Train2Sustain – developing capacity to teach sustainability in VET

Unit 3

UN Sustainable Development Goals

Index

Glossary

Glossary for Units 1 – 7 ALPHABETIC ORDER

Artificial intelligence	**Artificial intelligence** (**AI**) is <u>intelligence</u>—perceiving, synthesizing, and inferring information—demonstrated by <u>machines</u>, as opposed to intelligence displayed by <u>non-human animals</u> and <u>humans</u>. Example tasks in which this is done include speech recognition, computer vision, translation between (natural) languages, as well as other mappings of inputs.
Biocapacity	The **biocapacity** or **biological capacity** of an <u>ecosystem</u> is an estimate of its production of certain biological materials such as <u>natural resources</u>, and its absorption and filtering of other materials such as <u>carbon dioxide</u> from the atmosphere
Biodiversity	**Biodiversity** or **biological diversity** is the variety and variability of <u>life on Earth</u>. Biodiversity is a measure of variation at the <u>genetic</u> (<u>genetic variability</u>), <u>species</u> (<u>species diversity</u>), and <u>ecosystem</u> (<u>ecosystem diversity</u>) level.
Carbon footprint	A **carbon footprint** is the total <u>greenhouse gas (GHG) emissions</u> caused by an individual, event, organization, service, place or product, expressed as <u>carbon dioxide equivalent</u> (CO_2e)
Carbon handprint	A carbon handprint is **the opposite of a footprint**. It recognises the actions you take to have a positive impact on the climate, over and above reducing your own carbon footprint if you do enough of these, they might even outweigh the size of your carbon footprint.
Circular economy	A **circular economy** is a model of <u>production</u> and <u>consumption</u>, which involves <u>sharing</u>, leasing, <u>reusing</u>, repairing, refurbishing, and <u>recycling</u> existing materials and products as long as possible
Decarbonization	The term decarbonization literally means **the reduction of carbon**. Precisely meant is the conversion to an economic system that sustainably reduces and compensates the emissions of carbon dioxide (CO_2)
Deforestation	**Deforestation** or **forest clearance** is the removal of a <u>forest</u> or stand of trees from land that is then <u>converted</u> to non-forest use.[3] Deforestation can involve conversion of forest land to <u>farms</u>, <u>ranches</u>,

	or urban use. The most concentrated deforestation occurs in tropical rainforests
Eco-design	**Ecological design** or **ecodesign** is an approach to designing products and services that gives special consideration to the environmental impacts of a product over its entire lifecycle
Ecological footprint	The **ecological footprint** is a method promoted by the Global Footprint Network to measure human demand on natural capital, i.e. the quantity of nature it takes to support people and their economies.
Energy-efficient	Energy efficiency is **the use of less energy to perform the same task or produce the same result**. Energy-efficient homes and buildings use less energy to heat, cool, and run appliances and electronics, and energy-efficient manufacturing facilities use less energy to produce goods.
Environmentally friendly	**Environment friendly processes**, or **environmental-friendly processes** (also referred to as **eco-friendly**, **nature-friendly**, and **green**), are sustainability and marketing terms referring to goods and services, laws, guidelines and policies that claim reduced, minimal, or no harm upon ecosystems or the environment.
European circular economy action plan	
	The EU's Circular Economy Action Plan (CEAP) was **a comprehensive body of legislative and non-legislative actions adopted in 2015, which aimed to transition the European economy from a linear to a circular model**. The Action Plan mapped out 54 actions, as well as four legislative proposals on waste.
Fertilisers	**Fertiliser** is any material of natural or synthetic origin that is applied to soil or to plant tissues to supply plant nutrients.
Fossil fuels	A **fossil fuel** is a hydrocarbon-containing material formed naturally in the Earth's crust from the remains of dead plants and animals that is extracted and burned as a fuel. The main fossil fuels are coal, oil, and natural gas.
Greenhouse emission	**Greenhouse gas emissions** from human activities strengthen the greenhouse effect, contributing to climate change. Most is carbon dioxide from burning fossil fuels: coal, oil, and natural gas.
Greenhouse Emissions	Greenhouse gas emissions from human activities strengthen the greenhouse effect, contributing to climate change. Most is carbon dioxide from burning fossil fuels: coal, oil, and natural gas. The largest emitters include coal in China and large oil and gas companies.

Greenwashing	is a form of <u>advertising</u> or <u>marketing spin</u> in which <u>green PR</u> and <u>green marketing</u> are deceptively used to persuade the public that an organization's products, aims and <u>policies</u> are <u>environmentally friendly</u>.
Holistic process	**relating to or concerned** with wholes or with complete systems rather than with the individual parts.
Innovation	**Innovation** is the practical implementation of <u>ideas</u> that result in the introduction of new <u>goods</u> or <u>services</u> or improvement in offering goods or services
Lean management	**Lean manufacturing** is a <u>production method</u> aimed primarily at reducing times within the <u>production system</u> as well as response times from suppliers and to <u>customers</u>.
Lean principles	The five principles are considered a recipe for improving workplace efficiency and include: 1) defining value, 2) mapping the value stream, 3) creating flow, 4) using a pull system, and 5) pursuing perfection.
Linear economy	he traditional model where raw materials are collected and transformed into products that consumers use until discarding them as waste, with no concern for their ecological footprint and consequences.
Muda, Mura, Muri	**Muda, mura and muri** are three types of wasteful actions that negatively impact workflow, productivity and ultimately, customer satisfaction.
Organic farming	Organic farming, also known as ecological farming or biological farming, is an agricultural system that uses fertilizers of organic origin such as compost <u>manure</u>, <u>green manure</u>, and <u>bone meal</u> and places emphasis on techniques such as <u>crop rotation</u> and <u>companion planting</u>.
Pesticides	In general, a pesticide is a chemical (such as <u>carbamate</u>) or <u>biological agent</u> (such as a <u>virus</u>, <u>bacterium</u>, or <u>fungus</u>) that deters, incapacitates, kills, or otherwise discourages pests
Product Life cycle	Product life-cycle management is the succession of strategies by business management as a product goes through its life cycle. The conditions in which a product is sold changes over time and must be managed as it moves through its succession of stages.
Product-as-a-service	Product as a service is the concept of selling the services and outcomes a product can provide rather than the product itself.

