



Schools For Goal 7: A Guide on Renewable Energy and The Energy Transition

Preparing to Teach SDG7



Produced by the Global Schools Program, UN Sustainable Development Solutions Network (SDSN) in partnership with Siemens Energy.

© Global Schools Program, 2025.

About the Global Schools Program

The Global Schools Program is an initiative of the UN SDSN in support of UNESCO's Roadmap for Education for Sustainable Development (ESD). The vision of the program is to create a world where every primary and secondary school student is equipped with the knowledge, values, and skills necessary to respond effectively to the most significant challenges of this century and shape a sustainable and prosperous world for all.



About Siemens Energy

The energy transition is the greatest challenge our generation faces. How do we reduce emissions while also increasing energy supply? It is an uphill battle, and there is no silver bullet. But finding solutions has always been in our DNA. For more than 150 years, our engineers have been spearheading the electrification of the world. Today, we are a team of 98,000, sharing the same passion, vision, and values. Our diversity makes us strong and helps us find answers together with our partners.



Sustainable Development Goal 7 (Affordable and Clean Energy) aims to provide affordable, reliable, and sustainable energy for all by 2030. It is key to the 2030 Agenda, and transitioning to clean energy is vital to supporting the Paris Climate Agreement. Achieving SDG7 requires advocating for universal access to modern energy services—not by replicating fossil fuel models but by creating renewable energy infrastructures for the global economy. Its targets guide the transition from fossil fuels to clean energy access.

Schools for Goal 7 is a project by Global Schools in partnership with Siemens Energy designed to train teachers and students in energy and Sustainable Development through gamified curricula. The initiative encourages active learning about SDG 7 to accelerate local sustainable development action. It provides hands-on experience in the energy transition, renewable energy, climate change, and sustainability, thereby equipping the next generation with essential skills for building resilient societies.



7 AFFORDABLE AND CLEAN ENERGY





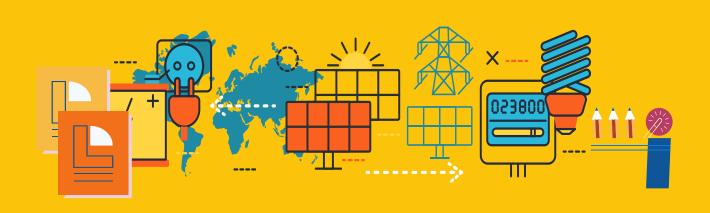
Acknowledgements

The Global Schools Program is grateful for the following educators and individuals for providing their expert input into this guide:

Ahmet Murat Zeytcioglu Chinasa Gloria Cynthia Brawner Garima Singh Lizzie Muringi Marti Hendrichs Ngozi Awazie Raymond Mitchell Africa Sandra Ospina Saumya Tripathi Nouf Youssef

For inquiries, please contact: globalschools@unsdsn.org

TABLE OF CONTENTS	Page
Introduction to the guide	05
What is SDG7: Affordable and Clean Energy	07
Education for Sustainable Development	07
A gender-senstive approach	09
Background on SDG7	09
Concepts and Definitions Used in this Guide	16
Pre-unit Videos, Readings and Additional Training	19
Adapting SDG7 to the Local Context and to the Classroom	22



Introduction to the guide

he Global Schools Activities Guide on the energy transition supports teachers or facilitators in carrying out activities on SDG 7: Affordable and Clean Energy in school communities with lower and upper secondary students. The goal of this

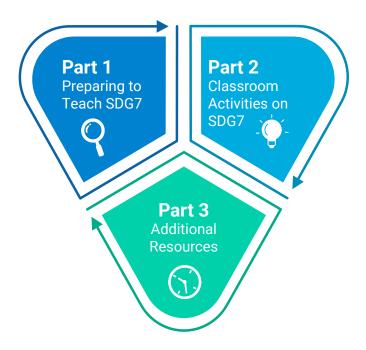
guide is to engage students in understanding the critical aspects of renewable energy and the energy transition.

