



ESDGs!



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Module 1

Sustainable development, introduction to sustainability, sustainability as an opportunity in entrepreneurship



Sustainable development, introduction to sustainability, sustainability as an opportunity in entrepreneurship

Sustainable development or sustainability is a frequently discussed concept both by the public and the professional sphere (e.g. Van Marrewijk, 2003; Lamb, 2011; Zdražilová, 201, Kunz 2012). Over the course of industrial and economic development, consideration has not been given to possible negative impacts, such as air and water pollution, climate change, overpopulation, migration, poverty, or enormous social inequality (Hummels & Argyrou, 2020). In the 1970s, however, the concept of sustainable development began to emerge, and environmental scientists and economists called for limits on growth (e.g. Meadows, 1972) and a stabilization of the state of the economy (e.g. Daly, 1973).

Although this term is commonly used and utilized by various organizations (Lélé, 1991), it is challenging to understand it and how it is interpreted (White, 2013). This is because it encompasses a broad number of topics, which include e.g. climate change, water and air pollution, overpopulation, poverty or enormous social inequality (Hummels & Argyrou, 2021). Thus, it is evidently a comprehensive field that is difficult to specify in a unified manner and thus to define. Perception of this concept is highly influenced by cultural differences between countries and the economic sector (Webster 1997; Von Wirén-Lehr, 2001).

Milestones in the evolution of sustainable development

There have been various efforts to provide a unified definition of this field and the terms linked to it. An example of a utilized definition of sustainable development is the one provided by the World Commission on Environment and Development (1987, p. 16), according to which sustainable development can be explained as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. Nonetheless, Hummels & Argyrou (2021) claim that this definition is misleading and that, thanks to it, many enterprises are wrongly considered to be contributors to sustainable development. For this reason, they recommend revising the definition. At the same time, the Office of the Government of the Czech Republic (2017) views this concept as a complex and dynamic system, in which all areas of interest are interlinked, including economic, social and environmental pillars, and it is crucial to respect their mutual balance. In a similar manner, scholars such as Kunz (2012) or Van Marrewijk (2003) explain the concept of sustainability using these three dimensions, their interconnection and mutual balance.

Sustainable development itself is thus most frequently explained using three possible methods (Ministry of Regional Development, 2012):

- based on the World Commission on Environment and Development (1987, p. 16),
- based on three pillars (economic, environmental and social),
- based on capital assets (human, social, natural, productive and financial).

The term sustainable development has its roots in the 18th century in Europe, primarily in the field of forestry and agriculture (Wiersum, 1995). However, it only made its way into the broader consciousness of society in the second half of the 20th century. As was stated above, the concept of sustainable development began to emerge in the 1970s, as environmental scientists and economists called for limitations on growth (e.g. Meadows, 1972) and the stabilization of the state of the economy (e.g. Daly, 1973).

In 1972, the UN Conference on the Human Environment (or the Stockholm Conference), which adopted the declaration acknowledging humanity's right to a healthy environment, gave rise to the UN Environment Programme (Moldan, 2007).

Furthermore, in 1987 the *Our Shared Future* report (or *Brundtland Report*), created by the World Commission on Environment, was adopted (World Commission on Environment and Development, 1987).

In Rio de Janeiro in 1992 at the UN conference on environment and development, the Declaration on Environment, which elaborates on the principles of sustainable development, was adopted (United Nations, 1992). The UN approved the Agenda 21 document, which defines particular steps for the implementation of sustainable development at a local and regional level in various areas. The local Agenda 21 can be seen as an “*action plan for sustainable development*” (Ministry of the Environment, 2022).

Furthermore, at the Millennium Summit in New York in 2000, the Millennium Development Goals (or MDGs) were also adopted.

And, in 2012, the plan to create and subsequently integrate global Sustainable Development Goals (SDGs) was adopted in *The Future We Want* declaration in 2012.

SDGs are encompassed in the document entitled “Transforming Our World: Agenda for Sustainable Development 2030”, which was accepted at the UN Summit in 2015. This involves the 17 goals depicted in Figure 1. These goals are seen as crucial for the future direction of sustainability. All UN member states and representatives of civic society, the business sphere, academic community and citizens of all continents took part in creating these goals (United Nations, 2020). The goals represent an urgent call to action by all developed and developing countries in a global partnership (United Nations, 2019).

Figure 1: Sustainable Development Goals

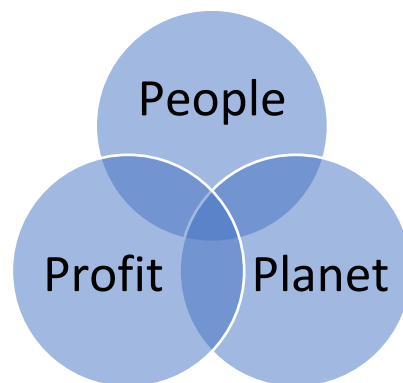


Source: OSN, 2022

SDGs focus on key areas of society-wide problems such as poverty, social inequality, water pollution, climate change, military conflicts, etc., which have emerged or are emerging in the course of industrial and economic development (which has not given consideration to the environment or social externalities) (United Nations, 2019; Hummels & Argyrou, 2021).

Sustainability, the triple bottom line principle and the ESG concept

Since the 1980s, the triple bottom line principle has been discussed as a concept of sustainability. While respecting this principle, a business and its business activities are not focused solely on achieving profit and economic growth (aspect of profit), but also on the environmental impact of its activity (aspect of environment, planet) and, last but not least, the social responsibility of its action (aspect of people). The triple bottom line leads to an intertwining of these three aspects (Roberts & Cohen, 2002). According to Elkington (1998), the creation of a new economic, environmental and social partnership is necessary in order to achieve balance within this concept. This partnership must emerge in both the private and public sector. A graphic depiction of the intersection of this triple bottom line is provided in Figure 2.

Figure 2: Triple Bottom Line

Source: Roberts & Cohen, 2002

At present, the ESG strategy is primarily being discussed, as it focuses on how to suitably integrate elements of sustainability into the functioning of an organization. The abbreviation ESG is created from the initial letters of the areas in question (Asociace společenské odpovědnosti, 2021; World Economic Forum, 2020):

- Environmental represents the area that considers the role of society in the protection of the planet (e.g. greenhouse gas emissions, soil protection, use of water, biodiversity, etc.)
- Social (People) represents the area that considers the responsibility of organizations towards their employees (e.g. safe work environment, salary equality, diversity, etc.)
- Governance represents the area that considers the responsible management of an organization (e.g. ethical codex or the fight against corruption).

The goal of a correctly established ESG strategy is to move towards an organization's sustainability in a manner that is not based upon "greenwashing¹".

Initiatives and organizations dealing with sustainability

There is a wide spectrum of tools that play a key role in the field of sustainable activity management in an organization and in sustainable development. These standards, norms and initiatives offer organizations advice and instructions on how to proceed in their sustainable activities and direct them onwards in entrepreneurial sustainability. The most prominent of these tools are listed below:

¹ The term greenwashing can be used to denote a form of disinformation, the goal of which is to create an impression among the public (or consumers) of a company's (or organization's) environmental responsibility.

- *Global Reporting Initiative*

The Global Reporting Initiative or “GRI” is a methodology that is created via a set of indicators that can be implemented in an organization; subsequently, it is possible to compare the measurements and evaluations of organizations’ social responsibility. This independent international organization helps businesses, governments and other organizations understand and communicate their impacts on issues linked to economic, social and environmental results. This organization has promoted sustainability reporting since 1997, and is still the most widely used standard for the creation of non-financial reporting (KPMG, 2017).

Information on the sustainable activities of an organization are recorded in “Sustainable Reporting Guidelines”. Thanks to unification, these guidelines today belong to the most extensive and objective initiative for providing a report on the sustainability of an organization. Reports created within the Global Reporting Initiative evaluate the behavior of an organization in terms of laws, norms, regulations, directives, standards of behavior and voluntary sustainable activities. At the same time, they give consideration to the development of these indicators in time (Global Reporting Initiative, 2021).

- *AccountAbility (AA 1000)*

AccountAbility is a series of standards by which an organization attempts to improve its performance. Heightening an organization’s performance is achieved via a sustainability strategy and by taking into consideration the environmental and social impacts of said organization.

The goal of the AccountAbility non-profit organization is to support fair business (Národní portál, 2021).

- *OECD directive for multinational enterprises*

The OECD’s directive titled “Guidelines for Multinational Enterprises” is among the oldest, most well-known and also most complex tools for the area of socially-responsible entrepreneurship, which was created in 1976. It was a part of the OECD declaration on international investments and multinational enterprises. A total of 46 countries agreed to adhere to these Guidelines. However, the recommendations that are anchored in them are voluntary for enterprises and cannot be enforced (Ministry of Industry and Trade, 2016).

The goal of the OECD’s Guidelines for Multinational Enterprises is to lead multinational enterprises towards avoiding and limiting the negative impacts of their activity on society. Areas that these Guidelines regulate include access to information, human rights, employment and labor relationships, environment, combatting bribery, consumer interests, science and technology, economic competition and taxes (Ministry of Industry and Trade, 2016).

Nonetheless, it should be added that these Guidelines are in agreement with the UN Global Compact and the ISO 26000 Norm (Ministry of Industry and Trade, 2016).

- *UN Global Compact*

The UN Global Compact is an initiative aimed at enterprises that have committed to putting their activities and strategy in line with ten generally accepted principles in the field of human rights, employment relationships, the environment and combatting corruption (Asociace společenské odpovědnosti, 2013). This will make it possible to take steps leading to the promotion of social goals and implementing Sustainable Development Goals (SDGs) (Národní portál, 2021).

This Global Compact establishes the submission of yearly development reports, i.e. “*Communication on Progress*”. Using this method, an organization creates efforts in the area of mapping how well it is fulfilling the principles of sustainable activities. Thus, it provides information concerning even the negative impacts of an enterprise’s performance. If the progress report is not published for a period longer than one year, the organization is automatically ejected from the UN Global Compact (Asociace společenské odpovědnosti, 2013).

- *ISO 26000 Norm*

The ISO 26000 Norm represents the standard for the social responsibility of companies, the goal of which is to strengthen organizations’ responsibility for their entrepreneurial activity and thus increase their participation in sustainable development. If an organization accepts the elements of this norm, it thus agrees to maintain the principles of the social responsibility of organizations. The norm includes guidelines on improving the organization’s impact within the three pillars of the triple bottom line, i.e. the social, economic and environmental pillar (Managementmania, n.d.).

It is important to note that this norm is not designated for certification. Nonetheless, it is closely linked to the certification norm SA 8000 (Managementmania, n.d.).

- *EMAS*

The EMAS tool or “*Eco-Management and Audit Scheme*” is designated for organizations located within the European Union. In the EU, this tool has been used since 1995, and began to be used in the Czech Republic in 1998 (European Commission, n.d.).

The goal of the system of environmental management and auditing is for an organization to have an active approach to monitoring and effective management in the area of environmental protection (European Commission, n.d; Ministry of the Environment, 2020).

Nonetheless, it is necessary to fulfill several criteria that EMAS requires, which are:

- introductory assessment of the state of the environment,
- publication and verification of the proclamation on the state of the environment,
- active participation of employees in the process of improving an enterprise’s impacts on the environment (EnviWeb, 2005).

At the same time, however, it imposes the responsibility to uphold a specific methodology of audits and their frequency (EnviWeb, 2005).

- SA8000

SA8000 is an international standard that helps an organization create, uphold and use socially acceptable approaches in the workplace. This norm primarily regulates and monitors employees' working conditions and was first used in 1997 with the goal of evaluating the social approach in areas that are crucial for the social responsibility of companies. This deals with child labor, forced or compulsory labor, health and safety, freedom of assembly and the right to collective negotiations, discrimination, disciplinary practice, work hours, rewards and management system.

Elements of SA8000 such as management systems, involvement of employees, and a culture of constant improvement lead to better working conditions and an increase in employees' well-being. At the same time, an organization's productivity is heightened, relations with participating parties are improved, access to the market is supported, etc. (Social Accountability International, 2021).

According to Kašparová & Kunze (2013), it is possible to use the aforementioned standards, with the exception of EMAS, globally. They go on to claim that the OECD Guidelines have territorial limitations, which are only for the members of the organization and provide them with relevant topics. This also lowers their global applicability.

The use of these standards by organizations is not limited by the size of the organization or sector. They are founded on management according to consultations with stakeholders (Kašparová & Kunz, 2013).

Standards require the submission of reports, and therefore organizations that adhere to sustainability standards should present a comprehensive report on these activities. This reporting must stem from the guidelines and indicators that the specific standard requires.