Pull production	**A method of production control in which downstream activities signal their needs to upstream activities**. Pull production strives to eliminate overproduction and is one of the three major components of a complete just-in-time production system.
Recycling	**Recycling** is the process of converting <u>waste</u> materials into new materials and objects. The <u>recovery of energy from waste materials</u> is often included in this concept. The recyclability of a material depends on its ability to reacquire the properties it had in its original state
Renewable energy	**Renewable energy** is energy that is collected from <u>renewable resources</u> that are naturally replenished on a <u>human timescale</u>.[ ] It includes sources such as <u>sunlight</u>, <u>wind</u>, the movement of <u>water</u>, and <u>geothermal heat</u>
Sustainability	**Sustainability** is a societal goal that relates to the ability of people to safely co-exist on <u>Earth</u> over a long time.
Sustainable household	A sustainable home is **one that is built or retrofitted in a way that conserves resources, optimizes energy and water use and that will last longer with quality systems**. A sustainable house is built with low-impact, high-performance materials. They are efficient in terms of manufacturing, shipping, and installing.
Sustainable label	Eco labels **set minimum environmental and health standards and verify products that meet the criteria**. They're designed to inform consumers, brands, and manufacturers that labelled products are more environmentally friendly than most.
Sway	Sway is a digital storytelling app that helps you create professional, interactive designs for your images, text, videos, and other media in minutes.
The 5s	5S stands for the 5 steps of this methodology: **Sort, Set in Order, Shine, Standardize, Sustain**. These steps involve going through everything in a space, deciding what's necessary and what isn't, putting things in order, cleaning, and setting up procedures for performing these tasks on a regular basis.
The European action Plan	It aims to: Re-orient capital flows towards sustainable investment, in order to achieve sustainable and inclusive growth; Manage financial risks stemming from climate change, natural disasters, environmental degradation and social issues; and. Foster transparency and long-termism in financial and economic activity.

Value chain	A **value chain** is a progression of activities that a firm operating in a specific industry performs in order to deliver a valuable <u>product</u> (i.e., <u>good</u> and/or <u>service</u>) to the end <u>customer</u>.
Value stream	A **value stream** is the set of actions that take place to add value to a customer from the initial request through realization of value by the customer. The value stream begins with the initial concept, moves through various stages of development and on through delivery and support. A value stream always begins and ends with a customer.
Waste management	**Waste management** or **waste disposal** includes the processes and actions required to manage <u>waste</u> from its inception to its final disposal. This includes the <u>collection</u>, transport, treatment and disposal of waste, together with monitoring and regulation of the waste management process and waste-related <u>laws</u>, technologies, economic mechanisms.

1 UN Sustainable Development Goals

1.1 Introduction

The Topic

In content unit 2, you already read that it is absolutely necessary to act more sustainably in the future so that our planet remains liveable for future generations. Nevertheless, it is obvious that there is still a long way to go to a completely sustainable way of life.

> **Example**
>
> Here you will find a few examples that show that even today we are still far from sustainable living:
> - In recent years, around 10 million hectares of forest have still been destroyed every year.
> - According to the UN, about 100 civilians are killed every day in armed conflicts.
> - In 2019, 22% of all young people worldwide neither had a job nor participated in an education or training programme.

To ensure that sustainable action is implemented and adhered to around the globe, it has become clear that **globally applicable agreements and regulations are needed**. Therefore, the United Nations adopted the 2030 Agenda, which includes 17 Sustainable Development Goals (SDGs), to help reduce negative impacts on various areas of our planet and to eliminate grievances.

In this unit, you will first learn about the UN 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals. Then you will get an overview of how different countries or individual organisations work with these goals and what progress has already been made. At the end of this unit, you will see what challenges are faced in achieving the Sustainable Development Goals, but also what you can do to make our planet a little more sustainable.

1.2   Sustainable Development Goals

In order to stop the inequalities and grievances and the negative impact they have on our planet, the 2030 Agenda was adopted at a **United Nations Summit in 2015**. The 2030 Agenda, entitled **"Transforming our world: the 2030 Agenda for Sustainable Development",** is a plan to **promote sustainable peace and prosperity and protect our planet**. Since 2016, all member states of the United Nations have been working on translating the goals of this agenda into national measures and thus fighting poverty and inequalities. An important aspect of this is to **leave no one behind,** i.e. to also support less developed countries to develop and implement sustainable measures.

The 2030 Agenda contains **17** goals, the so-called **Sustainable Development Goals**, which are to be **achieved by 2030**. As you have already learned in Unit 2 - Sustainability, sustainability does not only refer to the **ecological** sphere, but also to the **social and economic areas**, which is why these 17 goals take into account our environment as well as people and the economy.

When working and talking about the 17 goals it is important to bear in mind that it is goals, we all are striving to achieve. It is about a mind-set for making the world a better place for all of us. Underneath the 17 global goals you find 169 targets are the real working parts of the Goals. The 17 main Goals give us well defined categories for the work ahead, but the targets give us a detailed list of our challenges and promotes engagement on a more personal level. Through them, the Global Goals can really come alive. Now, pick the ones that you feel most passionate about and take action to change the world for the better.
Read more about the targets and their KPI here: https://sdgs.un.org/2030agenda

> **Remember**
>
> The 17 Sustainable Development Goals were introduced to make global development socially, ecologically and economically sustainable.

The introduction of these sustainability goals is intended to achieve the following, among other things:

- Respect for human rights
- Supporting disadvantaged population groups
- Protecting our environment
- Economic growth

Have you already heard about the UN Sustainable Development Goals? If so, which ones do you know?

You could also discuss with your students about Green Washing when companies label themselves as "green" but in fact not green at all.

You can let you students consider how to strive towards the goals from different perspectives:
- What can I do?
- What can the school do?
- What can companies do?
- What can the municipality do?
- What can government do?
- What can EU do?

An interesting discussion in classes and with peers could be:
How much of my own lifestyle and privilege, am I will to reduce for the benefit of the "goals"

The specific goals that have been defined are shown in Figure 1.