The guide is divided into three sections:

Part 1 Preparing to Teach SDG7. Here, you will find learning goals and objectives, key concepts and definitions used, and introductory information, articles, and videos on SDG7.

Part 2 Classroom Activities on SDG7. A step-by-step set of activities on SDG7 to deploy in your classroom or school community with your students (see accompanying pdf).

Part 3 Additional Resources. Additional resources, career information, and case studies are needed to deepen engagement with renewable energy topics further (see accompanying pdf).



Sustainable Development Goals

n 2015, the 193 countries that comprise the United Nations General Assembly unanimously agreed to adopt a global action plan to address humanity's significant challenges: climate change, inequality, hunger, and more. This roadmap is outlined in the 2030 Agenda for Sustainable Development.

The new global agenda establishes 17 Sustainable Development Goals, commonly known as SDGs, which all signatory states are committed to achieving within a 15-year timeframe. The 2030 Agenda calls for action and collaboration among all sectors of society—businesses, public institutions, citizens, and education professionals. However, for this vision to become a reality, it is essential that everyone becomes aware of these goals and that each individual or institution explores how they can contribute to achieving the SDGs.





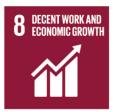


































Ensure access to affordable, reliable, sustainable and modern energy for all



What is SDG7: Affordable and Clean Energy?

Sustainable Development Goal 7 is one of 17 SDGs. It aims to ensure universal access to affordable, reliable, and modern energy services by 2030 and enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency, and advanced and cleaner fossil-fuel technology. SDG7 also promotes investment in energy

infrastructure (<u>The Global Goals</u>). Access to energy is a crucial pillar for people's well-being, economic development, and poverty alleviation.

Moreover, our current reliance on fossil fuels is unsustainable and harmful to the planet, so we have to change how we produce and consume energy.

Education for Sustainable Development

Learning goals and competencies in the context of SDG 7

In the face of today's challenges, the world needs responsible and committed citizens to find viable and sustainable solutions over time. Through education, these personal transformations can also lead to broader societal changes that create a more sustainable, peaceful, and just world for all (UNESCO & Education International, 2021).

Education for Sustainable Development (ESD) is essential to attain this goal. ESD emphasizes the importance of achieving learning objectives across the cognitive, socio-emotional, and behavioral domains and aims to empower learners to resolve global challenges through transformative action. Promoting curriculum on ESD topics is considered a key pillar of ESD integration (UNESCO, 2017), as curriculum influences students' learning outcomes.



Education for Sustainable Development (ESD) is UNESCO's response to the urgent challenges facing our planet.

Education for Sustainable Development empowers people with the knowledge, skills, values, attitudes and behaviors to live in a way that is good for the environment, economy, and society. It encourages people to make smart, responsible choices that help create a better future for everyone.

UNESCO's ESD for 2030 programme produces and shares knowledge, offers policy guidance and technical support to countries, and implements projects on the ground. It fosters peer learning and innovation through information, networks and partnerships.

Want to learn more about ESD? https://www.unesco.org/en/sustainable-development/education

Overview of the guide

Below, you will find two charts with suggested learning goals and objectives aligned with UNESCO's Education for Sustainable Development (ESD) pedagogy and frameworks, demonstrating how they relate to SDG7.