Contrary to other aforementioned standards, EMAS focuses only on the environmental area, which should be reported. The other standards are completely covered by the triple bottom line, i.e. economic, social and environmental areas. Individual pillars have the greatest coverage within the Global Reporting Initiative and ISO 26000 standards. On the contrary, the AccountAbility standard has the narrowest coverage (EnviWeb, 2005; Národní portál, 2021). It is important to mention that the reports also differ in their obligation to be verified. Reports of the UN Global Compact, OECD Guidelines or ISO 26000 do not have to be verified, as verification takes place on a voluntary basis. At the same time, the obligation for regular report submission is normatively established only for EMAS and the UN Global Compact. Other standards urge for the regular and timely publishing of complete information; this, however, is not mandatory (EnviWeb, 2005; Národní portál, 2021).

As is evident, standards and their reports are highly similar, and it depends on the organization which direction it chooses to take. The following chapter introduces the concept for harmonizing standards for the creation of the sustainable activity reporting that was discussed at the World Economic Forum in the autumn of 2020.

Sustainability as an opportunity in entrepreneurship

Climate changes, transformations in society and the move towards ESG concepts will logically cause a number of business sectors to disappear or force them to transform their business model (a wonderful example of this is the automobile industry or the area of the circular economy, in which, on the contrary, a number of new business opportunities are arising).

There are many motives for implementing the principles of sustainability into one's business or coming up with a new business concept built upon the sustainable approach. The following, for example, can be cited:

- *Financial advantages in the form of reducing costs and increasing efficiency:*

Additional costs may arise while implementing a sustainable approach; nonetheless, these costs are accepted with the aim of increasing the efficiency of entrepreneurial processes in the future. Efficiency can then be represented by factors such as cost-saving linked to reducing employee turnover or a decrease in future costs for creating products or improving internal processes. The application of sustainable principles thus leads in the long-term context to lowering costs, including a greater social effect (e.g. lowering employee turnover, a greater awareness among employees, identification with the mission, etc.)

- *Greater customer satisfaction and acquiring a competitive advantage:*

The competitive advantage is strongly linked to customer loyalty. Customers in the present era notice when the sustainable approach is being applied. Increasing pressure is being exerted not only on energy-efficient production, but also generally on an organization's approach with regard to the application of sustainable principles across the organization. This not only concerns the customer, but generally the reaction to the behavior of investors or the competition.

- *Reducing risks and finding new opportunities*

The sustainable approach provides new entrepreneurial opportunities and creates new areas for business, including the creation of new jobs. Investments are usually no longer viewed as an insurmountable barrier; their return rate and rentability can often be calculated. Application of the sustainable approach reduces the risk of being misunderstood by stakeholders and reduces the risk of pressure from them to apply a sustainable approach. For example, just in the area of the circular economy², the huge potential for the creation of new jobs is predicted. Similarly, an organization implementing the circular approach is expected to increase the sales of its product, expand its portfolio and improve its reputation, including lowering risks in terms of e.g. suppliers. If closed cycles are improved, profitability may be heightened, and these organizations can even be protected from fluctuations in the prices of resources.

² An economy that functions in a circle but has regenerative abilities and attempts to view Planet Earth as a place with limited resources. It is an economy that attempts to utilize resources to their maximum and not waste them.

Quiz questions:



- 1. What areas does the abbreviation ESG represent?**
 - A. environmental, social, governance
 - B. economic, social, governance
 - C. environmental, social, goods
 - D. economic, social, goods

- 2. When was the triple bottom line concept first discussed?**
 - A. 1960s
 - B. 1970s
 - C. 1980s
 - D. 1990s

- 3. What does the Stockholm Conference represent?**
 - A. The United Nations Conference on the Human Environment in 1972
 - B. The United Nations Conference on Environment and Development in 1992
 - C. The Millennium Summit in New York
 - D. The United Nations in 2015

- 4. Tools (standards, norms, initiatives) for managing sustainable activities in an organization and in sustainable development are:?**
 - A. GRI
 - B. UN Global Compact
 - C. EMAS
 - D. All of the above

5. SDGs

- A. stand for Sustainable Development Goals
- B. were presented in 2000
- C. represent the 19 goals of sustainable development
- D. are the goals of sustainable development until 2040

6. The Triple Bottom Line represents:

- A. the overlap of three pillars – people, planet, profit
- B. the overlap of three pillars – economic, social, governance
- C. the overlap of three pillars – environmental, social, goods
- D. the overlap of three pillars – people, environmental, governance

7. The report from Our Shared Future is also known as:

- A. Agenda 21
- B. Transforming our World: Agenda for Sustainable Development for 2030
- C. The Brundtland Report
- D. The Stockholm Report

8. Which of the tools listed below (standards, norms and initiatives) for managing the sustainable activities in an organization and in sustainable development focuses only on the area of the environment?

- A. UN Global Compact
- B. EMAS
- C. ISO 26000
- D. SA8000

9. Sustainable development:

- A. is identical at present with the term sustainability
- B. has its roots in the 18th century in Europe in connection with forestry and agriculture
- C. is viewed as development that meets the needs of the present without endangering the fulfillment of the future generations' needs.
- D. All of the above

10. The circular economy:

- A. Is an economy that functions in a circle.
- B. Is a linear economy.
- C. Attempts to use as many natural resources as possible.
- D. Is dominant in the present setting of world consumption.

11. The sustainable approach can be seen as an opportunity for business, because:

- A. it provides additional costs.
- B. it presents the space for the creation of a new labor force.
- C. it is a trend, and the sustainable approach cannot be applied if an organization wants to remain on the market.
- D. employees are the main and key actors who promote the principles of sustainability, and their wishes should be met.

12. SDG 12 involves:

- A. Responsible consumption and production
- B. Quality education
- C. Climate action
- D. Life below water

13. SDG 5 involves:

- A. Responsible consumption and production
- B. Gender equality
- C. Partnerships for the goals
- D. Life on land

14. SDG 11 involves:

- A. Reduced inequalities
- B. Affordable and clean energy
- C. Decent work and economic growth
- D. No poverty

15. Greenwashing means:

- A. Providing untrue information to one's employees
- B. The implementation of green investments
- C. The application of circular principles into an organization's strategy
- D. Disinformation with the goal of creating the impression among the public that an organization is environmentally responsible.

Correct answers: 1. — A./2. — C./3. — A./4. — D./5. — A./6. — 7. — C./8. — B./9. — D./10. — A./11. — B./12. — A./13. — B./14. — A./15. — D.

Source

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Module 2

Introduction to SDGs, 4 pillars of SDGs:
governance, people, planet and
prosperity



Introduction to SDGs, 4 pillars of SDGs: governance, people, planet and prosperity

This module points to the recent development of the concept of sustainable development (or sustainability). It summarizes the development of sustainability and builds upon it via the most prominent approach, i.e. the Sustainable Development Goals (SDGs). It then divides these goals into four comprehensive pillars that help organizations and society better orient themselves in this issue.

The concept of sustainable development in a nutshell (sustainability milestones)

Sustainable development was described in the previous module. The recent development of this concept is linked to so-called sustainable development goals (SDGs), which are associated with the document entitled Transforming our world: the 2030 Agenda for Sustainable Development (UN, 2015).

To reiterate, the most significant milestones of sustainable development are listed in the table below:

Table 1: Sustainable development milestones since the second half of the 20th century

Year	Document	Description
1972	<i>The Limits to Growth</i>	This publication points to the fact that there is a significant contradiction between economic growth and the protection of the environment including natural resources.
1987	<i>Our common future</i>	This report by the European Commission focuses on the integration of economic development, the management and protection of natural resources and social justice and integration. Sustainable development was first defined in this report.
1992	<i>Declaration on Environment</i>	A declaration that elaborates upon the principles of sustainable development in greater detail.
2000	<i>Millennium Declaration</i>	This declaration was approved at the Millennium Summit, where the Millennium Development Goals (MDGs) were adopted.
2002	<i>World Summit on Sustainable Development</i>	This summit supported the importance of all three pillars of sustainability – economic, social and environmental.
2012	<i>The future we want</i>	The goal to create and subsequently integrate the global Sustainable Development Goals (SDGs) was approved in this declaration.
2015	<i>Transforming our world: the 2030 Agenda for Sustainable Development</i>	This document, which was accepted at the 2015 UN Summit, lists 17 goals of sustainable development. This is a global development program until 2030.

Source: Meadows (1972); World Commission on Environment and Development (1987); United Nations (1992); World Health Organization (2002); United Nations (2012, 2015).

Sustainable Development Goals (SDGs)

All member states of the United Nations (UN) took part in creating the Sustainable Development Goals. SDGs are an urgent call to action from all developed or developing countries in the global partnership (United Nations, 2019). These Sustainable Development Goals, which have been adopted by the UN's member states, are represented by 17 icons depicted in the image below and present the development program for the following 15 years (2015 – 2030).

Figure 1: Sustainable development goals



Source: United Nations, 2021

SDGs focus on key areas of society-wide problems such as poverty, social inequality, water pollution, climate change or military conflicts that have emerged as a result of industrial and economic development without consideration to the environment or social externalities (United Nations, 2019; Hummels & Argyrou, 2020).

Each of these goals is analyzed in greater detail in the following modules.

The ESG approach and the 4 pillars of SDGs

The ESG strategy shows how it is possible to suitably integrate the elements of sustainability into an organization's operation. The abbreviation ESG comes from the first letters of the areas in question (World Economic Forum, 2020):

- Environmental, which deals with the role of society in the protection of the planet (e.g. greenhouse gas emissions, soil protection, use of water, biodiversity, etc.).
- Social, which deals with the responsibility of organizations towards their employees (e.g. a safe work environment, wage equality, diversity, etc.).
- Governance, which deals with the responsible management of organizations (e.g. ethical codex or the fight against corruption).

The goal of a properly established ESG strategy is to point an organization towards sustainability in a manner that is not based on “**greenwashing**”.

This term can be explained as a type of disinformation with the goal of merely creating the impression of an environmentally responsible company (or organization) to the public.

In the context of the ESG approach and the individual SDGs, the World Economic Forum and the International Business Council, in cooperation with consulting firms, published the “Big Four” in its 2020 document entitled “*Measuring Stakeholder Capitalism*”. This document defines common metrics for sustainable value creation. The goal of the International Business Council was to improve the methods via which an organization measures and demonstrates its contributions to society with the aim of creating more prosperous organizations and building more sustainable relationships with our planet (World Economic Forum, 2020).

The goal of this document is to identify the basic set of universal ESG metrics and information on publishing an organization’s sustainable approach. This is done via alignment with the UN’s Sustainable Development Goals (SDGs). This document suggests 21 primary and 34 secondary criteria. These criteria are divided into four basic pillars that can be used to effectively and universally assess a sustainable approach (Asociace společenské odpovědnosti, 2021; World Economic Forum, 2020).

There are four connected pillars that build upon the UN’s SDGs, which are described in the table below:

Table 2: SDGs divided into 4 pillars

Pillar	Description
Planet	These areas focus on the role of an organization in the protection of the planet.
People	These areas include issues linked to the responsibility of an organization towards its employees.
Prosperity	These areas are linked to economic, social and technological development.
Governance principles	These areas focus on the missions and responsible management of organizations and risk management.

Source: Asociace společenské odpovědnosti, 2021; World Economic Forum, 2020

The mutual connection of the identified pillars with individual SDGs can be demonstrated below.

Governance

These goals are closely linked to criteria that focuses on the mission of a company, the makeup of the company's leadership, an overview of topics that are relevant to company stakeholders, anti-corruption measures, ethical measures and the integration of risks and opportunities for entrepreneurial activities.

Figure 2: SDGs – Governance pillar



Source: United Nations, 2021

Planet

This pillar establishes the ambition to protect the planet from degradation via methods such as sustainable consumption and production, sustainable management of natural resources, and the adoption of urgent measures in the area of climate change in order to support the needs of the present and future generation (World Economic Forum, 2020).

Figure 3: SDGs – Planet pillar



Source: United Nations, 2021

People

The sustainable development goals that can be linked to the **People** pillar include the goals depicted in Figure 4.

Figure 4: SDGs – People pillar



Source: United Nations, 2021

The ambitions of this pillar aim at ending poverty and hunger in all their forms and dimensions, and at ensuring that all human beings can fulfill their potential in dignity and equality while living in a healthy environment (World Economic Forum, 2020). Thus, they include elements such as diversity, inclusion, wage equality and a safe work environment.

Prosperity

Figure 5: SDGs – Prosperity pillar



Source: United Nations, 2021

These goals are linked to criteria that are focused on economic indicators, the number of employees and their fluctuation, diversity or investment strategies (Asociace společenské odpovědnosti, 2021).

This pillar establishes the ambition in the area of human prosperity for all people to enjoy prosperous and fulfilling lives and for economic, social and technological progress to take place in accordance with nature (World Economic Forum, 2020).



