



Alternative Energy Symposium

May 31, 2024

Chamberlain Student Center

Partners

Green Jobs Academy, School of Earth & Environment, College of Engineering, NJEDA

Contact

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Introduction

Green Jobs Academy has the mission of elevating alternative energy careers in the South Jersey region through increasing awareness of opportunities, initiating workforce development, and developing networking engagements for those in the green energy sector. With a partnership between Green Jobs Academy's Marie Casanova, School of Earth & Environment's Jennifer Totoro, and College of Engineering's Yashwant Sinha, the Alternative Energy Symposium was developed with the following goals in mind:

1. Target specific audiences throughout South Jersey, in this case high school students (or near high school aged) who are directly focused in the STEM disciplines. This was achieved by inviting students involved in the STEM/STEAM Academies from our neighboring school districts.
2. Educate these students on the relevance of alternative energy as the future so they are aware of future career prospects in the region as well as the concept of "greening" their degrees/careers. So that regardless of their career path, they can consider options like Sustainability, GIS, or Climate as an add-on. This is achieved through speakers from the green energy industry and from Rowan.
3. Students who are already interested in Engineering as a career path may be redirected to Engineering majors and careers with an Alternative Energy focus. This is achieved through hands-on workshops.
4. Fun! The hands-on workshops should be engaging, interesting, interactive, and challenging to keep students thinking.

Format

- A. There were several components to the event which were handled by each of the members of the planning committee.
 - a. **Marie Casanova** (GJA) invited the speakers, met with them in advance to explain the event, and

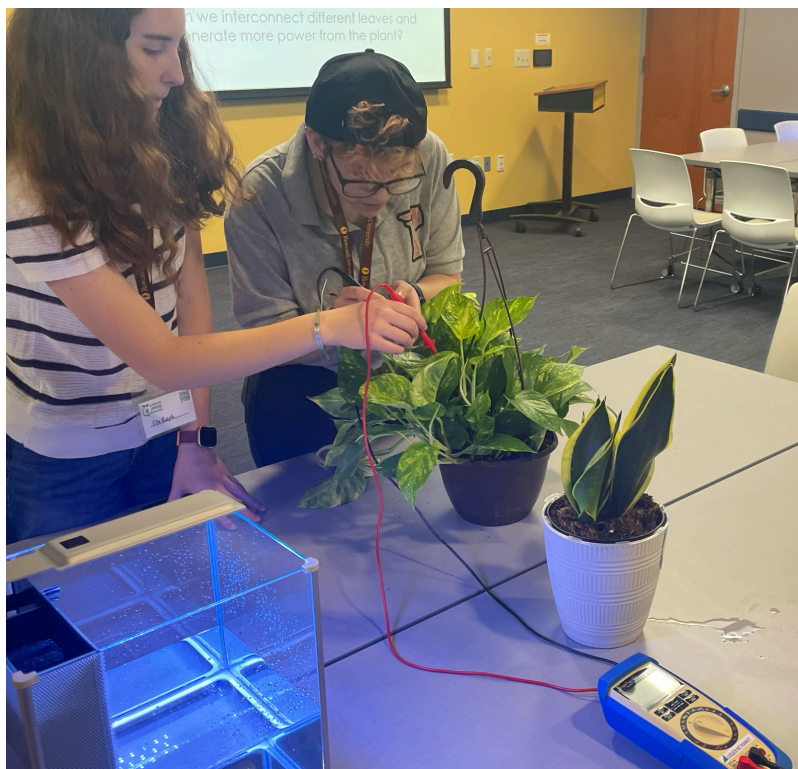


invited their companies to table during check-in as well as participate in a Q&A session at the end. The speakers were as follows:

- i. **Chad Lobley**, Senior Development Manager - Enel North America (Solar)
 - ii. **Roberto Polanco**, Lead Electrical Engineer Onshore Substation - Atlantic Shores (Offshore Wind)
 - iii. **Alexa Watkins**, Strategy and Business Development Lead - South Jersey Industries (Natural Gas & Hydrogen)
- b. **Jennifer Totor** (SEE) communicated with schools, coordinated with the venue, and planned the overall event.
- i. The Alternative Energy Symposium was held in the Chamberlain Student Center Ballroom from 8:00am-2:00pm on a Friday, May 31st. This date was selected after speaking with leaders from both **Glassboro High School's** STEM Academy and **Pitman Jr/Sr High School's** STEAM Academy to ensure both of these schools could attend since they are our closest neighbors and closest partner schools. In addition to these schools, **GCIT's** Engineering students and **Delsea Regional's** Environmental Science students were invited.



1. We had an anticipated attendance of approximately 80 students during the planning stages, which was around where we wanted to be for our first year.
 2. Though we initially had more sign up, one school did not attend (GCIT) and so we had less students overall. Our total attendance for the event was 56.
 3. Lunch was served to all attendees from Gourmet Dining, in the future it is recommended that we look into meal vouchers for the dining hall in the Student Center.
- c. **Zachary Christman** (GPS) was invited to run one of the three workshops
- i. **GIS Planning** - Using maps to plan where an alternative energy site can be located, and how to understand the constraints around where to place a site.
- d. **Yashwant Sinha** (CoE) organized two of the three workshops which were run by Engineering students who were paid a stipend for the day



- i. **Wind & Solar** - a hands-on workshop where the students broke into 6 small groups and built small-scale wind turbines connected to a battery and two solar panels so they could see how when the turbine spins, the energy meter would increase.
- ii. **Plant Energy** - students used voltmeters to measure how much potential energy was stored in the leaves of different plants. Then

they connected multiple leaves of plants together with wires to see if the charge increased.

- B. **Scavenger Hunt** - Students were given a QR Code on their name badge at check-in which led to a Scavenger Hunt. A series of 10 questions which were answered throughout the event.
- At the end of the event, a random drawing was done of all the turned in scavenger hunt responses. One individual winner received a personal solar panel (Goal Zero Nomad 5 Solar Panel), and one school received a Lego Wind Turbine Kit. The random drawing was done using the Wheel of Names.
- C. The event was funded through a workforce development grant from NJEDA and a TD Bank grant supporting Green Jobs Academy.
- D. Following the event, the six wind and solar kits are still available to be used and re-used for the purposes of educating more students at future workshops like AES, classes within the CoE, partner workshops at RCSJ, and activities in SEE. Please contact Jennifer Totoraj, totoraj@rowan.edu if you would like to set up a guided workshop or use any of these kits.