Title	Clean Energy and the Energy Transition
Suggested Ages	12-14 & 15-17
Overarching Objective of the Guide	To develop the knowledge, values, and skills related to the issues, challenges, and importance of clean energy and the energy transition
Global ESD Competencies	Critical Thinking, Research Skills, Problem-Solving Skills, Teamwork, Collaboration, Global Awareness, Public Speaking, Civic Engagement
Learning Goals	 Students will gain knowledge of the key elements of SDG 7 and why clean and renewable energy is crucial for sustainable development. Students will increase their understanding of the barriers and solutions for achieving affordable and renewable energy globally. Students will reflect on their energy practices, making SDG7 relevant to their daily lives, and how renewable energy sources could be implemented in their lifestyles, schools, and communities. Students will collaborate on SDG 7 activities and initiatives, emphasizing an active and participatory approach (group discussions, peer-to-peer learning, or interactive methods help students become more engaged and prepared for the peer-based dynamics of Education for Sustainable Development [ESD]). Adapted from Education for Sustainable Development Goals: Learning objectives, UNESCO, 2017.
Learning Objectives	 Students will be able to identify and differentiate between non-renewable and renewable energy sources and their impact on the environment, health, and safety. Students will be able to analyze and demonstrate the harmful impacts of unsustainable energy production. Students will be able to articulate and communicate why renewable energy is needed and evaluate alternative energy sources for a given context. Students will be able to interpret their energy usage and assess how they can become more energy efficient in their daily lives. Students will be able to identify and outline energy-saving behaviors that can be applied in their day-to-day lives. Students will be able to cooperate with others to develop action plans to achieve SDG7 in their communities. Students will be able to articulate how SDG7 is interconnected with other SDGs. Adapted from Education for Sustainable Development Goals: Learning objectives, UNESCO, 2017.
Standards Explicitly Taught	*Global Schools encourages teachers to align the above learning goals and objectives to their national standards
Success Criteria & Assessment	Sample quizzes, essays, debates, and presentation topics can be found in the companion toolkit to this introductory guide.

A Gender-Sensitive Approach



he lack of access to modern energy sources directly affects women and girls, who are often the primary household energy managers. They may spend hours each day collecting fuel and carrying heavy loads. In households that cook with solid fuels, girls spend 18 hours a week, on average, gathering fuel. Women are primarily sidelined in the industries that produce modern renewable energy sources; however, they comprise only 20 percent of the workforce (UN Women).

As educators, we have the powerful opportunity to make visible the situation of many women and girls concerning access to clean and affordable energy and integrate SDG7 into our lessons with a gendersensitive approach. This guide offers several examples that work at the intersection of SDG7 and SDG5 (Gender Equality).

Background on SDG7

he first step in facilitating a lesson or workshop using this guide is to familiarize yourself with <u>Sustainable"</u> Development Goal (SDG) 7 and introduce the topic to your learners. Here are some key concepts to begin with:

1. Sustainable Development Goal (SDG) 7: Affordable and Clean Energy



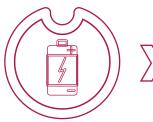


SDG7 ensures "affordable, reliable, sustainable, and modern" energy access for all. Achieving SDG7 requires comprehensive national, regional, and global action plans supported by strong leadership and increased investment in diverse energy solutions (<u>UN SDG7 High Political Forum</u>, 2018).





Global electricity access rose to 91% from 2015 to 2021; however, 675 million people remain without access (HLPF 2023 Factsheet), and over 2 billion people still rely on polluting fuels and cooking technologies (United Nations).





SDG7 is closely interlinked with all of the SDGs and is crucial for driving progress on climate action and sustainable development. For example, without electricity, clinics cannot store vaccines for children or provide other types of critical medical care (SDG3: Good Health and Well Being); many schoolchildren cannot complete homework at night (SDG4: Quality Education); and people cannot run competitive businesses (SDG8: Decent Work and Economic Growth) (United Nations) (UN SDG7 High Political Forum, 2018).

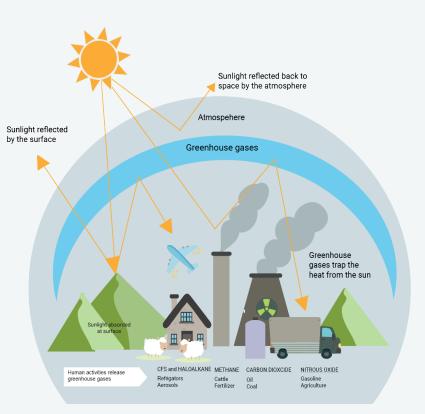
2. Non-renewable energy sources

- Non-renewable energy sources, also known as fossil fuels, include coal, oil, natural gas, and other energy sources derived from finite resources.
- They have been the primary sources of global energy consumption for over a century.
- They are responsible for about 80% of global energy production (<u>United</u> <u>Nations</u>).
- These sources have played a critical role in powering industries and homes; however, their extraction and continuous use are some of the largest contributors to environmental degradation and climate change (Client Earth).
- Relying on these types of energy sources can be unsustainable, and new technologies and energy sources are needed to achieve sustainable development.