Quiz questions:

1. Sustainable Development Goals are linked to the following document:

- A. The 2030 Agenda for Sustainable Development
- B. The 2035 Agenda for Sustainable Development
- C. Our Common Future 2030
- D. The Millennium Declaration

2. The Millennium Declaration took place in which year:

- A. 2000
- B. 1990
- C. 2010
- D. 2020

3. The first significant milestones in the 20th century in the area of sustainable development include the following report (published in 1972):

- A. The Limits of the Earth
- B. The Limits of Growth
- C. The Transformation of Humanity
- D. The Environment in the 20th Century

4. The following countries took part in creating Sustainable Development Goals:

- A. Only EU countries
- B. USA, China and Japan
- C. Only V4 countries
- D. All member countries of the United Nations

5. SDG 13 deals with:

- A. Climate Action
- B. Life below Water
- C. Inequalities
- D. Responsible Consumption and Production

6. SDG 1 deals with:

- A. Poverty
- B. Life below Water
- C. Quality Education
- D. Responsible Consumption and Production

7. SDG 12 deals with:

- A. Poverty
- B. Zero Hunger
- C. Responsible Consumption and Production
- D. Clean Water and Sanitation

8. SDG 4 deals with:

- A. Peace and Justice
- B. Partnerships for the Goals
- C. Quality Education
- D. Decent Work and Economic Growth

9. The ESG approach represents:

- A. The same concept as Corporate Social Responsibility (CSR)
- B. A synonym for the concept of a sharing economy
- C. The opportunity to suitably integrate elements of sustainability into an organization's operation
- D. A synonym for the concept of social entrepreneurship

10. The letter S in the ESG approach stands for:

- A. Social
- B. Secure
- C. Strong
- D. SDG

11. The letter E in the ESG approach stands for:

- A. Environmental
- B. Economy
- C. Energy
- D. Equal

12. The letter G in the ESG approach stands for:

- A. Global
- B. Governance
- C. Great
- D. Gravity

13. The Measuring Stakeholder Capitalism document divides SDGs into:

- A. 3 pillars
- B. 5 pillars
- C. 4 pillars
- D. 6 pillars

14. According to the Measuring Stakeholder Capitalism document, the Governance pillar includes the following SDGs:

- A. Responsible Consumption and Production; Zero Poverty
- B. Quality Education; Partnerships for the Goals
- C. Responsible Consumption and Production; Peace, Justice and Strong Institutions; Partnerships for the Goals
- D. Peace, Justice and Strong Institutions; Partnerships for the Goals; Life below Water

15. According to the Measuring Stakeholder Capitalism document, the Prosperity pillar includes the following SDGs:

- A. Responsible Consumption and Production; Zero Poverty
- B. Quality Education; Partnerships for the Goals
- C. Peace, Justice and Strong Institutions; Reduced Inequalities; Decent Work and Economic Growth
- D. Reduced Inequalities; Decent Work and Economic Growth; Industry, Innovation and Infrastructure; Zero Poverty

Correct answers: 1. - A. / 2. - A. / 3. - B. / 4. - D. / 5. - A. / 6. - A. / 7. - C. / 8. - D. / 9. - C. / 10. - A. / 11. - A. / 12. - B. / 13. - C. / 14. - C. / 15. - D.

Source

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Module 3

SDGs Governance



SDGs Governance

SDG 12 – Responsible Consumption and Production

The world population is growing at an increased rate – the World Population Prospects of The United Nations (2019) shows the current world population approximately 7.7 billion at a growth rate 1.08%, which represents per year around 82 million people. This scenario represents a huge environmental impact, since the growth of the world population is directly connected to global energy demands and exploration of natural resources. According to WWF, the standard of living will decrease by 2030 if the human beings continue on a growth pace depletion of planet's natural resources. In order to stop it, there is an urgent need to comprehend and become aware that fundamental changes in the way societies produce and consume are indispensable for achieving global sustainable development.

Thereby the importance of goal 12 of the Sustainable Development agenda, which aims to ensure sustainable consumption and production patterns.

- *Facts*

- Each year, an estimated one third of all food produced – equivalent to 1.3 billion tons worth around \$1 trillion – ends up rotting in the bins of consumers and retailers, or spoiling due to poor transportation and harvesting practices.
- If people worldwide switched to energy efficient light bulbs the world would save US\$120 billion annually.
- Should the global population reach 9.6 billion by 2050, the equivalent of almost three planets could be required to provide the natural resources needed to sustain current lifestyles.
- Water use has been increasing worldwide by about 1 per cent per year since the 1980s.
- 38 million children under the age of 5 were overweight or obese in 2019.
- Households consume 29 per cent of global energy and consequently contribute to 21 per cent of resultant CO2 emission.
- The food sector accounts for around 30 per cent of the world's total energy consumption and accounts for around 22 per cent of total Greenhouse Gas emissions.
- One in four teachers does not feel ready to teach themes related to these topics. More effort is needed to ensure that these issues are core components of national education systems.

- *Key business themes*
 - Sustainable sourcing
 - Resource efficiency of products and services
 - Materials recycling
 - Procurement practices
 - Product and service information and labeling

SDG 16 – Peace, Justice and Strong institutions

This chapter focuses on introduction of the sustainable development goal 16, which belongs to social pillar of sustainable development and has the importance to enhance sustainable development by ensuring the justice for all and build effective, accountable institutions at all levels. Among the 17 sustainable development goals, the SDG16 is recognized as the bedrock upon which the successes of the remaining goals lie, since conflicts, insecurity, weak institutions, and restricted admission to justice threaten sustainable development. This is because for any country or organization to reach higher heights, the fundamental principles of maintaining peace, attaining justice for all and ensuring institutional accountability must be realized. Empathy and a solid ethical compass are critical to every democratic society. However, persecution, inequity, and abuse still run flush and are tearing the civilization.

- *Facts about peace, justice, and strong institutions*
 - The judiciary and the police are among the institutions most affected by corruption and corruption, bribery, theft, and tax evasion cost developing countries about \$ 1.26 trillion annually; this amount could be used to keep those living on less than \$ 1.25 a day from the \$ 1.25 threshold for at least six years.
 - There are approximately 28.5 million school-age children in conflict-affected areas who do not attend primary school.
 - The number of people fleeing war, persecution, and conflict exceeded 70 million in 2018, the highest level recorded by the UN refugee agency (UNHCR) in almost 70 years.
 - Violence against children is another significant part of the task of SDG 16. The number of people fleeing war, persecution, and conflict in 2018 exceeded 70 million, the highest number recorded by the United Nations Refugee Agency (UNHCR) in almost 70 years. In 2019, the UN recorded 357 killings and 30 forced disappearances of human rights defenders, journalists, and union activists in 47 countries. Violence against children affects more than 1 billion worldwide and costs society up to \$ 7 trillion annually and every year 50% of the world's children experience violence.

- Every 7 minutes, a child dies somewhere in the world due to violence and one in 10 children is sexually abused before the age of 18. Every third Internet user is a child, and 800 million use social media. Any child can become a victim of online violence and the number of online child sexual abuse reports submitted to NCMEC increased from 1 million in 2014 to 45 million in 2018. Violence in schools affects 246 million children worldwide each year. Their peers have harassed one in three students at school in the last month, and at least one in 10 children has experienced cyberbullying.
- *Selected goals and strategies for children violence reduction, its declared in Agenda 2030*
 - Significantly reduce all forms of violence and related death rates everywhere
 - End abuse, exploitation, trafficking, and all forms of violence against and torture of children
 - By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime
 - Develop effective, accountable, and transparent institutions at all levels
 - Ensure responsive, inclusive, participatory, and representative decision-making at all levels
 - Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime
 - Promote and enforce non-discriminatory laws and policies for sustainable development.
 - The SDGs' goals are strictly interlinked and cannot be executed or even evaluated in separateness, particularly in the case of SDG 16. Across the 2030 Agenda, 24 targets and 33 indicators of seven other SDGs contribute instantly to peace, justice, and strong institutions, often also referred to as SDG 16+. SSG/R actions not only contribute to the accomplishment of SDG 16 but also to various other SDGs. One is gender equality, where mainstreaming security provision, management, and oversight is a critical component of suitable SSG and contributes to SDG 5. Increasing the recruitment of female attendants in the police, the judiciary, and the military is required to protect vulnerable parts of society, enable access to justice, and prevent human rights violations. Also, sustainable cities and communities (SDG 11) concentrate on building inclusive, safe, resilient, and sustainable cities and communities.

SSG/R activities in urban environments contribute to universal access to safe and inclusive public spaces, particularly for vulnerable members of society.

- *Related issues with corporate practice (Examples of good practice)*
 - Sustainability as a business model direction. Principles and cooperation with business partners based on ethical principles, fight against corruption in business.
 - Healthy and safe working conditions. Take care of healthy and safe working conditions is important because it's protecting the workers, the company reduce absences, ensuring that the workplace is more efficient and productive.
 - Work life balance. Some of the common reasons that lead to a poor work-life balance include: increased responsibilities at work.
 - Inclusive society. An inclusive society is a society that over-rides differences of race, gender, class, generation, and geography, and ensures inclusion, equality of opportunity as well as capability of all members of the society to determine an agreed set of social institutions.
 - Examples of good practice: <https://www.spolecenskaodpovednost.cz/sdg/mir-spravedlnost-a-silne-institute/>

SDG 17 – Partnerships for the Goals

As part of the Agenda 2030, the sustainable development goal 17 aims to strengthen the means of implementation and to revitalize the Global Partnership for Sustainable Development. With this mission, SDG 17 serves as enabler and support for SDGs 1 to 16, as all environmental, societal, and economic goals can only be achieved if powerful means for their implementation are put into effect.

- *SDG 17 as enabler for sustainable development*

Enabling sustainable development comprises mobilizing financial resources from multiple sources, as well as managing developing countries' debt. Financial resources for developing countries need to be mobilized both domestically and abroad. From a domestic perspective, developing countries are supposed to strengthen their capacity for revenue collection. Developed countries, on the other hand, have to fulfill their official development assistance (ODA) commitments. In addition, an open, multi-lateral trading system based on the rules of the WTO is supposed to empower developing countries to increasingly participate in world trade.

Technology as another enabling factor for the SGDs is twofold. Transferring technologies, sharing access to knowledge, science and innovation and building technological capacities in developing countries aims to facilitate the implementation of SDGs 1 to 16. Besides that, a steadily increasing use of technology, especially of information and communications technology, in developing countries is by itself regarded as an indicator of progress on sustainable development.

Moreover, for the SDGs to be successfully implemented, effective and targeted capacity-building in developing countries has to be enabled and supported internationally. Yet, the enablement of sustainable development is not exclusively a task of the public sphere, but requires the contribution of the private sector and civil society alike. Public, private and civil actors need to join forces and engage in strong and effective multi-stakeholder partnerships with the aim of sharing knowledge, technology and resources. Ultimately, progress on the SDGs can only be identified and measured if comprehensive and reliable data is available. In order to realize this, it is key to enable developing countries to collect data and analyze it using scientific methods.

- *Trends related to SDG 17*
 - Rising debt burdens of developing countries, fuelled by COVID-19 pandemic
 - Rebounding global foreign direct investment flows exceeding the pre-pandemic level, mainly for the benefit of developed countries; only modest FDI growth in the poorest countries
 - Increasing official development assistance provided by developed countries since 2015; yet, donor countries still do not reach their target of dedicating 0.7% of GNI to ODA
 - Increasing global use of the Internet especially driven by developing countries: 54% of the world population using the Internet in 2019 compared to 63% in 2021
 - Stagnating funding for data and statistics at 0.3% of ODA; Funding of statistical activities in areas other than health de-prioritized
- *Key action themes*
 - Re-aligning financial resources and mobilizing new financial resources for reaching the goals
 - Using scientific methods to analyse data and develop technologies for SDGs
 - Developing capacities
 - Strengthening partnerships and commitment with dialogue



Quiz questions:

1. The SDG 16 is considered as a bedrock for all remaining goals.

- A. Yes.
- B. No.
- C. Maybe.
- D. Don't know.

2. Considering the 2030 Agenda, SDG16 consists of:

- A. 12 targets.
- B. 16 targets.
- C. 30 targets.
- D. It doesn't have any targets.

3. The organization which aim is to decrease the level of corruption is called:

- A. Transparency international.
- B. World trade organization.
- C. European Union.
- D. World bank.

4. Respecting the Healthy and safe working conditions is making the work more:

- A. more efficient and productive
- B. less productive
- C. slower
- D. expensive

5. A social inclusion:

- A. is the tool which is used to create inclusive society.
- B. is a part of social life.
- C. regulates the social living.
- D. regulates general attitude of respecting the gender.

6. Work-life balance is explained as:

- A. Work-life balance means the right balance between work and leisure.
- B. Work-life balance means prioritizing work over leisure.
- C. Work-life balance means working from home.
- D. Work-life balance means working online.

7. Among the Sustainable Development Goals, SDG 17 plays a special role because...

- A. it monitors the progress on the other SDGs.
- B. it results from the achievement of the other SDGs.
- C. it enables and supports the other SDGs.
- D. it defines the scope of the other SDGs.