Source: https://www.un.org/sustainabledevelopment/news/communications-material/
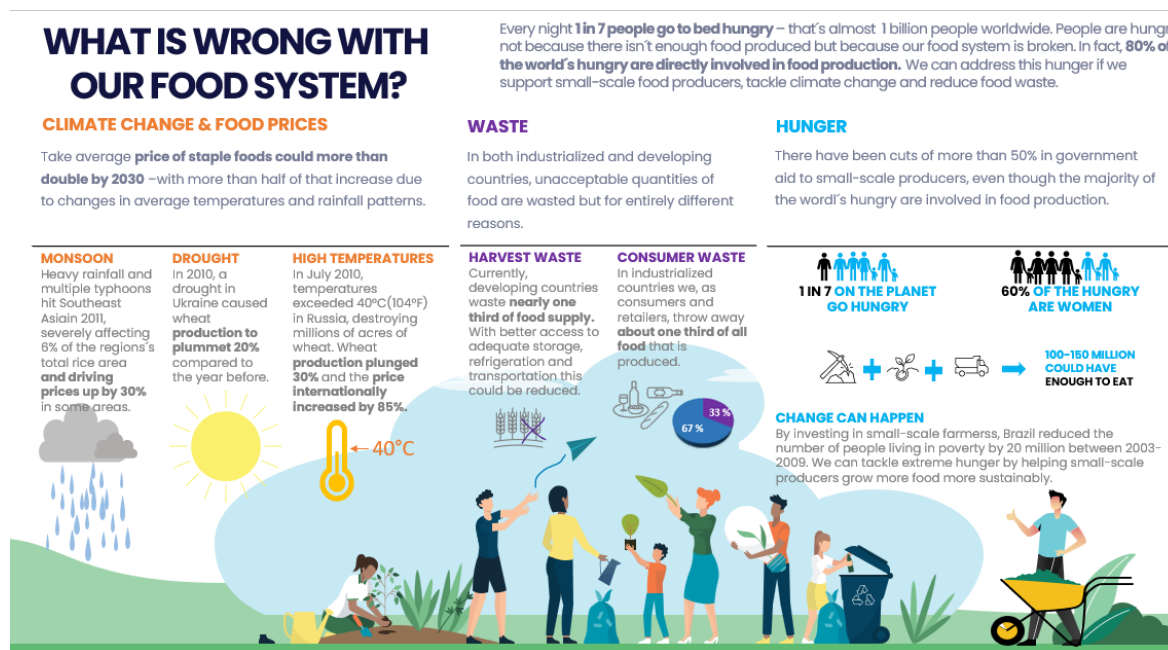
Figure 1. UN Sustainable Development Goals

1. No Poverty

Did you know that about 730 million people currently live on €1.70 a day? And if we don't significantly change this, there will still be 480 million people, about a third of them children, affected by extreme poverty in 2030. Poverty is a problem that can only be tackled across sectors, which is why all SDGs have this as an overall goal. In order to achieve this goal, the poorest and most vulnerable population groups, who are at home in less developed, crisis-ridden countries, are to be supported. The focus here is primarily on sub-Saharan Africa. These people should have access to basic services, be able to own land and other property, and be able to use natural

resources and new technologies. This support also relates to building resilience to crises, strengthening peace within countries and mitigating climate change.

2. Zero Hunger

This goal is focused on combating hunger in the world by 2030. Currently, there are about 700 million people suffering from hunger worldwide, but mostly in developing countries in Africa and Asia. You can see the reasons for this problem in Figure 2.

Source: https://www.good.is/infographics/infographic-what-s-wrong-with-our-food-system

Figure 2. Problems in the global food system

The aim is that all people have access to sufficient and nutritious food all year round through the implementation of appropriate measures. This is to be achieved primarily through the promotion of sustainable agriculture.

You can also support this goal, e.g. by buying sustainably manufactured products, helping farmers and not throwing food away.

3. Good Health and Well-Being

The entire world population should be able to live a healthy life and feel good. However, especially in poorer countries, health care is unfortunately weak. In 2017, just one-third to one-half of the population had access to the health care they needed, and the Covid crisis has also made relief efforts more difficult. To ensure universal health coverage by 2030, we would need additional 18 million health workers.

You can contribute to this goal by adopting a healthy lifestyle, taking care of your safety and encouraging others to do the same.

4. Quality Education

Education is an important means of escaping poverty, which is why efforts have been made in recent years to give as many people as possible access to education. Nevertheless, in 2018, around 260 million children could not attend school and around half of all children and adults do

not have the minimum requirements in reading and mathematics. This is a particular problem in developing countries, where basic resources for education are often not available. Therefore, this goal aims to provide access to quality education for all and support lifelong learning by 2030. All children should have free access to school education and gender inequalities should also be eliminated.

5. Gender Equality

Gender equality is a human right and is essential for peaceful coexistence. As you have probably heard, a lot has been done to achieve gender equality, but unfortunately there is still a lot of room for improvement in some areas, such as work or education. In addition, women all over the world are far too often victims of violence.

You can also contribute to counteracting these disadvantages. If you are a boy/man, treat all people with the same respect, regardless of whether they are women or men. Help to put women on an equal footing in all situations and prevent violence against women. As a girl/woman it is important that you claim your rights. Live a self-confident life, get the education you want and resist hostility and discrimination.

6. Clean Water and Sanitation

Globally, one in three people does not have safe access to drinking water and two in five people do not have access to a facility to wash their hands. Therefore, by 2030, the goal is to ensure that all people have access to safe drinking water and sanitation and hygiene facilities. This includes careful management of water use and curbing water pollution.

You can help to achieve this goal by taking part in various initiatives. You may even know one or two of them and have already taken part in them, such as the World Water Day.

7. Affordable and clean Energy

Energy is one of the main causes of climate change, and 60% of greenhouse gases are produced through its use. Since about one tenth of the world's population still has no access to electricity, this goal aims to ensure that all people worldwide have access to affordable, reliable, modern and, above all, environmentally friendly energy.

This point also includes the protection of the environment through the reduction of emissions caused by the use of energy. Above all, you can contribute to this goal, e.g. by switching off devices when you no longer need them, or by cycling or walking instead of taking your car.

