



Global Schools
Program



SUSTAINABLE DEVELOPMENT
SOLUTIONS NETWORK
A GLOBAL INITIATIVE FOR THE UNITED NATIONS

ACTIVITIES GUIDE: RESPONSIBLE CONSUMPTION



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Part 1: Introduction and Global Competencies



Introduction

How to use this guide

The Global Schools Activities Guide on **Responsible Consumption** is meant to support teachers or facilitators in carrying out activities on SDG 12 in school communities with lower and upper secondary students. The Activities can be carried out in the classroom or within the wider school community. Educators can select activities, videos, articles, or worksheets to use in a lesson plan. Additionally, facilitators can use all of the activities in a step-by-step process to develop an entire unit and actionable student projects on **Responsible Consumption**.



Facilitator's Objectives

Responsible Consumption is one of the main knowledge components of education for sustainable development, and it spans subjects beyond geography and science. The purpose of teaching this topic is to:

1. Facilitate student knowledge of the concepts through research in their local communities and strengthen independent research skills;
2. Promote and encourage positive values – appreciation, engagement, and exploration – on the topic;
3. Inspire positive actions and attitudes that contribute to solving local sustainable development challenges.

Overview of the Unit

Title	Responsible Consumption
Suggested Level	Grades 7-12
Learning Goal	To develop knowledge, values, and skills related to the issues, challenges, and importance of responsible consumption.
Learning Objectives	<ul style="list-style-type: none"> • Students will be able to articulate how individual lifestyle choices influence social, economic, and environmental development. • Students will explore pathways for engaging in sustainable consumption and production practices. • Students will be able to differentiate between necessities and desires of consumption and to reflect on their own individual consumer behavior in light of the needs of the natural world.
Global Competencies	Critical Thinking, Research Skills, Problem-Solving Skills, Teamwork, Collaboration, Global Awareness, Public Speaking, Empathy, Civic Engagement
Standards Explicitly Taught	*Global Schools encourages teachers to align the above learning objectives and goals to their national standards
Success Criteria & Assessment	Sample quizzes, essays, debates, and presentation topics can be found on the final pages of the guide.

Education for Sustainable Development Competencies

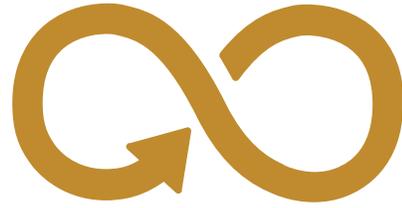
Competency	Description of the Competency	Applications to Quality Education
Systems thinking	“The ability to recognize and understand relationships; to analyze complex systems... and to deal with uncertainty.”	Encourage learners to consider how their daily actions contribute to responsible consumption and how distinct industries interact to create the complex problem of over-consumption.
Anticipatory	“The ability to understand and evaluate multiple futures – possible, probable and desirable; to create one’s own vision for the future;...to assess the consequences of actions.”	Encourage learners to envision a more sustainable world with energy for all as well as inclusive and realistic pathways for responsible consumption for all.
Normative	“The ability to understand and reflect on the norms and values that underlie one’s actions.”	Encourage learners to analyze the complexities that exist across these domains in a local context and how this affects their consumption habits.
Strategic	“The ability to collectively develop and implement innovative actions that further sustainability at the local level and [beyond].”	Encourage students to work together to critically analyze their school communities and propose innovative actions to promote responsible consumption within their school and with peers.

Competency	Description of the Competency	Applications to Quality Education
Collaboration	“The ability to learn from others; to understand and respect the needs, perspectives and actions of others (empathy); to understand, relate to and be sensitive to others (empathic leadership); ...to facilitate collaborative and participatory problem solving...”	Encourage students to consider responsible consumption and its significance across all groups, discussing problem-solving frameworks together to promote sustainable and inclusive consumption. Encourage students to work together and empathize with those that have less access to energy or resources.
Critical Thinking	“The ability to question norms, practices and opinions; to reflect on one’s values, perceptions and actions; and to take a position in the sustainability discourse.”	Encourage students to quantify their habits and reflect on their own consumption. Encourage students to discuss and debate their own opinions and perceptions on consumption habits.
Self-Awareness	“The ability to reflect on one’s own role in the local community and (global) society, ... evaluate and motivate one’s actions, and deal with one’s feelings and desires”	Encourage students to research energy sources, energy use, and waste management in their home country and community, as well as reflect on their findings.
Integrated Problem-Solving	“The ability to apply different problem-solving frameworks to complex sustainability problems and develop viable, inclusive, and equitable solutions that promote sustainable development – integrating the above-mentioned competencies.”	Encourage students to consider prior knowledge, their own values, and the circumstances of others, working together to design solutions for a better future so that the world can be more sustainable.