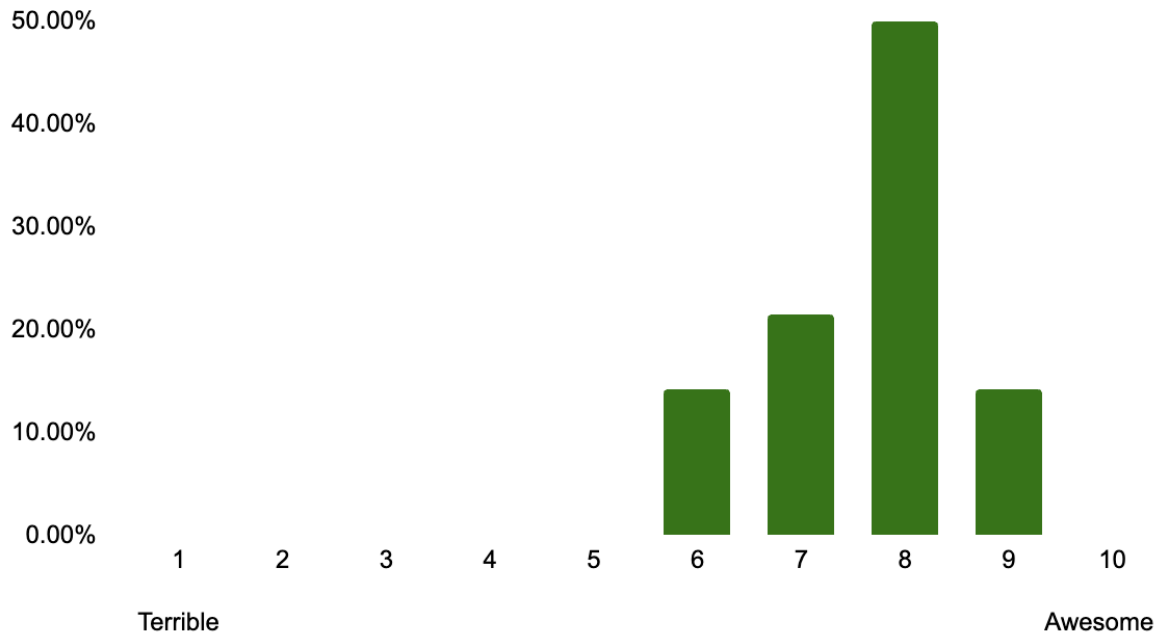
Schedule

Time	Activity
8:00 - 8:30 am	Check-in and Tabling Expo
8:30 - 8:45 am	Welcome and Introduction
8:50 - 9:05 am	Speaker 1 - Enel North America (International Solar)
9:05 - 9:20 am	Speaker 2 - Atlantic Shores (Offshore Wind)
9:30 - 10:30 am	Workshop Session 1 (Student Center Classrooms: 129, 144, 221)
10:45 - 11:45 am	Workshop Session 2 (Student Center Classrooms: 129, 144, 221)
12:00 - 12:30 pm	Catered Lunch
12:35 - 12:50 pm	Speaker 3 - South Jersey Industries
12:55 - 1:15 pm	Scavenger Hunt Answers & Prize Giveaways
1:20 - 1:50 pm	Q & A Panel Session
1:50 - 2:00 pm	Wrap Up & Dismissal