> **Practice**
>
> To give your students insight in the life of people who do not have any electricity to live and to raise awareness on a more responsible energy use, you can integrate practical activity A02 in your teaching. It is about spending one day in school and also at home without electricity.
>
> You can find the instructions as well as supporting documents of this activity A02 "A Day without Electricity" here: https://www.train2sustain.eu/instructors/electronic-toolbox/

8. Decent Work and economic Growth

Within the framework of this goal, the aim is to ensure that the economy in the various countries and productivity always grow, and that unemployment is kept as low as possible. Equal pay, the inclusion of disadvantaged people in the world of work, fair working conditions and the abolition of child labour are also promoted.

9. Industry, Innovation and Infrastructure

To ensure competitiveness as well as the income of individual countries and to reduce unemployment, inclusive and sustainable industrialisation combined with innovation and high-quality and sustainable infrastructure is necessary. They are important for the introduction of new technologies, enable efficient use of resources and facilitate international trade. This should both raise our standard of living and protect our environment.

10. Reduced Inequalities

As you probably know, there are still many inequalities on our planet today. For example, many people or countries suffer poverty while others bask in wealth, many are denied access to education and other necessary facilities, and gender inequalities are still present. All other Sustainable Development Goals are linked to this issue, which is why reducing inequalities is key to achieving many other Sustainable Development Goals. Population groups must no longer be excluded from various spheres of life and discriminated against; this is the only way to achieve a better life for all of us.

11. Sustainable Cities and Communities

More and more people prefer to live in cities; in recent years, more than half of all people lived in cities and this trend is expected to continue in the coming years. While cities are hugely important for economic growth, they are also the biggest producers of emissions and take up a large part of the raw materials at our disposal. This urbanisation has created many slums and the services provided by cities can no longer cope with the large number of inhabitants, leading to negative impacts on the environment as well as on people. Therefore, affordable housing in cities and access to necessary services for all inhabitants should be made possible again by 2030. The aim is also to make cities more sustainable, e.g. in terms of transport or housing, so that the negative environmental impact is greatly reduced.

You can support this goal by thinking about how you could make your city or your living environment more sustainable and implementing measures to achieve this.

12. Responsible Consumption and Production

The production as well as the consumption of products have a very strong negative impact on the environment. Far too many new raw materials are used for production and our consumption has become very wasteful. About one third of all food is thrown away. We also often buy products that are harmful to the environment just because they are cheaper, and it is easier to buy new products than to repair old ones. If the population continues to grow, it will soon no longer be possible to meet all our needs with our current consumption patterns. In order to ensure the survival of all of us, it is therefore necessary to switch to a more sustainable and resource-saving way of life, which affects the production and provision of products on the one hand, and our consumption on the other. For example, waste should be reduced, and resources used more efficiently by 2030. A major focus is also on developing countries, for which a sustainable way of life is even more difficult.

In order to achieve this goal, we are all called upon - including you as a private person. To help, you should make sure to minimise your waste and only buy new products that you really need. Buying regional products also helps to act more sustainably.

13. Climate Action

The year 2019 was the second warmest year ever and emissions pollution also set a new record this year.

> **Digression**
>
> In this video you can see the impact this has on our planet:
> https://youtu.be/E2j0pu_tM2Q

Climate change affects all of us - all people on all continents and in all countries. In order to ensure our survival in the future, we need to take swift action to stop global warming. Therefore, this goal deals with making humanity aware of this problem and motivating them to take appropriate action to stop climate change. The goal is to keep global warming at about 1.5%. An important step in this direction was taken with the signing of the Paris Agreement. You can read more about this in Unit 2 - subchapter International Agreements and Certificates.

Again, the help of all people is needed. You can find out what you can do to limit climate change here: https://www.un.org/en/actnow

14. Life below Water

Our lives are enormously affected by the oceans, whether in terms of weather conditions, the oxygen we breathe or the food we eat. Currently, however, the waters are subject to a huge number of negative impacts. Water pollution is destroying many ecosystems and reducing biodiversity enormously. But careful water management is a key element for a sustainable future and only healthy oceans can guarantee a healthy life for us. Therefore, the top priority of this goal is to protect the oceans and the creatures that live in them. Pollution and overfishing should be prevented, and sustainable use of the oceans should be guaranteed.

You can support this goal by disposing of your waste in appropriate bins and not in the sea, by not destroying the habitat of underwater creatures and by buying sustainable products when buying fish and seafood.

15. Life on Land

Nature is of crucial importance for our survival, as it provides us with oxygen and regulates the weather, among other things. But we humans have already transformed three quarters of the Earth's surface, depriving many animals and plants of their habitats. About 1 million animal and plant species are threatened with extinction and the ecosystems that are essential for our survival are increasingly deteriorating. Our actions are causing green spaces to disappear and deserts to form. It is also easier for pathogens to spread and cause pandemics like Covid 19. Therefore, this goal pushes for a responsible approach to nature by all people. Ecosystems and animal habitats are to be protected, thus preserving biodiversity. Desertification is also to be stopped.

We can contribute to achieving this goal by not polluting nature with waste, by not endangering animal and plant species and by only consuming what we really need in order to protect resources and the environment.

16. Peace, Justice and strong Institutions

In order to ensure sustainable development, compliance with laws, strong institutions and the preservation of peace are essential. Nevertheless, there are still numerous wars worldwide, people who have to leave their homes behind and flee, corruption and human rights violations. Therefore, this goal aims to reduce all forms of violence and the associated loss of life. Corruption must end and peace and strong, transparent, reliable institutions worldwide are required.

We can all support this by promoting peaceful coexistence, tolerating and respecting each other and exercising our rights, e.g. to vote.

17. Partnerships for the Goals

Achieving these sustainability goals can only be ensured if there is global cooperation. Partnerships that share the same values and are focused on saving the planet are needed at regional, national and international levels. The focus of this goal is therefore on strengthening these cooperations and ensuring the joint achievement of all sustainability goals. To this end, developing countries in particular are to be supported financially and strategically in achieving the goals. Technologies that guarantee sustainable development are to be developed jointly, and fair, sustainable trade between countries is also to be made possible.

