# Youth Leading Green Energy Transition

## Digital Booklet

### An useful resource for youth workers, youth leaders and teachers

**YLGET** Youth Leading Green Energy Transition

Asociatia Edulifelong

SAYEG

Младежки Международен център

Co-funded by the European Union

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# About the Youth Leading Green Energy Transition Project

**Hello and welcome to the YLGET project!**

We have developed this booklet as a resource collection designed to provide information, advice, and guidelines. Our aim is to assist you and your young people in understanding the transition to green energy. It will also support you in conducting workshops, raising awareness, and planning action projects.

The YLGET project is a youth-focused project coordinated by Asociația Edulifelong and implemented in collaboration with Sayeg-Der and IYCC. This project has recieved funding from the Erasmus+ programme In the Field of Youth Education. This initiative is led by YLGET consortium with local partner organisations – such as various schools from our cities, power plants that produce green energy etc.

The aim of the YLGET project is to empower youth through energy education, personal development, and entrepreneurship, fostering a generation of informed, responsible, and proactive individuals.

**Become a Green Energy Transition Ambassador!**

The YLGET – Youth Leading Green Energy Transition Youth Workers Booklet  is a fantastic opportunity for youth workers, youth leaders and teachers  to become inspirational leaders and advocates in the areas of Green Energy transition and Climate Action. You'll learn how to effectively communicate the importance of transitioning to sustainable energy sources, engage others in impactful projects, and inspire the next generation to take action.

This booklet provides comprehensive guidance on various topics, including understanding the intricacies of green energy, exploring innovative solutions, and implementing action projects tailored to your local context. Whether you're just starting your journey or you're an experienced facilitator, the YLGET project will support your growth and broaden your impact.

You will be able to learn how to implement a series of workshops on climate change awareness, renewable energy technologies, and sustainable practices. Additionally, skills-focused training sessions will include, but are not limited to, STEM education, advocacy and leadership, community engagement, and campaigning. These sessions are designed to equip you with the tools necessary to lead effectively in your community, inspire others, and create meaningful change in the transition towards a more sustainable future.

# The YLGET consortium

Meet the project partners!

**SAYEG-DER**, founded by volunteer educators and entrepreneurs in Istanbul Turkiye, aims to equip new generations with 21st-century skills and foster positive attitudes towards education, science, art, and technology. The organization promotes sustainable development goals through initiatives focused on quality education, environmental protection (aligned with the European Green Deal), financial education to combat poverty, and gender equality. To achieve its objectives, SAYEG-DER plans to implement national and international educational projects and organize various activities such as meetings, workshops, training courses, seminars, and youth exchanges.

**Asociatia Edulifelong** is a Târgu Jiu, Romania-based NGO focused on promoting lifelong learning and social inclusion. It provides educational programs and services to individuals facing social and economic barriers, covering areas like education, social work, and community development. The organization offers training courses, workshops, mentorship, and counseling to support personal and professional growth. Collaborating with local businesses, schools, and community organizations ensures that their services meet the needs of those they serve, fostering empowerment and social inclusion.

**IYCC** is a Municipal Enterprise in Burgas, Bulgaria, formed in May 2024, uniting the Youth Cultural Centre, one of the oldest institutions in Burgas dedicated to youth development and the International Youth Centre.
With 21 employees, including 9 youth workers, it focuses on youth and volunteer initiatives, cultural personal growth, and enhancing youth work across regional, national, and European levels. Its main goal is to create a proactive and socially engaged community for young people aged 15 to 29.

# Climate Ambassadors' Dictionary

**CLIMATE ACTION**

**Climate action** involves intensified efforts to lower greenhouse gas emissions while enhancing resilience and our ability to adapt to the effects of climate change.
**Example:** A practical illustration of this is when the government establishes a public transport corridor connecting two towns, which effectively decreases the reliance on private vehicles.

**CLIMATE JUSTICE**

**Climate Justice** refers to the acknowledgment of climate change as both an ethical and political issue, rather than merely an environmental or physical one. This concept highlights the inequalities created by our existing system, where certain countries bear more responsibility than others. Advocates for Climate Justice assert that overcoming environmental challenges will necessitate collective action and a reevaluation of the current system.

**CLIMATE REFUGEE**

Someone who is forced to leave their home country or area because climate change has made it impossible for them to continue to live or work there.
*Example: A family living on a small island is displaced due to rising sea levels and increased storm frequency, which have made their once thriving community uninhabitable. They are forced to relocate to the mainland, seeking safety and stability, while leaving behind their ancestral home and way of life. This phenomenon highlights the urgent need for global action and support for those affected by climate-induced displacement.*

**CLIMATE RESILIENCE**

The ability to manage the adverse effects of climate change while minimizing harm to both people and the environment, and simultaneously leveraging any beneficial opportunities.
Example: Arid communities use rainwater harvesting systems to capture and store water, ensuring a reliable supply during dry periods. This approach combines traditional knowledge with modern technology, adapting to changing rainfall patterns and enhancing community resilience against drought.

**EMISSIONS**

Gases or particles emitted into the atmosphere can lead to global warming and deteriorate air quality.
Example: Vehicles emit harmful gases (emissions) like carbon monoxide into our environment.

**ENERGY EFFICIENCY**

Utilizing less energy to achieve equivalent results is a key principle in sustainability. For instance, many eco-homes incorporate specialized features that enhance their energy efficiency.
A notable example is passive solar home design, which leverages the local climate and surrounding environment to facilitate heating during winter and cooling during summer.

**GREEN ENERGY**

**Green Energy** refers to renewable energy sources that are both environmentally friendly and sustainable, contributing to reduced carbon emissions and a healthier planet. These sources include solar, wind, hydroelectric, and geothermal energy, each harnessing natural processes to generate power without depleting resources or causing harm to ecosystems. For example, solar panels convert sunlight into electricity, while wind turbines use the kinetic energy of the wind to produce power. By investing in green energy, we not only reduce our reliance on fossil fuels but also foster innovation and create new economic opportunities, paving the way for a cleaner and more resilient future.

**JUST TRANSITION**

**A Just Transition** ensures that all communities can secure their futures and livelihoods while moving toward a greener, more sustainable economy. While some individuals may lose their jobs, others may struggle to adapt without financial assistance. It is crucial that we make this transition swiftly to avoid passing on the challenges we create today to future generations. Our commitment to a Just Transition aims to ensure that no one is left behind.

# What is a Just transition?

A Just Transition refers to a framework for a fair and equitable shift towards a sustainable economy that not only addresses environmental concerns but also considers the social implications for workers and communities. It aims to ensure that as we move away from carbon-intensive industries and adopt greener technologies, no one is left behind. This involves creating new opportunities for employment, providing training and education for workers to transition into new roles, and supporting communities that might be disproportionately affected by these changes. The concept emphasizes the importance of inclusivity, social justice, and economic resilience in the pursuit of a greener future.

## Can we use EU's approach as best practice for a just transition?

The European Union has indeed been at the forefront of implementing strategies for a Just Transition and can serve as a valuable model for best practices. The EU's approach is comprehensive, encompassing policies that prioritize social equity alongside environmental goals. For instance, the EU Just Transition Mechanism is designed to provide financial support and technical assistance to regions and industries that are most affected by the transition to a low-carbon economy. This includes investments in renewable energy, energy efficiency, and sustainable development projects, as well as reskilling and upskilling programs for workers.
One of the significant strengths of the EU approach is its recognition of the diverse challenges faced by different regions. By tailoring strategies to the specific needs and circumstances of each area, the EU ensures that the transition is not only effective but also equitable. This localized focus helps address regional disparities and promotes cohesion within the Union.

# Case study

## Romania

Romania is a country in Southeastern Europe, known for its rich history, diverse culture, and beautiful landscapes. From the majestic Carpathian Mountains to the serene Black Sea coastline, Romania offers a unique blend of natural beauty and architectural marvels, such as the iconic Bran Castle. Despite these attractions, Romania grapples with significant socio-economic challenges, including energy poverty, which affects a considerable portion of its population. Addressing this issue is crucial for enhancing the quality of life and ensuring sustainable development across the country.

**Romania & Coal heritage:** Romania is home to one of the largest .coal reserves in Europe, with a long-standing history of coal mining that dates back to the 19th century. This coal heritage has played a significant role in shaping the country's industrial development and energy landscape. However, reliance on coal has also contributed to environmental challenges and energy poverty issues, as many regions dependent on coal mining have struggled economically with the global shift towards cleaner energy sources.

In recent years, Romania has been working to transition from its coal-dependent past to a more sustainable and diversified energy future. This involves investing in renewable energy sources such as wind, solar, and hydropower, which have the potential to not only reduce carbon emissions but also provide cleaner, more affordable energy to its citizens. The transition is crucial for addressing energy poverty, as it can lead to more efficient energy systems and lower costs for consumers, ultimately improving the quality of life for those most affected by energy poverty.

Efforts to modernize the energy sector also include initiatives to improve energy efficiency in residential and public buildings, which can significantly reduce energy consumption and costs.

**Some approaches to tackling energy poverty include:**

- Income supports and financial assistance.
- Price regulation / consumer protection to control energy costs.

# Case study - Energy Poverty in Romania

**What is energy poverty?** When a household is unable to maintain adequate level of warmth, lighting, and other essential energy services at an affordable cost, it is said to be experiencing energy poverty. This issue is more than just an economic challenge; it has significant health, social, and environmental implications. Households facing energy poverty often struggle to keep their homes warm in winter or cool in summer, which can lead to health problems such as respiratory illnesses or heat-related conditions. Socially, it can lead to isolation and a lower quality of life, as individuals may avoid inviting guests over due to discomfort or embarrassment. Environmentally, energy poverty can drive reliance on inefficient and polluting energy sources, thus contributing to higher carbon emissions. Addressing energy poverty requires a holistic approach that combines social welfare policies, energy efficiency improvements, and sustainable energy sources to ensure that all individuals can live comfortably and contribute to a greener future.

**Who is affected the most?**
Energy poverty significantly impacts certain groups more than others. The populations most frequently recognized as vulnerable include low-income households, especially larger families, single parents, elderly individuals, children, and people with disabilities. Moreover, migrant and ethnic minority communities face additional challenges. In Romania, for instance, members of the Traveller and Roma communities often live in substandard housing, which negatively affects their health, well-being, and social inclusion.

# Case study

## Bulgaria

Bulgaria is a country in Southeastern Europe known for its rich natural heritage, diverse landscapes, and deep connection between people and nature. From the Black Sea coast to the Balkan Mountains and the unique Strandzha region, Bulgaria combines cultural traditions with valuable ecosystems. Today, the country is increasingly exploring how renewable energy and sustainable development can support both local communities and environmental protection, especially in regions facing demographic and economic challenges.

**Bulgaria & Green Energy Transition:** The country is highly dependent on coal-based energy, and the closure of coal-fired power plants leads to job losses and social tension. At the same time, new photovoltaic parks often face public opposition, as they affect agricultural land and natural areas, creating a conflict between the energy transition and nature conservation.

As part of its transition toward a more sustainable future, Bulgaria is gradually expanding the use of renewable energy sources such as solar power. This transition is particularly important for smaller towns and rural areas, where green energy can support local development, create jobs, and reduce dependence on centralized energy systems. Engaging young people in this process is essential, as they will shape future energy choices and community development.

## Case study - Construction of Photovoltaic Parks on Reclaimed Landfills – a Sustainable Solution for the Green Energy Transition

**Location: Burgas region, Bulgaria (reclaimed landfills converted into photovoltaic parks)**

This case study presents a good practice for the development of renewable energy through the construction of photovoltaic parks on reclaimed landfills as a sustainable and socially acceptable solution for the green energy transition in Bulgaria.

The country is highly dependent on coal-based energy, and the closure of coal-fired power plants leads to job losses and social tension. At the same time, new photovoltaic parks often face public opposition, as they affect agricultural land and natural areas, creating a conflict between the energy transition and nature conservation.

The construction of solar parks on reclaimed landfills has emerged as an effective compromise that utilizes degraded land without impacting natural areas, while simultaneously contributing to clean energy production and the creation of new "green" jobs.

As part of the initiative, young people visited such sites and learned about landfill reclamation processes, the construction of photovoltaic installations, and the benefits of reusing degraded land. The initiative has a strong educational impact and provides a positive example for future generations, demonstrating that the green energy transition can be achieved through balanced and sustainable solutions in the interest of both society and nature.

# Case study

## Turkiye

Türkiye is a dynamic country bridging Europe and Asia, known for its rich cultural heritage, strategic location, and vibrant young population. From the snowy peaks of Eastern Anatolia to the sun-soaked Mediterranean coast, Türkiye's diverse geography also shapes its energy needs and climate vulnerabilities. As the effects of climate change intensify—heatwaves, droughts, floods—Türkiye faces the crucial task of ensuring safe, clean, and affordable energy while pursuing economic growth.

With rising energy demand and dependence on imported fossil fuels, Türkiye has been accelerating its transition toward a greener, more resilient energy system. This transition is not only an environmental necessity but also a social and economic priority, especially for reducing energy poverty and strengthening national competitiveness.

Historically, Türkiye has relied heavily on imported fossil fuels—particularly natural gas and coal—to meet its energy needs. This dependency has made the country vulnerable to price fluctuations and geopolitical risks, while also contributing to high greenhouse gas emissions.

In the last decade, however, Türkiye has made remarkable progress in diversifying its energy mix. The country is now one of Europe's fastest-growing renewable energy markets.

Key Renewable Energy Strengths of Türkiye:

- Wind Energy: Strong potential, especially in the Aegean and Marmara regions. Türkiye ranks among the leading wind energy producers in Europe.
- Solar Energy: With over 2,700 hours of sunshine per year, Türkiye has rapidly expanded its solar capacity, particularly in Central Anatolia and the Mediterranean.
- Hydropower: Türkiye's rivers, especially in the Eastern Black Sea region, make hydropower a traditional backbone of renewable production.
- Geothermal Energy: Türkiye is the 4th largest geothermal energy producer in the world, benefiting from volcanic regions in the west.

The transition to renewable energy is vital not only for climate action but also for addressing inequalities in access to affordable, reliable energy services.

**Türkiye stands at a critical moment. Its ambitious Net-Zero 2053 target, alignment with the European Green Deal, growing renewable energy capacity, and modernization of industrial practices demonstrate clear commitment to a more sustainable future.**

## Case study - An Emerging Social Challenge

What is energy poverty?
Energy poverty occurs when households cannot access adequate heating, cooling, lighting, or other essential energy services at an affordable cost. This problem affects physical comfort, economic stability, and overall well-being.