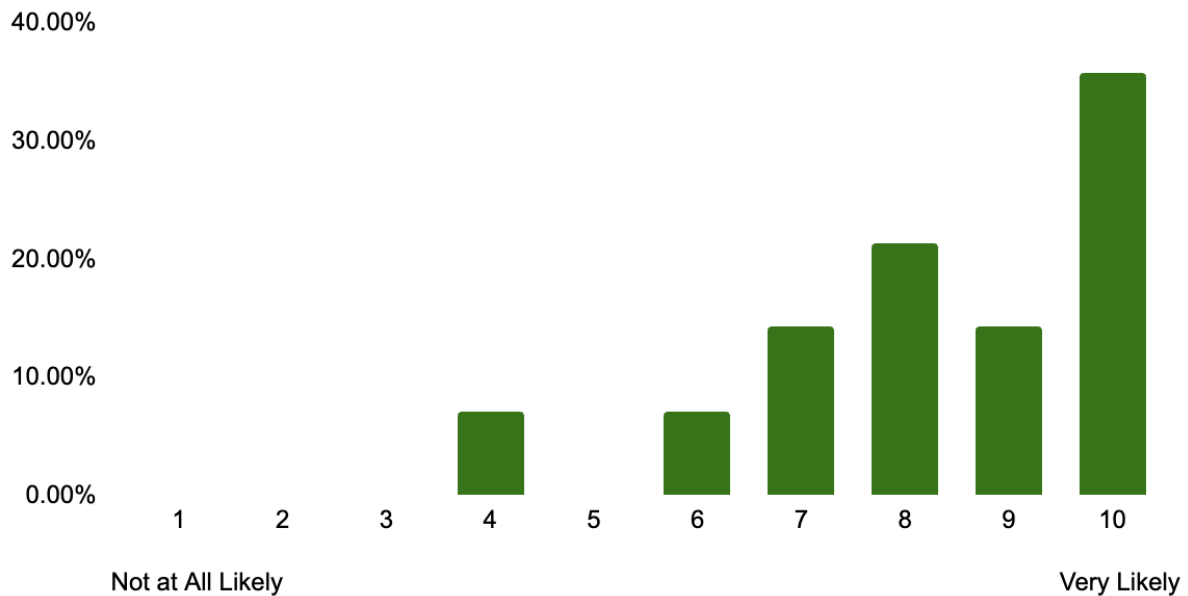
Assessment Data

All attending students were sent a post-event survey to collect information about their experience. This is the result:

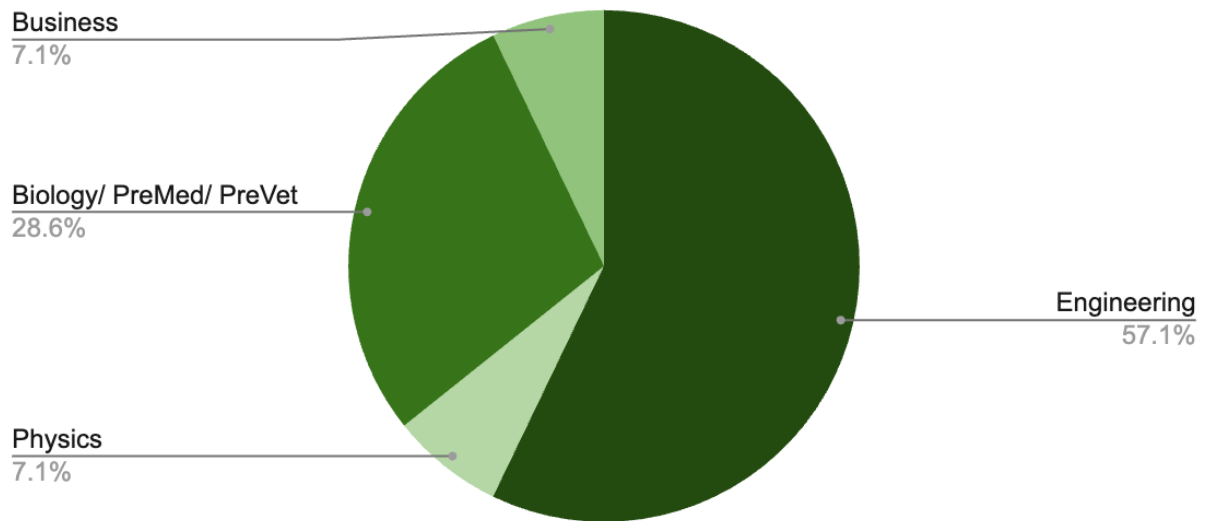
Overall, I would rate the Alternative Energy Symposium:



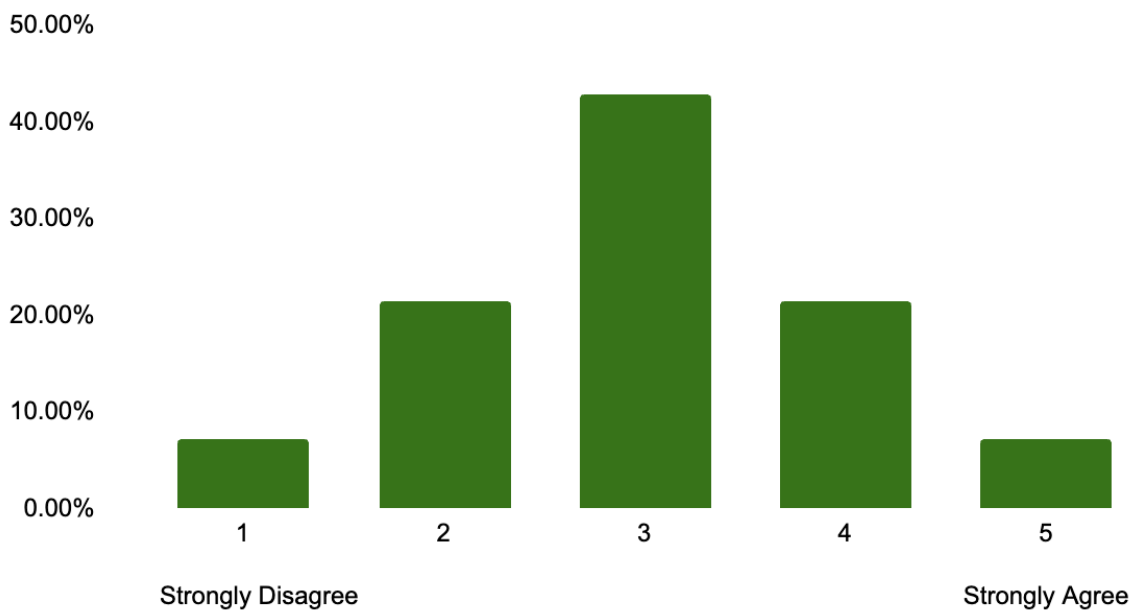
How likely are you to come back to the Alternative Energy Symposium next year?



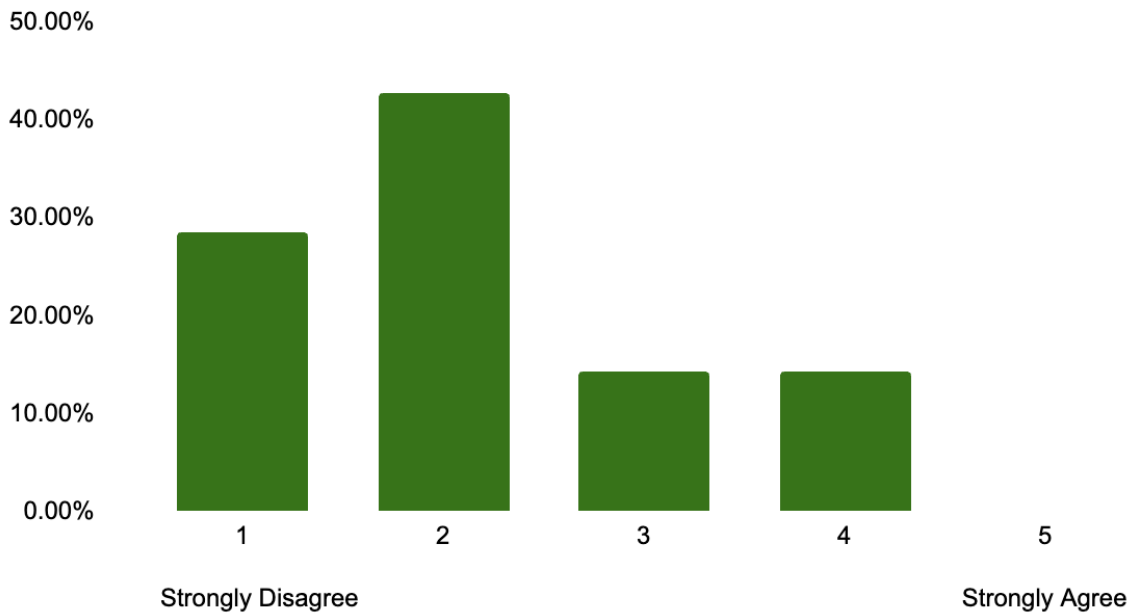
Alternative Energy Symposium Student Majors