In Figure 3 you and your students get an overview of the SDGs in categories: economy, society and biosphere.
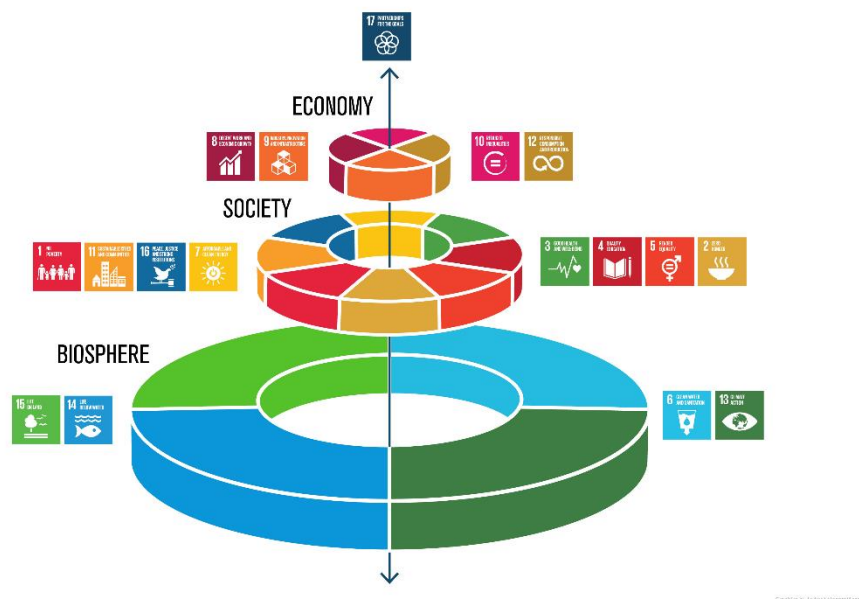

Figure 3. SDGs in economy, society and biosphere

Indicator

You can also start initiatives or join communities that contribute to the achievement of the Sustainable Development Goals. Here you can view existing actions, register your own initiatives and meet new people: https://sdgs.un.org/partnerships

The achievement of all these goals was enormously affected by the covid pandemic, and progress that had already been made in the respective areas was partially undone. Nevertheless, efforts are being made from various sides to compensate for the effects of the pandemic so that the original goals can still be achieved by 2030.

Indicator

Would you like to teach your learners about the SDGs in a playful way? You can download a board game related to the 17 Sustainable Development Goals on the following website: https://go-goals.org/downloadable-material/

Practice

Students should get some ideas what they could do to promote sustainable changes as a citizen. Therefore, we designed two examples for a project work (activity A03 and activity A05) that you could use in your teaching.

You can find the instructions as well as supporting documents of activities A03 "My Way to a more sustainable Future" and A05 "Shark Tank" here: https://www.train2sustain.eu/instructors/electronic-toolbox/

Hint: You could start with the project work at this time, then go through the following chapters together with your students, and then go on with the project work. This could help your students to get a better overview of possible solutions.

1.3 How European Countries and Companies are working with the SDG

Interaction

Can you think of some examples of how companies you know are implementing sustainable initiatives and policies that help save the planet? Take a few minutes to think about them!

As you have already read above, the member states of the United Nations have been **working since 2016 to achieve the Sustainable Development Goals** and are **implementing nationally defined measures**. Some progress has already been made in recent years, and you will learn about a few examples in this chapter.

As part of a research study by MSCI, the extent to which different companies adapt to the individual sustainability goals and thus contribute to achieving them was surveyed. Data was collected from 8,550 organisations. The result of this research was that of the participating companies, many are **the least aligned with the goals** shown in Figure 4.
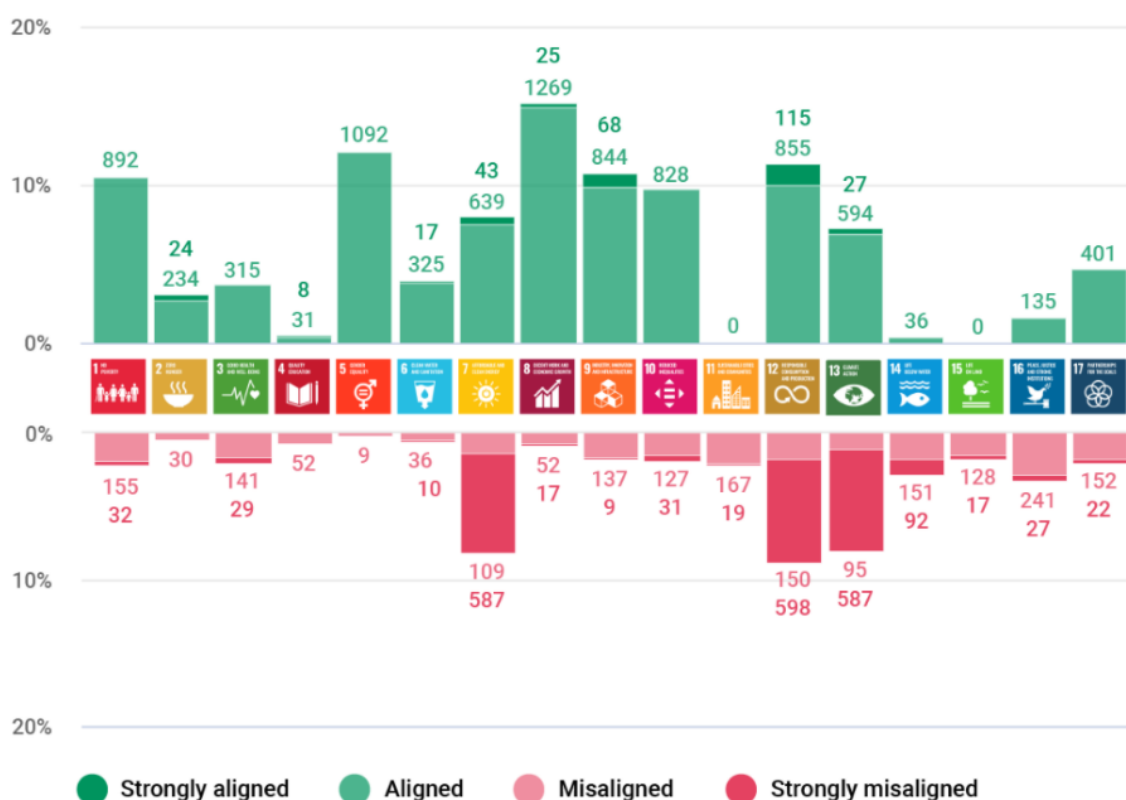
Figure 4. SDGs least aligned by companies

The goals that many participant organisations are pushing for and are also geared towards are shown in Figure 5.