3. The greenhouse gas effect

- When fossil fuels or non-renewable resources are burned, they release large amounts of carbon dioxide and other greenhouse gasses into the atmosphere.
- These greenhouse gases trap heat in the air, contributing to rising temperatures worldwide (<u>Client</u> <u>Earth</u>).
- Burning fossil fuels and the increased concentration of greenhouse gasses is one of the direct causes of climate change.
- As temperature rises, more moisture evaporates, intensifying extreme rainfall and flooding, causing more destructive storms. Such storms often destroy homes and communities, causing deaths and substantial economic losses. (United Nations).
- Finally, burning fossil fuels can also affect air quality and human health, causing illnesses and diseases.



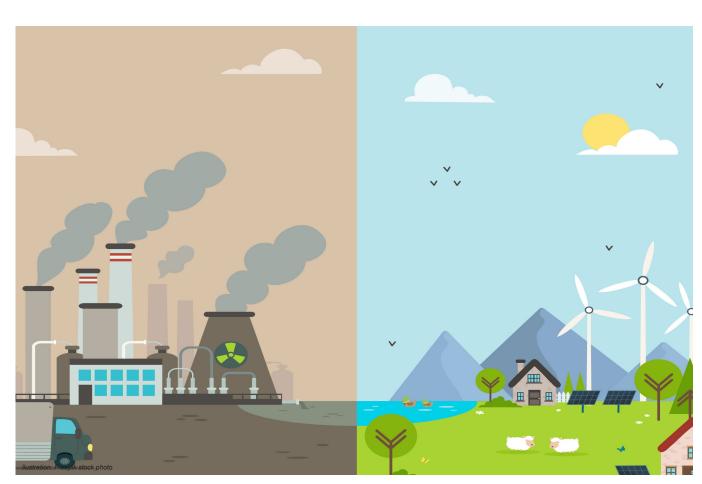
GREENHOUSE EFFECT

4. What is net zero?

- Due to the increasing threat of climate change, countries worldwide have created cooperative frameworks to cut carbon emissions.
- The Paris Climate Agreement was passed in 2015. This legally binding international treaty seeks to ensure that global temperatures rise no more than 1.5C above pre-industrial levels, as they did before the Industrial Revolution (UNFCCC).
- Many countries and organizations are working towards achieving net zero emissions.
- Net zero emissions mean that the world would cut carbon emissions to the extent that emissions can be absorbed naturally, leaving none in the atmosphere (United Nations).

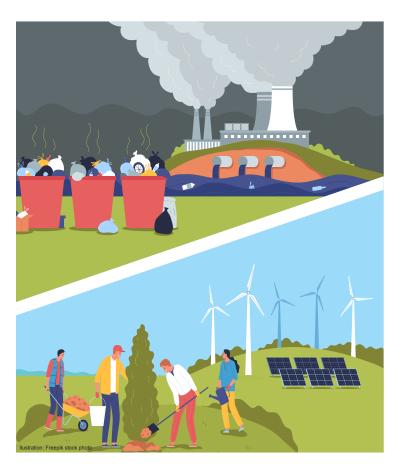


- Investing and transitioning to renewable energy sources and increasing energy efficiency are the most efficient ways to reach net zero emissions while simultaneously supporting daily living.
- Renewable energy sources currently account for 29% of electricity usage. However, to avoid the worst impacts of climate change, emissions need to be reduced by almost half by 2030, and the world needs to reach net zero by 2050 (United Nations).
- Another crucial pillar in reaching net zero emissions is decreasing the overall energy consumption in industrialized countries by removing or reducing emissions.



