



GREEN FUND

Sustainability Through Student Innovation

\$Project Application

Green Fund Mission Statement: “The NAU Green Fund promotes student participation in and provides funding for projects that reduce NAU’s negative impact on the environment and create a culture of sustainability on-campus.”

Requirements for Funding:

- The project must be implemented on campus.
- The person submitting the project must be a NAU student, faculty, or staff member.
- Projects must provide all necessary documents, letters of support, and authorizations prior to submission.
- The Green Fund distributes funding on a **reimbursement basis**. Project teams should partner with an administrative office to provide upfront funding for the project. Once the project has been successfully completed, the Green Fund will reimburse the administrative partner.
- All project applications should be submitted to greenfund@nau.edu for review.

Disclaimer: All applications will go through a comprehensive vetting process. We highly recommend meeting with a Green Fund Committee member prior to submitting the application. The Green Fund Committee member will assist you with every step of writing your project application. If your project is approved, you may be asked to provide more detailed information regarding specific deliverables. The Green Fund is not responsible for acquiring the necessary permits, permissions, or approvals for a project, although we are happy to assist with this process if needed. Additionally, the Green Fund does not provide any ongoing maintenance costs. A sponsoring department must take responsibility for operations and management.

Review Process: Upon project application submission, the Green Fund will review your project within two weeks. At this time, the Green Fund will provide comments on the project. Incomplete applications will not be reviewed until all components are submitted. **Note:** The Green Fund Committee only meets during the academic year. All projects submitted outside of the regular academic year will be reviewed at the start of the next academic session.

Contact Information

Project Leader/Advisor Name: **Sara LaRosa** Phone: **928-523-8352** E-mail: **sara.larosa@nau.edu**

Sponsoring Department: **NAU Printing Services**

Project name: **Printing Services Delivery E-Bike**

NAU Department/Unit for funding reimbursements (Attach letter of commitment from departmental representative): **NAU Printing Services**

Project Overview

Executive Summary

Please provide a brief overview of your proposal. Please address how this project will support the goals of the Green Fund (student involvement, creating a culture of sustainability, and lessening NAU's impact):

NAU Printing Services would like to add an additional delivery vehicle to our fleet. We are focused on sticking to our sustainability initiatives as a department, so we are seeking an e-bike for our delivery team to utilize.

This vehicle would not depend on fossil fuels, it will not contribute to air pollution, and it will provide a healthy method of alternate transportation. The e-bike would be added to our fleet to be used in lieu of our existing delivery van, whenever possible. This would also allow us to expedite our delivery route by being able to utilize the central pedway and bike paths around campus.

Our delivery team consists of student workers, directly linking student involvement into this project. Overall, an e-bike would allow us to work to create a culture of sustainability on campus, while simultaneously lessening NAU's impact on the environment.

Please answer the following questions detailing the components of your project:

1. Does your project require space or construction on campus? If so, where? Please review the "Space Committee Document" located on our webpage and follow the steps to begin requesting a location.
No, we would not need extra space – we would be keeping the bike in our shop on campus.
2. Have you obtained all necessary approvals for this project? Please attach all letters of support to this application. Letters of support should include confirmation from the sponsoring department that the sponsoring department will cover all upfront expenses and work with the Green Fund Business Manager to acquire reimbursement after project completion. If any ongoing operations and maintenance is required of your project, provide a letter of support from the entity that will be covering those costs and/or services. **Yes, letter of intent is attached from Printing Services, for both covering the up-front cost, as well as covering the cost of service/maintenance.**
3. Will this project provide funding for student wages? **No. We cover student worker wages as a department.**
4. Please list all additional sources of funding you have pursued. Include departments, grants, ASNAU, Graduate Student Government, etc. **Printing Services will be the initial source of funding, and we are hoping to acquire a reimbursement from the Green Fund grant.**
5. Have any of the Green Fund Committee members been involved in this project?
 - a. If Yes, please identify all committee members:
Met with Bryce Thayer on 11/7/19 to discuss project viability and details, and have been in contact with him for questions through this process.

Project Specifics

Please address the following questions. One or more of these questions may not apply to your particular application. Answer as many questions as are applicable to your project.

Relationship to NAU Climate Action Plan (CAP)

1. How does your project align with one of the seven CAP categories (Energy, Water, Transportation, Waste Minimization, Sustainable Landscaping, Environmental Justice, Communication)?
Our project directly aligns with the transportation section of NAU's Climate Action Plan. This project would immediately allow NAU Printing Services department to decrease its emissions from transportation and use of fossil fuels by offering an alternative method of transportation for deliveries.