Figure 5. SDGs that companies are mostly aligned for

In Figure 6 you can see an overview of the alignment of the companies with the sustainability goals.
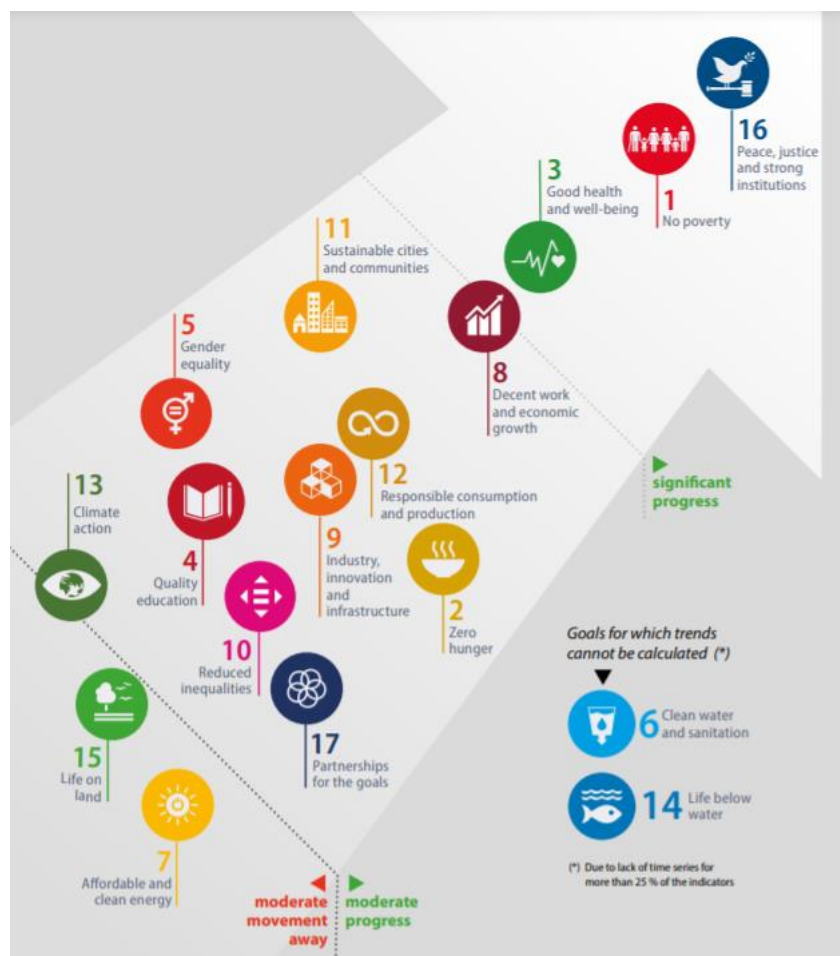

Source: https://www.msci.com/www/blog-posts/assessing-company-alignment/02085389620

Figure 6. Alignment of companies with the sustainability goals

Another aspect that became visible in the MSCI survey was that in **Europe**, Goals 5 and 10, which focus on **avoiding inequalities**, were **more strongly supported by the participating companies** compared to countries in other continents.

The previous graph thus shows that many organisations are already paying attention to the Sustainable Development Goals and taking them into account in their operations. This has contributed to **obvious progress in achieving many of these goals in recent years.** In the figure 7 you can see which goals have made moderate progress over the last 5 years and which have made significant progress. Unfortunately, there were also a few goals whose achievement declined:

Figure 7. Progress of the SDGs over the past five years

Significant progress has thus been made, for example, in **SDGs 16, 1 and 3**, in the promotion of the health of the population, the fight against poverty and the reduction of acts of violence. Progress has also been made in many other areas, especially social and economic ones. Due to our high energy consumption and our continued enormous environmentally damaging activities, **goals 7 and 15** were even **negatively affected**.

> **Indicator**
>
> On the following website you can take a look at the progress made by the various European countries in achieving the individual sustainability goals, and also at the - sometimes significant - differences that prevail between the countries:
> https://ec.europa.eu/eurostat/web/sdi/indicators

Let us now take a look at how the work on the SDGs is organised in the countries of the Train2Sustain project partners:

Finland

The current Government aims to transform Finland into a socially, economically and ecologically sustainable society by 2030. A sustainability assessment has been integrated into annual cycle of policy planning, budgeting and reporting. Finland has created a monitoring system that helps and supports decision-making processes. There are 10 monitoring baskets and 8 objectives that carry out the 17 goals in SDG as can be seen in the Figure 8.

Source:
https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/162268/VNK_2020_8_Annex_2_The%20state%20of%20sustainable%20development.pdf?sequence=6&isAllowed=y

Figure 8. SDG monitoring system in Finland

Along with the other Nordic countries, Finland is at the top of international comparisons of sustainable development. In the Sustainable Development Report 2021 Finland was ranked number one. According to the report, Finland has already achieved or is in the process of achieving the main goals of Agenda2030 related to poverty eradication, health and well-being, quality education, clean water, energy access and cleanliness, decent work and economic growth, industry and innovation, reducing inequality, urban and local, and the functioning of the institutions and the judiciary.

Denmark

Denmark initiated its SDG implementation by setting up an interministerial Group on Sustainable Development to ensure coordination among all relevant institutions and stakeholders. The Ministry of Finance is responsible for coordinating the national implementation of the SDGs, while line ministries are responsible for designing policies that address the SDGs, as appropriate. The Ministry of Finance is also responsible for EU follow-up to maintain a holistic approach and create linkages to the national follow-up, while the Ministry of Foreign Affairs is responsible for the SDGs in the context of the UN and other international forums. Both Ministries coordinate their efforts closely.

In 2021, Denmark ranked third among the countries that contributed the most to achieving the Sustainable Development Goals. Here you can read about the strategy Denmark is following: https://um.dk/en/danida-en/strategies%20and%20priorities/the-un-sustainable-development-goals/

Portugal

In 2017, Portugal, in the first national report on the implementation of the 2030 Agenda for Sustainable Development, identified priorities and challenges, policies and competing initiatives for the pursuit of the 2030 Agenda. It also made an assessment of the national starting point, defining six of the 17 goals as priorities:

- Quality Education
- Gender Equality
- Industry, Innovation and Infrastructures
- Reduction of Inequalities
- Climate Action
- Protection of Marine Life

In order to monitor progress in a consistent and integrated manner, an inter-ministerial network was created, which facilitates the articulation and exchange of information between entities. The responsibility for the implementation, monitoring and review of each SDG belongs to the Ministry that holds the respective competences.