8. In which aspect has the COVID-19 pandemic spurred SDG 17?

- A. The global use of information and communication technology increased during the pandemic.
- B. Developed countries now meet their ODA commitments due to COVID-related assistance.
- C. The poorest countries now benefit from significant growth in FDI.
- D. Statistical activities are now funded with a larger share of ODA.

9. Enabling sustainable development...

- A. is the task of states and therefore a matter of the public sphere.
- B. mainly takes place through FDI by private sector companies.
- C. can only be accomplished by developing countries themselves.
- D. requires multi-stakeholder partnerships formed by public actors, the private sector and civil society.

10. What is official development assistance?

- A. Funding of NGOs to implement sustainable development projects.
- B. Financial resources provided by developed countries to developing countries.
- C. Donations of individuals to support voluntary projects in developing countries.
- D. Trainings offered by the United Nations to foster sustainable development.

11. Why do developing countries need to be enabled to collect and analyze data with the help of scientific methods?

- A. Because this is part of promoting higher education in developing countries.
- B. Because this is required to comply with global macroeconomic reporting norms.
- C. Because this is needed to identify and measure progress on the SDGs.
- D. Because this promotes transparency on recent developments in society and economy.

12. Why is SDG 12 addressing consumers and producers?

- A. Because we need a shared responsibility
- B. Because production is more than consumption
- C. Because consumption is responsible for production
- D. Because production is responsible for influencing consumption

13. To which conception can SDG 12 be connected to:

- A. Circular economy
- B. De-growth economy
- C. Sharing economy
- D. Economic growth as it is now

14. How many planets would be needed to ensure resources for population growth?

- A. 6 planet earth
- B. 5 planet earth
- C. 4 planet earth
- D. 3 planet earth

15. Using eco-efficiency to factor input and output: what factor could be possible?

- A. Factor 2
- B. Factor 3
- C. Factor 4
- D. Factor 5

Correct answers: 1. - A./ 2. - A./ 3. - A./ 4. - A./ 5. - A./ 6. - A./ 7. - C. 8. - A./ 9. - D./ 10. - B./ 11. - C./ 12. - A./ 13. - A./ 14. - D./ 15. - D.

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ESDGs!

Module 4

SDGs People



SDGs People

The module SDGs people and the individual indicators must be seen in conjunction with the other three goals. Each of these modules has relevance for the other subjects. The aim of module 4 is to define the SDGs people. An ambition of the SDGs people module is to end poverty and hunger, in all their forms and dimensions, and to ensure that all human beings can fulfil their potential in dignity and equality and in a healthy environment.

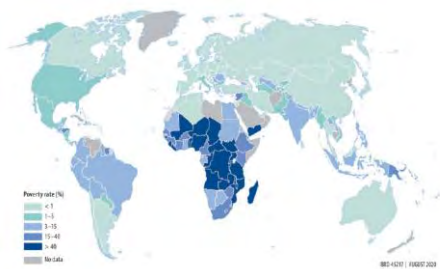
The values of specific indicators are monitored, and their ideal future development is determined. See: Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development.

SDG 1 - No Poverty

The No Poverty sub-module aims to end poverty in all its forms everywhere in the world. While the goals are clear, implementation is lagging behind. Unfortunately, the issue of poverty and debt for the world's poorest countries remains the most pressing problem. Poverty reduction is a challenging task that must be achieved through incremental steps and by ensuring equal rights and access to economic and natural resources, technology, assets and basic and financial services. It also calls for support for communities affected by conflict and climate-related disasters and emphasizes political commitment and resource mobilization as essential levers to accelerate poverty eradication.

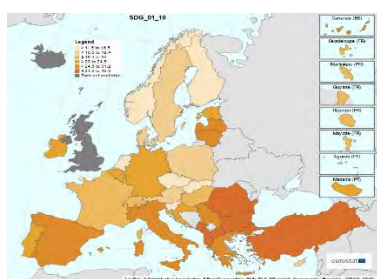
- *Facts about poverty:*
 - “Since 2015, the World Bank has defined extreme poverty as people living on less than \$1.90 a day, measured using the international poverty line.” (WHO, 2022a)
 - “About 9.2% of the world, or 689 million people, live in extreme poverty on less than \$1.90 a day, according to the World Bank. (WHO, 2022b). For almost 25 years, the number of people living in extreme poverty was steadily declining. But the trend was interrupted in 2020, when poverty rose due to the disruption caused by the COVID-19 crisis combined with the effects of conflict and climate change — which had already been slowing poverty reduction. (The World Bank, 2022) The COVID-19 pandemic has caused an increase in poverty: 71 million more people will live in extreme poverty.” (OSN, 2022)
 - “Most extremely poor people live in South Asia and sub-Saharan Africa. High levels of poverty are often found in small, fragile, and conflict-affected countries. One in five people in developing countries lives on less than \$1.25 a day.” (OSN, 2022)

Fig. 1: Poverty Rate at the US\$1.90-a-Day Poverty Line, by Economy, 2017



Source: The World Bank. (2022a).

Fig. 2: People at risk of poverty or social exclusion, 2021



Source: Eurostat (2022)

- *Selected goals and strategies for poverty reduction:*
 - Fewer children growing up in poverty - increase pupil performance in schools through youth projects, interventions to help youth, clubs for children, financial and legal literacy.
 - Fewer homeless people - keep the proportion of social housing at a set threshold, social housing masterplans, free advice for borrowers.
 - Reduce health inequalities for vulnerable groups and people with disabilities.
 - Political commitments, social policy, resource mobilisation, support for disadvantaged localities.

- *Related issues with corporate practice (Examples of good practice):*
 - To inspire practice and show examples of how business can support and help achieve goals (finding inspirational cases).
 - The relationship between population growth and poverty (e.g. population growth, demographic transition, population rejuvenation means demand for new jobs, link to changes in consumption patterns).
 - Introducing and consolidating fair rewards, benefits that contribute to the economic well-being of employees. Because wage and income distribution are essential to eliminate inequality and poverty.

- Measures to avoid child labour. Child labour and forced or compulsory labour are violations of fundamental human rights and are obstacles to development. There is a strong link between poverty and child labour, which can reduce living standards across generations.
- Examples of good practice: <https://www.spolecenskaodpovednost.cz/sdg/chudoba/>

SDG 2 - Zero Hunger

The Zero hunger sub-module aims to end hunger, achieve food security and improved nutrition and promote sustainable agriculture. Malnutrition is a big problem, but developed countries are fighting the opposite, namely obesity. The aim, therefore, is not only to combat malnutrition, but also to prevent and treat obesity, which also has an adverse effect on quality of life. An important aspect of the fight against obesity is that it is preventable. It is important to increase agricultural production and support small farmers. At the same time, protecting the environment, preventing natural disasters.

- *Facts about zero hunger*
 - *“Hunger is the distress associated with lack of food. The threshold for food deprivation, or undernourishment, is fewer than 1,800 calories per day. Around the world, more than enough food is produced to feed the global population—but as many as 829 million people still go hungry. After steadily declining for a decade, world hunger is on the rise, affecting nearly 10% percent of people globally. From 2019 to 2022, the number of undernourished people grew by as many as 150 million, a crisis driven largely by conflict, climate change, and the COVID-19 pandemic. An estimated 14 million children under the age of five worldwide suffer from severe acute malnutrition, also known as severe wasting, yet only 25 percent of acutely malnourished children have access to lifesaving treatment.” (ACF-USA, 2022).*
 - *“Worldwide obesity has nearly tripled since 1975. In 2016, more than 1.9 billion adults, 18 years and older, were overweight. Of these over 650 million were obese. 39 million children under the age of 5 were overweight or obese in 2020.” (WHO, 2021)*
 - *“Most of the world's population live in countries where overweight and obesity kills more people than underweight. Overweight and obesity are linked to more deaths worldwide than underweight. Globally there are more people who are obese than underweight – this occurs in every region except parts of sub-Saharan Africa and Asia.” (WHO, 2021)*

Fig. 3: Mean BMI (kg/m²)



Source: WHO (2022)

Fig. 4: Obesity rate by body mass index (BMI), 2019



Source: Eurostat (2022)

- *Selected goals and strategies for reducing hunger:*
 - Better nutrition and food education, quality food, school education.
 - Promote local food, support small farmers, protect diversity of seeds, crops and livestock.
 - Meals for children, youth and seniors - School meals, meals for seniors.
 - Reduce food waste, food banks.
 - Urban community gardens.
- *Related issues with corporate practice (Examples of good practice):*
 - To inspire practice and show examples of how business can support and help achieve goals (finding inspirational cases).
 - Support for countryside infrastructure, investment...
 - Elimination of export subsidies,
 - Reducing extreme food price volatility
 - Promoting regional food, fair trade
 - Examples of good practice: <https://www.spolecenskaodpovednost.cz/sdg/konec-hladu/>

SDG 3 - Good Health and Well-being

The Good health and well-being sub-module aims is to ensure healthy lives and promote well-being for all at all ages. Ensuring a healthy life can be supported by education, employment opportunities, educational activities, and the elimination of social inequalities. It is social inequality that significantly affects people throughout their lives and affects their health. Health care must not only aim to cure illnesses but must also focus on promoting a healthy lifestyle and an active way of life. This is helped not only by the provision of quality and accessible healthcare, but also by clean air, healthy and good quality food, sports and recreation centers. The aim is to disseminate health education, mental health issues, raising awareness of the dangers of drugs, alcohol, and smoking.

- *Facts about good health and well-being*
 - *“The World Health Organization (WHO) defines health as ‘a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity’”*
 - *“In 2018 an estimated 6.2 million children and adolescents under the age of 15 years died, mostly from preventable causes. Of these deaths, 5.3 million occurred in the first 5 years, with almost half of these in the first month of life. Despite determined global progress, an increasing proportion of child deaths are in Sub-Saharan Africa and Southern Asia. Four out of every five deaths of children under age five occur in these regions.” (UN, 2022)*
 - *“Over 40 per cent of all countries have fewer than 10 medical doctors per 10,000 people; over 55 per cent of countries have fewer than 40 nursing and midwifery personnel per 10,000 people.” (UN, 2022)*

Fig. 5: Healthy life expectancy at birth



Source: WHO (2022)

Fig. 6: Healthy life years at birth by sex



Source: Eurostat (2022)

- *Selected goals and strategies for good health and well-being:*
 - Accessible and quality health care, affordable medicines and vaccines, digitalization of health care, maternal health.
 - Health literacy, health education.
 - Increased quality of life - access to sports facilities, increased leisure activities, reduced smoking especially among young people, take other addictive substances.
 - Living with dignity for the elderly - assisted living, mobile services, homes for the elderly, early prevention, dignified care, unmarried care.
 - Healthy diet, healthy lifestyle.
- *Related issues with corporate practice (Examples of good practice):*
 - To inspire practice and show examples of how business can support and help achieve goals (finding inspirational cases).
 - Maintaining health standards.

- Quality OSH (developing), protecting employees from occupational accidents and diseases.
- Active care of employees (provision of non-occupational health care, available medicines).
- Control of addictive substances.
- Development and promotion of health care (in developing countries). Supporting research and development of medicines.
- Examples of good practice: <https://www.spolecenskaodpovednost.cz/sdg/zdravi-a-kvalitni-zivot/4> - kvalitní vzdělání

SDG 4 - Quality Education

The sub-module aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Providing an educational and stimulating environment not only for children and adolescents but also for adults. A quality education system needs to be constantly innovated in line with current requirements, to promote digital education system, to create research centers.

- *Facts about quality education*
 - *“Before the coronavirus crisis, projections showed that more than 200 million children would be out of school, and only 60 per cent of young people would be completing upper secondary education in 2030. The proportion of children and youth out of primary and secondary school had declined from 26 per cent in 2000 to 19 per cent in 2010 and 17 per cent in 2018. More than half of children that have not enrolled in school live in sub-Saharan Africa, and more than 85 per cent of children in sub-Saharan Africa are not learning the minimum. 617 million youth worldwide lack basic mathematics and literacy skills”. (UN, 2022)*
- *Selected goals and strategies for quality education:*
 - Access to education for all - school education without fees.
 - Increasing the proportion of students with better grades.
 - Digitization in education.
 - Social strategies - to reduce the impact of social background on academic achievement and student performance.
 - Anti-bullying strategy, reducing truancy, helping to integrate disadvantaged children and youth.
 - Lifelong learning, educational courses.
 - Environmental education.