5. The Energy Transition

- In pursuit of environmentally friendly energy solutions, the world is shifting from nonrenewable energy sources such as carbon and coal to renewable energy sources (<u>United</u> <u>Nations</u>).
- Transitioning to renewable energy requires adapting electrical grids to accommodate the intermittent nature of renewable energy sources and different ways to store and transport energy, which may require technological innovation.
- Countries and regions have varying energy needs, and solutions adaptable to the local context will vary. For example, they may focus on specific, abundant renewable energy sources in each region.
- A clear understanding of the dynamics of this transition is essential for achieving SDG7: Affordable and Clean Energy.
- With climate change threatening our planet, countries, organizations, and industries are working together to find strategies to support the energy transition.



6. Renewable energy sources

Renewable energy sources are available in abundance, such as energy provided by the sun, wind, ocean, waste, and heat from the Earth (<u>United Nations</u>).

Renewable energy is energy derived from these natural sources that can be replenished at a higher rate than consumed (UN Economic and Social Council, 2016).

For a closer look at some renewable energy sources, read the definitions on the next page.



Solar panels convert sunlight into electricity, offering an abundant, entirely renewable energy source. This source reduces dependence on fossil fuels and is an incredibly sustainable method that can be scaled for extensive purposes, such as powering an entire school or electric grid (Britannica). However, solar energy is weather-dependent and requires consistent sunlight, meaning it is not viable for areas without sunlight (Forbes).

Wind

Wind turbines harness kinetic energy from the wind. The wind rotates the turbine blades, which power a generator and create energy that can power homes, businesses, towns, and electrical devices (National Geographic). This energy source can also be utilized for large-scale use but may be inefficient in areas with inconsistent or low wind speeds.

Hydroelectric

Dams and turbines capture the energy of flowing water, providing a reliable and efficient source of power generation. This form of energy can also benefit water management within a community (National Geographic).

Tidal

Waves and tides move vast amounts of water, and that movement is full of kinetic energy or energy in motion. Generators placed in the water where tides or waves are most decisive capture that motion and turn it into electricity.



Geothermal

This energy is heat within the earth and can be found in natural pools and hot springs. People have used geothermal energy for centuries for cooking, bathing, and warmth. Today, it is also used to create electricity.

Green Hydrogen

The term "green hydrogen" refers to hydrogen produced using renewable energy sources and is considered one of the most promising energy vectors in the future (Guevara-Ramírez et al., 2023). It is produced by splitting water (H2O) into oxygen (O2) and hydrogen (H2). When electricity is used for this process, it is called electrolysis. However, a significant amount of energy is required to split the H2 molecule. At the same time, hydrogen can be stored as secondary energy, unlike electricity, enabling a temporal and spatial decoupling between energy production and consumption.

Biomass

Biomass is a type of energy from plants and animal products. It can be burned directly to produce heat, or it can also be changed into liquid fuels, like biodiesel or gaseous fuels, through special processes (Siemens)

7. A note on nuclear energy

- Nuclear fission reactions produce heat, which drives turbines connected to generators. The steam from the reaction spins the turbine, thus generating electricity.
- This method has a high energy density, meaning that a small amount of fuel produces a large amount of energy (<u>Britannica</u>).
- Since nuclear reactors do not produce air pollution or carbon dioxide while operating, it is sometimes considered a form of renewable or clean energy.
- A primary environmental concern related to nuclear power is the creation of radioactive waste. These materials can remain radioactive and dangerous to human health for thousands of years. (<u>U.S Energy</u> <u>Information Administration</u>).
- Nuclear energy has safety concerns and must be thoroughly regulated to ensure the safety of workers, the environment, and the community surrounding the power plant.
- However, it provides a consistent and reliable energy supply that is suitable for large and stable electrical grids (World Nuclear).