Part 2:
Topics in SDG 12:
Responsible
Consumption



Background on SDG 12: Responsible Consumption



What is Sustainable Consumption?

Sustainable Consumption was addressed at the UN Conference on Environment and Development, which took place in 1992 in Rio de Janeiro. This was followed by a symposium in Oslo in 1994. The two events set the framework for the development of the working definition of Sustainable Consumption, defining it broadly as: the use of services and products which fulfill basic needs and provide a better quality of life for humanity; minimizing the use of natural resources, toxic materials and reducing wasteful emissions; and all the while ensuring that there are sustainable sources of energy and resources for future generations. At these conferences, emphasis was made on education and public awareness as a tool for ensuring sustainability and was enshrined in the [Rio de Janeiro Agenda 21](#). Under the SDGs, Responsible Consumption is one of the 17 Goals, with a set of targets and indicators to be met by 2030.

In 2020, [the United Nations Environment Program \(UNEP\)](#) estimated that the Global Population will reach 9.6 billion by 2050. An equivalent of almost three planets would be needed to sustain the current lifestyles. [Sustain Your Style \(2020\)](#) finds that in western countries, a family throws away an average of 30 kg of clothing annually and recycles only about 15%.

The United Nations advocates for a sustainable lifestyle to avoid the pitfall and consequences of heavy consumption of natural resources. But how can students attain sustainable lifestyles? Individual actions are very effective in promoting responsible consumption. For instance, individuals can contribute to environmental sustainability by buying only what they can eat, using re-useable bags vs. plastic options, and making everyday choices about the cost of their lifestyles. Individuals can make considerable contributions to environmental sustainability and efficient natural resource management.

Education for Sustainable Consumption

Target 8 of the Responsible Consumption and Production SDG aims to "ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature" by 2030. Education for Sustainable Consumption (ESC) is an essential part of Education for Sustainable Development (ESD). It empowers individuals and social groups with appropriate information on the impacts of their daily choices as consumers and provides workable solutions and alternatives. As an educator, by facilitating the activities in this guide, you are empowering your students to develop sustainable values and attitudes.

Connection to the Environment

The need to prioritize environmental challenges and responsible consumption has become more relevant with increased population growth and commodification of human activities. The increase in demand for resources has resulted in undesired environmental impacts such as global pollution, increased carbon emissions, deforestation, food waste, and water insecurity (Al-Nuaimi & Al-Ghamdi, 2022). [Agenda 21](#) stated that “the major cause of the continued deterioration of the global environment is the unsustainable pattern of consumption and production, particularly in industrialized countries, which is a matter of grave concern, aggravating poverty and imbalances.” Years later, and in the context of the Sustainable Development Goals, this analysis remains the same. For example, UNESCO states that each year approximately 1/3 of all food produced – equivalent to 1.3 billion tons worth around [US \\$1 trillion](#) - is wasted either in consumer's trash, or is spoiled due to poor transport. Also, despite technological advances that have promoted energy efficiency gains, energy use in some countries will continue to grow. This makes Education for Sustainable Consumption an essential agenda in achieving environmental sustainability.

Consumer Responsibilities

The United Nations Conference on Trade and Development (UNCTAD) provides a set of [Guidelines for Consumer Protection](#) which supports countries in formulating and implementing laws on sustainable consumption. Guideline 5 highlights consumer rights, such as "access...to adequate information to make informed choices according to individual wishes and needs...and the promotion of sustainable consumption patterns." Education on Sustainable Consumption can help students grow into capable adults who are well-aware of making responsible and sustainable consumption choices.