While Türkiye has made progress in social welfare policies and energy infrastructure, energy poverty remains a reality for certain segments of the population—particularly in:

- Regions with long, harsh winters (Eastern Anatolia, Central Anatolia)
- Rural areas with underdeveloped housing insulation
- Low-income urban neighborhoods affected by rising utility costs

Energy poverty in Türkiye is often connected to:

- Poor building insulation
- Dependence on inefficient heating methods
- Increasing electricity and natural gas prices
- Limited knowledge about energy-efficient practices

**Who is affected the most?**
Just like in the rest of Europe, several vulnerable groups experience energy poverty at higher rates:

- Low-income households
- Elderly individuals living alone
- Large families with high consumption needs
- People with disabilities or chronic health conditions
- Migrant or socially marginalized communities
- Residents of older buildings with very low insulation (especially illegal housing areas)

The combination of outdated housing, insufficient insulation, and rising energy costs creates a cycle of financial strain and health risks—such as respiratory illnesses due to cold homes or heat-related problems in poorly ventilated buildings.

# The first station in Romania for molecular disintegration of garbage

**What is the molecular disintegration process?**
The molecular disintegration process is a kind of dry distillation, at high temperatures, of anything containing organic material, from which a gas is obtained that is decomposed and remains clean. Synthesis gas is a very important raw material for the chemical and fertilizer industries. The process of producing energy from garbage, through this dry distillation, is fully automated and generates zero pollution. The waste is brought to the station with a backhoe and passes through a shredder, a shredding system that brings it to a fine granulation. At this stage, materials that cannot be used for energy are eliminated, and the rest is brought to the optimal humidity for processing.

**Photo source: Actual de Cluj**

**What happens next?**

Then, the garbage is introduced into two special tanks, where, through a molecular disintegration process, it is transformed into gas. This gas is used to power the energy generators, which send the current produced to the transformation station. From there, the energy enters the national electricity system, becoming part of the grid that supplies homes and businesses in Romania.
With a capacity of 60,000 tons, the new station can produce 56,000 megawatts per year, about as much as a city the size of Câmpia Turzii consume
The plan is for the current station to be expanded with three more reactors, through another investment, so that waste from all over Transylvania can be processed in Cluj..

# The Anaerobic Treatment Plant in Burgas

The anaerobic treatment plant in Burgas is an important example of sustainable waste management and green transition in Bulgaria. The facility has a capacity to process over 30,000 tonnes of biodegradable waste per year, preventing these materials from being landfilled and reducing pressure on the regional landfill used by nine municipalities.

The plant helps reduce methane emissions, a powerful greenhouse gas, by treating organic waste in a controlled anaerobic process.

**What is the anaerobic process?**

Anaerobic treatment means that waste is processed without the presence of oxygen, in conditions similar to those found in nature, such as in wetlands or underground environments.

This approach prevents the uncontrolled release of gases into the atmosphere. The installation serves the municipalities of Burgas, Pomorie, and Nessebar and is the first in Bulgaria operating with dry anaerobic digestion, one of the most efficient and environmentally friendly waste treatment technologies.

**Photo source: https://chernomorie-bg.com/**

**What happens next?**

Using this natural process, special bacteria break down organic waste in sealed reactors, transforming it into valuable resources. As a result, the process produces compost that can be used to improve soil quality, and biogas, a renewable energy source mainly composed of methane.

The biogas is captured and used to generate renewable energy, with an expected output of around 5 million kWh of electricity per year, contributing to climate protection and the transition to clean energy.

The facility includes eight bioreactors, a biogas and gas storage system, and a composting installation with six tunnels, all equipped with modern process control systems. The project also supports separate collection of biodegradable waste through dedicated infrastructure and containers across the three municipalities.

Built under Project No. BG16M1OP002-2.004-0002, the installation is funded by the Operational Programme "Environment 2014-2020" with support from the European Regional Development Fund.

This plant shows how waste can be transformed into energy and resources, supporting a cleaner environment and a greener future for the next generation.

# Landfill Gas Energy station in Istanbul

Istanbul, one of the world's most populated metropolitan cities, generates thousands of tons of household waste every day. As this waste breaks down in landfills, it produces gases that can damage the environment—especially methane, a potent greenhouse gas. To protect the climate and reduce Türkiye's dependence on imported energy, Istanbul transforms this waste gas into clean, renewable electricity through advanced landfill gas-to-energy systems operated by İSTAÇ.

**What is the landfill gas-to-energy process?**
Landfill gas forms naturally as mixed municipal waste decomposes underground. This gas contains methane, a greenhouse gas 28 times more powerful than carbon dioxide in contributing to global warming. Instead of allowing it to escape into the atmosphere, İSTAÇ captures this gas through a controlled network of wells and underground pipes installed across the city's landfill sites.
Once collected, the gas is cleaned, dried, and made suitable for use as fuel. It is then burned in gas engines to generate electricity. This transformation not only prevents harmful emissions but also creates an important renewable energy source for the city. Through this method, İSTAÇ turns an environmental risk into a valuable public benefit.

**Photo source: ISTAÇ catalogue**

**What happens next?**

After the landfill gas is purified, it is transported to high-capacity engines in Istanbul's three major landfill energy plants:
- Silivri-Seymen Landfill Gas Energy Facility
- Odayeri Landfill Gas Energy Facility
- Şile-Kömürcüoda Landfill Gas Energy Facility

These facilities operate with a combined installed capacity of 109 MW. In 2023 alone, they produced 700,000 MWh of electricity—enough to meet the annual energy needs of 1,355,000 people. Through this process, Istanbul prevented approximately 3.5 million tons of greenhouse gas emissions, an impact comparable to planting 2.2 million trees or removing 2.3 million vehicles from the roads.
This sustainable system not only provides clean energy but also contributes directly to Türkiye's efforts to build a low-carbon economy and achieve its long-term climate goals.

# Best practices found

## Cooked in the Solar Oven
## Asociația Energia Inteligentă (AEI) (Romania)

**Age level:** 13-18 years old
**Subjects:** Science, Technology, Engineering, Mathematics (STEM), Environmental Education, Green skills Curriculum Category: Climate Science, Sustainable Lifestyles, Resilience-Building
**Learning objectives:** To help students understand how solar energy can be harnessed as a clean, renewable resource, develop technical and creative skills by designing solar cookers, and increase awareness of sustainable energy choices in daily life.

**Resources:**
- Basic materials for constructing solar ovens
- Outdoor workspace with direct sunlight
- Recipe or cooking task defined by a chef
- Jury evaluation sheets
- Safety equipment (gloves, aprons)



### Description:
In this interactive workshop, youths build functional solar ovens using simple materials and test them in a friendly competition. Working in small teams, students design, construct, and present their solar cooker, then prepare a dish using only solar energy based on a theme provided by a professional chef. The activity transforms a science lesson into a hands-on engineering challenge that demonstrates the power and practicality of renewable energy.
The workshop is part of a programme "Cooked in the Solar Oven", developed by Asociația Energia Inteligentă to raise awareness about climate neutrality, efficient energy use, and the transition to sustainable technologies.

### Key Benefits:
Engages students with exciting, practical experiments that make green energy concepts easy to understand.
Connects classroom science with real environmental challenges and the transition toward climate neutrality.
Students design their own solar cooker, encouraging problem-solving, experimentation, and originality.
Integrates engineering, physics, environmental science, teamwork, and even culinary arts.
Helps youths reflect on energy consumption and the need to adopt cleaner alternatives in daily life.

### Implementation Tips:
Form teams of 4-5 students to promote collaboration and balanced task-sharing.
Provide simple, accessible materials (cardboard, aluminum foil, glass/plastic covers, insulation).
Allow time for testing and adjusting the design before the final competition.
Invite a chef or local professional to set the cooking challenge for extra motivation and real-world context.
Ensure sunny outdoor space and safe handling procedures.
Include a debrief discussion about renewable energy, energy scarcity, and the importance of sustainable lifestyles.

### Impact Example:
Students reported an increased understanding of how solar energy works and expressed motivation to explore more renewable technologies. Teachers observed improved teamwork, problem-solving, and technical creativity. The competition setting made sustainability topics memorable and engaging, inspiring youths to reflect on how daily habits can support climate goals.
**Links to where more info may be found:**
Asociația Energia Inteligentă (AEI) – project organiser
https://asociatiaenergiainteligenta.ro
Contact for programme coordination: energie@asociatiaenergiainteligenta.ro

# Best practices found

## Short Film in Learning

**Age level: 6+ years old**
**Subjects: Ecological systems, Climate literacy, Sustainable resource management, Civic engagement**
**Green skills Curriculum Category: Climate Science, Sustainable Lifestyles, Resilience-Building**
**Learning objectives:**
Enhance understanding of complex concepts through visual storytelling.
Stimulate critical thinking and reflection by connecting narratives to real-world issues.
Encourage discussion and dialogue among learners about social, environmental, or scientific topics.
Develop empathy and emotional intelligence by exposing learners to diverse perspectives and experiences.
Motivate engagement and participation by making learning more dynamic and relatable.

**Resources:**
- Large TV or Smart Board
- Chairs or other furniture

**Description:**
Short film is a method that facilitates learning on a pre-defined topic or subject. Besides the film itself, the methodology includes several tools aimed at: preparing participants, introducing the topic, engaging them in active discussion, and closing the learning process through reflection and summary.

**Key Benefits:**
Improved comprehension – learners retain information better when concepts are visualized.
Engaged learning – films capture attention and make abstract topics concrete.
Enhanced discussion and reflection – shared viewing sparks critical debates and collaborative thinking.
Development of emotional intelligence – exposure to stories encourages empathy and social awareness.
Bridging theory and practice – learners connect classroom knowledge to real-world examples.

**Implementation Tips:**
Introductory Activity – Brainstorming - 15 min
To assess the participants' knowledge and introduce the topic, we begin with a brainstorming session. A question is posed and participants are invited to respond quickly without overthinking, emphasizing that there are no wrong answers. All responses are written on the board/flipchart. Then, the facilitator groups the answers (if possible), the group discusses them, and the facilitator summarizes the outcome.
Main Activity – Film and Discussion -  30 min
The facilitator explains that a short film will now be shown that answers the initial question in a fun and simple way. Participants are invited to join in a discussion after the film to reflect on its key moments. Before starting, the facilitator should ensure that all participants understand English (if subtitles are not in their language) or provide subtitles in advance.
After the film, the facilitator plays a key role in guiding the discussion. Participants are encouraged to share their impressions and opinions, and the facilitator ensures the space remains safe and respectful.
Guiding questions should include: "What did we just watch?" "What stood out most to you?" "Was there anything in the film that provoked an emotional reaction? What kind?"
Reflection - 15 min
This is the most important part of any youth learning activity, as it allows the experience to surface and be transformed into knowledge. Reflection is held in a circle and aims to help participants connect the experience with what they learned. Questions:
"What emotions/thoughts did today's activity evoke in you?"
"What happened today, what did we do?"
"How can we use what we learned and experienced today in our personal lives?"

**Impact Example:**
A short film on water conservation sparks local community projects to reduce water waste. A film illustrating climate systems helps students design local sustainability initiatives.

# Best practices found

## Explore the Black Sea
## Green Balkans NGO (Bulgaria)

**Age level: 13-18 years old**
**Subjects: Marine and Environmental Science / Ecology**
**Green skills Curriculum Category: Biodiversity Awareness & Sustainable Environmental Management**
**Learning objectives:** To provide basic information about the Black Sea ecosystem and raise awareness of its biodiversity and conservation status in an interactive and team-based learning environment.

**Resources:**
- Map of the Black Sea: A vertical cross-section of the sea basin so that species cards can be placed in their respective natural zones.
- Species cards: Each features an image and info on the species' characteristics, habitat, role in the ecosystem, etc.
- Presentation: General information about the Black Sea and details about the species.
- Sticky tack: To attach species cards to the map.

**Description:**
The interactive map is a tool that can be used in many ways, with the main idea being to present specific terminology and connect it to a physical surface or concept. Here, we present the tool through the theme of marine education, introducing participants to the Black Sea and its inhabitants at different depths.

**Key Benefits:**
New knowledge
Teamwork
Observation
Communication
Awareness / responsibility
Engagement
Curiosity

**Implementation Tips:**
**Prepare materials in advance**
Short introduction of the session. (5 minutes) Use a clear introduction to explain marine zones and species roles.
Participants are divided into four groups. Each group receives a map and 8 species cards with information and pictures.
Groups place the species cards in the correct marine zones (coastal, open sea, etc.) (15 minutes) Encourage discussion and negotiation when placing species cards.
Each group presents what they learned about the species to the others. (20 minutes)
A short presentation follows to reinforce the learning. (15 minutes)
At the end, participants are invited to share their impressions, answering questions like: "What did you think of this session?" and "What was most interesting for you?" (5 minutes)

**Impact Example:**
Young people can identify key Black Sea species and explain their ecological roles.
Youth organize awareness campaigns about local marine conservation.
Participants adopt more environmentally responsible habits, e.g., reducing plastic use near waterways.
Schools or youth groups design local "marine" initiatives, citizen science monitoring or starting/participating in youth science club.

**Links to where more info may be found:**
Session adapted from the Green Balkans manual "Education Program for Marine and Environmental Literacy," developed under project BSB00432 "Environmental Education and Marine Literacy in the Black Sea Basin," co-funded by the EU via Interreg NEXT Black Sea Basin Programme 2021-2027.
https://blackseawatch.org/Pdfs/SPECIES%20CATALOG%20-%20EN.pdf

# FROM AWARENESS TO ACTION

## Using the Black Sea Best Practice in YLGET

The Explore the Black Sea activity helps young people understand marine biodiversity, ecosystem balance, and human–nature interdependence. To fully align this best practice with the Youth Leading Green Energy Transition (YLGET) objectives, it can be used as a starting point for civic awareness and youth-led action.

**Why This Matters in YLGET?**

Marine ecosystems, such as the Black Sea, are significantly impacted by factors including fossil fuel extraction, pollution stemming from energy and industrial projects, and climate change driven by our energy choices.
Understanding biodiversity is therefore not an end in itself, but a foundation for responsible decision-making and civic engagement.

**How to Use This Best Practice for Civic Action**

After completing the Explore the Black Sea activity and understanding how fragile and interconnected the Black Sea ecosystem is, young people are invited to reflect on current decisions that directly affect this ecosystem — and decide whether to act.

Invite participants to discuss:

- Which species or zones seem most vulnerable?
- What human activities could affect the Black Sea ecosystem?
- Who usually makes decisions about energy and environmental projects?

This helps young people connect ecological knowledge with real-world responsibility.

