THE GLOBAL GOALS
For Sustainable Development

5TH EDITION

UNIVERSITIES FOR GOAL 13

COMPETITION & AWARD

A **Student Competition** for **Climate Solutions** hosted by Siemens Energy in collaboration with the UN Sustainable Development Solutions Network (SDSN)

SUSTAINABLE DEVELOPMENT SOLUTIONS NETWORK
A GLOBAL INITIATIVE FOR THE UNITED NATIONS

SIEMENS energy

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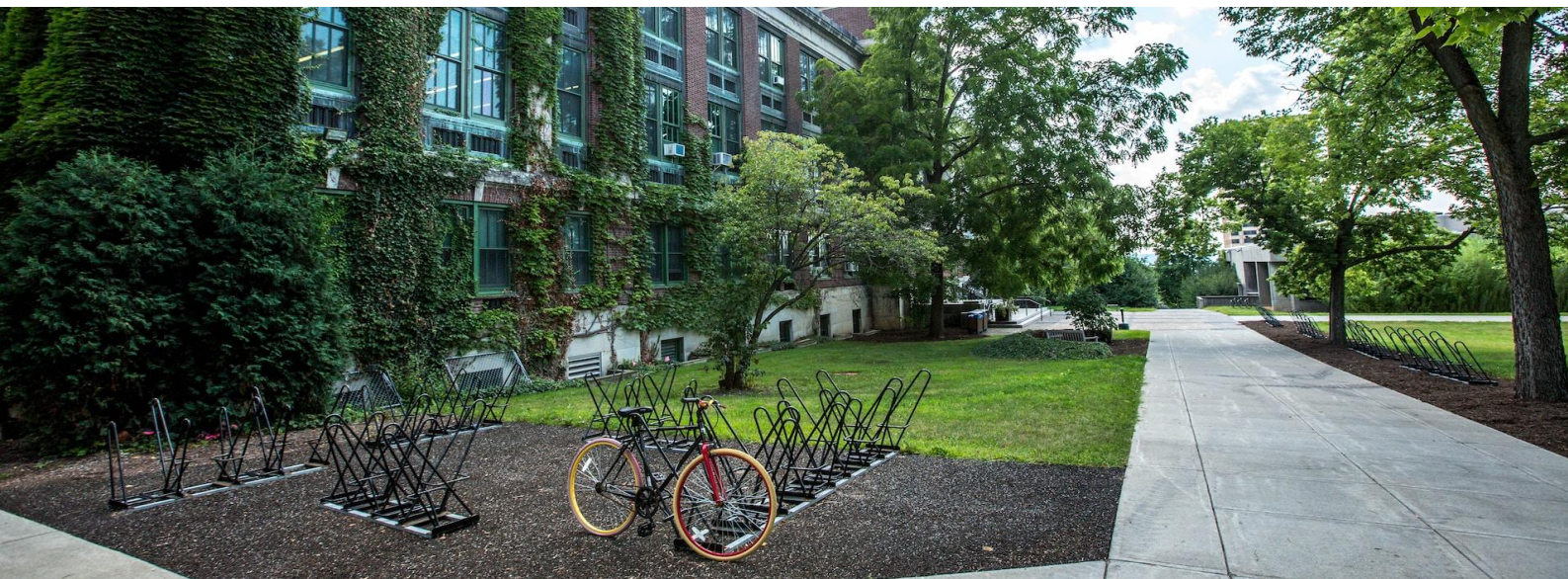
The purpose of this brief is to provide all relevant information about this competition and help participants frame their project and design their solution.

We look forward to receiving your proposal!



Competition overview

Sponsored by Siemens Energy and in collaboration with the United Nations Sustainable Development Solutions Network (SDSN), 'Universities for Goal 13' is an annual competition and award to recognize students' talent and their critical role in the quest for new technology and innovative solutions to combat climate change and its impacts, especially from the perspective of the energy transition. We aim to foster practical solutions for achieving SDG 13 on Climate Action, from multi-disciplinary perspectives and in a collaborative way.

Who can participate? Open to undergraduate and graduate students from universities of the SDSN global network that have been selected to participate. Check this edition's cohort on the project's website.

How to enter? The competition starts with a Call for Solutions launched by each participant university in September 2025. Students team up and must submit their Application Form to their university focal point by mid-December. A maximum of 3 proposals from each university will be shortlisted. Check the Rules & Guidelines for more information.

What are we looking for? We aim to identify solutions that address SDG 13, from the perspective of energy transition, emerging from our network of universities. Teams will pitch their project in front of a jury in June 2026. The proposals will be evaluated on criteria such as innovation, feasibility, impact, and alignment with the SDGs.