Waste Management

In 2016, over [2 billion metric tons of waste was generated globally](#), with each person contributing on average 0.74 kilogram per day. More than half of global waste is said to be from food and plastic. Other sources include paper, cardboard, glass, metal, rubber, leather, and wood. Material consumption is expected to increase with higher economic growth in low- and middle-income economies and the projected population growth by 2050. Responsible Consumption recognizes the long-term impact of material consumption and therefore seeks to substantially reduce waste generation through prevention, reduction, recycling, and reuse by 2030 (Target 12.5).

Part 3: Classroom Activities



Step 1: Set the Context

Set the context for the unit and increase your own knowledge of SDG 12 before facilitating the following activities.

Preparing for the Unit

Watch these videos from the SDG Academy to gain technical background and prepare yourself for teaching Responsible Consumption. These videos can also be used in advanced-level courses with students.

1. [Consequences of Climate Change](#)
2. [The decision chain of natural resource management: Part I](#)
3. [Short History of Oil, Gas, and Mining](#)
4. [Environmental Challenges and Trends: Oil and Gas](#)
5. [Global Value Chains](#)
6. [Human rights and the extractive industries](#)
7. [How natural resources shape and are shaped by political context](#)
8. [A World Without Modern Energy](#)
9. [Sustainable Food and Land Use](#)

Pre-Reading Homework Assignments for Advanced Courses

For an advanced secondary education course, core reading for this topic or an example textbook is “The Age of Sustainable Development” by Professor Sachs. For the topic of Responsible Consumption, Global Schools suggests Chapter 1 and Chapter 6 of the book. Free downloads are available [here](#).

Concepts and Definitions in this Unit

Biodegradable
Carbon Footprint
Composting
Efficiency
Emissions
Energy Efficiency
Food Waste
Hazardous Waste
Landfill
Material Footprint
Methane
Natural Resources
Recyclable Materials
Sustainability
Sustainable consumption
Upcycling
Waste Diversion
Waste Reduction
Waste Separation

Sample Introduction Activities



Activity 1: Energy Use

Have your students fill out this [easily achievable list](#) and assess their energy use. This list can be found on the American Museum of Natural History site, titled "Be an Energy Saver". Students will work together to complete a checklist on their energy use. The checklist is divided into 5 categories: "Getting Around" "Shopping" "Eating and Drinking" "At Home" and "Outdoors". After students fill out the checklist, ask them to share in pairs before sharing to the wider group. Then discuss how they can become energy savers themselves. Ask them to make their own list, decorate it, and hang it up either in the classroom or at home to remind themselves how to save energy. Explain over the course of the unit, you will dive into deeper detail on these themes and topics.



Activity 2: Reducing Waste by Recycling

First, have students raise their hands to make a list of household products. Write these on the board. Ask the students how they think they should dispose of these household products, such as batteries, medicines, and cleaning supplies. Write down their answers. To check their answers, have students complete an online scavenger hunt. Go to [My-Waste](#) at [mywaste.ie](#) to learn about how to recycle all types of goods and reduce waste. Alternatively, this activity can be used as a waste separation game by showing different products, and having student groups determine how each should be recycled. Then, facilitators can reveal the answers using My-Waste. To extend the activity, students can even track classroom waste throughout the week.



Activity 3: Upcycling Arts and Crafts

Learn about [upcycling](#). Find out more about [upcycling initiatives](#) and how to conduct a workshop. Task your students with bringing in old materials, or with finding old materials in the school to upcycle. Use a class period to experiment with upcycling.



Activity 4: Ecological Footprint

Using [footprintcalculator.org](#) have students calculate their [ecological footprint](#) and learn about their "Personal Overshoot Day". This activity is available in 8 languages. Compare and contrasts differing responses with a class discussion. Ask students what they are most interested in learning more about as the unit continues.



Videos

1. [“What is sustainable development?”](#) - A simple introduction to sustainable development, FN-sambandet Norge
2. [“Unravel”](#) - A 14-minute documentary about the garment industry, AEON NGO.
3. [“Ethical Textiles”](#) Documentary, Pumpkin Interactive.
4. [“Upcycling: what is it and why it matters”](#), Upcycling initiatives, Alan’s Theory.
5. [“Overconsumption”](#), Carlos explaining overconsumption, desjardins group.
6. [“Saving the Environment from Consumerism”](#), Ted Talk, Breton Lorway.