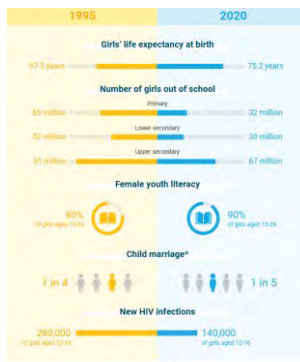
- *Related issues with corporate practice (Examples of good practice):*
 - To inspire practice and show examples of how business can support and help achieve goals (finding inspirational cases).
 - Provide, offer education and training programs, training for employees; follow up on national pension increases, skilled workforce. Focus on level of investment and effectiveness of training rather than number of people trained.
 - Inclusion and diversity of employees (by age group, gender and other diversity indicators (e.g. ethnicity).
 - Effective learning environment for all (children people, disadvantaged groups...), support for scholarships for students from developing countries, internships in companies.
 - Work balance and family life.
 - Examples of good practice: <https://www.spolecenskaodpovednost.cz/sdg/kvalitni-vzdelani/>

SDG 5 - Gender Equality

The sub-module aims to achieve gender equality and empower all women and girls. Addressing cases of harassment and discrimination. Ensuring equal rights, recognition and values in all areas of life, i.e. care, employment, lifestyle, decision-making, political and economic life, etc. Above all, it is necessary to adopt gender-sensitive policies and legislation to promote gender equality and eliminate gender discrimination.

- *Facts about gender equality*
 - *“Globally, 750 million women and girls were married before the age of 18 and at least 200 million women and girls in 30 countries have undergone FGM. In 18 countries, husbands can legally prevent their wives from working; in 39 countries, daughters and sons do not have equal inheritance rights; and 49 countries lack laws protecting women from domestic violence. (UN, 2022) Some 1 in 20 girls between the ages of 15 and 19 – around 13 million globally – have experienced forced sex in their lifetimes.” (UNICEF, 2022)*
 - *“While women have made important inroads into political office across the world, their representation in national parliaments at 23.7 per cent is still far from parity.” (UN, 2022)*
 - *“Worldwide, nearly 1 in 4 girls between the ages of 15 and 19 are neither employed nor in education or training – compared to 1 in 10 boys”. (UNICEF, 2022)*

Fig. 7: Progress for girls and young women



Source: INICEF (2022) <https://www.unicef.org/gender-equality>

- *Selected objectives and strategies for gender equality:*
 - Promoting gender equality and sexual orientation - educating teachers, gender equality in management and care services, minimizing gender discrimination against job applicants,
 - Equality for children - leisure activities, combating discrimination and bullying.
 - Corporate Social Responsibility.
 - Retraining programs
 - Equal rights - adoption of policy and legislation to promote gender equality.
- *Related issues with corporate practice (Examples of good practice):*
 - To inspire practice and show examples of how business can support and help achieve goals (finding inspirational cases).
 - Empowering women. Gender equality in all spheres.
 - Work balance of family and working life for women (and men), flexible working conditions and jobs.
 - Examples of good practice: <https://www.spolecenskaodpovednost.cz/sdg/rovnost-muzu-a-zen/>

SDG 8 - Decent Work and Economic Growth

Economic growth is addressed as a key SDG to finance the ending of poverty and comes along with 12 subgoals (8.1-8.10 and 8a. and b). It is about promoting a sustained, inclusive and sustainable economic growth, full and productive employment and decent working conditions for all. Since the so called Brundlandt Report 1987 published the main definition of sustainable development there is also an important second sentence following: "...far from requiring the cessation of economic growth, it recognizes that the problem of poverty and underdevelopment cannot be solved unless we have a new era of growth in which developing countries play a large role and reap large benefits. " (World Commission 1987, p. 51).

Since COVID-19 has disrupted the global economy and war also escalate a recession which estimates that nearly half of the global workforce is facing the risk of losing their livelihoods.

- *Facts about Decent Work and Economic Growth*

- Since 2020 the global economy has recovered to 4.4 annual growth rate but now has to decline to 2.1 in 2022 due to Ukraine crisis. Working productivity has rebounded to 3.2% growth output per worker.
- This two examples highlight the necessity to focus on the subgoals and sustain the economic growth per capita, achieve higher levels of economic productivity, promote policies that support productive activities, improve global resource efficiency in consumption, achieve full and productive employment, reduce the proportion of youth unemployment, eradicate forced labour, protect labour rights and safe, secure working environments, enable sustainable tourism, strengthen domestic financial institutions, increase aid for developing countries and implement the ILO Global Job Pact.

- *Selected objectives and strategies, Further relevant aspects*

1. How to growth

- Although capitalism has caused many current problems, its core ideas are still important today to achieve sustainability goals: property rights, free markets, profit orientation, no central planning.
- The SDG8 does not call to growth criticism. In the meanwhile there are future economic alternatives: De-growth; Donoug economy, circular economy (linked to decoupling).

2. Decent work

- Aspects for decent work can be found with the International Labour Standards, but what does decent work mean? Physically & mentally. Implementing these aspects with a global wide Standard as the SA 8000 may support a company.

3. Limitations of SDG8

- Marginal utility of SDG 8 and upcoming challenges, because economic growth without resource decoupling will lead to a negative ecological impact.

SDG 10 - Reduced Inequalities

The aim of the sub-module is to promote equal pay and provide equal rewards for equal work for all people regardless of gender, colour, caste, creed, religion and other aspects of diversity. (a potential legal risk). Prevention in the area of population inequality is particularly important, and the problem must be tackled at the root. Civic participation leading to a reduction in inequalities, involving citizens in urban decision-making processes is appropriate. When planning public

spaces and new buildings, aim for barrier-free access and accessibility for citizens within walking distance of their homes.

- *Facts about reduced inequalities*
 - *“Evidence from developing countries shows that children in the poorest 20 per cent of the populations are still up to three times more likely to die before their fifth birthday than children in the richest quintiles”. (UN, 2022)*
 - *“Social protection has been significantly extended globally, yet persons with disabilities are up to five times more likely than average to incur catastrophic health expenditures. Of the one billion population of persons with disabilities, 80per cent live in developing countries. One in ten children is a child with a disability. Only 28 per cent of persons with significant disabilities have access to disability benefits globally, and only 1per cent in low-income countries.” (UN, 2022)*
 - *“Up to 30 per cent of income inequality is due to inequality within households, including between women and men. Women are also more likely than men to live below 50 per cent of the median income.” (UN, 2022)*
 - *“COVID-19 has deepened existing inequalities, hitting the poorest and most vulnerable communities the hardest. On the economic front, the COVID-19 pandemic has significantly increased global unemployment and dramatically slashed workers’ incomes.” (UN, 2022)*
- *Selected objectives and strategies for reducing inequalities:*
 - Social assistance, family centres.
 - Affordable housing in all price ranges, fewer homeless people, social housing.
 - Integration, inclusion - Closing social gaps, equal access to education and labour market, policy for people with disabilities.
 - Citizen participation.
- *Related issues with corporate practice (Examples of good practice):*
 - To inspire practice and show examples of how business can support and help achieve goals (finding inspirational cases).
 - Respect the human rights of workers, allow collective bargaining, remedy in case of violations.
 - Ensure equal remuneration in the organization irrespective of gender, colour, caste, creed, religion and other aspects. The pay gap metric is considered as a potential indicator of structural inequality and under-representation in the organization - disadvantaged groups in managerial and better paid positions.
 - Examples of good practice: <https://www.spolecenskaodpovednost.cz/sdg/mene-nerovnosti/>

- *Examples of good practice for these topics:*
 - In general, for all topics, corporate self-regulation can help in corporate practice, e.g. corporate codes of ethics, more advanced forms are ethical and social audits often linked to environmental audits, corporate/corporate responsibility. Introduce and implement diversity, social responsibility, codes of ethics, etc.
 - Companies set up projects, join organisations/associations to increase corporate responsibility.
 - Obtain certifications supporting the SDGs.
 - Use goods in accordance with Fairtrade standards. Fairtrade is trade based on partnership. The FAIRTRADE® mark indicates goods that have been produced in accordance with Fairtrade standards. This means that strict social, environmental and economic criteria have been maintained in its production. Fairtrade stands for fairer trading conditions, respect for human and labour rights and environmental friendliness. (see <https://www.fairtrade.net/issue/sdgs>).
 - For example - the PURITY VISION® brand - uses Fair Trade raw materials for its products (The first company in the Czech Republic and Slovakia to be certified Fair for life. The company cooperates with individual farmers in Uganda, the Philippine Islands or Bulgaria to help raise a stable income for socially disadvantaged families).
 - For example, Tierra Verde uses input materials and raw materials that are as ecological, fair and organic as possible (Ecogarantia, PEFC or GOTS certificates), thus contributing to a better and healthier world. Humanity and social responsibility are an important part of the company's corporate values.
 - For example, Nespresso works in line with B Corp™ values, contributing to sustainable livelihoods, supporting farmers and helping to protect the environment.
 - Universities and schools are engaging with the SDGs, e.g. Codes of Ethics, Human Resources Strategy For Researchers (HRS4R), implementation of the Code of Conduct for the Recruitment of Researchers, etc.
 - Universities and schools focus their educational activities not only on their students, but also on the general public, e.g. Elearning courses, Third Age Universities, courses and clubs for children, organize cultural, educational and sports events, organize green projects.



Quiz questions:

1. The SDG 1 headline target of no poverty is:

- A. End poverty in all its forms everywhere.
- B. Support small farmers and local food.
- C. Establish and support food banks.
- D. Support local poverty reduction programmes.

2. The SDG 2 headline target of zero hunger is:

- A. End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
- B. Support small farmers and local food.
- C. Reduce hunger by promoting international cooperation.
- D. Reduce hunger by promoting sustainable agriculture.

3. The SDG 3 headline target of good health and well-being is:

- A. Ensure healthy lives and promote well-being for all at all ages.
- B. Reduce the global maternal mortality and neonatal mortality.
- C. Ensure medical care for all.
- D. Provide nutrition and healthy lifestyle education for all and promote sport.

4. The SDG 4 headline target of quality education is:

- A. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
- B. Ensure education for young children and the elderly.
- C. To promote the construction of new schools.
- D. To support international education projects.

5. The SDG 5 headline target of gender equality is:

- A. Achieve gender equality and empower all women and girls.
- B. Achieve gender equality and empower all men and boys.
- C. Achieve gender equality and empower all kids.
- D. Achieve gender equality and empower all seniors.

6. The SDG 10 headline target of reduced inequalities is:

- A. Reduce inequality within and among countries.
- B. End discrimination.
- C. Ensure equal opportunities for all.
- D. Encourage development aid, especially to the least developed countries.

7. The World Bank has defined extreme poverty as:

- A. people living on less than \$1.90 a day, measured using the international poverty line.
- B. people living on less than \$5 a day, measured using the international poverty line.
- C. people living on less than \$10 a day, measured using the international poverty line.
- D. people living on less than \$15 a day, measured using the international poverty line.

8. Child labour and forced or compulsory labour are primarily violations of:

- A. fundamental human rights
- B. family standards
- C. international standards
- D. EU standards

9. A code of conduct is a rule or document that:

- A. regulates general and specific practices in individual organizations and professions.
- B. regulates only gender issues for employees.
- C. regulates only public contracts.
- D. regulates general and specific plagiarism practices.

10. Work-life balance is explained as:

- A. Work-life balance means the right balance between work and leisure.
- B. Work-life balance means prioritising work over leisure.
- C. Work-life balance means working from home.
- D. Work-life balance means working online.

11. What percentage of care workers are women?

- A. around 90 %
- B. around 40 %
- C. around 50 %
- D. around 10 %

12. What does equal access to healthcare mean?

- A. Ensuring equal access to healthcare for all people and reducing health inequalities across countries and generations.
- B. Ensuring quality healthcare for the seniors.
- C. Ensuring specialist doctors.
- D. Supporting health centres.

13. Which areas are lacking in education and need to be provided to ensure SDGs 4?

- A. Education is lacking in the areas of sustainable development and sustainable lifestyles, health science, culture, human rights and gender equality, global citizenship and other key skills needed to live in healthy and sustainable societies.
- B. There is a lack of education in the areas of human rights and gender equality, world citizenship.
- C. There is a lack of education in health, work-balance and labour market issues.
- D. Education for critical thinking is lacking.

14. What is the set limit of calories per day that already means food deprivation or malnutrition?

- A. The threshold for food deprivation or malnutrition is fewer than 1,800 calories per day.
- B. The threshold for food deprivation or malnutrition is fewer than 2,000 calories per day.
- C. The threshold for food deprivation or malnutrition is fewer than 2,800 calories per day.
- D. The threshold for food deprivation or malnutrition is fewer than 800 calories per day.

15. Who can help achieve SDGs goals?

- A. Anyone, children, individuals, states, municipalities, international organisations, educational institutions, non-profit organisations, businesses and others can help and achieve the SDGs.
- B. Only States and governments can contribute to the SDGs.
- C. Only international organizations can help to achieve the SDGs.
- D. States and municipalities can help to achieve the SDGs.