**Linking to Energy Transition**

The Black Sea ecosystem is influenced by long-term energy choices, including fossil fuel extraction, renewable energy development, and climate policies. Discussing these links allows participants to better understand the concept of a just and sustainable energy transition, one of the core themes of YLGET.

**From Knowledge to Voice:** Young people explore ways citizens can express concern or influence decisions, such as:

- youth awareness campaigns
- petitions and open letters
- public discussions or debates
- creative actions (art, storytelling, digital content)
- dialogue with local authorities or institutions

A real-life example (e.g. a public petition related to the Black Sea) may be presented as an illustration, not as an obligation.

**Implementation Tips**: Each group chooses one way young people could act to protect the Black Sea. Participants work in small groups to answer:

- What message would young people like to send?
- Who should hear it?
- What is one realistic action we could take?

**Closure: "My Voice, My Choice"**:

Ask participants to complete one sentence:

"After today, I feel that I can protect the Black Sea by…"

# Best practices found

## From Peel to Power: Climate-Smart Menu Challenge ( Türkiye)

**Age level: 13-18 years old**
**Subjects: Sustainable Lifestyles, Environmental Education, Circular Economy, Green Energy Awareness**
**Green skills Curriculum Category: Sustainable Food Systems, Resource Efficiency, Climate Action, Green Citizenship**

**Learning objectives:** To help students understand the connection between food waste, climate change, and green energy production; develop climate-smart culinary practices; and encourage creativity in designing low-waste, sustainable menus inspired by Türkiye's circular food and energy systems.

**Resources:**
- Kitchen or food preparation space (or simulated setup)
- Basic food ingredients and preparation tools
- Containers for sorting food waste
- Climate-Smart Menu Redesign template (printed or digital)
- Flipchart paper or digital presentation tools
- Informational materials on İSTAÇ biomethanization and composting systems

**Description:**
To help students understand the connection between food waste, climate change, and green energy production; develop climate-smart culinary practices; and encourage creativity in designing low-waste, sustainable menus inspired by Türkiye's circular food and energy systems. The activity empowers youth to recognise their role in the green transition by making informed, responsible choices in professional kitchens.

**Key Benefits:**
the real environmental impact of food waste through a culinary lens.
Supports circular econom
Develops practical kitchen skills such as portion planning, precision cutting, and ingredient utilisationy thinking by showing how organic waste becomes energy or compost
Strengthens environmental responsibility in future professionals working in restaurants, hotels, and catering.
Boosts teamwork, communication, and presentation skills.

**Implementation Tips:**
Use waste generated during the cooking lesson or waste coming from home to ensure authenticity and relevance.
Provide a short introduction on Istanbul's biomethanization plants, which turn organic waste into renewable energy and compost.
Encourage students to think about flavour, nutrition, cost efficiency, and sustainability when redesigning menu items.
Display a few examples of "upcycled food" dishes (e.g., vegetable-top pesto, stale-bread croutons, citrus-peel marmalade).
Give each group a simple template to document:
their redesigned recipe,
waste reduction strategies,
and ideas for managing unavoidable waste.
End with a short reflection circle:

- "How can young chefs shape the future of sustainable gastronomy in Türkiye?"

**Impact Example:**
Young people can identify different types of food waste and explain their environmental and energy-related impacts.
Youth demonstrate increased awareness of how organic waste can be transformed into renewable energy and compost through local waste-to-energy systems.
Participants adopt more environmentally responsible habits, such as reducing food waste, improving portion planning, and reusing ingredients in daily life.
Youth groups design and implement small-scale sustainability actions, such as creating climate-smart menus, zero-waste kitchen rules, or awareness activities promoting responsible food consumption and circular economy practices.

**Links to template**
https://drive.google.com/file/d/1ZtoXzFAPrExHzHLeaZ5k3N6njKYUmEJl/view?usp=sharing
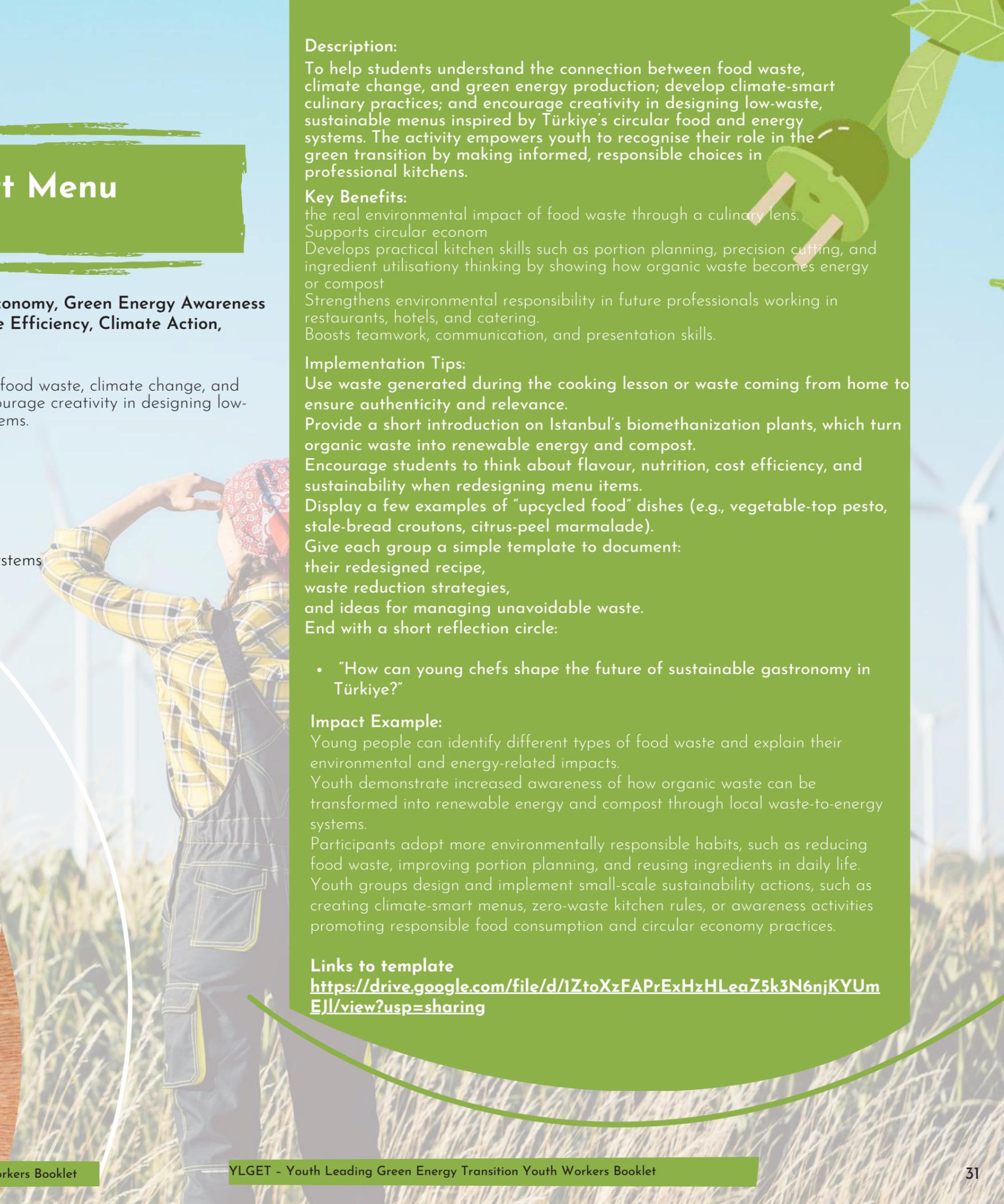
## Energizers Suggestions

## POWER UP THE ENERGY!

**Learning Objective:**
Identify the super skills for top-notch communication.

**Time:** 10 minutes

**What to do:** Get everyone to form a circle, leaving enough room to flap their wings like they're about to take flight!

1. The starter is like a human dynamo, brimming with energy! They pass it to a neighbor by pointing both arms their way and unleashing a mighty "haiYah!"
2. The next person keeps the energy flowing, echoing the same action and shout. This lively energy ping-pongs around the circle until everyone has joined the chorus.
3. Enter, the Backjack move! Want to flip the energy direction? Bend those arms like a champion and holler "Backjack!" The energy boomerangs back to the previous player, reversing its course.
4. Bounce that energy back and forth, echoing "haiYah" loud enough to wake the neighborhood!
5. Introducing the stealthy "Slish!" This maneuver lets you beam the energy to anyone in the circle. Slide your top hand over the bottom in a smooth motion towards your target, who catches and continues the electric game.
6. Now you're armed with "haiYah," "Backjack," and "Slish" in your energy arsenal.

The grand finale is "Mundango!" Rotate your fists like a disco ball and shout "Mundango!" Everyone scrambles to find a new spot in four seconds. The Mundango maestro then revs up the energy again with a booming "haiYah!" 8. Keep the game rolling until everyone's bouncing off the walls with energy!
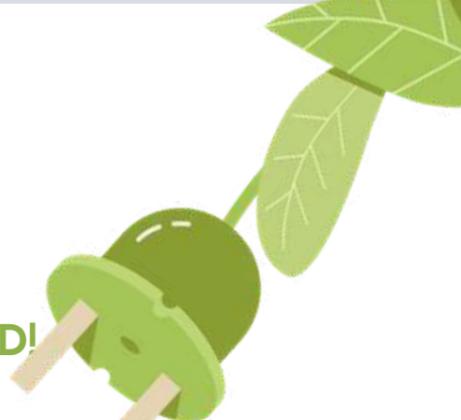
## FIFTEEN MINUTES TO HIGHER GROUND!

**Learning Objective:**
- To encourage empathy and perspective-taking through a climate-related scenario.
- To stimulate quick decision-making and prioritization under pressure.
- To open discussion on vulnerability, resilience, and essential needs.

**Time:** 10-15 minutes

**What to do:** Ask participants to close their eyes and imagine living in a village affected by severe drought for six months. Their family has survived with only the essentials and by growing groundnuts over the past year. Suddenly, the weather shifts dramatically—heavy rain begins to fall, causing rapid flash flooding. They have just 15 minutes to evacuate and can take only three essential items with them.

Participants individually choose their three items and explain why they selected them. Facilitate a short group discussion on similarities, differences, and what these choices reveal about personal values and survival priorities.

Encourage participants to think critically about the implications of their choices, considering factors such as safety, sustainability, and community support. After the discussion, introduce a twist: they must now imagine encountering another family who was unable to bring any items. How would they respond? What compromises or collaborations could emerge from this situation?

# ELEVATE THE VIBE!

## Energizers Suggestions

### SUSTAINABILITY BINGO

**Learning Objective:**
Build connections, spark conversations, and explore sustainability topics in a fun, non-formal way.

**Time:** 10-15 minutes

**What to do:** Hand out a Sustainability Bingo sheet to each participant. Each sheet contains 8 statements related to green living, climate action, or sustainable habits.

Now it's time to mix, mingle, and move!

Participants walk around the room, asking each other questions to see who matches the statements on their sheet. When they find someone who fits a statement, they mark an X in that box.

**The challenge?**
Be the first to complete a full row—horizontal or vertical—and shout "BINGO!"

**After the game:**
Bring everyone together for a short reflection:
- What did you learn about others?
- What surprised you the most?
- Did you hear any new ideas or habits you'd like to try yourself?

Sustainability Bingo combines movement, curiosity, and conversation. It's a great icebreaker that helps participants get to know each other while discovering new perspectives and practical ideas for a more sustainable lifestyle.

### FUTURE SNAPSHOT

**Learning Objective:**
Energize imagination and positive future thinking.

**Time:** 8-10 minutes

**What to do:** Participants walk freely around the room. The facilitator calls out prompts:
- "Show me a future city!"
- "Show me clean energy!"
- "Show me cooperation!"

Participants freeze into a statue that represents the prompt.Invite a few people to explain their pose.

Participants individually choose their three items and explain why they selected them. Facilitate a short group discussion on similarities, differences, and what these choices reveal about personal values and survival priorities.

### ENERGY SWITCH

**Learning Objective:**
Increase alertness, laughter, and group awareness.

**Time:** 5-10 minutes

**What to do:** Participants stand in a circle. One person starts by clapping once and making eye contact with someone across the circle. That person must immediately clap twice and pass the energy to someone else with eye contact.

Change the rules mid-game:
- Single clap = pass left
- Double clap = pass right
- Stomp = reverse direction

Mistakes are celebrated, not punished!
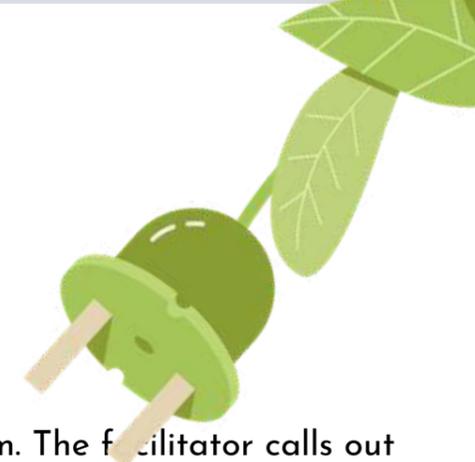
# LET'S BUILD THE FUTURE!

## Green Energy Youth Expo

**Age level:** 13-18 years old
**Duration:** 90-180 minutes
**Subjects:** STEM, Environmental Education, Renewable Energy, Civic Engagement, Innovation and Entrepreneurship
**Green skills Curriculum Category:** Sustainable Innovation, Renewable Energy Literacy, Green Technology Awareness
Concept: The Youth Expo is an interactive exhibition where young people present their projects, models and prototypes related to green energy, renewable sources and sustainable living. It showcases creativity, innovation, and practical applications of sustainable technologies – for example, projects such as an autonomous smart village, renewable energy models, robots, prototypes and an electric vehicle developed by students.
The expo format can easily be adapted to other themes.



**Learning objectives:**
To promote youth innovation and engagement in sustainability and green technology.
To develop communication, presentation and project-based learning skills.
To raise awareness about renewable energy and smart, sustainable solutions.
To encourage networking and peer learning among young people.

**Preparation:**
Invite student teams or youth groups to prepare and display their projects. Provide tables, power access, display boards for presentations or other materials. Arrange a large open space (indoor or outdoor) for stands and demonstrations.

**Description/What to do:**
Opening (10 min): Introduce the event, objectives and participants.
Exhibition Time (40-60 min): Each team presents its project (e.g., smart village model, solar prototypes, electric car, robotics, etc.) to visitors and peers.
Visitors can ask questions, test prototypes and interact with exhibitors.
Feedback and Reflection (15-20 min): Participants discuss what they learned, share impressions and reflect on the creativity and potential impact of the presented ideas.
Closing (optional): Certificates or recognition can be awarded for creativity, innovation or teamwork.