Even more videos can be found on the website of our partner organization: [SIMA Classroom](#).



Articles

1. [“Why Responsible Consumption is Everyone’s Business”](#), World Economic Forum.
2. [Bus Lanes and Bike Lanes in the Philippines](#), 360.org
3. [‘Nudging can influence you to do better but it can also backfire’](#), 360.org
4. Try to save water at home through these [simple ideas](#) by the Water Corporation.



Data Visualizations

1. Check out [Eurostat](#) for indicators on monitoring SDG 12.
2. Check progress on SDG 12 by country through the [interactive SDG 12 Hub](#).
3. Explore the [Sustainable Development Report Dashboard](#) for SDG 12.

Step 2: Research

Students are encouraged to partake in guided research and activities to explore the topic of Responsible Consumption.

Research can be completed independently in a computer lab, as a homework assignment via talking to community members, through visiting a library, or as a classroom activity. Here are some suggested links for the students to use in their research process:

1. [CIA World Factbook](#)
2. [World Inequality Database on Education \(WIDE\)](#)

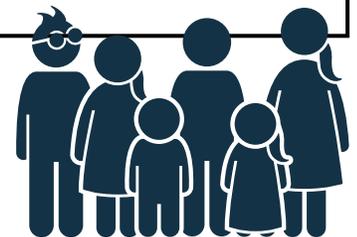


Student Research Worksheet

[Print Here](#)

Research Questions	Student Notes
What types of gasses are considered to be greenhouse gasses?	
What is the definition of a carbon footprint? What is your personal carbon footprint? https://www.carbonfootprint.com/calculator.aspx	
What types of natural resources are found in your country?	
How many CO2 emissions does your country produce? What is the percentage share of the world's total emissions?	
What is the most common energy source used in your community? How safe is it? How sustainable is it? Do all people have access to this energy?	

<p>Does your country have private or public infrastructure in terms of consumption of energy?</p>	
<p>Are there any policies in your country in order to limit energy consumption?</p>	
<p>Does your country have established infrastructure to help people recycle their garbage? Evaluate how garbage collection is efficient or not efficient. Are recycling and garbage collection policies the same across your country? Or, how are they different? (Provide at least two examples)</p>	
<p>Where is the closet landfill to your house? Where is the closet recycling plant?</p>	
<p>List any policies in your country that are established to limit and/or reduce waste</p>	



Step 3: Investigate

Description: Students are encouraged to think critically and use research skills to investigate their schools' contribution to Responsible Consumption. They are responsible for taking notes, asking questions, and discussing with peers, teachers, and school leadership.

01

Group Students

Split students into groups of 3 to 5 for the following activity.

02

Distribute Questions

Give students a copy of the School Investigation Worksheet ([printable version here](#)) or post the questions at the front of the room. Worksheets can be adapted based on the local context and the time allocated for the activity.

03

Set the timeframe

Allocate 20 minutes for students to work together to answer the questions.

04

Discuss

Facilitate a whole class discussion where students share and compare their responses. Which parts of the school community are the most critical areas of need/attention?

School Investigation Worksheet

[Print here](#)

Research Questions	Student Notes
How many lights are in the school/classroom? Do the lights in your school have motion sensors so that they turn off when no one is in the room to save energy?	
Does your school have power, internet, and electricity at all hours of the school day? What times do these energy sources turn on and off?	
Does your school have solar panels?	
Do you have computers? How long does it take computers to go into power saving mode?	
Do you have water fountains in your school?	
Do the sinks in the bathroom or the water fountains in your school turn off automatically?	

<p>Does your school have air conditioning or heat that contributes to energy consumption?</p>	
<p>Do the doors properly close, or do they let in heat or the cold?</p>	
<p>Are there objects covering the radiators? If so, they might not be heating the room well and it is not energy efficient.</p>	
<p>Does your school go on many field trips that involve carbon dioxide-emitting vehicles and planes?</p>	
<p>How do the majority of students travel to and from school? Do they walk, take public transportation, or drive?</p>	
<p>On average, how much water and electricity does your school consume every year?</p>	
<p>Does your school recycle? Do they compost?</p>	

<p>Are any of the products used in your school biodegradable? Such as cleaning products?</p>	
<p>Is there a chemistry lab in your school? What is done with the hazardous waste produced at the end of the experiments and classes?</p>	
<p>Given all these questions and notes above, what is the biggest problem in your school? How can you help your school community in this area? Write down your ideas here:</p>	

Step 4: Take Action

Now that students have had the opportunity to investigate their schools, it is time to encourage them to take action.