Correct answers: 1. - A. / 2. - A. / 3. - A. / 4. - A. / 5. - A. / 6. - A. / 7. - A. / 8. - A. / 9. - A. / 10. - A. / 11. - A. / 12. - A. / 13. - A. / 14. - A. / 15. - A.

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ESDGs!

Module 5

SDGs Planet



SDGs Planet

SDG 6 – Clean water and Sanitation

The development and well-being of human societies has been inevitably linked to the availability of freshwater in sufficient quantity and quality to meet the needs for various uses (from domestic to industrial). Once used for such activities, water loses quality and needs to be treated to make it suitable for use again. When the water used is returned to the environment (e.g. rivers, lakes or lagoons) it undergoes a natural purification process. The organisms that live in the water eliminate both inorganic and organic pollutants. However, when the water intake is excessive, the self-purification capacity is exceeded and the water is no longer suitable for domestic and many industrial uses (Vigil 2003). In addition, as one moves along the rivers from the headwaters to the mouth of the river, the downstream population centers receive water contaminated by waste from upstream populations. It is therefore necessary to treat the water before using it for its various uses. The simplest system would require:

- a) making the water drinkable before it is used in households,
- b) an adequate piping network for transporting drinking water and collecting wastewater,
- c) treatment before returning the water to the natural environment.

Lack of access to these systems increases infant mortality rates and decreases life expectancy very significantly due to the spread of diseases caused by viruses and bacteria. There are about 500,000 (the size of a city like Dresden, Gdansk) deaths per year related to the consumption of unsafe water. Globally, one in three people do not have access to properly treated water, two out of five do not have a basic toilet (sometimes even health centers lack clean water) and almost 700 million people defecate in the open.

From another point of view, the return of untreated or inadequately treated wastewater to the environment affects aquatic ecosystems. Various groups of organisms, including fish, are capable of concentrating pollutants in water. Elements such as heavy metals, complex chemical residues such as drug residues or household plastics are incorporated into the animals through the gills and digestive system. Many of these pollutants cannot be eliminated and end up severely harming individuals living in polluted waters. Indirectly, they can also cause human health problems when these fish are part of the diet. On the other hand, the arrival of inorganic elements such as nitrogen or phosphorus causes an excessive and unbalanced growth of microscopic algae that form part of the plankton, causing eutrophication in bodies of water. This leads to serious alterations in the state of aquatic ecosystems and even to the extinction of species. The development of low-cost technologies for water purification and sanitation networks is crucial for preserving both human health and the good condition of ecosystems.

SDG 7 – Affordable and Clean Energy

The pursuit of affordable and clean energy is one of the key SDGs, and one which requires much goodwill from national governments and organizations at the regional and local levels. Secondly, clean energy is cheap in the long run, since the benefits reaped from the investments initially made have a long duration. Thirdly, there is a reduction in expenditures with the purchase of fossil fuels, a matter of relevance to poor countries and small developing island states. Fourthly, affordable and clean energy encourages economic growth in all countries where is implemented (Franco et al. 2021).

- *Energy accessibility*

As for the definition of energy access, it can be broadly defined as the ability to deliver quality energy that is adequate and affordable to make possible the provision of energy services for consumptive and productive uses both at the household and national levels. Though there is no single working definition agreed upon at the international level, this definition encompasses the many facets offered by organizations and scholars in the field (Tarekegne, 2021).

- *Fossil fuels and the environment*

Fossil fuels in providing energy and power led to the associated emissions of pollutants such as sulphur dioxide (SO₂), carbon monoxide (CO), carbon dioxide (CO₂), and nitrogen oxides (NO_x), the latter three being significant greenhouse gases (Walsh, 2021) linked to the global warming and fossil fuels are non-renewable energies since their stock is running out (Chernysh et al., 2021).

- *Transition to sustainable energy*

Several policies have been introduced to help chart a global pathway to clean energy solutions which are both deemed more efficient and can engender the needed green transformation along the value chain (United Nations Development Programme, 2022).

Operationally, SDG7 can be implemented by investments in renewable energy which is a kind of clean and sustainable energy source that is rapidly renovated naturally, since the sources are water, wind, solar, ocean, and thermal (Sasana & Ghozali, 2017).

SDG 12 – Responsible Consumption and Production

The SDG 12 suggests taking action in the field of raising awareness of consumers about their everyday choices, as well as the suppliers and producers about the procedures that they realize and governments about the regulations that they create to enable or facilitate responsible and sustainable product life cycle and in general moving toward more sustainable patterns of consumption by 2030 (Machnik et al, 2020).

- *Key concepts and terminology*

According to the report by the Ministry of Norway (1994), sustainable consumption and production (SCP) is defined as “the use of services and related products, which respond to basic needs and bring a better quality of life whilst minimising the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardise the needs of further generations.”

- *Sustainable household consumption: efficient use of food, consumer goods, energy and waste. Challenges and solutions*

Currently, there is a growing awareness of consuming goods in a responsible and sustainable way. Some tips for responsible consumption:

- Flee from consuming for consumption and the culture of using and throwing away.
- Make responsible consumption in supermarkets and local shops.
- Save energy and use it efficiently

- *Circular consumption: textile, agriculture/food, plastics, buildings, materials*

The idea of 'use and throw away' has prevailed for decades in our way of consuming. This has caused serious damage to the health of the planet. It is important to be aware and transform our habits into others that advocate the optimization of resources. This is the idea behind the so-called circular economy, which promotes the use of resources and the reduction of unnecessary consumption (United Nations, 2015). Ten tips for contributing to the circular economy (Fundación Aque, 2022):

1. Repair before throwing away
2. Choose durable over disposable
3. Reduce litter to a minimum
4. Make the shopping list
5. Buy second hand
6. Compost at home
7. Adjust energy expenditure
8. Recycle
9. Learn to get rid of what is not used
10. "Doggy bag" or "Gourmet bag"

SDG 13 – Climate Action

In 2015, ambitious 2030 Agenda for Sustainable Development was set for the next 15 years, with an aim to eradicate poverty, improve human rights, and protect the environment. Agenda has 17 Sustainable Development Goals and 169 targets which should guide and engage stakeholders

around the world towards the achievement of crucial globally set priorities for humanity and the planet (United Nations, 2015).

- *Greenhouse effect and gases*

The greenhouse effect is the phenomenon that, under normal conditions, allows life on planet earth as we know it. It is the effect by which the sun's heat that reaches the earth is not bounced back to space in its entirety and remains at a certain percentage, giving rise to an ideal temperature for life.

The term greenhouse effect is used because the earth's atmosphere does a job similar to that done by plastic tents in greenhouse gardens. Therefore, this effect is beneficial for life and what's more, without it, it would not be possible. The problem has arisen when, as a result of human activity and industrial and social growth, the amount of gases in the atmosphere with properties to cause this greenhouse effect has increased disproportionately and in a very short time. By increasing the proportion of greenhouse gases above normal concentrations, the terrestrial natural greenhouse effect has multiplied, giving rise to a harmful phenomenon (European Parliament, 2022).

- *Climate change and its impacts*

Climate change has a series of consequences that can be summarized in the following 10 items (Oxfam Intermón, 2016; Murphy, et al., 2018):

1. Warmer temperatures.
2. More intense storms.
3. Spread of disease.
4. Stronger heat waves.
5. Melting of glaciers.
6. Most dangerous hurricanes.
7. Ecosystem change.
8. Disappearance of animal species.
9. Sea level rise.
10. More expensive foods

- *Tips to fight against climate change*

The United Nations Environment Program (UNEP) makes a series of recommendations to fight climate change:

- After charging your phone unplug the charger.
- For short distances, walk or use a bicycle.
- Reduce consumption:
- Eliminate the use of plastic bottles from your routine.
- Do not use objects with plastic.

- For your purchases, use cloth bags.
- Make responsible use of heating and keep the thermostat as low as possible.
- Commitment to sustainable food.

SDG 14 – Life below Water

Oceans and seas cover 71% of the Earth's surface and store 97% of the water in the hydrosphere. However, the general public's knowledge of the structure and function of marine ecosystems is lower than that of terrestrial ecosystems. Although in the past they were interpreted as an inexhaustible source of resources, including food, energy or minerals, the reality is that the oceans can be considered a desert for most of their surface area in terms of biological productivity (amount of organic matter produced by plants per unit area per year). The oceans produce approximately 1/3 of the organic matter generated annually on the planet, with an uneven distribution between open ocean areas (90% of the ocean surface and 75% of the oceanic production) and that of coastal areas, reefs, upwelling areas and kelp beds (together 10% of the ocean surface and 25% of the organic matter production). In the open ocean, each plant has a large amount of space. For example, temperate forests have a biomass of approximately 30 kg/m² or estuaries 2 kg/m² while the open ocean has an average of 0.003 kg/m². It seems that the oceans are not particularly important places for life, yet they are home to 90% of the Earth's biodiversity and, among other ecosystem services, regulate the climate, provide oxygen to the atmosphere and protein-rich food for mankind. There is therefore ample reason for basic education and public outreach to raise awareness of how the oceans influence our lives and how humans influence the oceans.

- *Human Impacts on the World Ocean*

Humanity's negative impacts on the oceans causing biodiversity loss in the oceans can be divided into 4 main groups according to Luypaert et al. (2020):

1. Habitat destruction and modification. It has a relative importance of 37% as a stressor on threatened marine species. It is particularly important in areas of intensive use of ocean resources.
2. Overfishing. It contributes in the order of 24%. In general, it is one of the impacts whose solution is apparently the most feasible, due to the high resilience of fish stocks and the growth of aquaculture in recent decades. Thus, according to the SOFIA report on the state of world fisheries and aquaculture (FAO 2022), aquaculture production currently has values similar to those of capture fisheries, whereas two decades ago it represented approximately one third of the production of fish and fish by-products.
3. Pollution. It has a relative importance of around 15%. At present, it is particularly pollution caused by plastics (Bonnano 2022). At the current rate (about 8 million tonnes of plastic end up

in the sea annually), it is estimated that by 2050 the weight of plastics in the ocean will be greater than the sum of the weight of all the fish in the biosphere.

4. Climate change. Approximately 14% of the relative importance of threats is related to climate change. In addition to altering locally highly biodiverse ecosystems (such as coral reefs) it has global effects by causing acidification of the water.

5. Invasive species. Contributing values of about 10%. Accidental or intentional, the number of species that, once introduced into a habitat they are not part of, have high reproductive success and colonise the environment has increased when the intensity of transport in the ocean has increased.

SDG 15 – Life on Land

Human life depends on the land as much as on the ocean for its sustenance and survival. Plants provide 80% of human food and agriculture represents an important economic resource and means of development. Forests, in turn, cover 30% of the earth's surface, provide crucial habitats for millions of species and are an important source of clean air and water. They are also fundamental to combating climate change (Leal-Filho, 2021; United Nations, 2022; IBERDROLA, 2022).

SDG 15 focuses specifically on the sustainable management of terrestrial ecosystems, halting and reversing the degradation of land and natural habitats and forests, successfully combating desertification and halting biodiversity loss (Keesstra et al., 2016; Behradfar et al., 2022). It is therefore necessary to have evaluation mechanisms in place to monitor the targets and indicators of SDG 15 (Ansari et al. 2021).

- *Forest management*

Forests play a significant role in regulating the global carbon cycle, as they store gigatons of carbon each year. It is therefore a growing concern to decrease greenhouse gas (GHG) emissions from deforestation and forest degradation as a step towards climate change mitigation (Avtar et al., 2020). Forest cover and condition are influenced by a number of factors: growing population (selective logging for increased demand for food and other commodities); large forest fires; fragmentation; pests and diseases (Sayer et al. 2019).

The total global forest area in 2020 was 4 060 million hectares (ha), corresponding to 31 percent of the total land area (0.52 ha per person), although forests are not evenly distributed by world population or geographic location (FAO, 2020). Tropical areas hold the largest proportion of the world's forests (45 percent), with the remainder located in boreal, temperate and subtropical regions. Between 1990 and 2020, 5.9 million hectares of forest were lost per year (178 million hectares), although the rate of net loss declined over those 30 years (-7.8 percent in 1990-20, compared to -4.7 percent in 2010-20). This has been due to a reduction in deforestation, in addition to afforestation campaigns and natural forest expansion. Forests face many disturbances

that can negatively affect their health and vitality, reducing their capacity to provide a wide range of ecosystem goods and services.

- *Why biodiversity?*

Biodiversity is the variety of life on Earth, in all forms and at all levels, from genes to higher animals, including humans and all species as yet unknown. Our dependence on biodiversity is very high for all kinds of resources (food, medicine, fuel, shelter and recreation). For other species, it provides nutrients, pollination, seed dispersal and reproductive success. Therefore, no living thing could survive without biodiversity. According to the Sustainable Development Goals (SDGs), urgent action is needed to address biodiversity loss worldwide (Sayer et al. 2019).

