

EDUKI COMPETITION 2021/2022

LET'S GO SUSTAINABLE!

Think global and act local

THE SDGs EXPLAINED

What are the SDGs?

In 2015, the 193 member states of the United Nations adopted the **17 Sustainable Development Goals (SDGs)**.¹ Together, these goals form the **2030 Agenda**, an action plan aimed at making the world more equal and sustainable by 2030.

The singularity of the 2030 Agenda lies in the fact that each of the 17 SDGs is interdependent with the others. In other words, achieving one of them contributes to the achievement of the others. For example, tackling the threat of climate change means rethinking how we manage natural resources and build our cities, and vice versa.

The SDGs are also unique in that they cover topics that affect us all, wherever we are on the planet. Their implementation must therefore involve each of us: individuals, communities, companies, etc. This concerns all of us!

Thus, the SDGs are a major step forward in the fight for a better future for the whole of humanity. Their adoption has reaffirmed the international will to build a more sustainable world that is respectful of the environment and living beings.

To do so, a lot of progress has been made and many initiatives promoting sustainable development have been launched. Despite these positive developments, there is still room for improvement. **It is up to each of us to contribute to this.**

The 2021/2022 competition of the Eduki Foundation invites you to think about how you can achieve the SDGs 11, 12 and/or 13. This guide aims to provide students with the keys to understanding, so that they have the necessary instruments to participate, at their own level, in the achievement of the SDGs.

Reading note: the concepts or key words in bold and colour are explained in alphabetical order in the glossary at the end of each SDG section.

¹ [For more information, click here.](#)

SDG 11: MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

Cities have always been dense centres in which a great deal of human interactions and exchanges (commercial, social, political, etc.) take place. Often synonymous with employment and prosperity, they attract more and more people who decide to settle in them. According to the UN, around 60% of the world's population, i.e. 5 billion people, will be living in cities by 2030.

1. The modern city, a place of innovation and challenges

Urbanisation poses many challenges, both ecological and societal. First of all, ecological, because the increase in urban density mobilises many **natural resources** and generates a lot of pollution. It is known, for example, that cities account for 70% of carbon dioxide (CO₂) emissions in the world. This air pollution has consequences on the quality of life, well-being and health of the population.

Socially, the rapid and uncontrolled development of many cities is sometimes to the detriment of **inclusiveness** and thus disadvantages certain groups of people. Numerous studies have shown that women, children, older people and people with disabilities do not have equal access to public spaces. Yet, to build a sustainable city, the inclusion of all is necessary!

Therefore, we can all participate in the improvement of our daily life by rethinking our conception of the city: How can it be less polluting? What mechanisms can be put in place to include everyone in the public sphere? What place should plants have, in the urban landscape?

2. So how can SDG 11 contribute to making our cities and human settlements more sustainable?

To answer these challenges, SDG 11 proposes a new urban model in which inclusion and sustainability prevail. Its aim is to support cities in their transition and to anticipate their growth.

SDG 11 is composed of 10 sub-goals advocating, for example, the accessibility of public transports for all, better air quality and waste management, and the opening up of green and safe public spaces.

It is also important to underline the strong interdependence between SDG 11 and SDGs 12 and 13: a sustainable city cannot exist without optimising our resources (SDG 12) or reducing greenhouse gas emissions (SDG 13).

3. Sustainable cities in Switzerland

In Switzerland, more than three quarters of the population live in cities or built-up areas. The issue of urbanisation is thus central, as it concerns a large proportion of citizens.

Since the adoption of the SDGs, Switzerland has repeatedly affirmed its commitment to a sustainable and inclusive urbanisation. There are many examples of laws that go in this direction, such as the law aimed at facilitating access to public transport for people with reduced mobility or disabilities by the end of 2023.

At the local level, many initiatives are being implemented: creation of eco-districts, feminisation and greening of public spaces, promotion of soft mobility... the Swiss are bursting with creativity to make our cities and human settlements open to all, safe, resilient and sustainable.

4. Key words to better understand the topic

Inclusivity / inclusion: The act of integrating a person or a group of people in order to end their exclusion. This group is usually, but not necessarily, a minority. In the context of SDG 11, inclusivity can be defined as the means that are put into place to integrate every individual - men*, women*, children, elderly people or people with disabilities - in the public space. This must be accessible and promote the safety of all.

Urbanisation: Urbanisation is a process, whether controlled or imposed, characterised by the growth of cities and their outskirts to the detriment of rural areas. This phenomenon is a major challenge for sustainable development, as it is a factor of inequalities and pollution.