Actions can be small or they can be longer-term projects that are worked on over the course of a few class periods. Global Schools suggests that student actions take the form of an **Innovation** or a **Campaign**.



Innovation

A new project that has never been done before. For teachers, this could include hosting a workshop on Education for Sustainable Development for their fellow teachers. For schools, this could be creating a community garden with composted material or investing in forms of renewable energy. For students, this could be creating a new prototype for a sustainable city as part of an engineering class project and displaying their innovation in the hallway.



Campaign

Raising awareness about a certain issue, raising money for an issue, or advocating in the school community. For teachers, this could be creating a “Sustainable Living Challenge” or campaign for their classroom. For schools, this could be running a recycling campaign. For students, this could be advocating to leadership groups and teachers to take a stance on biodiversity or raising money for an NGO that focuses on wildlife protection. It could be selling artwork or sustainable food and using the money raised to donate to an environmental organization.



Create Campaigns

Create a campaign to raise awareness of responsible consumption. You can display posters, signs, or stickers all around your school. For example, place a note above a light switch saying “Last one out? Switch off the light” or next to water taps “Save water! Turn off the taps when rubbing your hands with soap”.



Green Day

Advocate for your school to run a green day. On this day, you will promote sustainable, renewable energy and responsible consumption. Invite other classes, students, and teachers. Don't hesitate to run games or workshops to raise awareness amongst students.



Energy Consumption Survey

Set up a table at the entrance of the school and ask students about their energy consumption. Compile this information to understand the energy habits of students.



No Plastic Day

Motivate your school to adopt a plastic-free day or week at the cafeteria. Share your outcomes and successes with your entire school after completing this action day. Then start conversations about eliminating plastic completely.



School water bottles

Provide school water bottles to students and create a contest to promote using them and bringing them to school. Help your school reduce its ecological footprint by providing school water bottles to students. You can also do the same with lunch containers.



Install Water Fountains

Does your school have water fountains and access to clean drinking water? If not, advocate for your school to install some.



Transportation Data

Collect data on student transportation and complete a data analysis project. Determine how many students walk to school, how many students ride bicycles, how many students use public transportation, and how many students use automobiles. Calculate the number of kilometers/miles that each student has to travel in each of these instances. Finally, calculate the carbon footprint of your school and brainstorm suggestions for helping your school embrace responsible consumption.



Host a Workshop

Host an upcycling workshop. There are many ways that you can use old products and turn them into brand new ones. Use your artistic skills and upcycle old products. A quick online search will give you many ideas for upcycling workshops, which could also be used in after-school programs.

Action Planning Template for Students

[Print Here](#)

<p>Describe your idea or action.</p>	
<p>Where will you implement your action? Your school, classroom, or local community?</p>	
<p>What is your primary goal in completing this action? How many people do you want to reach? What do you hope to accomplish?</p>	
<p>Provide any background and prior knowledge you have on this topic. Use research, facts, and statistics you gathered</p>	
<p>What are your next steps for completing this action?</p>	

Step 5: Sharing Student Work

Celebrating Successes

Finally, your students have completed their project. They've done so much work up to this point, and now you deserve to celebrate their accomplishments and achievements. It's also time to share their project with other students, teachers, parents, and the community. We encourage you to facilitate the celebration of their work by having a platform to share their project outcomes. This also allows students to work towards a common goal.

- Host an exhibition in the school lobby or courtyard, where everyone in the class can showcase their projects and share what they have accomplished. Invite parents, teachers, and other students.
- Host a Ted Talk Day. Students will speak for 5-10 minutes about their project. Invite the head of the school, teachers, and parents.
- Encourage students to write a blog post about their work. Share it with Global Schools leadership and socialmedia@globalschoolsprogram.org to feature projects on the Global Schools website and social media.
- Encourage students to write a blog post or a short article for the school or local newspaper.
- Have students create a video about their project and the SDGs to share with your school.