**Key Benefits:**
Innovation, Engagement, Knowledge, Communication, Teamwork, Inspiration

**Implementation Tips:**
Encourage interdisciplinary projects combining technology, art and science.
Allow participants to explain both the technical and social impact of their ideas.
Invite local stakeholders, teachers and professionals to interact with the youth teams. Provide informal discussion corners to promote peer-to-peer exchange.
Document the event (photos, short videos, interviews) for future dissemination.

**Questions for discussion:**
What inspired your project or prototype?
How does your idea contribute to a greener, more sustainable future?
What challenges did you face during development?
Which renewable energy technologies are most relevant for your community?
How could these projects be developed or upgraded?

# LET'S DECIDE EUROPE'S GREEN FUTURE!

## EU decision making- Role-play

**Age level:** 13-18 years old
**Duration:** 90-180 minutes
**Subjects:** Civic Education, Environmental Education, Climate Change, EU Studies
**Green skills Curriculum Category:** Climate Governance, Sustainable Transitions, Civic Engagement
**Concept:** The Model EU Parliament Role-play on Decarbonisation is an interactive simulation in which young people take on the roles of EU Member States and institutions to debate and vote on a fictional Decarbonisation and Heritage Directive. The directive aims to support the transition to clean energy while protecting jobs, communities and cultural identity in former mining regions. Through debate, alliances and compromise, participants experience the complexity of climate policymaking at European level and understand the balance between environmental ambition, social fairness and economic realities.

**Learning objectives:**
To increase understanding of EU decision-making and democratic processes.
To raise awareness about decarbonisation and just transition in former coal and mining regions.
To develop critical thinking, public speaking, negotiation and teamwork skills.
To empower youth to express opinions and engage constructively with different perspectives.

**Preparation:**
Assign roles: EU Member States, European Commission, European Parliament, and a Council President. Provide each group with a short role card outlining national priorities. Prepare a simplified directive proposal with 3-4 articles (emissions targets, funding, social measures, heritage protection). Arrange the room in a semi-circle or parliamentary setting.

**Description/What to do:**
Opening (10-25 min): Facilitator introduces the EU legislative process, the directive proposal and the rules of the role-play.
Preparation Phase (20-30 min): Youths read their role cards, discuss priorities and prepare arguments or amendments.
Debate & Negotiation (60-80 min): Each delegation presents its position. Participants debate, negotiate, form alliances and propose amendments.
Voting (10-15 min): Delegations vote on the directive. Results are announced and briefly discussed.
Reflection & Debrief (15-20 min): Group reflection on the process, challenges, compromises and real-life relevance.

**Key Benefits:** Democratic participation, Climate literacy, Empathy and perspective-taking, Communication skills,  Youth empowerment

**Implementation Tips:** Encourage respectful dialogue and active listening.
Adapt complexity based on age group.
Link the debate to local or national climate challenges.
Document the activity with photos or short reflections for dissemination.

**Questions for discussion:**
What arguments were most convincing and why?
Was it easy to reach a compromise?
What made it difficult?
How can decarbonisation be fair for workers and communities?
What role should young people play in climate decision-making?

**DIRECTIVE PROPOSAL**

**EU Decarbonisation and Heritage Directive**

Article 1: Carbon Reduction Targets
All EU member states shall reduce $CO_2$ emissions by 60% in former coal and mining regions by 2035 through the use of clean energy sources.
Article 2: Transition Funding
A total of €40 billion will be allocated to support this transition:
• 40% for green job creation and retraining
• 30% for preservation of local industrial heritage, museums, and cultural initiatives
• 30% for infrastructure and innovation in clean energy
Article 3: Community Involvement
All transition projects must include citizens' assemblies at the local level to ensure transparency, fairness, and cultural sensitivity.

# IMMERSIVE LEARNING FOR A GREEN FUTURE

## Energy Encyclopedia VR

**Age level:** 13-18 years old

**Duration:** 90-180 minutes

**Subjects:** STEM, Environmental Education, Physics, Renewable Energy, Climate Education

**Green skills Curriculum Category:** Renewable Energy Literacy, Green Technology Awareness, Digital Skills

**Concept:** Energy Encyclopedia VR is an interactive learning activity that uses Oculus VR goggles and the application "Energy Encyclopedia VR" to immerse young people in virtual 3D environments focused on renewable energy systems. Participants explore how photovoltaic panels, wind turbines and hydroelectric installations function, from energy generation to distribution. Placing students in realistic virtual scenarios transforms abstract scientific concepts into tangible experiences, enhancing comprehension and engagement with renewable energy technologies.

**Learning objectives:**

To help young people understand how renewable energy is produced and distributed.

To introduce key green technologies such as solar, wind and hydropower through immersive learning.

To improve energy efficiency awareness and its role in climate protection.

To increase motivation and engagement in learning scientific concepts related to sustainability.

**Preparation:**

Ensure Oculus VR headsets are fully charged and the Energy Encyclopedia VR app is installed.

Prepare a rotation schedule if headsets are limited. Set up a safe, open space for VR use.

Prepare guiding questions or a short worksheet for reflection.

**Description/What to do:**

Introduction (10-15 min): Facilitator introduces renewable energy sources, energy efficiency and the purpose of the VR activity.

VR Exploration (30-60 min): Participants use the VR goggles individually or in small groups to explore: Solar energy and photovoltaic panels, Wind energy and turbine operation Hydropower plants and water-based energy production, Energy efficiency solutions and climate impact

Group Discussion & Reflection (15-30 min): Participants share observations, ask questions and connect the VR experience to real-life energy use.

**Key Benefits:** Experiential learning , Increased motivation,  Better understanding of complex systems, Digital and green skills development, Curiosity and innovation

**Implementation Tips:**  Combine VR exploration with hands-on experiments or discussions. Encourage participants to compare virtual systems with real installations in their region. Adapt language and depth of explanation to the age group. Document reactions and learning outcomes for dissemination.

**Questions for discussion:**

Which renewable energy source impressed you the most and why?

How does energy efficiency help protect the climate?

What advantages do renewable technologies have compared to fossil fuels?

How could these technologies be applied in your community?

# Comic Book Creation

**Age level:** 10-18 years old
**Duration:** 90-150 minutes
**Subjects**: Environmental Education, Art, Language & Communication, Climate Education
**Green skills Curriculum Category:** Sustainability Awareness, Creative Communication, Civic Engagement
**Concept:** Comic Book – The Story of Renewable Energy is a creative, non-formal learning workshop that replaces traditional presentations with storytelling, drawing and imagination. Young people explore how clean energy works by creating their own comic characters and short illustrated stories set in a future powered by renewable energy.
Through narrative techniques, participants personify energy sources, transform abstract concepts into relatable stories, and emotionally connect with sustainability topics. The workshop empowers youth to imagine themselves as "heroes of change", contributing to a cleaner and fairer world.

**Learning objectives:**
To help young people understand renewable energy sources such as solar, wind and hydropower.
To make the concept of energy transition accessible through storytelling and visual expression.
To develop creativity, teamwork, communication and narrative skills.
To encourage youth to see themselves as active agents of change in their communities.

**Preparation**:
Prepare drawing materials: paper, markers, pencils, crayons or digital tablets. Create a short visual or verbal introduction to renewable energy types. Arrange tables for group work and creative collaboration. Optional: provide simple comic templates or story prompts.

**Description/What to do:**
Introduction & Inspiration (15-20 min): Facilitator introduces renewable energy sources and presents examples of comics or characters related to sustainability.
Character & Story Creation (40-60 min): Participants work individually or in small teams to:
Create a hero or character linked to renewable energy, Develop a short comic story about a clean-energy future, Illustrate key scenes and messages.
Sharing & Gallery Walk (20-30 min): Groups present their comics, explain their stories and reflect on the messages behind them.
Reflection (15-20 min): Facilitated discussion on energy transition, creativity and personal responsibility.

**Key Benefits:** Creativity, Emotional engagement, Better understanding of complex topics, Teamwork, Communication skills , Youth empowerment

**Implementation Tips:**
Focus on ideas and messages, not artistic perfection.
Encourage collaboration and peer feedback.
Adapt complexity depending on age group.
Display comics publicly or share them online to amplify youth voices.

**Questions for discussion:**
Which renewable energy source did your story focus on and why?
How does storytelling help explain complex ideas?
What role do young people play in the energy transition?
How can your character inspire change in real life?

# THINK • ARGUE • DECIDE BASED ON EVIDENCE

## Debate on Green Energy Transition

**Age level:** 15-18 years old
**Duration:** 90-150 minutes
**Subjects:** Environmental Education, Civic Education, Economics, Media Literacy
**Green skills Curriculum Category:** Critical Thinking, Climate Literacy, Civic Engagement, Evidence-Based Decision-Making
**Concept:** The Structured Debate on the Green Energy Transition "Is Romania ready for a just transition from coal to green energy?" is a non-formal educational activity in which young people explore different perspectives on energy policy using real data, scientific studies and news articles. Instead of debating opinions alone, participants build arguments based on research and verified information.

Youth are divided into three thematic teams representing contrasting viewpoints: supporters of rapid renewable energy transition, defenders of traditional energy sectors, and a moderate group advocating for mixed or transitional approaches. This structure highlights the real-world complexity of energy de_____ nd the need for balanced, evidence-based reasoning.

**Learning objectives:**
To deepen understanding of the green energy transition and its economic, social and environmental impacts.
To develop research, media literacy and evidence-based argumentation skills.
To practise public speaking, active listening and respectful debate.
To help young people understand the complexity of energy-related decision-making.

**Preparation:**
Provide tablets or laptops with internet access. Prepare a short list of reliable data sources (scientific institutions, EU agencies, trusted media). Set debate rules focusing on respect, time limits and evidence-based arguments. Arrange the room to support group work and debate (semi-circle or panel format).

**Description/What to do:**
Introduction & Framing (10-15 min): Facilitator introduces the topic of green energy transition, debate rules and team roles.
Research Phase (30-40 min):Teams use tablets to research data, statistics, studies and real examples supporting their assigned position. Participants document key arguments and sources.
Debate Session (30-45 min): Each team presents opening statements, followed by moderated discussion, rebuttals and responses.
Reflection & Synthesis (15-20 min): Participants step out of roles to reflect on what they learned and identify common ground.

**Key Benefits:** Critical thinking, Media literacy, Argumentation skills, Empathy for diverse perspectives, Democratic dialogue, Informed decision-making

**Implementation Tips:** Encourage participants to cite sources during the debate.
Rotate speaking roles to ensure equal participation.
Emphasize listening as much as speaking.
Link debate outcomes to real national or EU energy policies.

**Questions for discussion:** Which arguments were strongest and why?
How did data and evidence influence opinions?
Is there a single "right" solution for energy transition?
How can societies balance economic, social and environmental needs?

# TO BUILD OR NOT TO BUILD?

## POWER PLANT IN THE CITY OF SVETLINA

**Age level:** 15-99 years old
**Duration:** 90-150 minutes
**Subjects**: Environmental Science, Geography, Social Studies / Civics, Economics, Political Science, Ethics / Philosophy, Sustainability / Green Education, STEM (Science, Technology, Engineering, Mathematics) Media Literacy / Communication Skills
**Green skills Curriculum Category:** Environmental Awareness and Energy Transition, Critical Thinking and Problem Solving, Communication and Collaboration, Civic and Systems Thinking, Change Management and Innovation Mindset
**Concept:** This activity explores the controversy surrounding the construction of a new photovoltaic power plant in a traditional coal-mining region through a simulation of a municipal council meeting.



**Learning objectives:**
To explore real-life conflicts that may arise when balancing the needs of different stakeholders;
To examine the right to freedom of choice;
To develop debate and analysis skills.

**Preparation**:
Photocopy the role cards, issue description, and debate rules (optional). Prepare name tags for the different sides/groups represented at the meeting. List the various roles on a flipchart visible to all
Ensure there is space for the "council meeting" and separate rooms for groups to prepare or meet with others

**Description/What to do:**
Introduction & Context (10 min) The facilitator introduces the scenario: all participants are citizens of Svetlina, a town facing an important decision—whether to build a photovoltaic power plant on land that may contain brown coal (coal) deposits. The issue is presented as a real-life dilemma involving environmental, economic and social consequences.
Role Assignment (10 min) Participants are shown the list of available roles and asked to choose one. Role cards and the issue description are distributed. The facilitator explains where each group or individual can meet during the preparation phase and where the city council meeting will later take place.
Rules & Preparation Phase (30 min) The debate rules are explained, emphasizing respectful dialogue, time limits and evidence-based arguments. Participants are informed that they have 30 minutes to prepare: talk to others, research arguments, prepare statements and decide how they will vote. They are encouraged to prepare only one or two key points, as speaking time during the council meeting will be limited.

During this phase, the facilitator prepares the meeting space:
- Chairs arranged in a semicircle or horseshoe shape
- The Mayor seated at the front, slightly elevated
- Groups seated together with name tags
- Two signs placed at opposite ends of the room: "Agree" and "Disagree"
- Two chairs placed in the center of the room, about 50 cm apart, with space for movement

# TO BUILD OR NOT TO BUILD?

## POWER PLANT IN THE CITY OF SVETLINA

City Council Meeting (30 min)

After 30 minutes, participants are called to the meeting.

The Mayor opens the session with a short speech and reminds everyone of the debate rules. Participants present their arguments, respond to others and position themselves in the room according to their views.

Voting & Closure (10 min) At the end of the debate, the Mayor invites participants to vote. Votes are counted and the result is announced. The role-play officially ends.

Debrief & Reflection (15–20 min) Participants rearrange the chairs into a circle for a facilitated discussion. Together, they reflect on the process, the arguments presented, the difficulty of decision-making, and the relevance of evidence-based reasoning in real energy policy decisions.

### Questions for discussion:

Were you surprised by the voting results, and did they reflect the position of the character you played?

How much influence do you think you had (in your role) on the outcome?

Did your interaction with others or groups make you change your approach or attitude toward the issue?

Did you find it easy to identify with your role? Why or why not?

Do you think this situation could occur in real life? Can you think of similar cases?

How would you respond if this happened in your town or place of residence? Did the activity change your attitude in any way?

What does the right to freedom of choice mean to you? Can you think of historical (or current) situations where this right was denied?

Why do you believe the right to opinion and choice is a fundamental human right?

