

ENERGY EFFICIENCY

SE GUIDED PROJECTS



<https://studentenergy.org/program/guided-projects/>

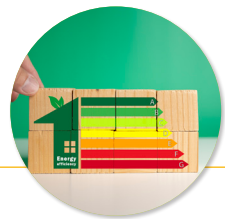
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STUDENTENERGY

Student Energy Guided Projects

The Student Energy Guided Projects (SEGP) program provides training in project management, energy technologies and related topics, as well as funding and other resources, to support youth in implementing sustainable energy solutions, be they proven technologies or new innovations.

The program launched in August 2022 with its first stream: SEGP - Solar, and is currently running on its second cohort. The program aims to launch an Entrepreneurship stream, as well as Energy Efficiency stream in the next 3 years.



Visit the SE Guided Project Webpage to Meet the Cohort

Energy Efficiency Stream

The Energy Efficiency stream is a 5-7 month initiative designed to inspire and equip young people with the skills and tools to lead energy-saving efforts in their communities. This program focuses on developing practical knowledge in energy efficiency, providing mentorship, coaching, and other resources to support participants as they design and implement meaningful projects. With a tailored curriculum and hands-on learning opportunities, participants will gain real-world experience and access to resources that prepare them to take on energy challenges and drive sustainable change.

RATIONALE FOR SEGP

Energy Efficiency

The Energy Efficiency stream addresses pressing global issues such as rising energy consumption and the need for more sustainable solutions. According to the International Energy Agency (IEA), global electricity demand is projected to increase by 4% in 2024, a notable rise from 2.5% in 2023. Buildings alone account for approximately 30% of global energy use and more than 50% of electricity demand, highlighting significant opportunities for improvement. Inefficient energy practices are not only a financial burden, costing households and businesses billions annually, but they also contribute significantly to greenhouse gas emissions and climate change.

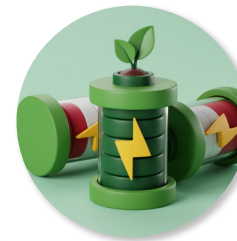
This program is designed to respond to these challenges by preparing young people for careers in energy management and efficiency-focused roles. It emphasizes the importance of energy-saving practices and aligns with global goals, such as SDG 7, to ensure access to affordable, reliable, and sustainable energy. By training participants to develop scalable, practical solutions and understand demand-side management, this stream empowers them to contribute to decarbonization efforts and build more resilient energy systems for the future.



OUTCOMES FOR PARTICIPANTS

Participants of this program will:

- Demonstrate a comprehensive understanding of energy efficiency principles, including the significance of energy management and the impact of energy use on climate change and sustainability
- Acquire the skills to perform energy audits, analyze energy consumption patterns, and identify opportunities for energy savings within various environments
- Gain practical experience in project management, including defining project goals, budgeting, stakeholder engagement, and the execution of energy efficiency initiatives.
- Have the chance to connect with mentors who possess extensive knowledge and experience in energy efficiency practices.



CURRICULUM OVERVIEW

Participants will have access to learning modules,

- Introduction to Energy Efficiency
- Sectors in Focus: Residential, Commercial and Transportation
- Policy, Regulation and incentives
- Energy Management Systems
- Energy Audits and Assessments
- Effective Project Management

Program Components



CURRICULUM:

The Energy Efficiency stream curriculum is designed to equip participants with both theoretical knowledge and practical skills to lead impactful energy-saving initiatives. It covers key topics such as energy audits, demand-side management, and system optimization, along with training in data analysis, project development, and policy frameworks.

MENTORSHIP:

Teams will be paired with a mentor who will use their extensive experience in the energy efficiency industry to provide teams with business expertise and tricks of the trade.

WRAP-AROUND SUPPORT:

Teams will have access to needs-based support services to enable the successful implementation of their energy efficiency projects.

COACHING:

Participants will receive regular coaching from Student Energy staff. A team's coach will guide them through the curriculum and will monitor and support the team's progression through the program. Coaches are a team's go-to person for any and all questions, guidance and resources they need to succeed in the program.

TEAM PROJECT:

Each team will apply their knowledge and skills by working with a project host to undertake an energy audit of one of their facilities/systems. As a final deliverable, the team will design and submit an energy audit report along with actionable recommendations to the host on how to improve their energy efficiency.