The Ministry of Environment and Climate Action is responsible for coordinating four SDGs: Drinking Water and Sanitation; Sustainable Cities and Communities; Sustainable Production and Consumption; and Climate Action. The National Institute of Statistics regularly publishes a report monitoring the evolution of sustainable development indicators in Portugal.

Austria

In Austria, the implementation of the 2030 Agenda was initiated in 2016 with a Council of Ministers decision. Since then, the Sustainable Development Goals have been integrated into all activities of Austrian politics and administration. An interministerial working group was set up, led by the Chancellery and the Ministry for European and International Affairs and consisting of people from the federal ministries, so that achieving the Sustainable Development Goals can be done even faster. Since then, new plans and work programmes have been continuously developed to promote the achievement of the goals. In the ranking of the Sustainable Development Report, Austria took 6th place in 2021.

The majority of companies have already recognised that sustainable action leads to a competitive advantage or will contribute to this in the future. This video introduces you to **7 of the most sustainable and environmentally friendly companies of 2021**: https://youtu.be/JhbZ0b5PH10

For more examples of sustainable companies and information on what these organisations do, visit this website: https://growensemble.com/environmentally-friendly-companies/

Many well-known European and international companies also committed to a more sustainable planet:

- IKEA: https://about.ikea.com/en/sustainability
- Neste: https://www.neste.com/sustainability
- Wella: https://www.wellacompany.com/about-us/sustainability
- McDonalds: https://corporate.mcdonalds.com/corpmcd/our-purpose-and-impact/our-planet.html
- Nike: https://www.nike.com/sustainability
- Nestle: https://www.nestle.com/randd/sustainability
- Apple: https://www.apple.com/environment/
- BHP Gruppe: https://www.bhp.com/sustainability

Digression

Here you can see, for example, how greenhouse gas emissions in the construction industry have developed in recent years: https://www.eea.europa.eu/data-and-maps/indicators/greenhouse-gas-emissions-from-energy/assessment

Digression

The partner organisations of this Train2Sustain project team are also working to ensure that the sustainability goals are achieved. One example is the Danish educational institution EUC SYD. In Figure 9 you can find more information about how they integrate the 17 Sustainable Development Goals into their activities: https://www.eucsyd.dk/verdensmaal/

Figure 9. SDGs in EUC syd

1.4 Challenges regarding reaching the SDGs

At this stage, we are still far from achieving all 17 Sustainable Development Goals by 2030, as the implementation of these faces many different challenges. These are, among others:

- Due to the different dimensions of the SDGs, various **conflicting goals can arise**. For example, it is difficult to reconcile the goal of economic growth with that of environmental protection, since high prosperity is difficult to achieve with low resource use and low CO2 emissions. To achieve this, new technologies would be needed, but they are currently not sufficiently available.

- In recent years, the **world population has grown strongly,** and this trend will continue in the future. This automatically leads to the fact that there are more people who want to access the resources of our planet and thus cover their (basic) needs. Furthermore, they also must be integrated into our economic system (e.g. by providing jobs), which visibly influences the achievement of some sustainability goals.

- Although the goals have been set, there are **no concrete recommendations for action**. Thus, it is difficult for all actors to derive concrete actions from these overarching goals. In addition, the number of **indicators** for achieving the goals is enormous, which means that it is not even possible for many countries to provide data for all indicators and fulfil them. In addition, it was mentioned in a survey that these are formulated too vaguely for many, which makes monitoring difficult.

- In addition to the last-mentioned problem, it is **often not clear who is actually responsible for achieving the goals**. At the same time, there is a **lack of sanction mechanisms** in case of non-achievement of goals.

- Due to the large number and the different dimensions of the Sustainable Development Goals, it is **difficult** for the member states and also for individual organisations **to take care of all goals comprehensively**, which is why they often focus on a few individual ones and work on them one after the other. One of the consequences of this is that progress cannot be made everywhere at the same time and certain goals are neglected for the time being.

- Another challenge is that our **existing technologies have not yet advanced to the point where they can support the achievement of goals in the best possible way**. For example, a new energy system would be necessary and renewable energies would have to be offered more frequently and at a lower price. In the area of mobility, too, several things would have to be done, e.g. the abolition of fossil fuels would be beneficial in this area. Technologies for productivity increases, e.g. in agriculture, or waste and recycling technologies for poorer countries would also bring great benefits.

- The **cost factor** must also be mentioned in this context. On the one hand, it has not been clarified how or by which agencies the work on achieving the Sustainable Development Goals is to be financed. On the other hand, there are also high additional costs for individual organisations, especially at the beginning, due to the change to more sustainable actions, which can also lead to a competitive disadvantage, at least in the short term, in the early stages.

- For many countries, it is **difficult to increase their domestic value added** as long as cheap products are imported from abroad. This is the case in Africa, for example, where European products are sold at enormously low prices and own products often remain on the shelves.

Indicator

The **Covid19 pandemic** in particular posed yet another major challenge to achieving the 2030 sustainability goals: https://www.youtube.com/watch?v=SmhEhqLAn8A

One of the biggest challenges in the next years will therefore be to deal with the consequences of the pandemic. To counteract the negative effects of the Covid crisis, it is necessary that governments find ways to control the pandemic as soon as possible and put in place measures that will help recover from this crisis.

But **how can all these challenges be mastered** and thus the achievement of goals simplified?

- The implementation of the sustainability goals must be **regularly analysed for weaknesses** and gaps, and **strategies for compensating** for these must be found.
- In the individual countries, **central national coordination and a consistent sustainability strategy** involving civil society are necessary so that work can be done efficiently to achieve the goals. In addition, concrete measures must be described and consistently implemented.
- In order to overcome the challenges, **global cooperation** is necessary. This also means that the member states must support each other. For example, with regard to financing, it is important that richer countries provide financial assistance to poorer ones.
- In order for the goals to be worked on comprehensively, it is important that attention is drawn to the importance of implementing the goals. In part, **incentives** may also need to be created for the various actors. For example, it is important to show companies the benefits that come to them through sustainable action, and subsidies could also be offered to them to keep the costs they face lower.