Current global rates of species extinction are approximately three times higher than before humans. Anthropogenic activities since 1500 have caused the extinction of 322 terrestrial vertebrates, and populations of most of the remaining species have declined.

The risk of species loss is caused by multiple factors (habitat modification and fragmentation, overexploitation, interactions with other species and climate change, among others). The loss of a species in a forest causes the ecological processes linked to it to be lost; as a consequence, the resilience of the community decreases and can lead to further species loss. The fragmentation of terrestrial ecosystems by infrastructure and the emerging threat of climate change pose new challenges for biodiversity conservation programs.

The essential elements of terrestrial ecosystems can effectively contribute to achieving the SDG targets and presents SDG 15 as a suitable tool for integrating biodiversity into all policy and administrative sectors.



Quiz questions:

1. Annual worldwide mortality due to the consumption of contaminated water is close to:

- A. 700 million
- B. 0.5 million
- C. 1 million
- D. 2 million

2. Some of the organisms that live in rivers should not be consumed because they:

- A. Concentrate heavy metals.
- B. Accumulate organic matter.
- C. Accumulate phosphorus.
- D. Have high amounts of nitrogen.

3. Energy accessibility is defined as:

- A. The ability to distribute electric power across a nation's territory.
- B. The ability of each country to produce high-quality energy.
- C. The ability to distribute good quality energy both domestically and internationally for consumption and production purposes.
- D. The balanced distribution of the energy consumed by a country among a pool of both renewable and non-renewable energy sources.

4. The cleanest of the fossil fuels is:

- A. Unleaded gasoline
- B. Diesel fuel
- C. Natural gas
- D. Propane

5. For heating purposes in African counties with a temperate climate the most commonly energy used is:

- A. Solar
- B. Wind
- C. Thermal
- D. Gas

6. Some tips for responsible consumption:

- A. Flee from consuming for consumption and the culture of using and throwing away.
- B. Make responsible consumption in supermarkets and local shops.
- C. Save energy and use it efficiently
- D. All of the above

7. The circular economy is a model of production and consumption that involves

- A. Renting, reusing, repairing, renewing and recycling existing materials.
- B. Discarding products when they reach the end of their useful life.
- C. All products are discarded after only one use (e.g. a glass bottle after exhausting its original contents).
- D. All three of the above

8. Climate change has a series of consequences

- A. Disappearance of animal species.
- B. Increased precipitation in areas with dry climates.
- C. A decrease in frequency and intensity of thunderstorms.
- D. A decrease in the sea level.

9. The greenhouse effect is the phenomenon that:

- A. Under normal conditions, no allows life on planet.
- B. The term greenhouse effect is used because the earth's atmosphere does a job similar to that done by plastic tents in greenhouse gardens.
- C. Has increased in recent decades on the planet due to natural causes.
- D. Is always beneficial to ecosystems.

10. Of the organic matter produced annually in the biosphere, the oceans produce the equivalent of:

- A. 33%
- B. 20%
- C. 67%
- D. 86%

11. What is the human impact that most affects the biodiversity of the oceans?:

- A. Climate change
- B. Overfishing
- C. Habitat destruction and modification
- D. Pollution

12. If the current rate of plastic waste dumped into the ocean continues unabated, it will outweigh the biomass of fish in the world's oceans:

- A. 2050
- B. 2075
- C. 2100
- D. 2125

13. Human life for its survival depends on:

- A. The oceans
- B. Land animals
- C. Land and oceans
- D. Vegetation

14. The condition of forests is influenced by:

- A. Forest fires
- B. Population growth
- C. Fragmentation
- D. All three of the above

15. The loss of a species in a forest can cause:

- A. The loss of the ecological processes linked to it.
- B. An increase in resilience
- C. Decrease in species loss
- D. All three of the above are false

Correct answers: 1. - B. / 2. - A. / 3. - C. / 4. - C. / 5. - C. / 6. - D. / 7. - A. / 8. - A. / 9. - B. / 10. - A. / 11. - C. / 12. - A. / 13. - C. / 14. - D. / 15. - A.

Source

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Module 6

SDGs Prosperity



SDGs Prosperity

The pursuit of prosperity is a central priority in the UN 2030 Agenda for Sustainable Development. It seeks to ensure that wealth is shared, while income inequality is dealt with through economic growth that is sustainable and inclusive, generating decent work for all. According to the 4P division, Prosperity includes 5 goals: SDG 1 and SDGs 8 through 11. For each of the 5 goals, this chapter explains what it is, what we are trying to achieve, and where we currently stand.

SDG 1: No Poverty

SDG 1 focuses on eliminating poverty in all its forms around the globe. Although the number of people living in extreme poverty has more than halved from 1.9 billion in 1990 to around 667 million in 2022, the number of people struggling to meet the most basic human needs is still too high. Goal 1 recognizes poverty as a multidimensional concept and studies a whole range of factors that lead to poverty and impaired quality of life. Being guided by a holistic approach makes it possible to address this problem more comprehensively. This subchapter provides an overview of 7 targets that are a part of this goal and provides insight into where we are regarding various aspects of poverty.

- *Targets, means of implementation and data*

The first goal reads: “End poverty in all its forms everywhere“, and is supported by seven targets as follows:

1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day

1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions

1.3 Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable

1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance

1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social, and environmental shocks and disasters

1.a Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programs and policies to end poverty in all its dimensions

1.b Create sound policy frameworks at the national, regional, and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions

Global database, all indicator values, country profiles, overview of trends and possibilities of different comparisons are available in the UN database (UN, 2022c). For European countries, Eurostat (2022a) collects data on poverty and social exclusion. Targets and indicators are summarized in Table 1. The first five targets are denoted by numbers, while the remaining two are denoted by letters and refer to the means of implementation.

Table 1: Overview of Targets of SDG 1

Specific targets		Means of implementation
1. Eliminate extreme poverty	4. Basic services and legal rights	a. Financial resources
2. Eliminate poverty by country levels	5. Resilience from shocks	b. Policy framework
3. Social protection		

Source: UN (2022b), Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development

The 2019 coronavirus pandemic has erased much of the progress made in poverty reduction, seeing that global extreme poverty began to rise in 2020 for the first time since the Asian crisis in the late 1990s. Even before the onset of the pandemic, the world was not anywhere near achieving the goal of eradicating poverty by 2030, so quick and significant action is needed. Furthermore, the pandemic is likely to increase disparities in working poverty between genders and age groups.

- *Case studies and examples of good practice*
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 - Medicott, A. (n.d.). Public-Private Partnerships: Eradicating Poverty Through Education. CropLife International. <https://croplife.org/public-private-partnerships-eradicating-poverty-through-education/>
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SDG 8: Decent Work and Economic Growth

SDG 8 is concerned with inclusive and sustainable economic growth and decent work. Each year the global unemployment rate continues to rise, and the situation has worsened with the onset of the COVID-19 pandemic and the Ukraine crisis. Without decent work, people are exposed to the risks many other SDGs covers, such as poverty, hunger, unsatisfactory living conditions, and losing good health. The purpose of this Goal is to stimulate economic growth through higher productivity and technological innovation. Promoting policies that encourage entrepreneurship and the creation of new jobs are key here, as well as effective measures to eradicate forced labor, slavery, and human trafficking. This subchapter looks at 12 targets and provides a current outlook on economic growth and equal work opportunities.

- *Targets, means of implementation and data*

The eighth goal reads: “Promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all”, and is supported by 12 targets as follows:

8.1 Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries

8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labor-intensive sectors

8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity, and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services

8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavor to decouple economic growth from environmental degradation, in accordance with the 10-Year Framework of Programs on Sustainable Consumption and Production, with developed countries taking the lead

8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training

8.7 Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labor, including recruitment and use of child soldiers, and by 2025 end child labor in all its forms

8.8 Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment

8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products

8.10 Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all

8.a Increase Aid for Trade support for developing countries, in particular least developed countries, including through the Enhanced Integrated Framework for Trade related Technical Assistance to Least Developed Countries

8.b By 2020, develop and operationalize a global strategy for youth employment and implement the Global Jobs Pact of the International Labour Organization.

Aside from the UN database (UN, 2022c), Eurostat (2022b) and World Bank (2022) collect data on Economy and Finance, and other relevant indicators in this area. Targets and indicators are summarized in Table 2. The first ten targets are denoted by numbers, while the remaining two are denoted by letters and refer to the means of implementation.

Table 2: Overview of Targets of SDG 8

Specific targets		Means of implementation
1. Economic growth	6. NEET reduction	a. Aid for Trade
2. Economic growth per employed	7. Eradication of forced labor	b. Strategy for youth employment
3. Formal economy	8. Work safety	
4. Sustainable consumption and production	9. Sustainable tourism	
5. Equal job opportunities	10. Financial inclusion	

Source: UN (2022b), *Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development*

Although the global economy began to recover in 2021, with an improvement in the unemployment rate, the recovery is still weak. The speed of recovery also varies significantly across regions, countries, sectors, and labor market groups. While developed economies are experiencing a stronger recovery, the LDCs struggle with weak growth and job losses. The crisis hit the hardest women, young people, and people with disabilities. The conflict in Ukraine is expected to seriously set back global economic growth in 2022, create many market shocks, and lead to more job losses. Additional significant challenges include rising inflation, supply chain disruptions, policy uncertainties and labor market challenges, as well as child labor practices, where 1 in 10 children are engaged in child labor worldwide (160 million total children in 2020).

- *Case studies and examples of good practice*
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SDG 9: Industry, Innovation and Infrastructure

SDG 9 promotes building resilient infrastructure and inclusive and sustainable industrialization. Nearly three billion people still do not have internet, and 90% of them live in developing countries. Finding a solution for this digital divide is necessary for equal access to information and knowledge, which in turn encourages innovation and entrepreneurship. This goal is one of the most tangible for the business sector as industry and innovation is usually associated with firms. It strives to reduce the negative impact of firms on the environment, as well as to promote creating new business models, products, and services in a sustainable way. This subchapter is focused on eight targets related to the industry, innovation, and infrastructure, as well as current challenges in this area.

- *Targets, means of implementation and data*

The ninth goal reads: “Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation”, and is supported by 8 targets as follows:

9.1 Develop quality, reliable, sustainable, and resilient infrastructure, including regional and trans border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all

9.2 Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry’s share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries

9.3 Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets

9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities

9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending

9.a Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States

9.b Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities

9.c Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020

Apart from the UN database (UN, 2022c), Eurostat (2022c, 2022d) and World Bank (2022) collect data on Industry, Trade, Services, Transport, and other relevant indicators in this area. Targets are summarized in Table 3. The first five targets are denoted by numbers, while the remaining three are denoted by letters and refer to the means of implementation.

Table 3: Overview of Targets of SDG 9

Specific targets		Means of implementation
1. Access to transportation	4. CO2 emission	a. International support to infrastructure
2. Manufacturing	5. Scientific research	b. Policy framework
3. Small-scale industries		c. Technology access

Source: UN (2022b), *Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development*

The pandemic hit the manufacturing sector harder than in the 2007 financial crisis, causing a drop in production in 2020. Its onset caused disruption in transport, global value chains, manufacturing, and the movement of people and goods. However, this crisis has indicated what industries are more resilient (e.g. higher technology industries) and has given an example of how technological innovation can lead to the production of quick solutions that the world needs.

- *Case studies and examples of good practice*
 - Shanklin, K. (2019). *Sintavia: Innovation for Cleaner Manufacturing*. Green Business Bureau. <https://greenbusinessbureau.com/members/member-stories/sintavia-innovation-for-cleaner-manufacturing/>
 - *Dow's Olympic carbon programmes continue to deliver climate benefits and a positive legacy. (2020). International Olympic Committee.* <https://olympics.com/ioc/news/dow-s-olympic-carbon-programmes-continue-to-deliver-climate-benefits-and-a-positive-legacy>
 - *Aqua Robur Technologies – Digital Business Development. (2021). Digital Business Development.* <https://dbd.au.dk/blog/case-studies/aqua-robur-technologies-ab/>

SDG 10: Reduced Inequalities

SDG 10 is concerned with reducing inequality within and among countries, while promoting economic, political, and social inclusion of all, irrespective of age, sex, ethnicity, religion, or any other characteristics. Inequality does not only hinder economic growth but also harms

public and political relations through a lack of discourse. The pandemic has increased income inequality, endangering two decades of steady progress, while the war in Ukraine is adding to an already high number of refugees around the globe. Solving this problem includes improving regulations and monitoring financial markets and institutions, encouraging development aid and FDI for those countries that are in need, and safe migration and mobility of all people. This subchapter provides insight into this multifaceted issue.

