

Funding Award and Acceptance Letter

April 14, 2020

Project: Eco Illini Supermileage G5e Vehicle

Dear Stefan Kamzol

On behalf of the University of Illinois at Urbana-ChampaignStudent Sustainability Committee (SSC), we would like to thank you for initiating a project that improves the sustainability of our campus. SSC is pleased to inform you that your project will receive **\$10,000.00** in grant funding.

In order to remain eligible for this award, you must agree to the following conditions:

- 1. The project must be completed within two years. A final report of all work completed should be provided to the SSC Assistant Director by **May 14, 2022**.
- 2. Project status updates and detailed account statements must be provided at the end of each semester, in the method requested, until the project is completed.
- 3. The Contact Person will be individually responsible for all official communication and the execution of this agreement.
- 4. The awardee will take the appropriate steps to create a CFOP with OBFS UAFR University Accounting Services. The CFOP provided for this award shall strictly be used for the money awarded in this proposal.
- 5. Any substantial modifications to project scope, budget, or timeline must first be approved by SSC. These requests must be submitted in a formal letter to the Chair and the Assistant Director.
- 6. All projects will be expected to follow campus policies and procedures as well as any applicable State and Federal laws.
- 7. SSC reserves the right to revoke funding if the project does not comply with the terms and conditions outlined in this letter.
- 8. Any press releases or educational/promotional materials involving the project should acknowledge SSC funding.
- 9. Any signage involving the project or events surrounding this project should include SSC's logo and/or a statement of which fee funded the project. Projects must coordinate with SSC to ensure promotion appropriately highlights the SSC's contributions to the project.

If you agree to the terms and conditions for the funding, please sign on the designated line at the bottom of this letter. If you have any questions regarding these requirements please contact the SSC, at <u>sustainability-committee@illinois.edu</u>. You will be notified when the Institute for Sustainability, Energy, and Environment and Vice Chancellor for Student Affairs officially approves this project. Again, thank you for your interest in improving the sustainability of the University of Illinois at Urbana-Champaign. We look forward to working with you in the future.



SSC Signatories

Joseph Edwards, Chair Student Sustainability Committee

Awardee Signatory

Stefan Kampol

Stefan Kamzol Applicant

Faculty or Staff Project Advisor (for Student-Led Projects)

Michael Philpott Faculty/Staff Project Advisor

Faculty or Staff Project Advisor (for Student-Led Projects)

Bruce Flachsbart Faculty/Staff Project Advisor

iSEE Signatory

Dr. Madhu Khanna, Director Institute for Sustainability, Energy & Environment

Student Affairs Signatory

Dr. Danta M. B. Young

Dr. Danita Brown Young, Vice Chancellor Division of Student Affairs



Project Information

Project: Eco Illini Supermileage G5e Vehicle

Funding Source:

- [] Cleaner Energy Technologies Fee (302571)
- [X] Sustainable Campus Environment Fee (303692)

Funding Amount: \$10,000.00

Receiving Campus Unit: Mechanical Science & Engineering

Unit Financial Contact: Marcia Mathis

E-mail: mmmathis@illinois.edu

Project Description:

Eco Illini Supermileage will complete the design, production, and testing of a fully-electric prototype vehicle-optimized to achieve the highest mileage per kWh of any competitor at the Shell Eco-Marathon Americas competition. The team will emphasize principles of sustainability and consider the effects of the project's lifecycle, especially concerning the sustainability of materials use/produced. The project will gather an interdisciplinary team to finish the development, production, and testing of student-designed battery management systems, optimized motor controllers, regenerative braking, and lightweight components. Eco Illini Supermileage aims to enrich student experiences through pursuing the next generation of automotive propulsion, mobility, design, and systematic efficiency in performance parameters, and sustainable design methods. The previous project submission in 2018 aimed to pursue and develop an electric drivetrain using the chassis of the vehicle designed and funded in part from financial support by SSC in 2017. This project aims to sustainably reuse as many foam molds and existing parts/designs in the development, construction, testing, and innovation of a dedicated electric vehicle. This intergenerational innovation of the fifth generation vehicle allows the team to responsibly and sustainably pursue technical innovations using technical evaluations and analyses of the previous car to aid in the most optimized and carbon-neutral vehicle built by the team to date.

This proposal directly funds:

- 1. Oscilloscope
- 2. Strain Gauge
- 3. Water Jetting

STUDENT SUSTAINABILITY COMMITTEE

- 4. Machining
- 5. 3D Printing
- 6. SMT Soldering Station
- 7. Waveform Generator
- 8. X-acto Knives
- 9. Storage Units
- 10. Carbon Fiber Tubing
- 11. Chain Guard
- 12. Fasteners
- 13. Steering System Hardware
- 14. Mirror Mounts
- 15. Custom Wheels
- 16. Windows
- 17. Sensors
- 18. Chain
- 19. PCB Boards
- 20. Mechanical Components
- 21. Computer Parts
- 22. C-Clamps
- 23. 6061 Aluminum
- 24. G5e Battery
- 25. Nucleo Boards
- 26. Catchpot
- 27. Power Supply
- 28. Carbon Fiber
- 29. BLDC Motor
- 30. Dampening Materials
- 31. Vacuum Pump
- 32. Wiring