In order to achieve the SDGs by 2030, it is **important that we all work together** - countries, organisations and institutions as well as individuals must contribute.

Have you ever wondered what you can do to help move towards a sustainable planet without spending a lot of time? Here are some examples that you can do right from your couch: https://www.un.org/sustainabledevelopment/takeaction/

Practice

You may have already started working with your students on activity A03 or A05. Now it would be a good time to go on with this project work.

You can find the instructions as well as supporting documents of activities A03 "My Way to a more sustainable Future" and A05 "Shark Tank" here: https://www.train2sustain.eu/instructors/electronic-toolbox/

Practice

If you prefer an activity that does not take up so much time, you could also carry out activity A04 here. The aim of this activity is to let students work on solutions that could support reaching the SDGs.

You can find the instructions as well as supporting documents of this activity A04 "SDG upside down" here: https://www.train2sustain.eu/instructors/electronic-toolbox/

2 Summary

In **2015**, the member states of the United Nations adopted the **2030 Agenda for Sustainable Development**. It includes **17 goals to make our planet more sustainable** and liveable for future generations. These goals relate to the economy, people and the environment. For example, poverty is to be combated, economic growth achieved and life on land and under water made more sustainable.

Hard work has been underway since 2016 to achieve these goals, and visible positive changes have already been recorded. For **some goals, clear progress can already be seen**, e.g. in the fight against poverty or in the reduction of violence, and for many others at least moderate improvements. The member states are responsible for **drafting national implementation strategies**, for which separate working groups have been formed in many countries to work on the 2030 Agenda. **Many companies have also already recognised the importance of sustainable action** and adapted their business models accordingly. Examples include IKEA, Neste and Apple.

However, working towards these goals is sometimes very difficult, as the **member states face numerous challenges.** For example, there is still a lack of coordinating bodies, of responsibility and of concrete strategies for implementing measures. Other aspects, such as conflicting goals, high costs and deficient technologies also slow down the achievement of the goals. Probably one of the biggest challenges is dealing with the worst pandemic in recent years, the **Covid19 crisis**, which has partially undone progress already made. Therefore, the focus must be on learning to cope with the pandemic and to undo the negative impact of the pandemic and continue to achieve the goals.

Concrete strategies, analysis of deviations from targets, mutual support and cooperation, and the creation of incentives can overcome these challenges. But it is **important that everyone** - including you - **contributes to achieving the Sustainable Development Goals and saving our planet.**

3 Resources

SDGs

https://unric.org/de/17ziele/

https://sdgs.un.org/2030agenda

https://ec.europa.eu/international-partnerships/sdg/end-poverty_en

https://www.un.org/sustainabledevelopment/poverty/

https://www.un.org/sustainabledevelopment/wp-content/uploads/2016/08/2_Why-It-Matters-2020.pdf

https://www.un.org/sustainabledevelopment/wp-content/uploads/2017/03/3_Why-It-Matters-2020.pdf

https://www.un.org/sustainabledevelopment/education/

https://www.un.org/sustainabledevelopment/wp-content/uploads/2016/08/5_Why-It-Matters-2020.pdf

https://www.un.org/sustainabledevelopment/water-and-sanitation/

https://www.un.org/sustainabledevelopment/energy/

https://www.un.org/sustainabledevelopment/economic-growth/

https://www.un.org/sustainabledevelopment/infrastructure-industrialization/

https://www.un.org/sustainabledevelopment/inequality/

https://www.un.org/sustainabledevelopment/wp-content/uploads/2019/07/11_Why-It-Matters-2020.pdf

https://www.un.org/sustainabledevelopment/wp-content/uploads/2019/07/12_Why-It-Matters-2020.pdf

https://www.un.org/sustainabledevelopment/climate-change/

https://www.un.org/sustainabledevelopment/oceans/

https://www.un.org/sustainabledevelopment/biodiversity/

https://www.un.org/sustainabledevelopment/peace-justice/

https://www.un.org/sustainabledevelopment/globalpartnerships/

Countries/companies working with SDG

https://www.msci.com/www/blog-posts/assessing-company-alignment/02085389620

https://ec.europa.eu/eurostat/documents/3217494/12878705/KS-03-21-096-EN-N.pdf/8f9812e6-1aaa-7823-928f-03d8dd74df4f?t=1623741433852

https://www.un.org/depts/german/millennium/SDG%20Bericht%202021.pdf

https://www.eea.europa.eu/themes/sustainability-transitions/sustainable-development-goals-and-the/country-profiles/denmark-country-profile-sdgs-and

https://www.eea.europa.eu/themes/sustainability-transitions/sustainable-development-goals-and-the/country-profiles/portugal-country-profile-sdgs-and

https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/162268/VNK_2020_8_Annex_2_The%20state%20of%20sustainable%20development.pdf?sequence=6&isAllowed=y

https://www.sustainabledevelopment.report/reports/sustainable-development-report-2021/

https://www.esdn.eu/country-profiles/agenda-2030-implementation/detail?tx_countryprofile_countrycategory%5Baction%5D=showcat&tx_countryprofile_countrycategory%5Bcontroller%5D=Country&tx_countryprofile_countrycategory%5Bcountry%5D=1&cHash=9125d9e7b5af56abd669afa4dd03af06

https://www.bundeskanzleramt.gv.at/themen/nachhaltige-entwicklung-agenda-2030/implementierung.html

Challenges:

http://www.denknetz.ch/wp-content/uploads/2019/05/15_Agenda_2030_Merz_Schmassmann.pdf

https://www.researchgate.net/publication/336120842_Die_Agenda_2030_als_systemische_Herausforderung_-_Zielkonflikte_und_weitere_Umsetzungsherausforderungen

https://www.researchgate.net/profile/Georg-Gratzer/publication/324889207_Chancen_und_Herausforderungen_bei_der_Umsetzung_der_UN-Nachhaltigkeitsziele_aus_osterreichischer_Sicht/links/5ae967f7aca2725dabb5351c/Chancen-und-Herausforderungen-bei-der-Umsetzung-der-UN-Nachhaltigkeitsziele-aus-oesterreichischer-Sicht.pdf