8. Economic aspects of SDG7

- Ensuring access to affordable, reliable, sustainable, and modern energy. Goal 7 is key to developing essential sectors of the global economy, such agriculture, business, communications, and transportation (Sustainable Energy for All).
- The energy transition is expensive and requires and funding from government incentives international sources, cooperation, private innovative investors. and partnerships between stakeholders for possible change.
- Green Jobs and the Greening Economy Green jobs (ILO, 2023) exist across industries and are growing significantly due to environmental policies, new design principles, and worldwide decarbonization. Deloitte Economics Institute projects 300 million more green jobs by 2050 (2022).



- Encouraging female students to pursue careers in green energy can help break gender-related barriers to career paths in STEM, which is essential for future innovation and sustainable development. UNESCO reports that women make up only 35% of STEM graduates, a number that has remained unchanged for a decade.
- Approximately 700,000 jobs were added in the energy sector between 2020 and 2021 (IRENA Renewable Energy and Jobs, Annual Review 2022, IRENA, 2022). Crucial skills for developing a career in Green Energy (Earth Buddies) include technical expertise in engineering and energy management, problem-solving, innovation, and adaptability, as well as soft skills like communication, project management, and policy understanding.





Manufacturing - plant and system operators, first-line supervisors, inspectors, logistics



Green Construction - architects, building inspectors, carpenters or laborers, managers, installation or repair workers



Environmental Protection - zoologists or biologists, reporters, plant scientists, meteorologists, conservation workers, scientists



Engineering - electrical, energy, mechanical, environmental, civil, biochemical, industrial



Transportation - planners, automotive engineers or mechanics, fuel cell technicians, locomotive engineers, aerospace engineers

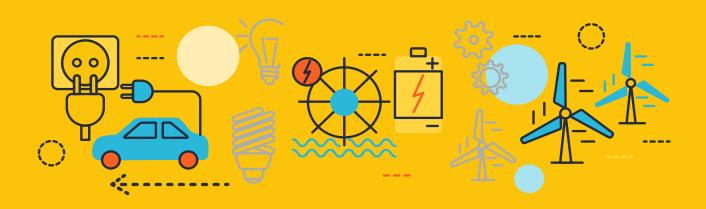


Government and Administration energy auditors, politicians, urban and regional planners, safety & health



Agricultural and Forestry - farmers, ranchers, managers, landscape

Some real-life sample job openings from Siemens Energy can be found here.



Concepts and Definitions Used in this Guide



Carbon footprint - a carbon footprint is the number of greenhouse gases emitted by an individual, company, or organization's activities (<u>The Nature Conservancy</u>)



Carbon neutral - this refers to having no carbon footprint or achieving net zero emissions by having a balanced amount of carbon released into the atmosphere (<u>UNEP</u>)



Clean energy - this is energy that comes from renewable energy sources (<u>United Nations</u>)



Climate change - this refers to long-term shifts and weather patterns, which since the 1800s have primarily been human induced, primarily due to the burning of fossil fuels and the release of greenhouse gases; consequences of climate change can include droughts, water shortages, natural disasters, rising sea levels and declining biodiversity (United Nations)



Energy efficiency - involves using technologies or other methods to reduce energy usage while maintaining the same or better output (<u>UNEP</u>)

Energy mix - the combination of energy sources needed to meet the energy needs of a particular region, country, or location; this is determined by the availability of resources, policies, and energy demands (Planet Energies)



Energy sufficiency - this involves reducing energy consumption by making behavioral and lifestyle choices, as well as ensuring that people's basic energy needs are met equitably and sustainably (Climate Recon 2050)



Energy transition - this is a long-term process, including adopting new energy strategies, jobs, and planning across countries and communities to reach net-zero emissions (UNDP)



Fossil fuels - fossil fuels are a carbon-based type of non-renewable energy source that releases carbon into the Earth's atmosphere when combusted; these types of fuels formed naturally in the Earth's crust and originated from the Earth's geological past, such as coal, natural gas, oil, etc. (European Commission)



