UNIVERSITIES FOR GOAL 13

6TH EDITION

A Student Competition & Award for Solutions Focused on the Energy Transition

Hosted by Siemens Energy in collaboration with the UN Sustainable Development Solutions Network



SUSTAINABLE DEVELOPMENT SOLUTIONS NETWORK
A GLOBAL INITIATIVE FOR THE UNITED NATIONS

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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!







Overview

Universities for Goal 13 —an initiative co-created by the United Nations Sustainable Development Solutions Network (SDSN) and Siemens Energy— is an annual competition and award recognizing students' critical role in developing new technology and innovative solutions to combat climate change and its impacts, **from the perspective of the energy transition**. We empower multi-disciplinary student teams to design bold, practical solutions and groundbreaking technologies to safeguard our collective future.

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 2026. 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 emerging from our university network that address SDG 13 from the energy transition perspective. Teams will pitch their project in front of a jury in June 2027. 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 today's reality. Extreme weather events, rising sea levels, and biodiversity loss are already affecting communities worldwide. This crisis prompted all UN Member States to adopt the **2030 Agenda for Sustainable Development** —establishing 17 Sustainable Development Goals (SDGs)— and the Paris Agreement back, laying out a roadmap for global climate resilience.

The core mandate remains clear: **to hold the increase in global average temperature to well below 2°C above pre-industrial levels**. A decade on from those historic commitments, humanity is still falling short of its targets. However, path-correcting is still within reach. Achieving net-zero by mid-century demands rapid action across energy systems, agriculture, and industry. As we enter the final stretch toward 2030, the time for high-level promises has passed. Now is the moment for decisive execution.



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.

A transformative shift in our energy systems through a fair and rapid energy transition is central to climate action. Decarbonizing economies, whether through renewable expansion, transport electrification, or grid modernization, is a inherently multidisciplinary endeavor. Lasting solutions require scientists, economists, engineers, and social innovators to work together. SDG 13 naturally links to every other global goal. To tackle this interconnected crisis, competing projects must align with the SDGs and apply a systems-thinking mindset. Reimagining how we live, work, and innovate requires bold vision, and university students are uniquely positioned to lead the way.

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 6th 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.



About the 6th Edition

Through this team-based competition, we aim to empower students to step up as architects of the next generation of climate & energy solutions. Whether you are an engineer, economist, scientist, designer, or social innovator, your perspective is vital. Your ideas can help accelerate the transition to a cleaner, more equitable future. Explore the key highlights of this 6th edition and discover how you can drive real-world impact when it matters most!

Eligibility

The competition and award is open to all undergraduate and graduate students currently enrolled in 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, which is essential for developing solutions for the energy transition. Teams should consist of at least three students, preferably from different fields of study (technology, law, social sciences, etc.).

Mentorship

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 a SDSN high-level event.

Check the full Rules & Guidelines here!

Benefits for Students

Joining this 6th edition offers student participants a unique platform to gain hands-on experience, connect with industry leaders, and turn ambitious climate and energy related ideas into reality.

Participants selected for the competition will benefit from:

- ✔ **Participation in a global initiative** under the umbrella of the UN 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.
- ✔ **Travel to an international high-level event** to present the winning 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

Solutions should focus on tackling climate change (SDG 13), with a particular welcome for ideas that intersect with the **energy transition, sustainable technology, or clean energy access**.

We are looking for solutions that are:

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

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, potential, 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.

The **proposals are evaluated** by their novelty, disruptive potential, feasibility, alignment with the SDGs, and the quality of the presentation. In line with SDSN values, we actively champion diversity and gender balance in team composition to foster a wider range of perspectives and innovative solutions.

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!

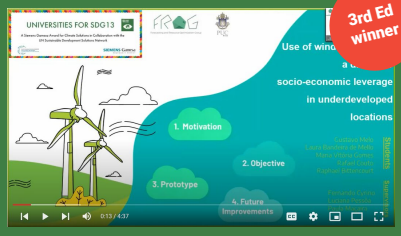
Learn about the solutions that student teams presented in previous editions.

Watch the pitch videos of the past edition here!

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



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.



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



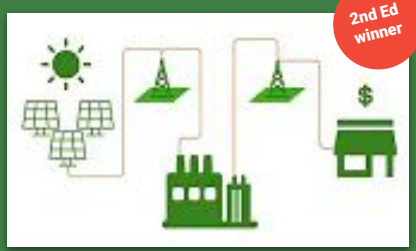
Students from Tsinghua University in China proposed a blockchain-based system to monetize the carbon sink potential of tropical rainforests by converting carbon flux into carbon credits. More info here.



The 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.



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 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 Transitions 10-minute take
Stanford University

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

A Youth Vision

Youth Regional Consultations on Climate Action
SDSN Youth

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 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

Empowering multi-disciplinary student teams to design bold, practical solutions and groundbreaking technologies to safeguard our collective future

For more information please contact SDSN at **info@unsdsn.org** or visit **unsdsn.org/UG13**