What's in it for you? Teams will benefit from mentorship given by staff from Siemens Energy, with experience in engineering, finance, compliance or project management, to help students refine their proposals from technological, legal, spatial, and social perspectives. The winner will be awarded with a USD 10,000 cash prize, and opportunities for further development and networking. All teams receive a certificate of participation.

Stay tuned! Check the project's website and follow the SDSN on Linkedin for updates and the latest news.

Have questions? Write to info@unsdsn.org or contact your university's focal point.

Why SDG 13 matters: Climate Action and the 2030 Agenda

Climate change is no longer a distant threat, it's one of the defining challenges of our generation. From rising sea levels to extreme weather and biodiversity loss, the impacts are being felt in every corner of the world. This urgency is why, back in 2015, all UN member states adopted the 2030 Agenda for Sustainable Development and the Paris Agreement, two global commitments to building a sustainable and climate-resilient future.

The Paris Agreement set a clear goal: keep global temperature rise **well below 2°C**, aiming for **1.5°C**. A decade later, in 2025, we're still falling short, but there's time to act. Countries have pledged to peak emissions as soon as possible and reach **net-zero** by mid-century, which means transforming how we produce energy, grow food, and power economies.

SDG 13 on Climate Action is a call to action for **everyone**, including you! The SDGs are not just for governments; they offer a framework for universities, businesses, and young people to drive change. Student creativity and leadership are essential to building a net-zero world.

Energy accounts for around **75% of global emissions**, so clean energy transitions are critical. But making them happen requires more than just technology. It takes engineers, economists, designers, and social scientists working together. From electrifying transport to expanding renewables, it's a truly multidisciplinary challenge.

That's why SDG 13 connects across sectors — from education and health to oceans and forests. Projects in this competition must align with the SDGs and apply systems thinking. Addressing climate change means reimagining how we live and work, and students have a key role in shaping that future.

About the 5th edition

Through this team-based competition, we aim to empower students to become architects of the next generation of climate solutions. Whether you're an engineer, economist, scientist, designer, or social innovator, your perspective matters, and your ideas could help shape a cleaner, more equitable energy future. Explore the key highlights of this 5th edition and discover how you can be part of the change!

Eligibility

The competition and award is open to all undergraduate and graduate students currently enrolled in the participating universities.
Participants must be students at the time of submission. Former participants may reapply as long as they fulfill the relevant criteria.

Project Requirements

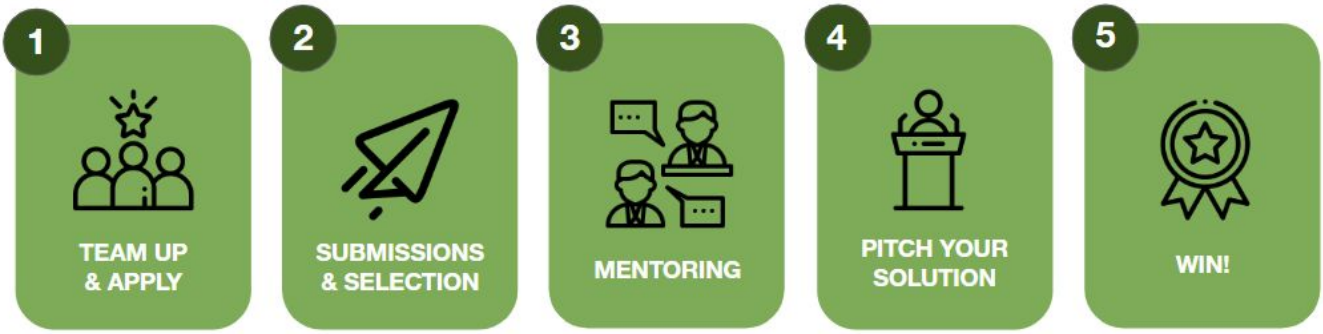
The projects require a multidisciplinary approach, essential for transforming towards a carbon-free economy, especially the energy sector.
Teams should consist of at least three students, preferably from different fields of study (technological, legal, economic, and social).

Mentorship and Support

Selected candidates receive support from university faculty and mentors from Siemens Energy to enhance their proposals throughout the contest.

Award

The winning solution is awarded USD 10,000 for further development and implementation and, the finalist project will be presented alongside the SDSN high-level events during the UN General Assembly in New York, USA.



Check the full Rules & Guidelines document!

Benefits for students

The competition aims to empower university students to become an innovative driving force in achieving the Sustainable Development Goals by making meaningful contributions to a global issue: climate change.