To what extent do you think this right is respected in your community?:

**Key Benefits:** Critical thinking, Media literacy, Argumentation skills, Empathy for diverse perspectives, Democratic dialogue, Informed decision-making

**Implementation Tips**: If possible, conduct this exercise together with another facilitator so you can answer questions and coordinate each step of the activity. The exercise will benefit from having more time, especially for the meeting itself, so participants can respond to each other's comments.

You can also assign the roles in advance or randomly to save time during the session. During the preparation stage, it may help to check if participants are using their time to meet others or plan what they will say.

When assigning roles, keep in mind that the role of the mayor is very challenging and the person playing it must feel confident in leading the meeting and – if necessary – interrupting others to ensure everyone gets a chance to speak.

Be sure to explain the mayor's responsibilities before the simulation starts. It is recommended that the person playing the mayor take full ownership of facilitating the session. This will show your trust in them and help other participants respect their authority rather than turning to you. Of course, if difficulties arise, you may need to step in – but try to do so in a way that does not undermine the authority of the mayor.

If the simulation gets out of hand – for example, if participants go off topic, introduce fictional information, or the council gets stuck and cannot reach agreement – remind everyone that this may reflect real-life outcomes and does not mean the exercise has failed.

You can then use the debrief to discuss the difficulties of reaching consensus on complex issues. During the discussion, it's important to avoid continuing the simulation. Participants must let go of their roles to be able to reflect meaningfully on what they experienced. Help them return to their usual perspective and think critically about the activity, not the character they played.

# MAKING DIFFICULT DECISIONS THROUGH THE LENS OF INCLUSION

## Social Inclusion on the Island Debate

**Age level:** 15+
**Duration:** 60 minutes
**Subjects:** Civic Education, Social Studies, Ethics, Human Rights, Diversity and Inclusion
**Green skills Curriculum Category:** Social Sustainability, Equality, and Inclusive Decision-Making
**Concept:** This interactive debate explores values of social inclusion, diversity, and human rights through a challenging group experience. Participants must decide which individuals should be sent to a deserted island for 50 years, based on limited information about their background, identity, and abilities.

**Learning objectives:**
To raise awareness of stereotypes, prejudice, and discrimination.
To encourage empathy, respect for diversity, and inclusive thinking.
To develop communication, reasoning, and teamwork skills.
To reflect on fairness, equality, and moral decision-making.

**Preparation:**
Prepare role sheet describing 8-10 or more fictional people (age, gender, profession, background, ethnicity, health status, etc.).
Ensure a balance of diverse identities and social positions.
Arrange the room for small-group discussions and a plenary debate.
Prepare a flipchart or whiteboard for recording group decisions and key points.

**Description/What to do:**
Introduction (5 min): Explain the scenario: a group must decide which individuals will be sent to live on a deserted island for 50 years. There is only limited space, so not everyone can go.
Group Work (20-25 min): Divide participants into small groups. Give each group the same set of character cards. They discuss who should go and why, reaching a group decision. Encourage reasoning and respectful dialogue.
Debriefing Debate (25 min): Each group presents its choices and justifications.
Discuss similarities and differences in reasoning.
Reflection (10-15 min): Facilitate a group discussion on what influenced their decisions, how bias appeared, and what fairness and inclusion mean in real life.

**Key Benefits:** Empathy, Awareness, Communication, Teamwork, Decision making, Critical thinking Inclusion

**Implementation Tips:** Remind participants that there are no "right" answers. Focus on reasoning and inclusion. Create a respectful and safe discussion environment. Encourage quieter participants to share their views. Use follow-up questions to deepen reflection (e.g., "What made your decision difficult?").Adapt the character cards for the age group or social context.

**Questions for discussion:** What criteria did you use to make your decision?
How did personal values influence your group's choice?
Did any stereotypes appear during the discussion?
How does this exercise relate to real-life?
What could make decision-making processes more fair and inclusive in society?

# SEE THE WORLD BEYOND ASSUMPTIONS

## Developing of world view

**Age level:** 15+
**Duration:** 60 minutes
**Subjects:** Geography, Social Studies, Economics, Social Citizenship
**Green skills Curriculum Category:** Critical Thinking & Systems Thinking, Global Awareness & Sustainability
**Concept:** This activity invites participants to explore their worldview and examine their assumptions and prejudices about countries and continents based on economic development, size, population and geographical placement. Using a world map and a "cut-up" set of countries or continents, participants will place pieces correctly, discuss metrics such as capitals, population, GDP or other economic indicators, and reflect on how we perceive the world and other places.

**Learning objectives:**
To heighten awareness of how geographical size, economic development and global distribution influence our perceptions of countries and regions.
To surface and question implicit prejudices or stereotypes about places (e.g., "small country = less developed", "large land area = powerful", "continent X is homogeneous").
To build participants' geographic knowledge in an interactive way.
To stimulate critical reflection on how the world is mapped, how data is presented, and how our worldview is shaped.

**Preparation:** Print or buy a large world map where countries or continents are visible. Prepare cut-out pieces of selected countries or continents (for example: Africa, South America, Australia, or specific large / small countries) so that participants will place them on a map outline (or remove from the map and then re-place). Prepare strips or cards with additional data for each country/continent: e.g., capital city, population size, GDP/economic development category, area size, human development index (HDI). Arrange the room so participants can move and collaborate around the map. Decide how many groups/pieces you will include depending on available time and participant number. Prepare a short introduction and some guiding questions for discussion after the activity.

**Description/What to do:** Begin by introducing the theme: how we view the world, how size, population, and economic data can shape our assumptions about places, and how we may carry prejudices about countries or continents. Hand out the cut-out pieces of countries or continents and the data cards to small groups (2-4 participants per group). Ask each group to place their pieces on the map (or remove and replace) in the correct geographical location. At the same time, they should read the data card associated with the piece and discuss among themselves. Facilitate a group discussion guided by prepared questions (see below) on how our assumptions may be challenged and what underlying prejudices we hold about "large/small", "rich/poor", "developed/developing" places.

Conclude by reflecting on how such map-based and data-based exercises can help us develop a more nuanced worldview and reduce stereotypical thinking.

**Key Benefits:** Geographic literacy, Critical thinking , Systems thinking, Global awareness, Empathy, Collaborative learning

# SEE THE WORLD BEYOND ASSUMPTIONS

## Developing of world view

**Implementation Tips:**

Choose a mix of countries/continents varying by size, development level and geographic region to maximise contrast and discussion.

Consider including "unexpected" pieces (for example, a small country with high GDP, or a large country with lower GDP) to challenge assumptions. Encourage groups to move around and discuss rather than remain stationary.

Use the data cards not as "right/wrong" but as prompts to trigger reflection: ask "What did you think before reading this card?" and "How does the data change your view?".

Allow time for debriefing and reflection – the learning lies in the discussion more than the map placement.

Keep the mood open and non-judgmental: the aim is to explore perceptions and awareness, not to "correct" participants.

**Questions for discussion:**

What assumptions did you make about a country/continent before seeing the data card?

Were you surprised by any country's size vs population vs economic data? Why?

How do you think size (land area), population size and economic development influence how we view a country?

In what ways might our worldview carry stereotypes (e.g., "all small countries are poor", "big countries must be powerful")?

How does the way maps are drawn or countries are labelled influence those assumptions?

How might this exercise change the way you think about global citizenship, development and inter-regional relations?

What can you do in your own thinking or work to become more aware of and challenge these assumptions or prejudices?

How can you modify the topic and use this training in your social circle / work?

# SPOT THE WASTE, LEAD THE CHANGE

## Energy Detectives to Energy Influencers

**Age level: 13+**

**Duration:** 80 minutes

**Subjects**: Green energy, energy efficiency, climate change, youth leadership, advocacy and community engagement

**Green skills Curriculum Category:** Leadership, advocacy, and community engagement skills Sustainable Lifestyles, Resilience-Building

**Concept:** Beyond just renewable production, the green transition relies on smarter habits and energy savings. Energy Detectives to Energy Influencers is a hands-on learning activity that transforms young people from observers into community leaders.

By investigating energy use in familiar spaces—like schools and youth centers—participants discover that small, everyday choices drive massive collective change. The activity strengthens young people's confidence to speak up, influence peers, and take ownership of sustainable solutions within their communities.

**Learning objectives:**

Analyze how energy is used and wasted in everyday environments

Explain the relationship between energy consumption, climate change, and sustainability

Develop leadership, teamwork, and problem-solving skills

Translate observations into clear messages and action proposals

Design and communicate youth-led energy actions that influence others

**Preparation**: Select the space(s) to be observed (school building, youth center, common areas, classrooms, homes, etc.). Prepare and print energy observation templates and role cards Decide how groups will present their outputs (poster, pitch, action plan, message. Ensure basic materials are available (markers, flipcharts, sticky notes). Brief any staff involved and secure permission for youth to observe selected areas if needed. **Optional:** Prepare short examples of everyday energy waste to stimulate discussion. Adapt the focus to local priorities such as lighting, heating, electronics, cooling

**Description/What to do: 1. Framing the Mission (15 minutes)** The facilitator introduces the idea that saving energy is as important as producing renewable energy. Youth are invited to see themselves not only as learners, but as future leaders of the green energy transition.

**2.Investigation (20-30 minutes)** Groups explore their environment and document: unnecessary energy use; inefficient habits or systems. opportunities for improvement. Observations are recorded using the provided templates.

**3.From Findings to Action (20 minutes)** Groups analyze their data and design one concrete output, such as: a mini energy-saving campaign, a visual poster or slogan, a 3-step energy action plan, a short pitch aimed at peers or decision-makers.

**4.Energy Influencers Present (15 minutes)** Each group presents their findings and proposed action. Participants reflect on how youth voices can influence change at school, community, or localy.

**5.Reflection & Commitment (10 minutes)** Youth share one personal or collective energy-saving commitment they are willing to adopt after the activity.

**Key Benefits:** Empowers youth in green energy leadership, connects climate concepts to daily life, enhances teamwork, communication, and problem-solving skills, promotes youth-led advocacy, supports behavior change with commitments, adaptable to various contexts.

**Implementation Tips:** Emphasize youth ownership and decision-making, focus on achievable actions rather than technical perfection adapt duration and complexity according to group experience, use this activity as a foundation for longer-term campaigns or projects
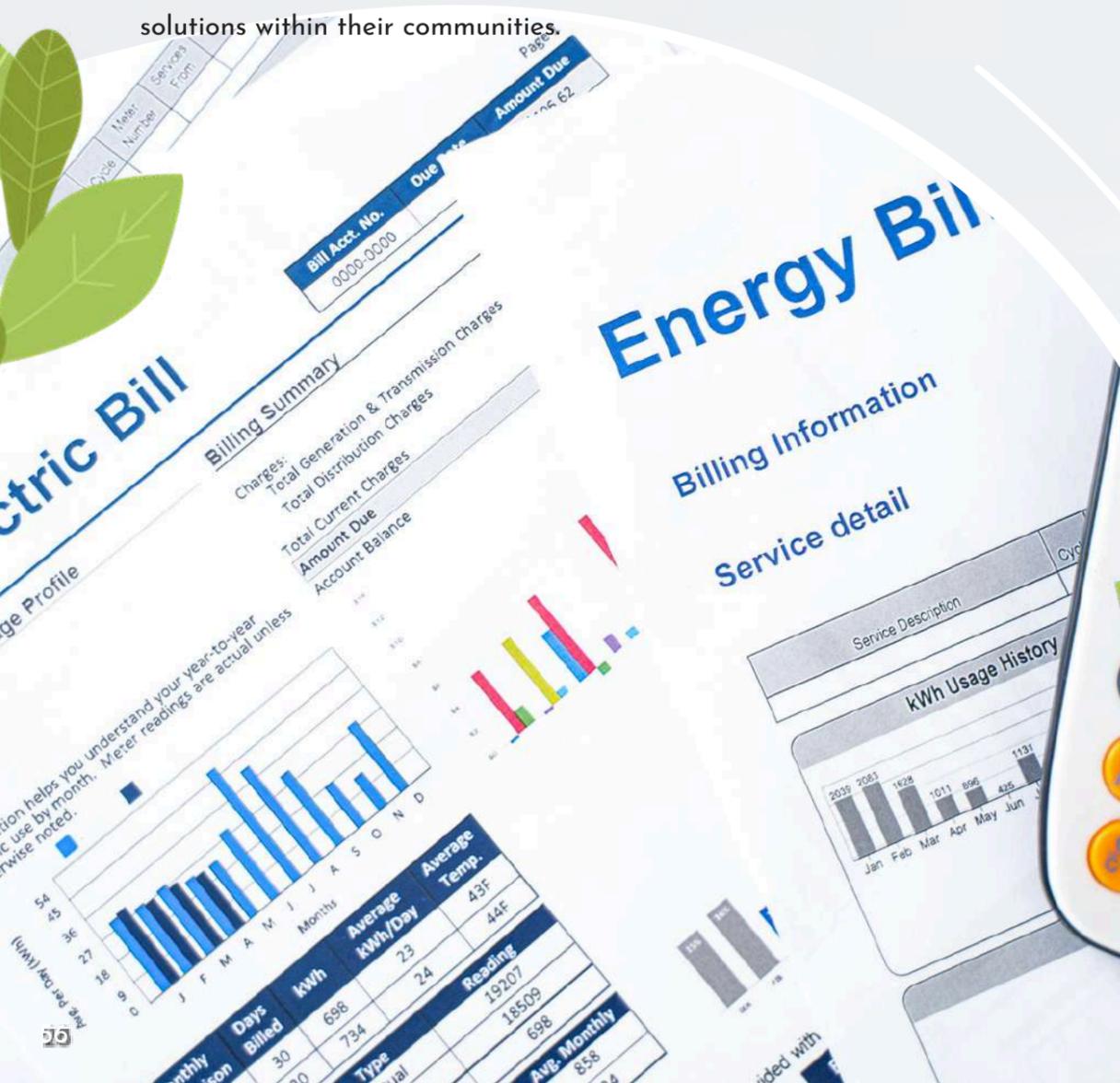
**Questions for discussion:**

What did you notice about how energy is used or wasted around you?

Which habit or behavior could be changed most easily?

Why is saving energy important for climate action?

How can young people influence others to use energy more responsibly?

What is one action you are willing to take after this activity?

# DESIGNING A LOCAL GREEN TRANSITION

## My City, My Energy

**Age level:** 13+

**Duration:** 70 minutes

**Subjects:** Renewable energy, sustainable cities, climate action, systems thinking, youth participation

**Green skills Curriculum Category:** Green Energy Literacy, Systems Thinking Problem-Solving & Innovation,Civic Engagement and Participation, Collaboration and Communication

**Concept:** My City, My Energy is a collaborative, scenario-based activity where young people act as local energy planners. Working in teams, they design a sustainable energy transition for a fictional city by choosing renewable energy sources, efficiency measures, and community actions. The activity helps youth understand the complexity of green energy decisions while empowering them to propose realistic, locally relevant solutions.