Natural resource: A natural resource is a treasure provided by nature and exploited by the human beings to satisfy their needs. There are **living** (e.g. forests and animals), or **non-living** (e.g. water and sand) resources. Some natural resources, such as solar energy, are **renewable**, which means they can regenerate as fast as people consume them, while some others, such as coal, are not.

SDG 12: ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

In 2021, the “overshoot day” occurred on 29 July. This is the day by which humanity has consumed all resources that the planet is capable of generating in a single year. This means that, in only 7 months, we have consumed all the resources allocated for one year. In 2000, this symbolic day took place on 1 November. The advancing of this date shows that our resources are far from being unlimited, that our consumption and production rhythms have an increasingly strong impact on our planet, and that the need for action is urgent.

1. What are the challenges for our production and consumption patterns?

Although people are aware of the limited nature of natural resources, the way we manage them is not optimal. We consume and waste massively, and companies rely on production models that favour offshoring and overuse of resources.

This dynamic has serious environmental consequences. Here are three examples:

- ▶ **Meat production and consumption** is responsible for 91% of the destruction of the Amazonian forest, considered the “lungs of the Earth”. This industry also uses huge amounts of water. For example, between 550 and 16,000 litres of water are necessary to produce one kilo of beef,² depending on the industry, the geographical area and the kind of calculation. Most of this water is used to grow feed for the cattle. According to a study by the University of Oxford, we could reduce our personal **carbon footprint** by 73% simply by stopping eating animals.³
- ▶ Experts have estimated that if **food waste** were a country, it would be the third-largest emitter of greenhouse gases in the world. Also, according to the UN, 20% of the world’s food, amounting to 1 billion tonnes, is wasted each year.⁴ That’s seven times the distance 40-tonne lorries would travel around the world if they stood end to end.
- ▶ The same can be observed in the **textile industry**. With the advent of **fast fashion**, it has become the second most polluting industry in the world, after oil. It’s also the third largest consumer of water in the world. To make one T-shirt for example, it takes 2,720 litres of water, the equivalent of 70 showers.⁵ As more and more populations suffer from drought or famine, better management of resources appears necessary.

These few examples show the impact of our production and consumption rhythms. At the local level, eco-systems are gradually being destroyed, while polluting the entire atmosphere, on a global scale. It is therefore essential that we act and re-think our habits so as not to exhaust the Earth.

2. The importance of SDG 12

In order to limit the ecological and social impacts of our current consumption and production models, the member states of the United Nations have adopted SDG 12, made up of 11 sub-goals, aimed at promoting waste reduction and recycling, as well as a sustainable and rational management of natural resources.

SDG 12 aims at making everyone responsible, producers and consumers alike, so as to better manage our resources. If companies are called upon to make changes in their practices, consumers must also be made aware of sustainable development.

2 [For more information, click here.](#)

3 [For more information, click here.](#)

4 [For more information, click here.](#)

5 [For more information, click here.](#)

3. What is Switzerland doing?

In line with its commitments to the 2030 Agenda, Switzerland has declared its desire to change its economic model by promoting a **green economy**. In this sense, it supports companies, NGOs and science in finding solutions for more responsible production and consumption. At a more local level, we have for example witnessed the creation of local currencies, such as the “Léman”, a complementary currency promoting **short supply chains**, and thus a more sustainable and solidarity-based economy.

4. How can we, as consumers, take action for SDG 12?

Fortunately, we can provide a positive answer to the issue of resource management: reducing meat consumption, repairing, reusing or recycling objects instead of buying new ones, reducing food waste, and promoting local or second hand fashion, are increasingly visible on the market.

We can also re-think our habits to promote more ethical and environmentally-friendly consumption: many eco-actions can be carried out at home to act, at our own level, in favour of sustainability.

5. Key words to better understand the topic

Short supply chain: This is a product distribution circuit, the purpose of which is to reduce the distances between producers, distributors and clients. A short supply chain limits the pollution generated by the circulation of goods.

Green economy: According to the United Nations Environment Programme (UNEP), a green economy is an economy that leads to improvements in human well-being and social equity, while significantly reducing environmental risks and resource scarcity.

Carbon footprint: Carbon accounting is an instrument that allows each individual or entity to account for their carbon footprint, i.e. their direct and indirect greenhouse gas emissions, according to a publicly and officially recognised methodology.