Student Feedback

It is also important to encourage students to collect peer feedback on the project. This includes comments, experiences, lessons learned, and roadblocks. Additionally, make sure that you host a reflection session within your classroom.

- Have students answer 1 to 5 questions about their favorite and least favorite parts of the project and what they would like to do again.
- Hold a focus group session where everyone can discuss their feedback. Make sure you have someone take notes.
- Ask students to quantify their impact. Did they reach 80 other students in the school? How can they reach 100 next time?
- Have students speak to another classroom to receive feedback.
- Encourage other students to leave comments in a "comment box" in the school's lobby, offering their opinions and feedback. Save these comments so that you have quotes to use in the future.

Step 6: Review and Assessment



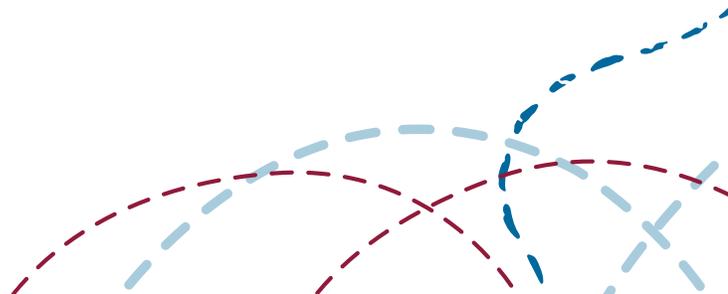
Quiz Questions

1. List all the greenhouse gasses.
2. Define carbon footprint.
3. Elaborate on one of the Goal 12 targets.
4. Approximately, what is the average consumption of energy in your country?
5. Briefly describe the carbon cycle.
6. How is carbon dioxide and methane harmful to the environment?
7. Approximately how much food is spoiled or rotting each year?
8. Describe the history of oil, gas, and mining.
9. Which continent is devoid of oil?
10. Describe why oil is an important example of a natural resource.



Debate Topics

1. Replacing fossil fuels with nuclear energy.
2. Climate change is not man-made. It is a natural phenomenon.
3. As fossil fuels become scarcer around the world, should we use renewable energy?
4. Population affects climate change.
5. Gas cars should be banned, and people should buy electric cars.



Example Questions for Exams, Essays and Projects



Lower Secondary

1. What is a carbon footprint? What are three things that you can do to reduce your carbon footprint?
2. Describe the difference between recycling, upcycling, and composting. Be sure to include an example of one type of product that you can recycle, one type of product that you can make when upcycling, and one type of product you can compost.
3. Write out five ways that you can save energy on a day-to-day basis. Which way do you think is the best way to save energy?



Upper Secondary

1. Each country has a different waste management strategy. Explore a few different strategies and elaborate on how your country can improve.
2. Imagine you are writing a proposal that will be sent to the school Director. Write out three recommendations for your school to practice more responsible consumption. Be sure to include evidence on why these policies would contribute to positive environmental outcomes. Be sure to include evidence on why these recommendations are practical and achievable by the school.



Advanced Upper Secondary

1. According to Sustainable Development Goals, 1.3 billion worth of food is rotting or spoiling. Explain what governmental policies or projects you would like to adopt or implement in your country.
2. Explore how communities, industries, and private businesses implement green economics and sustainability. If they are using products that are detrimental to the planet, how can they change and adapt sustainable practices, products, services, and/or strategies? Focus in on one company for an in-depth case-study presentation and analysis.
3. Discuss the trade-offs between environmental sustainability and economic sustainability. Be sure to include the types of natural resources your country produces and if these negatively impact the environment. How would the country be affected by policies to curb carbon emissions?

Additional Resources for Teachers

1. [“An Energy Project for Global Goals”](#) lesson plan by the World’s Largest Lesson on comparing the use of energy and paper with students from another school and country!
2. [Subject To Climate](#) is a large database with lessons and climate resources for all K-12 subjects.
3. [UNESCO SDG 12 Resources for Educators](#), UNESCO
4. [Concern Worldwide](#) activities for educators to facilitate in their classes.
5. [Tips on Teaching Sustainability](#) by Vanderbilt University
6. [Lesson plan on Choosing Sustainable Decisions](#) by Arizona State University
7. [Ideas for Classroom Activities](#) UNESCO



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