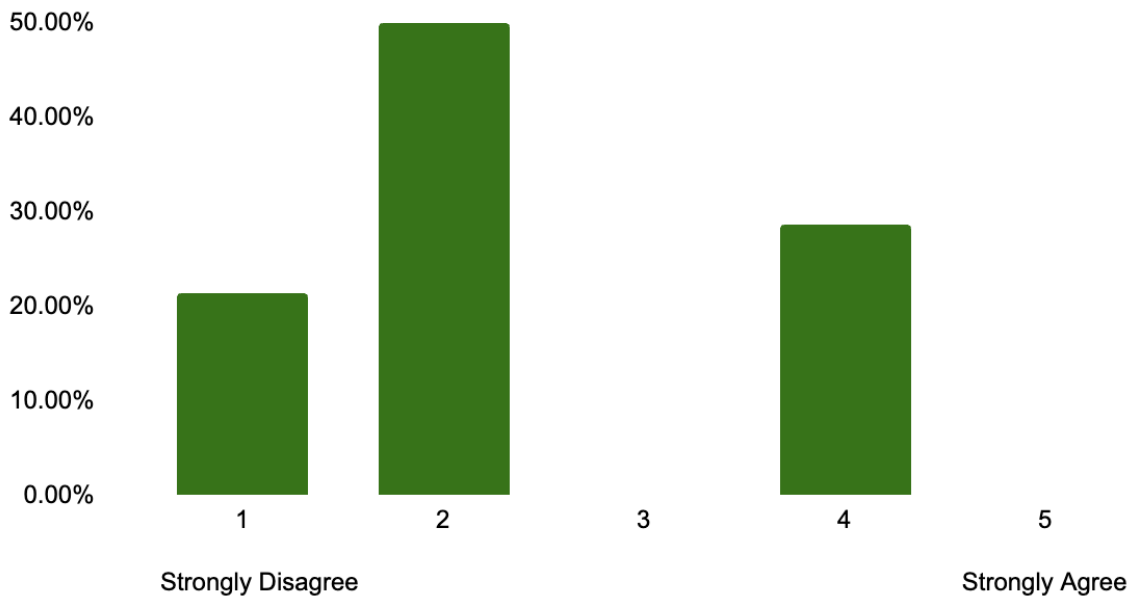
Because of the Alternative Energy Symposium, I am more likely to take college classes related to Sustainability or Green Energy



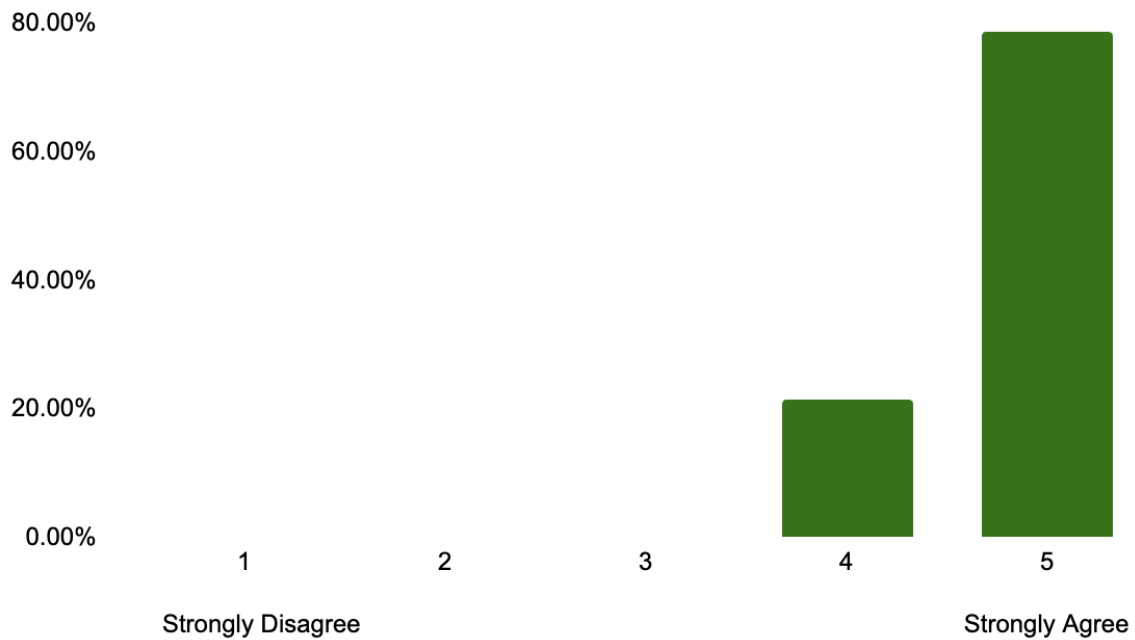
Because of the Alternative Energy Symposium, I am considering a College Major in Sustainability or the Green Energy sector