Fast fashion: Fast fashion is a segment of the clothing industry characterised by the very rapid renewal of the clothes offered for sale. This practice is being called into question due to its polluting effects. In order to ensure the renewal of clothes, fast fashion industries are compelled to relocate their production, which involves long commercial flights before clothes can be put out for sale. The raw materials used to produce these clothes are also a great source of pollution.

Food waste: This is food intended for human consumption that is thrown away or left to rot, for whatever reason. Food waste must not be confused with food loss, which is a reduction in the quantity or quality of agricultural, forestry or fishery products intended for human consumption, but which are not ultimately consumed by people. Food losses happen in all stages of the food chain (production, harvest, storage, transformation or transport).

SDG 13: TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS

Atmospheric concentrations of the main greenhouse gas emissions have continued to rise, despite the temporary reduction of emissions in 2020 linked to the measures taken in response to the COVID-19 pandemic. The period from 2015 to 2020 was probably the hottest ever registered. This year, 2021, in particular, the world has experienced extreme weather: from the numerous floods in Switzerland to the **remarkable variations in climate** elsewhere around the globe, humanity has realised the impact of **climate change**.

The latest report of the Intergovernmental Panel on Climate Change (IPCC) released this summer, also warns of the global situation.⁶ If we do not act now to reduce our **greenhouse gas emissions**, we could experience a temperature rise of about 4 degrees by 2100. At first glance, this might seem like only a minimal increase. In reality, it means a profound imbalance in our ecosystems and, consequently, of our lifestyles.

To better understand and limit these climate changes, here is a short explanation of the origins and implications of climate change.

1. Where does this climate change come from?

Since the Industrial Revolution of the 19th century, the production and consumption rhythm of much of humanity has accelerated. As our needs multiply, companies try to satisfy them. As a result, our consumer society pushes us to want ever more, and to want it ever more quickly, so we adopt habits that are sometimes not very responsible: use of unsustainable transport, purchase of goods from offshoring or exploitation of natural resources such as forests... These consumption and production patterns are not without consequences: through their greenhouse gas emissions, they contribute considerably to atmospheric warming, and consequently, to climate change.

2. What are the consequences?

Atmospheric warming has consequences at all levels. It encourages extreme climatic phenomena such as floods, fires or hurricanes, which devastate entire ecosystems and precipitate the extinction of many species. Additionally, it renders the lives of local populations more precarious, forcing them to **migrate** more and more. With the climate crisis, instability becomes permanent.

In this sense, it is essential that we all act together to fight against climate change.

⁶ [For more information, click here.](#)

3. What place for SDG 13 in the fight?

Sustainable Development Goal number 13 aims to «*Take urgent measures to fight climate change and its impacts*». This fight therefore involves **two concrete actions: mitigation and adaptation**.

► **Mitigation** of climate change, i.e. the reduction of climate disturbances, would be possible through measures such as the reduction of greenhouse gas emissions linked to the combustion of fossil fuels (coal, gas, oil), the promotion of reforestation and the transition towards green energies (e.g. wind, solar, hydro). In order to limit climate warming by 1,5°C above pre-industrial levels in line with the **Paris Agreement**, the world should achieve zero net carbon dioxide emissions by around 2050.

► **Adaptation** consists in supporting communities to adapt to a changing climate so that they can better manage and anticipate natural catastrophes. To limit inequalities, it is essential to build resilience in all countries to face climate-related risks and natural disasters. **Prevention** and **education** play an important role in improving individual capacities and resilience.

4. What is Switzerland doing? What actions can be taken?

Different actions are being taken on the international stage, but in the fight against climate change, every country and individual have a role to play. Switzerland, for its part, has ratified the **Paris Climate Agreement** in 2017 and is increasing its efforts to limit CO² emissions. On an individual basis, many actions can be taken: limiting one's consumption of animal-animal foods, getting involved in local associations, joining climate marches or even preferring public transport are all ways of limiting and preventing climate change and its repercussions.

5. Key words to better understand the topic

Paris Climate Agreement: In 2015, during the United Nations climate conference in Paris, a new legally binding agreement was adopted that for the first time commits all states to reduce their greenhouse gas emissions. It includes provisions to reduce global greenhouse gas emissions gradually.

Greenhouse gas emission: A greenhouse gas is a gaseous substance capable of absorbing the infrared radiation produced by the Earth. Greenhouse gases are considered one of the main causes of global warming.

Climate refugee: A climate refugee is a person who is forced to leave the country of origin due to environmental degradation. This migration may follow floods or droughts, hurricanes, fires, rising temperatures, or any other extreme weather event.