**Learning objectives:**

- Identify different renewable energy sources and energy efficiency measures
- Explain how cities meet their energy needs and why choices matter
- Analyze environmental, social, and practical trade-offs in energy planning
- Collaborate to design a youth-informed local energy transition proposal
- Connect fictional planning scenarios to real local contexts

**Preparation**: Before the activity, please take these steps for easygoing activity: print City Profile Sheets (fictional but realistic: population, energy needs, challenges), print Energy Sources Cards (solar, wind, waste-to-energy, energy efficiency, mobility, etc.), print a City Energy Planning Template, decide presentation format (poster, map, short pitch) and arrange materials (flipcharts, markers, sticky notes).

**Optional:** Adapt city profiles to resemble participants' your city or region, prepare 2–3 example constraints (budget limits, space, public opinion).

**Description/What to do:  1. Setting the Scene: How Do Cities Use Energy? (10 minutes)** The facilitator briefly explains how cities consume energy and why urban areas are central to the green transition. Participants are introduced to the idea that energy planning involves choices and trade-offs.

**2.City Challenge & Team Roles (5 minutes)** Youth will think that they are rhe member of the city planning committee. Their task will be designing a sustainable and fair energy plan for their own cities. The facilitator distributes the city profile sheets to the teams and assigns the following roles to the team members. In 5 minutes they will do the quick conversation about their cities profile and takes notes.

**3.Exploring Energy Options (15 minutes)** Groups explore the Energy source Cards for renewable and non renewable energy options and discuss. Energy options card visuals will give clues about the renewable energy and energy efficiency options. Youth will talk about following: benefits of each option, possible challenges (space, cost, acceptance), how options can be combined. At this stage youth select the options they believe best suit their city.

**4.Designing the City Energy Plan (25 minutes)** Using the City Energy Planning Template, groups define: their chosen energy mix, supporting efficiency measures, expected benefits for people and environment, one key challenge and how they address it.

**5.Reflection & Commitment (10 minutes)** Groups present their city energy plan using a poster or short pitch. Peers compare similarities and differences between city solutions.

**6.Reflection & Local Connection (10 minutes)** Facilitated discussion connects the fictional city to participants' real local context and explores how youth can contribute to energy discussions locally.

### Implementation Tips

Emphasize decision-making, not technical accuracy
Encourage debate and compromise within groups
Keep energy concepts simple and visual
Adapt complexity based on age and experience
Use this activity as preparation for campaigns or action projects

# FROM INSIGHT TO IMPACT

## Study visit in Burgas- Anaerobic Installation

**Age level:** 13+
**Duration:** 180 minutes
**Subjects:** Sustainability by using biomass
**Green skills Curriculum Category:** Green Energy Transition & Sustainable Environmental Management
**Concept:** Through an immersive, on-site investigation of the Burgas Anaerobic Installation, participants bridge the gap between theory and practice by witnessing the complete biological cycle of transforming organic waste into renewable biogas, ultimately mastering the principles of circular resource management and the technical realities of the green energy transition.



**Learning objectives:** The main objective of the study visit to the Burgas Anaerobic Installation is to help participants understand how biomass is used as a sustainable energy source within the green energy transition. The activity aims to connect theoretical knowledge with real-world applications by exploring the processes of waste-to-energy conversion and circular resource management. Through interactive mapping and on-site observation, participants will develop green skills related to renewable energy production, environmental sustainability, and responsible resource use.

**Preparation:** The preparation for the Burgas Anaerobic Installation visit integrated pedagogical scaffolding—such as pre-briefings on biomass and digital mapping—with rigorous technical coordination to secure industrial safety equipment and develop inquiry-based observation tools that aligned the facility's operational workflow with the participants' learning objectives..

**Description/What to do:** The study visit begins with an introduction to the facility and its strategic role in the sustainable waste management system of Burgas. Following this, participants receive an overview of biomass as a renewable energy source to understand its specific contribution to the green energy transition. The group then moves to the waste reception area for a guided tour where they observe how organic waste is collected and pre-treated for processing. This leads into a detailed presentation on the anaerobic digestion process, covering both the fundamental biological principles and the various technological stages involved.

Participants then proceed to observe the bioreactors to see how microorganisms break down organic matter to produce biogas. This is followed by an explanation of how that biogas is purified and converted into electricity and heat for local energy needs, alongside an insight into the facility's monitoring systems and environmental safety protocols. To see circularity in action, the group receives a demonstration of how the remaining digestate is utilized as a valuable by-product. The visit moves into an interactive phase where participants complete tasks designed to link each stage of the process to broader sustainability concepts. Finally, the activity concludes with a structured discussion and reflection on how such installations support local green policies and deepen the collective understanding of renewable energy.

**Key Benefits:** New knowledge, observation, communication; awareness / responsibility; engagement; curiosity.

**Questions for discussion:** How does seeing the transition from "smelly waste" to "clean energy" change your perception of what we usually throw away at home or school? How does seeing the transition from "smelly waste" to "clean energy" change your perception of what we usually throw away at home or school? Now that you've seen the pre-treatment process, how does the quality of our waste sorting at home directly affect the efficiency of this renewable energy plant?

**Implementation Tips**
Prepare participants in advance by providing brief introductory materials on biomass, anaerobic digestion, and the goals of the visit. Coordinate with facility staff to ensure a clear tour route, safety briefing, and access to key operational areas. Use visual aids and digital tools such as diagrams or the interactive map to support understanding during each stage of the visit. Encourage active engagement by assigning observation tasks or reflection questions that participants complete during the tour. Conduct a post-visit discussion to summarize key insights, clarify questions, and connect the experience to broader sustainability and green energy concepts.

# FROM INSIGHT TO IMPACT

## Study Visit in Yassıada - Sustainable Heritage

**Age level:** 13+
**Duration:** 180 minutes

**Subjects:** Sustainability, Cultural heritage, Democratic values and active citizenship, Environment, Youth participation

**Green skills Curriculum Category:** Environmental awareness, Systems thinking, Cultural sustainability, Civic engagement and responsibility ,Critical reflection, Youth advocacy

**Concept:** This study visit-based activity enables young people to explore how historical and civic spaces can be transformed using sustainable and eco-conscious practices. Through guided observation, reflection, and discussion on Demokrasi ve Özgürlükler Adası (Yassıada), participants examine the relationship between cultural heritage, democracy, environmental protection, and green transition. The activity encourages youth to critically reflect on how the past, present, and future intersect, and how responsible action is essential for building sustainable societies.

**Learning objectives:**
Understand how historical sites can be adapted using sustainable approaches
Recognize the link between democracy, civic identity, and sustainability
Develop observation and reflection skills in real-life settings
Strengthen awareness of eco-conscious tourism and site management
Feel motivated to promote sustainability in their own communities

**Preparation:** Make advance reservations with the site management and confirm access, group size, and any guided tour options. Plan green transportation, prioritizing public ferry or collective travel to reduce carbon footprint. Organize meals and refreshments using sustainable principles (local food, reusable bottles, minimal waste). Inform participants in advance about clothing, walking distance, and weather conditions.

**Description/What to do:** Participants take part in a structured study visit to a historical and civic site, exploring how cultural heritage can be preserved and reimagined through sustainable and eco-conscious practices. During the visit, young people observe the site's transformation, reflect on the relationship between history, democracy, and sustainability, and discuss how responsible use of resources supports a greener future. Through guided observation, collective reflection, and action-oriented discussion, participants connect real-life experiences with the principles of the green transition and active citizenship. At the beginning of the visit, the guide introduces: the historical background of the site and its transformation process.
Participants are informed that the goal is not only to visit, but to observe, question, and reflect.
Participants explore the site together, focusing on: adaptive reuse of historical buildings, energy-efficient or eco-friendly design elements, preservation of natural landscapes, visitor management and tourism practices
Youth are encouraged to take notes, photos, or short recordings during the visit.

**Key Benefits:** Connects sustainability with real historical and civic spaces, encourages interdisciplinary learning, strengthens youth reflection and observation skills, promotes democratic values alongside environmental awareness, supports experiential, non-formal learning

**Questions for discussion:** What green or eco-conscious practices did you notice during the transformation of this place?
How do sustainable site management and heritage protection support the green transition?
In what ways can daily green practices (energy saving, waste reduction, responsible tourism) be applied in places like this?

## Implementation Tips
Prepare participants with background information in advance
Encourage observation for the green transition elements and sustainability concepts rather than passive listening
Allow time for reflection and dialogue
Adapt questions to the age and experience level of participants
Emphasize respect for the site and its natural environment

# FROM INSIGHT TO IMPACT

## Study Visit in Romania - From Rivers to Rays

**Age level: 13+**
**Duration:** Full-day study tour
**Subjects**: Science, Technology, Engineering, Mathematics (STEM), Environmental Education
**Green skills Curriculum Category:** Climate Science, Sustainable Lifestyles, Resilience-Building
**Concept:** This activity transitions youth from theoretical energy concepts to real-world observation by exploring the synergy between natural resources and industrial innovation. Participants investigate how the Danube's flow and the sun's radiation are harnessed through large-scale engineering, while simultaneously examining the historical and ecological importance of preserving the environments where these facilities operate.

**Learning objectives:**
To help students understand how green energy like solar and hydro works by engaging them in on-site observations of a 3 MW solar farm and the Iron Gates II Hydropower Plant. The activity aims to bridge the gap between technical engineering and environmental stewardship, showing how renewable infrastructure integrates into both the national grid and local ecosystems.

**Preparation**: Preparation begins with a classroom briefing on the physics of photovoltaic cells and the mechanical function of Kaplan turbines. Organizers coordinate with site engineers at Răchiți and Iron Gates II to establish safe walking routes and secure necessary permits. Participants receive a digital "Energy Explorer" guide containing maps of the Danube region and basic technical specifications of the facilities they will visit.

**Description/What to do:** The activity starts at the Răchiți solar power plant where an energy engineer introduces the technical components of the 3 MW photovoltaic system and explains the process of converting sunlight into grid-ready electricity. Participants then travel to the Iron Gates II Hydropower Plant to enter the turbine hall and observe the six 190 MW/h Kaplan turbines in operation. During this stage, specialists explain the mechanics of water pressure and the dual challenge of generating power while protecting the Danube's river ecosystems.

The journey continues at the Iron Gates Region Museum, where the group shifts focus to the historical and biological impact of the river, exploring exhibits on Roman history and endangered sturgeon species. This visit illustrates the deep connection between regional development and natural resource management. Throughout the day, youth document the infrastructure through photos and sketches, focusing on how human engineering interacts with the landscape. The experience concludes with a group reflection session held at the museum, where participants synthesize their technical observations into a broader understanding of climate resilience and sustainable heritage.

**Key Benefits:** Engages students through direct contact with industrial-scale renewable technology, connects engineering principles with historical and environmental conservation., empowers youth to visualize green career paths in energy and ecology, fosters a sense of responsibility for local natural and cultural heritage.

**Questions for discussion:** How does the scale of a hydropower plant compare to a solar farm in terms of energy output versus environmental footprint? In what ways did the construction of the Iron Gates dams change the cultural and biological history of the Danube region? After seeing these facilities, how would you explain the importance of the "Green Transition" to someone who has never seen a power plant?

## Implementation Tips

Ensure participants have pre-read materials on how a grid functions to maximize their time with the engineers.
Use the bus travel time between sites for "micro-challenges," such as identifying potential locations for future renewable projects along the route.
Partner with museum curators to highlight specific species affected by damming to ensure a balanced view of hydropower.

# REFLECTION THROUGH VISUALISATION

## Rucksack- What Do I Take With Me?

**Age level:** 10+ years
**Duration:** 40 minutes
**Subjects:**Personal Development, Citizenship, Reflection & Evaluation
**Green skills Curriculum Category:** Learning to Learn, Self-awareness, Values & Mindsets
**Concept:** The Rucksack Activity is a reflective exercise designed to help participants consolidate their learning and identify key takeaways from a training session or workshop. Using visualization, participants explore what knowledge, ideas, and personal growth they want to carry forward, as well as what they wish to leave behind.

**Learning objectives:**
To encourage participants to reflect on what they have learned.
To help participants identify knowledge, skills, attitudes, or relationships they want to retain.
To enable participants to recognize and let go of unhelpful habits, outdated ideas or negative patterns.
To promote self-expression, creativity and emotional awareness.
To strengthen communication and sharing within the group.

**Preparation**:
Ensure each participant has paper and colored pencils or markers. Arrange a comfortable space where participants can sit and work individually.
Optional: play soft background music to support reflection.

**Description/What to do:**
Introduction (5-10 min)
The facilitator explains the purpose of the activity and reassures participants that artistic skills are not important. Symbols, words, stick figures or simple drawings are enough.
Individual Reflection & Drawing (20 min)
Participants draw themselves waving goodbye while carrying a rucksack. Inside the rucksack, they illustrate or write what they are taking with them from the experience. Outside the rucksack, they may draw or note what they want to leave behind or throw away.
Sharing & Group Reflection (10-15 min)
Participants are invited to share their drawings and reflections in pairs or in the whole group. Sharing is encouraged but voluntary.

**Key Benefits:** Deep reflection, Emotional processing, Creativity, Self-awareness, Group bonding, Meaningful closure

**Implementation Tips:** Emphasize that drawing skill is irrelevant; focus on meaning rather than artistry. Allow enough quiet time for participants to reflect deeply and complete their rucksack. Facilitate sharing carefully, respecting participants' comfort levels. You can combine this activity with a closing discussion or journaling for deeper reflection.

**Questions for discussion:** What are the most important things in your rucksack?
Which new ideas or perspectives surprised you the most?
What are you happy to leave behind?
How will you use what you are taking with you in the future?

# TAKE ACTION

## What Is Meant by an Action Project?

An action project involves working together with others to bring about meaningful and positive change.

You can follow the 6 steps to completing an action project.

These are:

1. Form Your Team – Evaluate each member's strengths, assign appropriate roles, and create a team agreement that outlines responsibilities and expectations.
2. Choose and Research an Issue – Select a topic that young people care deeply about and that allows for realistic, meaningful action. Conduct research to understand the problem and possible solutions.
3. Create an Action Plan – Set SMART objectives, establish a timeline, distribute tasks, and identify any people or organizations you should consult or collaborate with.
4. Take Action – Implement your plan and carry out the activities you have prepared.
5. Raise Awareness – Amplify the impact of your project by sharing your message with key decision-makers (such as politicians or policymakers) and with the wider public—whichever audiences will best support the change you aim to make.
6. Reflect on the Project – At the end, review your progress, evaluate whether your goals were met, and identify lessons learned to improve future initiatives.