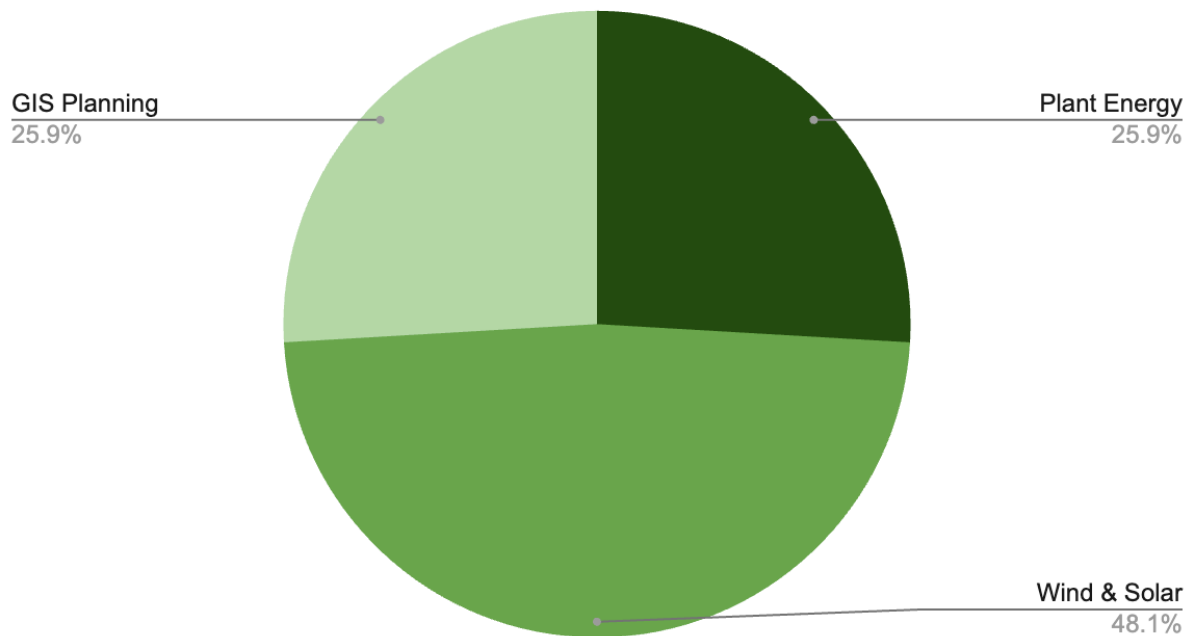
Because of the Alternative Energy Symposium, I am considering a career in the Green Energy sector



At the Alternative Energy Symposium, I learned something new



Which of the three workshops did you participate in?



Workshop Feedback:

"I really liked the hands-on activities and feel like they helped me better understand the underlying information."

"I liked being able to do hands-on activities while learning."

"I LOVED the GIS Planning. It was interesting, great speaker, I loved it so much."

"The workshops were very constructive and very educational. The topics discussed were both relevant and interesting, and the industry (which is relatively new to me) appears very fascinating."



Speaker Feedback:

"All the speakers were very nice and were very good at persuading me to maybe go into a career of natural energy."