Participants selected for the competition will benefit from:

- ✔ **Participation in a global initiative** under the umbrella of the United Nations Sustainable Development Solutions Network.
- ✔ **Mentorship** from leading professionals at Siemens Energy.
- ✔ **Funding** for the winning solution: USD 10,000 prize.
- ✔ **Certificate of participation**.
- ✔ **Visibility** of the solution through SDSN's communications channels.
- ✔ **Support from university staff** in designing and developing the solution.
- ✔ **Professional development opportunities**, including knowledge enhancement, network building, and hands-on experience.

2023 Competition Winner at the Award Ceremony in New York

Testimonials

Read what the SDSN and Siemens Energy Leadership as well as our participants have to say about their impactful journeys in Universities for Goal 13:

"Universities for Goal 13" is making sure that this innovation process continues in a dynamic way right into the new young engineers and leaders of the coming generation. Thanks to this competition, students from universities in all parts of the world receive excellent mentorship to work on practical problem solving exactly directed at the challenges we face."

– Jeffrey Sachs, President of the SDSN

"Participating in this initiative has enhanced our university's visibility and provided valuable, engaging activities for our students, offering insights into climate change and collaboration opportunities with SDSN and Siemens Energy."

"The students' teams have found the experience invaluable, especially the support from the mentors who have been providing quite inspirational."

– Comments from University Focal Points

"Winning the contest was an incredible honor. Our team was able to gain invaluable resources and recognition, and with the prize, we have been able to advance our project and take it to the next level."

"The competition has been a unique experience to expand my knowledge and skills while being supported by a team of real-life experts. One of the greatest benefits was having a platform to showcase our projects."

– Comments from students

Solution guidelines and criteria

The solutions **must address** SDG 13, with a focus on innovative strategies that promote sustainability and decarbonization, particularly in the energy sector but not only. More details on the specific areas in which ideas can be presented can be found in the next section (key challenges to consider).

We are looking for solutions that fulfil the following requirements:

- ✔ Innovative
- ✔ Disruptive
- ✔ Technically feasible
- ✔ Multidisciplinary approach
- ✔ Aligned with the SDGs

The **proposals are evaluated** by their novelty, disruptive potential, feasibility, alignment with the SDGs, and the quality of the presentation. The solutions **can be at any development stage**: they can be an idea, a pilot project, or an existing project that needs further development. They do not necessarily have to be unpublished.

The potential **outcomes of students' work** should include: analysis of needs, potentials, barriers, and opportunities to utilize the capabilities of business and industry offerings. They should enhance understanding of technical, legal, economical, or sociological aspects of how the solutions can support the development of the region. They can also design, analyze, and suggest concrete solutions for narrowing, slowing, and/or closing resource loops, minimizing energy demand and use, regenerating resources and materials, and creating, supplying and using data. If you want to learn more about the **kind of solutions that have been selected** in past editions, read the section on solutions from previous editions!



Driving the energy transition

Experts agree: We can still limit global warming, but only by building a new, clean energy economy. While green technologies have advanced rapidly in recent years, the global energy transition still faces major obstacles. Making it truly sustainable will require more than just innovation. It demands bold technological solutions, smart economic models, strong policy frameworks, and new forms of collaboration. **This is where you come in.** The 5th edition of the competition welcomes a wide range of proposals that support the energy transition in practical, impactful ways.

We challenge students to tackle some of the most pressing issues in the energy transition by developing creative, cross-disciplinary solutions that can make a real difference. Need inspiration? **Here are some key challenges to consider:**

✔ Making renewable energy reliable and resilient

How can we improve how energy is generated, stored, and delivered to ensure a stable, low-carbon electricity system? Smarter grids and better storage solutions are key.

✔ Applying circular economy principles

How can we design renewable energy systems that reuse and recycle materials? From production to end-of-life, solutions must minimise waste and environmental impact.

✔ Reducing the impact of clean energy technologies

How can we improve the materials and processes used in clean tech? Greener ways to make concrete, steel, and polymers can lower emissions and resource use.

✔ Securing critical materials for clean energy

How can we ensure a stable supply of essential metals and minerals? Tracking material flows, recycling, and diversifying sources are all part of the solution.

✔ Building stable policies for clean energy

How can we create clear, effective policies that support clean tech and attract investment? Strong frameworks should connect finance, labour, manufacturing, and phase out fossil fuel subsidies.

✔ Training the green workforce

How do we close the skills gap in the clean energy sector? We need more education, training, and innovation to equip workers for the jobs of a net-zero future.