Community

2. Is there a public outreach plan? How will faculty, staff, and students learn about this?
We would like to wrap the bike with graphics, allowing viewers to see some info while the bike is in passing – NAU Printing Services and GreenFund logos. We would also include a write-up about the project in our newsletter that we email out across campus. We would also be interested in trying to include a write-up in the NAU News or the Lumberjack. This project will encourage students to explore alternative means of transportation and methods of reducing one's impact. We would ideally love to partner with NAU Earth Week to unveil our delivery e-bike on Earth Day 2020.
3. Are you working with other groups on or off campus? If so, describe your partnership.
We will be partnering with Single Track, a local bicycle shop. We will have the shop assemble and customize the bike for our needs. They will also perform any necessary maintenance and service on the bike in the future. Any service and maintenance costs incurred in the future will be the financial responsibility of the Printing Services department.

Project Parameters

4. What are the environmental costs and benefits associated with your project?
There are several benefits associated with this project. As a zero-emission vehicle, the e-bike will not contribute to air-pollution. E-bikes are lighter than other forms of transportation, so we would be promoting less wear on the University's roadways. We would also be reducing congestion on NAU's roadways by utilizing alternate routes and paths. The potential environmental costs would be minimal, compared to the benefits. Since we would be utilizing electricity to charge the battery, there would be a small impact from the production of that electricity, but the positive impacts and benefits heavily outweigh the costs.
5. Provide an economic cost/benefit analysis for your project. Focus on identifying specific cost savings.
This project would allow us to provide a cost savings to the University on gasoline. Van servicing would occur much less frequently, providing an additional cost savings, and the cost of maintaining a bicycle is far less than the cost of maintaining a large van.

6. Is this a one-time expense or will you require future funding?
There will be an initial expense to purchase the bicycle and accessories and an initial assembly fee. Any additional service or parts will be paid for by Printing Services.

7. When your project members no longer attend NAU, who will be responsible for running the project?
NAU Printing Services will keep the e-bike in place indefinitely. We continuously have students on staff that would be allowed to use the e-bike for deliveries.

8. How will you monitor the impact of your project after implementation?
We will be able to begin seeing our impact immediately upon implementation. The Rad Power Bike that we will be purchasing comes with an odometer. We will use the odometer to track how many miles we're able to defer from the delivery van over the course of a year, and we'd like to include those findings in one of our departmental newsletters so we can bring awareness to the impact that our alternate transportation is having across campus.

Project Budget

Please include a thorough breakdown of all project costs, as well as a 5% line item for contingency.

NAU Printing Services Delivery E-bike Budget			
Item	Price	Quantity	Total
Rad Power Bike - RadCity Step-Thru	1499.00 (free shipping through RAD)	1	1499.00
2019 Kenda K-Rad Tire	30.00 (free shipping through RAD)	2	60.00
26" x 2.3" Inner Tube	15.00 (free shipping through RAD)	2	30.00
SR Suntour SP12 NCX Seatpost	109.00 (free shipping through RAD)	1	109.00
Large Basket	79.00 (free shipping through RAD)	1	79.00
Large Basket Bag	59.00 (free shipping through RAD)	1	59.00
Front Rack	69.00 (free shipping through RAD)	1	69.00
Small Basket	59.00 (free shipping through RAD)	1	59.00
Small Basket Bag	44.00 (free shipping through RAD)	1	44.00
Phone Mount	59.00 (free shipping through RAD)	1	59.00
Lock	130.00 (free shipping through RAD)	1	130.00
Chain Lube	10.00	1	10.00
Pump with Pressure Gauge	29.98	1	29.98
Crankbrothers M19 Multi-Tool	43.98 (shipping cost included)	1	43.98
Helmet	40.00 (free shipping over \$100)	4	160.00
Shipping	0.00	1	0.00
Assembly	75.00/hr	2	150.00
5% Contingency	130.30	1	130.30
Total Delivery E-bike Cost			\$2736.26

Project Timeline

The timeline should include significant implementation dates for your project. Please add information such as shipping time and consider any holidays or breaks.

NAU Printing Services Delivery E-bike Project Timeline		
Action	Parties Involved	Month/Year
Meet with GreenFund Committee Member	Project Leader, Green Fund Committee Member	November 2019
Submit Proposal to GreenFund	Project Leader, Green Fund Committee	November 2019
Purchase Rad Power Bike & accessories	Project Leader	December 2019
Have Single Track assemble bike and add-ons	Project Leader, Single Track Bicycle Shop	Dec 2019/Jan 2020
Soft roll-out for deliveries	Project Leader, PS Delivery Drivers	Jan/Feb/Mar 2020

Include e-bike in our PS newsletter to gain awareness	Project Leader, PS Coordinator	March 2020
Unveil e-bike for deliveries to campus	Project Leader, PS Delivery Drivers	April 2020

Project Checklist

Please ensure you have completed all of the following items before submitting your application:

- Meet with a Green Fund Committee member
- Obtain all necessary letters of support (sponsoring department, ongoing maintenance, etc.)
- Project Overview
- Project Specifics
- Project Budget
- Project Timeline
- Complete Project Checklist

Thank you for your submission. We deeply appreciate your commitment to sustainability at NAU, and we look forward to working with you.