Gender-sensitive approach - to understand and give consideration to socio-cultural norms and discriminations to acknowledge the different rights, roles & responsibilities of women and men in the community and the relationships between them (<u>UN- REDD</u>)



Greenhouse gases - greenhouse gases include carbon dioxide (CO2), methane (CH4), nitrous oxide (N20), hydrochlorofluorocarbons (HCFCs), and hydrofluorocarbons (HFCs), which are released into the atmosphere upon the burning of fossil fuels (World Meteorological Organization)



Green Economy - one that results in improved human well-being and social equity while significantly reducing environmental risks and ecological scarcity (UN Environment Program)



Green Jobs - the International Labour Organization (ILO) defines green jobs as "decent jobs that contribute to preserving or restoring the environment, either in traditional sectors such as manufacturing and construction or in new, emerging green sectors such as renewable energy and energy efficiency"



Net zero - achieving net zero means reducing carbon emissions to a small amount that can be absorbed or stored by nature and other carbon dioxide removal measures, leaving zero in the atmosphere (<u>United Nations</u>)



Non-Renewable energy - non-renewable energy is energy that is derived from sources that will eventually run out and could include coal, oil, natural gas, or any other finite resources (Inspire Clean Energy)



Offshore - offshore means something that happens in the water, away from the land. For example, offshore wind farms are built in the ocean or sea to capture strong winds and generate electricity using turbines. These areas are often chosen because the wind is stronger and more consistent than on land (IRENA)



Onshore - onshore means something that happens on land. For example, onshore wind farms are built on land, usually in open spaces like fields or hills, to capture wind and produce electricity. These turbines are closer to towns and cities, making it easier to connect the energy to the people who need it (Iberdrola)



Renewable energy - this is energy derived from natural sources that is replenished at a higher rate than consumed (UN Economic and Social Council, 2016). Examples of renewable energy include solar, wind, geothermal, hydropower, tidal, and bioenergy (United Nations)



Renewable energy sources - are available in abundance, such as energy provided by the sun, wind, ocean, waste, and heat from the Earth (United Nations)



The Paris Agreement - otherwise known as the Paris Accords, this is a legally binding international UN treaty on climate change. Its goal is "to limit the temperature increase to 1.5°C above pre-industrial levels" (UNFCCC)



Turbines - a turbine is a machine that uses air, water, steam, or another fluid to create energy. It has blades that spin when the fluid moves through or around them. This spinning motion can be used to produce electricity or power machines (Energy Education)





Pre-unit videos, readings, and additional training

B efore facilitating the activities in Part 2, use the following links and resources to increase your knowledge and understanding of SDG7: Affordable and Clean Energy.



Videos

Watch these videos to gain technical background and prepare yourself to teach about renewable energy and the energy transition.

Beginners

- Setting the Scene for SDG7 (SEforALL). An overall vision of what SDG7 encompasses.
- What does clean energy look like? Climate Action Explained (UNDP). Learn about renewable energy through real cases around the world.
- The Missing Piece of the Clean Energy Transition Sheila Ngozi Oparaocha (TED). A powerful call to prioritize gender equality in energy policies.
- How fossil fuel emissions add to the climate emergency (ABC News). A three-minute summary about the relationship between climate change and the use of fossil fuels.



Advanced Learners

Tailored for those with a firm grasp of the subject, focusing on in-depth analysis, complex concepts, and specialized skills

- Clean Energy (SDG Academy). A detailed explanation of SDG7 and the key aspects of the energy transition.
- The Earth's Energy Balance (SDG Academy). A comprehensive explanation of why, when, and how greenhouse gases should be reduced and their relationship to climate.



Readings

Read these articles to gain additional background and prepare yourself to teach about renewable energy and the energy transition.



Beginners

- Read the <u>UN's website on Goal 7</u> (Department of Economic and Social Affairs).
- <u>Fact sheet on clean energy</u> (United Nations).
- Read the <u>UN's website on renewable energy</u> and learn how energy use contributes to climate change (What is Renewable Energy, United Nations).
- Learn more about <u>net zero emissions</u> (Net Zero Coalition).