Remember, every action project is an opportunity to learn and grow, both individually and as a team. You can make a significant impact on the issues that matter to you and your community. Be creative, stay committed, and don't hesitate to reach out for support or collaboration when needed. Together, we can drive meaningful change and inspire others to join us in making the world a better place.

## Action Projects Suggestions

### Eco-Friendly Transportation Campaign

Promote the use of public transportation, cycling, and walking to reduce carbon emissions. Partner with local transit authorities to offer incentives for using eco-friendly commuting options. Encourage community events like "Car-Free Days" to raise awareness and inspire individuals to leave their cars at home. Host workshops on bike safety and maintenance, which can empower more people to choose cycling as a viable mode of transport. Collaborate with local businesses to offer discounts to customers who arrive on foot, by bike, or using public transit, fostering a culture that values sustainable travel.

### Renewable Energy Workshop

Host workshops to educate the community about renewable energy sources like solar and wind power. Invite experts to demonstrate how households can transition to renewable energy solutions. Encourage participants to calculate their carbon footprint and explore ways to reduce it through sustainable energy practices.

### Create a petition

to support the installation of more solar panels in public spaces, such as schools and community centers. This initiative could not only help reduce the community's carbon footprint but also serve as a powerful educational tool, demonstrating the benefits of renewable energy in a tangible way. In your petition, highlight the potential savings on energy costs and the positive environmental impact, and appeal to local government bodies to prioritize funding for such projects. Encourage community members to share personal stories about how renewable energy has positively impacted their lives, and use these testimonials to strengthen your campaign. Aim to gather diverse support by reaching out to local environmental groups, . educators, and businesses, creating a coalition that underscores the widespread community backing for the project

### Community Energy-Saving Challenge

Organize a month-long challenge where households or school classes compete to reduce their energy use. Provide simple weekly tips—like unplugging devices, switching to LED bulbs, or reducing heating/cooling usage. Track progress and celebrate the top "Energy Champions" at the end. This project helps people build real habits that lower emissions.

### Youth Climate Podcast / Video Series

Start a podcast or short-video series where young people interview local experts, activists, renewable energy workers, and community members. Focus on climate solutions already happening in your community. Share it on social media to inspire others and amplify youth voices in climate action.

### Clean Energy Career Fair

Invite renewable energy companies, climate researchers, NGOs, and green-tech startups to speak with young people about career paths in the green energy transition. This builds awareness of future opportunities and connects students with professionals in emerging fields.

### Public Art for Climate Awareness

Create murals, installations, or street art that highlight renewable energy, climate justice, or local sustainability goals. Use QR codes linking to youth-created digital content, petitions, or educational materials. Art can powerfully inspire and activate community interest.

### Local Energy & Environment Mapping

Ask participants to research how energy is produced and used in their local area and how this affects nature. They can map power sources, major consumers, or nearby ecosystems at risk. Present the results as a simple visual map or short presentation. This activity helps young people see the link between energy choices and environmental impact.

### Green School Pledge

Create a simple sustainability pledge for students or classes. Include realistic actions related to energy and waste. Invite voluntary sign-up and review progress after one month.

### Energy Myth Busters

Collect common myths about energy and climate. Research the facts and turn them into short "myth vs fact" posters or posts.

### Standby Power Challenge

Focus on devices left on standby. Identify how many are used in one classroom or home. Test what happens when they are unplugged for a week. Share the results.

### Energy Waste Photo Walk

Take photos of energy waste, such as lights on in empty rooms or open windows in heated spaces. Create a short visual report and suggest improvements.

# RESOURCES

## Blogs

Climate Justice Alliance Climate Justice Alliance website, offers youth-friendly resources on community-led climate action and justice-centered approaches to sustainability to tackle Just Transition, Just Recovery, Energy Democracy, Food Sovereignty, etc . https://climatejusticealliance.org/

European Youth Energy Network (EYEN) – A youth-led network that gathers >20 organisations across Europe and aims to put young people at the center of the energy transition. https://youthenergy.eu/

Youth and Environment Europe (YEE) – One of the largest independent networks of environmental youth organisations in Europe; works on raising awareness among youth about climate, sustainable energy, biodiversity, and supports inclusive activism. https://yeenet.eu/

## Games



SDG Game



Energy Encyclopedia



KEEP COOL Boardgame



Climate Fresk

## Podcasts and Ted Talks

There are lots of people doing wonderful things in the world and these Podcasts and TED talks provides that bit of inspiration we all need.

1. Energy Unplugged: https://auroraer.com/resources/energy-talks

2. Energy Gang: https://art19.com/shows/the-energy-gang

3. Luisa Neubauer. Why you should be a climate activist. https://www.ted.com/talks/luisa_neubauer_why_you_should_be_a_climate_activist

4. Europe Climate Connection: https://www.spreaker.com/podcast/europe-climate-connection--5699621

5. Xiye Bastida. If you adults won't save the world. We will. https://www.ted.com/talks/xiye_bastida_if_you_adults_won_t_save_the_world_we_will

6. Switched On: https://omny.fm/shows/switched-on-1?cloudflare-language=en-US

7. Why you should ditch deadly fossil-fuel appliances: https://www.ted.com/talks/donnel_baird_why_you_should_ditch_deadly_fossil_fuel_appliances?referrer=playlist-tactical_practical_climate_advice&autoplay=true

# Documentaries/Short Films

These documentaries serve as an excellent means to grasp the concept of climate justice while highlighting the real-life challenges faced by individuals in various countries as they strive to combat the devastating effects of climate change. They can also provide a delightful experience for a film night.

## See How Climate Change Is Impacting the Locations of These 11 Movies

Plenty of Netflix's biggest titles have something to say about protecting nature, climate change and other high-priority issues for Earth dwellers.
https://www.netflix.com/tudum/articles/environmental-movies-Netflix

## ARTE Resources for Exploring Sustainability

We also recommend exploring the sustainability documentaries and films available on the ARTE platform, which offer engaging, high-quality content that can help young people deepen their understanding of environmental issues and global sustainability challenges.
https://www.arte.tv/en/search/?q=sustainability&genre=all

## UN Climate Change – Educational Video Library

We also encourage exploring the UN Climate Change YouTube channel, where young people can access clear, up-to-date videos on global climate action, policy developments, and inspiring initiatives that help them better understand the realities of climate change and the solutions being implemented worldwide.
https://www.youtube.com/@UNClimateChange/videos

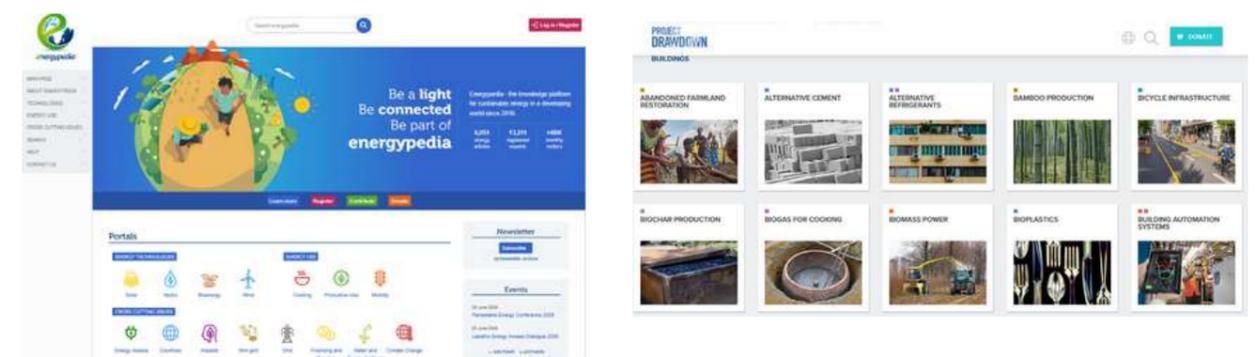## Online learning – UN CC Learn
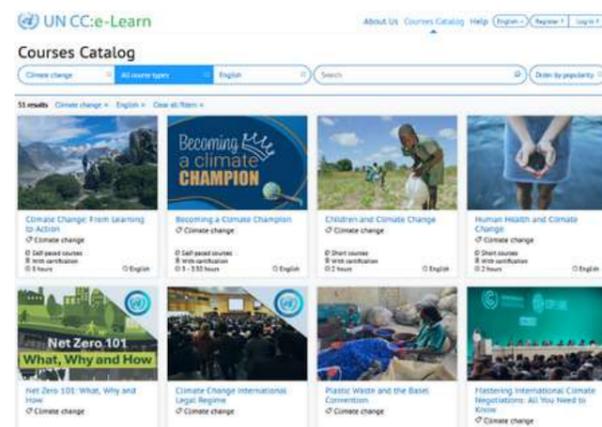


# Books
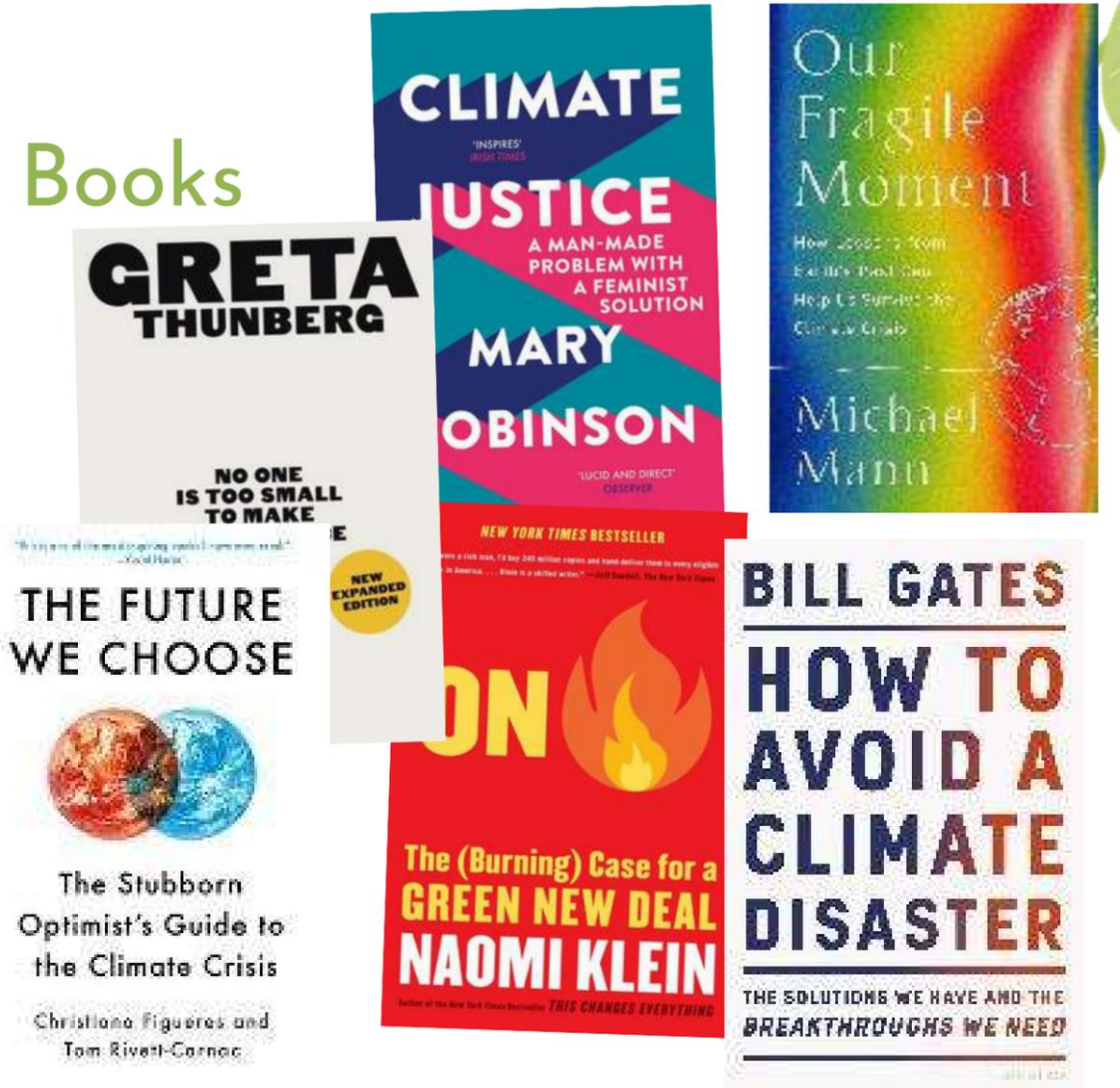


# Websites and Digital Platforms

You should start exploring Energypedia and the Project Drawdown Solutions Library, as both platforms offer clear, practical, and evidence-based resources that help young people understand real-world renewable energy practices and effective climate solutions.

# Handouts-Sustainability Bingo

| | | |
|---|---|---|
| REDUCED REUSED RECYCLED | USING PUBLIC TRANSPORT OR WALK | COMPOST FOOD SCRAPS |
| USED REUSABLE BOTTLES | | DONATED OR BOUGHT SECOND HAND CLOTHES |
| PLANTED SOMETHING | USED REUSABLE CLOTH BAG | TURNED OFF LIGHTS WHEN NOT IN USE |

| | | |
|---|---|---|
| REDUCED REUSED RECYCLED | USING PUBLIC TRANSPORT OR WALK | COMPOST FOOD SCRAPS |
| USED REUSABLE BOTTLES | | DONATED OR BOUGHT SECOND HAND CLOTHES |
| PLANTED SOMETHING | USED REUSABLE CLOTH BAG | TURNED OFF LIGHTS WHEN NOT IN USE |

# Handouts-EU decision making- Role-play

## ROMANIA

- Many regions still rely on coal and heavy industry.
- Strong interest in protecting cultural identity and historical mining towns.
- Wants funding for heritage tourism and retraining.
- Supports community involvement but requests more flexibility in timelines.

## BULGARIA

- Economically dependent on coal in some areas.
- Seeks maximum EU funding, especially for job retraining.
- Strong supporter of cultural preservation (e.g., mining museums).
- Favors citizen assemblies but wants simple implementation.

## FRANCE

- Strong supporter of environmental goals.
- Wants $CO_2$ targets to be higher (70%).
- Supports strict reporting and citizen oversight.

