will provide the tools and technology learners need to discover ways to make a positive impact on the world. Flexible classrooms will allow quick transition from a lecture format to collaborative group interaction.

Located at 503 East Gregory in Champaign, Wymer Hall will be constructed between BIF and Huff Hall.

23. Environmental Impact:

(In 200 words or less, how does your project increase environmental stewardship at UIUC? If applicable, what is the carbon, water, waste, and/or energy savings?) *

The project achieves a low energy use intensity (EUI) with a suite of measures including a chilled beam heating and cooling system, high efficiency lighting and equipment, and passive desiccant humidity control. The project showcases how new construction projects can exceed iCAP goals and emissions reductions by reducing dependance on the Abbott Power Plant via a \$7.1 million district-scale geothermal field providing heating and cooling for the building, a campus first, with expansion potential to surrounding facilities. The load of the chilled beam system for heating and cooling requires 273 tons (2,520,000 Btu/hour) of heating and cooling capacity. With the \$500,000 requested, the project can take 100% of that load and utilize the ground-source system to provide the heating and cooling needed through a combination of the stored thermal energy and electrical energy. The implementation of efficient building systems and the ground-source system will reduce source energy and carbon emissions by 58%.

The project builds on a new paradigm established with the Campus Instructional Facility, expanding the network of deep green infrastructure and drastically reducing energy reliance on the Abbott Power Plant. In this case, the system goes one step further delivering 100% of the building's heating and cooling load.

24. iCAP Objective Correspondence:

(In 200 words or less, does your project aim to advance one or more of the Illinois Climate Action Plan's (iCAP) objectives? If so, how?)

A full list can be found here: https://icap.sustainability.illinois.edu/objectives

The Illinois Climate Action Plan (iCAP) outlines a path for UIUC to achieve carbon neutrality as soon as possible, and no later than 2050. Our proposal reduces dependance on the Abbott Power Plant as the University transitions to a zero emission and zero carbon campus. While the existing plant has an efficient combined heat and power system, it also relies on fossil fuel to generate energy at a high carbon footprint. With the geothermal system, the total energy needed from chilled water is eliminated and provided to the building only for redundancy. This installation builds on past projects, providing heating and cooling for the building, a campus first, while also creating a template that can be replicated in other areas as the University works towards a cleaner future.

Eliminating emissions from Abbott and purchased electricity is a central vision outlined in the iCAP. Methods cited include reducing energy demands and shifting energy generation toward clean energy sources. Wymer is all-electric and aims to utilize 100% solar power for energy demands, while the geothermal system will vastly reduce its demand. Wymer will use high-efficiency heat pumps. All heating will be met by non-fossil-fuel electricity rather than by combustion of fossil fuels.

25. Student Impact:

(In 200 words or less, how will this project benefit students? How will students be involved with this project? What educational components are in your project?)

- The Project team envisions partnering with the SSC, including expanded teaching and research opportunities for faculty/staff:
- Wymer's design and engineering will be available for research.
- During construction, the Project team welcomes faculty/student engagement for site visits, Project team engagement and analysis of the building construction and geothermal installation.
- · Post-occupancy, digital monitoring and controls will display real time energy and emissions savings.
- Wymer Hall and the Project team will be available for student engagement, showcasing the University's dedication to its climate commitments.

We envision collaboration with faculty/staff in the Departments of Civil and Environmental Engineering, Mechanical Engineering and Geology, and Energy Systems Program, iSEE, and Facilities and Services.

We want to showcase the interface between the geo-exchange system and distribution of the heating and cooling from the digital monitoring and control room. Operationally, students will enjoy comfort from the chilled beam system.

The Project proposes to seek publicity in trade and scientific publications, in the media, in conferences/workshops, and in communications with campus administrators, public officials and regulatory agencies.

This Project touches all students at the University – those attending in-person, as well as those participating in the innovative programs developed in the Project's studios, generating content broadcast throughout the world.

Project Finances

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26. See attached file, please be very descriptive and fill out the finalized budget and timeline Excel sheet, and submit it below.

https://studentengagement.illinois.edu/student-sustainability/ssc/docs/SSC-Supplemental-Budget-Timeline.xlsx

SSC-Step2-Supplemental-Budget-and-Timeline Wy Arlene Vespa.xlsx

27. Project Finance Manager.

Must be a fulltime UIUC faculty or staff member** *

Shelley Campbell, Associate Dean of Finance and Administration

28. Finance Project Manager Department *

Gies College of Business

29. Project Finance Manager University Email *

SCampbe2@illinois.edu