Advanced Learners

- Analysis of SDG7 Progress, 2024 (Sustainable Energy for All). Check out how the world is progressing toward achieving the SDG7 targets.
- Learn about carbon footprints and worldwide statistics related to the Paris Climate Accords (Footprint Network).
- What net-zero emissions mean (8 Common Questions Answered, World Resource Institute).



Data visualizations



Beginners

- Check out the <u>SDG Index</u> to see how the world is progressing on SDG7.
- Visit <u>Our World in Data</u> to research different data indicators on energy.

Advanced Learners

- Check out <u>Eurostat</u> for indicators on monitoring SDG 7.
- Explore Climate Watch to learn more about its Net Zero Tracker.
- IRENA Dashboard provides information on the global annual energy-related CO2 emissions by sector.



Resources in multiple languages

- Climate Action
- **SDG7** (United Nations)
- **Client Earth**



Spanish

ODS 7 | Energía asequible y no contaminante (UN Etxea)



Supplemental Lesson Plans and Guides



- <u>Climate kids</u>. A complete guide to climate change for kids made by NASA.
- <u>Understanding Renewable Energy</u>, World's Largest Lesson.
- <u>Understanding Goal 7</u>, Resources for Rethinking.

Advanced Learners

- <u>Decoding Global Goal 7</u>, the World's Largest Lesson
- How can we keep the lights on?, a lesson plan by Commonwealth Class on renewable energies.



Please visit globalschoolsprogram.org/schoolsforsdg7

and inquire about our online training course for educators on SDG7.

Adapting SDG7 to the local context and classroom

The SDGs are a roadmap with solutions to the problems we are facing. Most solutions carry out unprecedented transformations of the social, cultural, or economic systems we have built over the past 200 years. We need to change how we eat,

move, consume, dress, produce goods, transport them, and how we relate to the environment. In this context, working with the SDGs in the classroom is a very enriching but complex process. Here are some tips on how to approach the teaching of SDG7.

Local context

Your students might experience energy scarcity or live in a village where a large solar plant is planned but faces community rejection. Or you might teach in a country with very few sunny days, no significant wind, or limited access to installation resources.

Understanding and talking about local realities will help students appreciate the importance of SDG 7 and see its relevance to their lives.

Classroom

When teaching more technical SDGs like SDG7, some teachers feel they don't have the knowledge or resources.

- The following background chapter, along with the pre-unit videos, readings, and additional training materials, provides both basic and advanced resources for gaining a comprehensive understanding of SDG7.
- Integration of SDG 7 can be done across almost all subjects, such as science, geography, maths, social studies, economics, and even art or history.

Challenges

Students may come from diverse backgrounds—some might have a deeper understanding of energy issues, while others may not be familiar with these concepts.

- The guide is structured in a color-coded system to show more basic and advanced information and activities. Choose what best suits your class.
- Group discussions can give you a sense of the different types of background and knowledge your students have in regards to SDG7.

Dynamics

It is important to manage classroom dynamics when discussing SDG7, which can sometimes include controversial topics.

Encourage a respectful, open environment where students feel comfortable sharing diverse opinions. Pay special attention to gender, cultural, and ethno-religious dynamics, among others, when discussing these topics with your students.



Connect with Us

Email: globalschools@unsdsn.org Facebook: Global Schools Program Instagram: @globalschoolsprogram X (formerly Twitter): @SDGsinSchools LinkedIn: Global Schools Program

New York Office

475 Riverside Dr. Suite 530 New York, NY 10115 USA +1 (212) 870-3920

Paris Office

19 rue Bergère 75009 Paris France +33 (0) 1 84 86 06 60

Kuala Lumpur Office

Sunway University Sunway City Kuala Lumpur 5 Jalan Universiti Selangor 47500 Malaysia +60 (3) 7491-8622