

https://esw.engineering.cornell.edu/

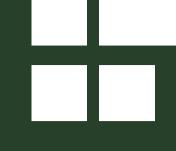
# ESW Cornell SPONSORSHIP PROPOSAL



Engineers for a Sustainable World (ESW) is an engineering project team committed to forging innovative, lasting solutions for local and global sustainability challenges.

Since its establishment in 2002 at Cornell, ESW has expanded to become an international, non-profit network with over 50 college, university, and city chapters with more than 4,000 student, faculty, and professional members. ESW Cornell is comprised of three major teams: Biofuels & Environmental Design, Renewable Energy Solutions, and Carbon Neutrality.

## **OUR E-BOARD**





Sitara Sastry

President



Kadijat Alakiu

Vice President



Joey Armstrong

Treasurer

### **OUR E-BOARD**



Gabrielle Tan

Recruitment & Onboarding Director



Outreach & Safety
Director



Emma Alexander

Communications
Director

### OUR E-BOARD



Anna Bleich

Biofuels & Environmental Design Team Lead



Cole Gilbert

Renewable Energy Solutions Team Lead



Reid Fleishman

Carbon Neutrality
Team Lead

## MEET OUR SUBTEAMS:







Renewable Energy Design (RES)

Biofuels & Environmental Design (BED)

Purpose: Research, design, and code our way to a sustainable future with renewable energy. Purpose: Improve campus and local sustainability through biofuels initiatives and outreach.



Purpose: Implement initiatives in energy conservation and efficiency to achieve carbon neutrality.

# PROJECT HIGHLIGHTS

## DATA SCIENCE / VISUALIZATION

## Software Development

This project entails working on a fullstack development project with the end goal of creating a sustainabilitycentered app that can be used by the Cornell community.

#### Food waste

This project involves working to visualize the extent of food waste on campus in Cornell dining halls by building a data-driven website.

## Business and Policy

The B&P team will apply business data analytics and user design to two upcoming carbon neutrality projects in order to directly impact the energy policy sector: Cold Water Laundry and Energy Portal.

#### Smart Controls

The SC subteam implements measures that reduce unnecessary energy consumption through two projects: Building Retrofit and Fault Detection.

#### **DESIGN BUILD**

#### **Hydroponics**

## Osprey wind turbine

**PowerHouse** 

Continuous Biodiesel Process

#### The hydroponics project will be a multisemester design and build project in order to create an efficient and robust outdoor hydroponics system to grow plants without soil and utilizing a solar component to offset energy use.

The goal of this project is to develop a prototype of a new design of wind turbine that can fold in on itself and store itself inside an underground compartment.

The PowerHouse is a tiny home on a trailer that will feature exhibits based on the sustainable lesson plans Business and Outreach (B&O) is writing.

The Bioenergy Implementation subteam is working on creating a Continuous Biodiesel Process capable of producing enough biodiesel to power a campus tractor for a full summer.

#### **OUTREACH**

## Podcast with Shinnecock Nation

B&O is working with the Shinnecock Indian Nation Environmental Department to will discuss Indigenous peoples' perspectives on sustainable engineering and implementing natural solutions as a response to climate change.

#### Energy Technologies Development

ETD will conduct studies on innovative energy research and develop technologies alongside experts in the field.

#### **RESEARCH**

Ammonium Phosphate Biochar At a lab scale, Research and Development is seeking to demonstrate the technical feasibility of forming ammonium phosphate in the pores of biochar using aqueous phase reagents, with long-term goals of working with plant sciences labs to test the fertilizer efficacy and runoff.

## SPONSORSHIP LEVELS:

#### Platinum (\$1500+)

- Company name/logo on website
- Mention in our newsletter
- Social media highlight post
- Company name on ESW Cornell apparel
- Copy of resume book
- Large company name or logo shown at all public ESW-related events
  - Expos, recruitment, info sessions, etc.
- Company name on all ESW posters
- Networking events with our members

#### Gold (\$1000-\$1500)

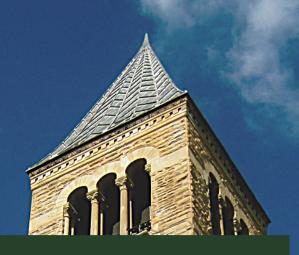
- Company name/logo on website
- Mention in our newsletter
- Social media highlight post
- Company name on ESW Cornell apparel
- Copy of resume book
- Company name shown at all ESW-related events
  - Expos, recruitment, info sessions, etc.

#### Silver (\$500-\$1000)

- Company name/logo on website
- Mention in our newsletter
- Social media highlight post
- Small name on ESW Cornell apparel

#### Bronze (\$250-\$500)

- Company name/logo on website
- Mention in our newsletter



## CONTACT US

#### Engineers for a Sustainable World-Cornell

https://esw.engineering. cornell.edu

eswcornell@gmail.com



eswcornell



eswglobal.org