✔ Deploying clean energy responsibly

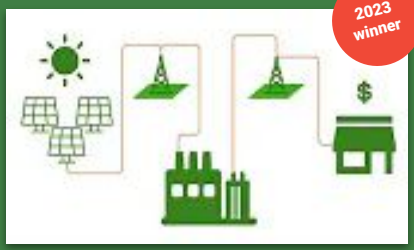
How can we scale up renewables while protecting people and nature? Projects must consider impacts on biodiversity, communities, and supply chains — and uphold human rights.

✔ Leveraging digital technologies

How can digital tools speed up the energy transition? Smart systems can boost efficiency, cut costs, and extend asset life — but must also address cybersecurity and sustainability.

Learn about the solutions that student teams presented in previous editions. Watch the 2025 pitch videos here!

During **past four editions of the competition**, students presented varied and ground-breaking solutions that addressed issues such as the use of biofuels, mapping energy networks, community participation in climate change, sustainable land use, generating sustainable energy through solar, wind and hydro power, public policy recommendations for wind powered energy, tackling industrial wastewater using engineered microbes, maritime anti-fouling innovation, and sustainable game-based education, among other.



E-Gora: The Energy Marketplace, created by students at Case Western Reserve University in the USA, seeks to provide a user-friendly platform that allows users to find information quickly on renewable energy projects near them that they can participate in.

Students from PUC-Rio University in Brazil worked on the use of wind potential as a driver for socio-economic leverage in underdeveloped locations.

Students from Tsinghua University in China proposed a blockchain-based system to monetize the carbon sink potential of tropical rainforests by converting carbon flux into carbon credits. More info here.

The Monash students' solution proposed a microalgae biorefinery that captures CO_2 emissions from industry and transforms them into valuable products for sectors like aquaculture and food, offering a circular, energy-efficient solution that supports climate action in high-emission areas.

The team from Tsinghua University in China proposed C-N Biotechnology, a carbon-negative wastewater treatment using AI-guided, light-regulated Anammox. Their photobioreactors and genetic light-switch databases enhance nitrogen removal while converting CO_2 into valuable bioproducts, supported by a digital platform for accessibility.

Students from the University of Pretoria in South Africa designed a solar-powered non-thermal plasma technology for water treatment in rural communities, aimed at developing easily-operated small-scale water purification systems that work without chemicals. More in the news.

Students from Arizona State University in the USA proposed a solution for a sustainable management of wind turbine blades, providing a circular economy methodology for this sector.

Timeline and milestones

The competition extends over one academic year. In the following visual timeline, you will see the key milestones of the competition:

Resources

Video Lectures

Introducing Sustainable Development
Presented by Jeffrey Sachs, President of the SDSN

What is Climate Change?
Presented by The SDG Academy

The Basic Science of Climate Change
Presented by Jeffrey Sachs

Business Solutions for Climate Change
Presented by the SDG Academy

The Economics of Climate Change
By Jeffrey Sachs

The Accelerating Energy Transtions 10-minute take
Stanford University

Video Lectures on Climate Change
The SDG Academy (full playlist)

Readings

The Sustainable Development Agenda (FAQ)
United Nations

The Paris Agreement
UN Climate Action

Websites

SDSN's Climate & Energy Program

SDG Impact Assessment Tool
SDSN Northern Europe

About the organizers

The UN Sustainable Development Solutions Network (SDSN)

The SDSN works under the auspices of the UN Secretary-General to mobilize the world's universities, think tanks, and national laboratories for action on the Sustainable Development Goals (SDGs) and the Paris Agreement; empower societies through free online education; and translate scientific evidence and ideas into solutions and accountability. Established in 2012 by the former UN Secretary-General, Ban Ki-Moon, and world-renowned economist and professor, Jeffrey Sachs, the SDSN promotes integrated approaches to implement the SDGs and the Paris Agreement, through education, research, policy analysis, and global cooperation.

Siemens Energy

Siemens Energy drives the transformation of the energy industry. With over a century of experience, they are at the forefront of innovation, working to address the world's most pressing energy challenges. Their global team of more than 90,000 professionals is dedicated to making sustainable, reliable, and affordable energy accessible globally. As leaders in the energy sector, Siemens Energy offers a comprehensive portfolio that includes conventional and renewable energy solutions such as gas and steam turbines, hybrid power plants, and power transmission systems. Their commitment to excellence and collaboration with partners has resulted in the successful deployment of cutting-edge technologies that power homes, industries, and communities worldwide. Siemens Energy's worldwide implementation ensures that their advanced energy solutions are making a significant impact in diverse markets and regions around the world.

Universities for Goal 13

For more information please contact us at
info@unsdsn.org

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