## HUNGARY

- Concerned about too much EU oversight.
- Wants greater control at national level over how funds are used.
- Open to green jobs but cautious about binding $CO_2$ targets.
- Prefers heritage funding be optional, not required.

## SWEDEN

- Advocates for fast green transition.
- Wants even more funding for clean energy, less for heritage.
- Pushes for stricter environmental rules.

## CZECH REPUBLIC

- Concerned about economic impact on local workers.
- Wants job guarantees and more gradual $CO_2$ reduction.
- Supports heritage protection.

# Handouts-EU decision making- Role-play

## PORTUGAL

- No longer reliant on coal but wants fair support for all regions.
- Supports heritage and green jobs equally.

## POLAND

- Large coal industry; worried about job loss.
- Strongly opposes 60% $CO_2$ cut.
- Wants national control over energy policy.

## GERMANY

- Undergoing transition already.
- Supports the directive but wants flexibility in national timelines.
- Supports balanced funding.

## BELGIUM

- Supportive of the directive.
- Pushes for urban green infrastructure as part of energy plans.

## THE NETHERLANDS

- Strong supporter of innovation.
- Wants more funds for clean technology.
- Supports community oversight.

## SPAIN

- Former mining regions interested in tourism and cultural renewal.
- Supports directive and heritage preservation.

# Handouts-EU decision making- Role-play

## IRELAND

- Small coal sector but supports environmental solidarity.
- Supports directive; interested in clean energy tech.

## AUSTRIA

- Supportive of the Decarbonisation and Heritage Directive.
- Pushes for urban green infrastructure (green roofs, sustainable transport, energy-efficient buildings).
- Believes cities play a key role in reducing emissions.
- Supports citizen participation and local-level decision-making.

## ITALY

- Undergoing its own energy transition, in former industrial areas.
- Supports the directive but wants flexibility in national timelines.
- Emphasizes protecting cultural landscapes and heritage.
- Supports balanced funding between clean energy, social measures and heritage preservation.

## European Parliament

- Represents EU citizens.
- Emphasizes youth participation, inclusion, and fair transition.
- Will vote based on overall balance of environment, jobs, and culture.

## EUROPEAN COMMISSION

- Defends original directive.
- Wants fast implementation, strong environmental rules.
- Open to small compromises but insists on overall ambition.

## PRESIDENT OF THE COUNCIL

- Neutral moderator.
- Ensures fair turn-taking and organizes voting.

# Handouts-POWER PLANT IN THE CITY OF SVETLINA

## Mayor of Svetlina

You chair the meeting and your role is to greet participants and remind them of the debate rules. Your goal is to ensure everyone gets a chance to speak and to keep contributions short. You're concerned about the public backlash and plan to speak with some groups beforehand to try to soften their positions.

## Municipal Council Member - Traditionalist Party

You represent the Traditionalist Party and firmly oppose the photovoltaic plant. You believe municipal land and resources should not be used for something that disregards the city's coal-mining tradition. You also fear the plant might attract cosmic radiation.

## Municipal Council Member - Populist Party

You supported the project initially due to the importance of the business sector but are now worried about public complaints. You want to avoid tension and protect your chances in the next local elections. You are likely to support the least controversial option.

## Municipal Council Member - Libertarian Party

You represent the Party for Diversity. You believe the diverse population has enriched Svetlina and see the abandoned site as a source of social problems. The council doesn't have the funds to develop it alone.

# Handouts-POWER PLANT IN THE CITY OF SVETLINA

## Members of "Past and Present" Association

You are a core opposition group. Coming from coal-mining communities, you believe the historical character of the city should be preserved. The proposed location is central and highly visible, and you feel that the newcomers' technological ambitions are changing your hometown's identity.

## Youth Action Group "Young Fireflies for Human Rights!"

You support the new power plant as a solution for both clean energy and social issues caused by the neglected site. However, you worry that council funding for the project could divert resources from youth programs, which have already seen budget cuts over the past 5 years.

## NGO "Green Transition Activists"

You've long requested land for a photovoltaic plant, always denied due to financial constraints. You find it unfair that the green community must cover 10% of the costs. Your contribution to a cleaner city goes unrecognized, and your right to live in a healthier environment is neglected.

## Citizens of Svetlina

You are concerned about the city's division and plan to attend the meeting to vote. You haven't yet decided how to vote and want to speak to as many groups as possible before making your decision.

## Background story

You live in the scenic city of Svetlina, with a population of around 80,000. The city is known for its coal power plant, which provides employment and electricity to almost the entire population. As a result of the green transition in recent years, the city has undergone drastic changes – on one hand, many young people seek opportunities in larger cities, and on the other, new residents with varying social and economic backgrounds have moved into the region. Some families have worked in the power plant for three generations, and the gradual shutdown of some units directly impacts their livelihoods. At the same time, the area is becoming more attractive due to cleaner air.

The issue currently dividing the city is a proposal by a businessman to build a photovoltaic power plant on a municipal plot. The land has been unused and abandoned for years and has been the subject of constant complaints to the municipality – it is located near the well-known coal power plant and is often a place for vandalism and drug use.

When a wealthy businessman offered to solve the problem, the mayor considered it a stroke of luck. The municipal council quickly agreed to grant the land and finance 20% of the construction costs. The remaining 10%, which the businessman could not cover, was expected to be raised by the citizens. Construction was set to begin this week... but the municipality was flooded with complaints from angry residents who opposed the project. An emergency meeting has been scheduled, inviting everyone to decide the matter.

🕐 The meeting will begin in 30 minutes.

# Handouts-Social Inclusion on the Island Debate

## Scenario:

A group of people are stranded on a deserted island.
They have:
- Shelter
- Water
- basic tools

!!! They do not have access to external resources, technologies, assistance, or contact with the outside world.

👉 For the next 50 years, the society must survive only with what these people are able to create themselves.

**Task:**

From 20 potential candidates, 10 people must be selected to lay the foundations of a new society.
Constraints:
- 5 women and 5 men
- different ages
- different professions
- religious diversity
- presence of prejudices and "uncomfortable" roles
- not all candidates are obviously useful.

## List of 20 Candidates

☐ 1 → Barman, 38 years old, male
Experience in working with people, conflict management, logistics, and supply organization.

☐ 2 → Former military officer, 42 years old – gender UNKNOWN
Experience in strategy, survival, and discipline.
❗ There are concerns about aggressiveness and authoritarian behavior.

☐ 3 →Gay man, 34 years old, water systems engineer
A key profession for the island.
❗ Some members of the group have prejudices.

☐ 4 →Woman, 29 years old, construction engineer
A typically "male" profession, but with limited experience.

☐ 5 →Man, 45 years old, medical nurse
Many years of practical experience, but not a doctor.

☐ 6 →Woman from an ethnic minority, 40 years old, agronomist
Experience in sustainable agriculture and seed production.

# Handouts-Social Inclusion on the Island Debate

## List of 20 Candidates

7 →Man, 55 years old, Orthodox priest
Moral support and mediator.
❗ Criticized for being conservative.

8 →Woman, 37 years old, Muslim, mathematics teacher
Good with children, education, and logical thinking.

9 →Man, 50 years old, Jewish, accountant
Financial planning and resource management.

10 →Unemployed psychologist, woman, 33 years old, from Turkey
❗ Limited practical experience
- ✔ High intercultural sensitivity

11 →Man, 26 years old, no profession
Physically healthy and motivated, but lacks skills.

12 →Woman, 60 years old, retired – world-renowned scientist (biologist)
❗ Advanced age
✔ Enormous scientific capacity

13 →Man, 41 years old, religious fanatic
Willing to help, but has difficulty accepting differences.

## List of 20 Candidates

14 →Woman, 35 years old, chef
Food preparation, organization, morale.

15 → Man, 39 years old, IT specialist
❗ Technology is limited
✔ Strong logical and analytical thinking

16 → Woman, 28 years old, midwife
Crucial for population growth and childbirth.

17 →Man, 47 years old, fisherman
Practical knowledge and survival skills.

18 →Woman, 44 years old, politician
Experience in negotiations.
❗ Manipulative tendencies.

19 →Man, 52 years old, farmer
Practical, resilient, experienced.

20 →Woman, 31 years old, artist
Culture, identity, and mental health.

# Handouts-Energy Detectives to Energy Influencers-Observation Template

## From Energy Use to Energy Action

✍️ Group Information

Group Name:

Date:

Observed Area / Space:

What Did We Observe?

(Look carefully at how energy is used in this space)

💡 Lighting

- [ ] Lights on when not needed
- [ ] Old / inefficient light bulbs
- [ ] Natural light not used

Notes:

🔌 Electrical Devices

- [ ] Computers left on
- [ ] Chargers plugged in without use
- [ ] Screens or projectors on unnecessarily

Notes:

🌡️ Heating / Cooling

- [ ] Heating or air conditioning running when not needed
- [ ] Windows open while heating/cooling is on
- [ ] Temperature feels too high or too low

Notes:

🔄 Daily Habits

- [ ] People forget to switch off devices
- [ ] Energy-saving rules are unclear
- [ ] No reminders or signs visible

Notes:

## Why Does This Matter?

(Think about climate, environment, and people)

- Wastes energy
- Increases $CO_2$ emissions
- Costs more money
- Harms the environment
- Affects health or comfort

In our own words:

## Who Is Affected?

(Think about different people)

- Students / Youth
- Teachers / Youth Workers
- Families
- Community
- City / Environment

How are they affected?

## What Can Be Improved?

(Think realistically)

🛠️ Your Ideas for Improvement:

Are these actions:  [ ] Easy      [ ] Medium      [ ] Hard

## From Detective to Influencer

(Turn observation into action)

📣 Your Message to Others:

(Slogan, advice, or short message)

🚀 One Action We Commit To:

⭐ Reflection

One thing that surprised us:

One habit we want to change:

**You are now an Energy Influencer !**

# Handouts-City Profile Worksheet

## My City, My Energy

✋ City Name: _____

Population Size: ( ☐ small / ☐ medium / ☐ large)

------------------------------------------

Main Energy Challenge:

☐ High electricity use

☐ Air pollution

☐ Fossil fuel dependency

☐ Rapid growth

☐ Other: _____

Special Characteristics of the City: _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

# Handouts-City Energy Planning Template

**1. Selected Energy Sources (choose 2-4):**
- ☐ Solar
- ☐ Wind
- ☐ Waste-to-energy
- ☐ Hydropower
- ☐ Other: _____

Why did you choose these? _____

_____

_____

_____

**2. Energy Efficiency & Supporting Actions:**
- ☐ LED lighting
- ☐ Insulation
- ☐ Awareness
- ☐ Smart energy use

Your ideas: _____

_____

_____

**3. Expected Benefits:**

Environmental: _____

_____

Social: _____

_____

**4. Main Challenge and Solution:** _____

_____

_____

---

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- ☐ Solar
- ☐ Wind
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Your ideas: _____

_____

_____

**3. Expected Benefits:**

Environmental: _____

_____

Social: _____

_____

**4. Main Challenge and Solution:** _____

_____

_____

# Handouts- Energy Sources Flashcards

## EXPLORING ENERGY SOURCES

Renewable

Non-Renewable
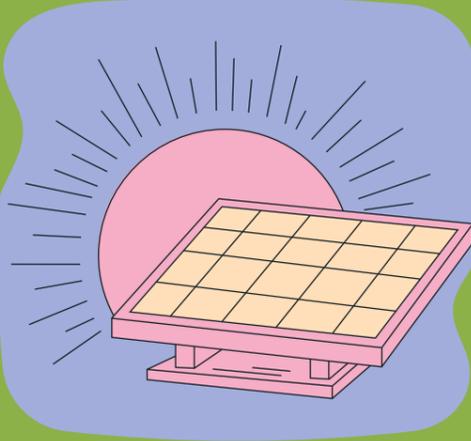
### RENEWABLE ENERGY
Solar Power

### RENEWABLE ENERGY
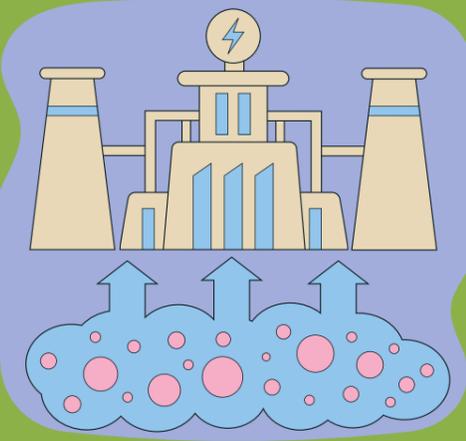Wind Energy

### RENEWABLE ENERGY
Hydropower Energy

### RENEWABLE ENERGY
Geothermal Energy

### RENEWABLE ENERGY
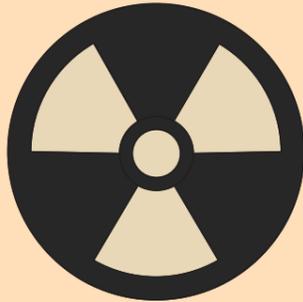Biomass Energy

### NON-RENEWABLE ENERGY
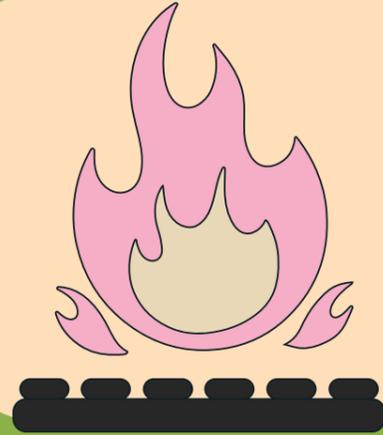Coal Energy

### NON-RENEWABLE ENERGY
Oil Energy

# Handouts- Energy Sources Flashcards

## NON-RENEWABLE ENERGY

Nuclear Energy

## NON-RENEWABLE ENERGY

Natural Gas Energy

## WHY USE RENEWABLE ENERGY?

Renewable energy is important because it does not run out and is cleaner for the environment, helping to reduce pollution and climate change.

## HOW IS SOLAR ENERGY GENERATED?

Solar panels capture sunlight and convert it into electricity.

## HOW IS WIND ENERGY GENERATED?

Wind turbines spin when the wind blows, creating electricity.

## HOW IS HYDRO ENERGY GENERATED?

Hydro energy is generated by using the flow of water in rivers or dams to produce electricity.

## HOW IS GEOTHERMAL ENERGY GENERATED?

Geothermal energy comes from the heat inside the Earth, which can be used to generate electricity and heat buildings.

## HOW IS BIOMASS ENERGY GENERATED?

Biomass energy is produced by burning organic materials like plants and animal waste to generate heat and electricity.