- *Targets, means of implementation and data*

The tenth goal reads: “Reduce inequality within and among countries“, and is supported by 10 targets as follows:

10.1 By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average

10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status

10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard

10.4 Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality

10.5 Improve the regulation and monitoring of global financial markets and institutions and strengthen the implementation of such regulations

10.6 Ensure enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions

10.7 Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies

10.a Implement the principle of special and differential treatment for developing countries, in particular least developed countries, in accordance with World Trade Organization agreements

10.b Encourage official development assistance and financial flows, including foreign direct investment, to States where the need is greatest, in particular least developed countries, African countries, small island developing States and landlocked developing countries, in accordance with their national plans and programs

10.c By 2030, reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent

Apart from the UN database (UN, 2022c), Eurostat (2022a, 2022e) and World Bank (2022) collect data on Income Inequality, Social Exclusion, Poverty, and other relevant indicators in this area. Targets are summed up in Table 4. The first seven targets are denoted by numbers, while the remaining three are denoted by letters and refer to the means of implementation.

Table 4: Overview of Targets of SDG 10

Specific targets		Means of implementation
1. Income growth of the bottom forty percent	5. Financial soundness	a. Tariffs
2. Multilevel inclusion	6. Voting rights	b. FDI
3. Equal outcome opportunity	7. Well-managed migration	c. Remittance costs
4. Equal wage opportunity		

Source: UN (2022b), *Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development*

Although before the emergence of COVID-19 some indicators showed positive developments, the pandemic brought many deteriorations in this aspect. The pandemic has intensified discrimination, widened disparities, and decreased the income of those already at risk of poverty. This is exacerbated by the war in Ukraine that has created a new refugee crisis.

- *Case studies and examples of good practice*
 - UNHCR (2016). *Using biometrics to bring assistance to refugees in Jordan*. UNHCR Innovation. <https://www.unhcr.org/innovation/using-biometrics-bring-assistance-refugees-jordan/>
 - World Bank Group. (2013). *Mongolia: Portable Solar Power for Nomadic Herders*. World Bank. <https://www.worldbank.org/en/results/2013/04/08/portable-solar-power-for-nomadic-herders>
 - Martínez, A. F. (2018). *A Spanish NGP reduces neonatal mortality by 40% in Guatemala*. Noticias Fundación Mapfre. <https://noticias.fundacionmapfre.org/en/neonatal-mortality-ngp/>

SDG 11: Sustainable Cities and Communities

As rapid urbanization leads to extreme poverty, and the development of slums and unsafe areas, SDG 11 aims to make human settlements and cities safer, more sustainable, resilient, and inclusive. The importance of this goal stems from the fact that cities provide homes, workplaces, and surroundings for a fulfilled life. Sustainable cities are designed considering the social and environmental impact they have, which means a reduction in pollution, smart energy consumption, and access to green, safe, and inclusive public spaces. After looking at the relevant indicators and data, this subchapter includes interesting examples of the implementation of this goal's sub-targets.

- *Targets, means of implementation and data*

The eleventh goal reads: “Make cities and human settlements inclusive, safe, resilient and sustainable”, and is supported by 10 targets as follows:

11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums

11.2 By 2030, provide access to safe, affordable, accessible, and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries

11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage

11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations

11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management

11.7 By 2030, provide universal access to safe, inclusive, and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities

11.a Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning

11.b By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015–2030, holistic disaster risk management at all levels

11.c Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials (*no suitable indicator*)

Aside from the UN database (UN, 2022c), data relevant to sustainable economies and cities can be found in World Bank (2022), UNEP (2022), UNHABITAT (2022) and other UN divisions, as well as in the Eurostat (2022f) database. Targets are summed up in Table 5. The first seven targets are denoted by numbers, while the remaining three are denoted by letters and refer to the means of implementation.

Table 5: Overview of Targets of SDG 11

Specific targets		Means of implementation
1. Adequate housing	5. Reduction of disasters' victims	a. Urban policies
2. Public transport access	6. Reduce city pollution	b. Disaster risk strategies
3. Sustainable urbanization	7. Safe public space	c. Multilevel support of LDC
4. Heritage protection		

Source: UN (2022b), *Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development*

More than half of the world population lives in cities (whereas 1 billion people lives in slums). It is estimated that by 2050 more than 70% will do so. This rapid increase in urban population can be welcomed if it is well-managed and planned, and the pandemic has exposed deep inequalities between cities in developed and least developed countries (LDCs). Major issues are municipal solid waste problems, and air pollution.

- *Case studies and examples of good practice*
 - *Country: Switzerland Level: Local SDG Addressed: SDG 11 -Sustainable Cities and Communities. (n.d.)* <https://standards4sdgs.unece.org/sites/default/files/2020-01/SDG%2011%20-%20Switzerland.pdf>
 - Ribó, J. (2021, December 1). *Why València is a leader in Smart City Kpis*. ITU Hub. <https://www.itu.int/hub/2021/05/why-valencia-is-a-leader-in-smart-city-kpis/>
 - UNHABITAT. (2022). *The Earth Observations Toolkit for Sustainable Cities and Human Settlements*. <https://eotoolkit.unhabitat.org/>



Quiz questions

1. The goal to end poverty worldwide refers to:

- A. SDG 1
- B. SDG 6
- C. SDG 11
- D. SDG 17

2. It is estimated that by 2050 how much of world population will live in cities:

- A. 40%
- B. 50%
- C. 60%
- D. 70%

3. The Ukraine crisis has led to:

- A. An increase in the already record number of migrants worldwide
- B. Creation of new migratory routes
- C. Derailing global economic growth
- D. All the above

4. The proportion of members and voting rights of developing countries in international organizations serves as a target for this goal:

- A. SDG 1
- B. SDG 8
- C. SDG 10
- D. SDG 15

5. The IOM-Microsoft collaboration to fight human trafficking is related to this SDG:

- A. SDG 8
- B. SDG 9
- C. SDG 10
- D. SDG 11

6. Enhancing scientific research in industry and innovation is a target of:

- A. SDG 7
- B. SDG 9
- C. SDG 11
- D. SDG 13

7. SDG 10 goal reads as follows:

- A. “Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation“
- B. “Reduce inequality within and among countries“
- C. “End hunger, achieve food security and improved nutrition and promote sustainable agriculture“
- D. “Achieve gender equality and empower all women and girls“

8. The proportion of urban population living in slums, informal settlements, or inadequate housing is one of the most important indicators of:

- A. SDG 5
- B. SDG 6
- C. SDG 11
- D. SDG 14

9. Strategies for youth employment are key for:

- A. SDG 7
- B. SDG 8
- C. SDG 9
- D. SDG 12

10. Which of the following SDGs is most closely related to the business sector:

- A. SDG 1
- B. SDG 2
- C. SDG 9
- D. SDG 10

11. SDG 9 goal reads as follows:

- A. “Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation“
- B. “Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all“
- C. “End hunger, achieve food security and improved nutrition and promote sustainable agriculture“
- D. “Achieve gender equality and empower all women and girls“

12. SDG 8 is called:

- A. No Poverty
- B. Decent Work and Economic Growth
- C. Climate Action
- D. Life Below Water

13. Which of the following goals does not fall under “Prosperity“

- A. SDG 2
- B. SDG 8
- C. SDG 10
- D. SDG 11

14. Extreme poverty in 2022 is closest to this number:

- A. 670 million
- B. 920 million
- C. 1.340 million
- D. 1.650 million

15. Equal job opportunities is most closely related to this SDG:

- A. SDG 2
- B. SDG 5
- C. SDG 8
- D. SDG 15

Correct answers: 1. - A. / 2. - D. / 3. - D. / 4. - C. / 5. - A. / 6. - B. / 7. - B. / 8. - C. / 9. - B. / 10. - C. / 11. - A. / 12. - B. / 13. - A. / 14. - A. / 15. - C.

Source:

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Related concepts



Related concepts

A number of related concepts are linked to the area of sustainable development. Looking more closely at these concepts can lead to questions concerning how the individual concepts differ or overlap. This module provides an overview of several related concepts that are linked to the field of sustainability.

Corporate Social Responsibility

The foundations of corporate social responsibility (CSR) were laid in the publication by Howard Bowen entitled “*Social Responsibilities of the Businessman*” from 1953, in which the author defined CSR as the obligations of a businessman to use practices, make decisions or follow directions of behavior that are desirable for the goals and values of our society (Carroll, 1999). Carroll (1991) sees CSR as a combination of philanthropic, ethical, legal and economic responsibility.

CSR was further developed in the 1990s thanks to the creation of the first platforms and initiatives. Nonetheless, the issue concerning the lack of a unified definition of CSR still remains, and many authors today are still dealing with this. For example, Dahlsrud (2008) reached the conclusion that three of five areas appear in nearly all researched definitions, and four of five areas appear in 80% of definitions. His analysis of the definition of the CSR concept revealed five areas with the most frequent occurrence:

- environmental,
- social,
- economic,
- stakeholders,
- voluntariness (Dahlsrud, 2008).

Furthermore, an institution like the EU defines CSR in its Green Paper as the voluntary integration of social and ecological viewpoints into the everyday activities of company operations and interactions with company stakeholders (Commission of the European Communities, 2001).

The CSR concept is based on the same pillars as sustainable development and stems from the triple bottom line principle – People, Planet, Profit (Epstein & Buhovac, 2014). Concepts of sustainability and corporate social responsibility can sometimes be seen as nearly identical (Laine, 2005). A contradicting opinion in terms of the relationship between sustainability and CSR sees sustainability to be a broader concept than CSR. Corporate social responsibility then represents a tool to achieve sustainability while using voluntary tools such as quality management systems, environmental management systems, cleaner production, ecological signs, etc. (Zdražilová et al., 2011).

In the second perspective, certain differences can be observed between the concept of CSR and sustainability. However, these differences should be dealt with carefully and in perspective. Some of these differences are listed below:

- Vision – CSR often looks into the past and reflects on how an organization has contributed to society.
- Sustainability looks to the future and searches for sustainable solutions.
- Timeframe – CSR is more associated with shorter timeframes and sustainability with longer ones.
- Motivation – the motivation for CSR usually tends to be the protection of a company's reputation and keeping a good name among its employees. Sustainability is more about the creation of new opportunities for existing or new markets.
- Focus – The aim of CSR is often determined by the opinions or pressure exerted by various groups – e.g. the media, politicians, etc. Many opinions of CSR view it as something similar to public relations for investors, media, politicians and other “pressure” groups. Sustainability looks at the whole value chain – from the end customer to other stakeholders.

Social entrepreneurship and social innovation

Social entrepreneurship is a concept that is closely linked to so-called social economics; social economics can be seen as an overarching concept for social entrepreneurship. How then do we understand what is social economics and what is social entrepreneurship?

Social economics encompasses entities such as associations, foundations, cooperatives, mutually beneficial or other organizations that provide products, goods and services with consideration of both economic and social interests (Fonteneau et al., 2011). They are founded on the triple bottom line principle. The basis of this principle is simple. An organization that espouses the concept of the triple bottom line shows that it is focusing not only on achieving profit and economic growth, but also on the planet and the environmental aspects of its activity. Finally, it also focuses on people, the social aspects of its activity.

Nicholls (2008) sees social entrepreneurship as a collection of innovative and effective activities that strategically focus on remedying faults in the social market and creating new opportunities in order to create social added value in a way that maximizes social impact and creates an environment for change.

Tessea (2011) views social entrepreneurship as entrepreneurial activities that benefit society and the environment. Social entrepreneurship plays an important role in local development and often creates work opportunities for individuals with health, social or cultural disadvantages. Profit is largely used for the further development of the social enterprise. Making profit is just as important for a social enterprise as heightening public benefit.

Defourny et al. (2001) summarize the basic description of social entrepreneurship using examples of the new things that arise from social entrepreneurship. These include:

- New products or new quality of products – social entrepreneurship reacts to the needs of society, and this reaction often leads to the creation of new services or products.
- New methods of organization and/or production – within social entrepreneurship, cooperation between various categories of partners takes place, i.e. between paid employees, volunteers, supporting organizations, local entities, etc.
- New production factors – a combination of paid employees and volunteers is utilized. One of the specificities of this type of entrepreneurship is the ability to acquire volunteers.
- New market relationships – in a number of countries, some activities were carried out exclusively by public providers or via informal methods (family, neighbors, etc.). At times, the demand for certain services/products to a certain degree remained unsatisfied. However, the situation is changing, and space for new quasi-markets is emerging; services are provided not only by public institutions.

Social entrepreneurship is inherently linked to social innovations. Social innovations can concern a change in a concept, process or product; organizational change or changes in financing; and also new relationships with stakeholders and territories.

Social innovations look for new answers to social problems via (a) identification of new services that improve the quality of life of individuals and communities, (b) identification and implementation of new processes of integration into the labor market, new job opportunities, and new forms of participation such as the particular elements that contribute to improving the position of individuals in the workforce (LEED, 2011). The terms social entrepreneurship and innovation are often seen to be indelible, and the differences between them are blurred. Nonetheless, these differences exist. Social entrepreneurship focuses on solving problems via own economic activity, while social innovation plays a prominent role in the process of social entrepreneurship.

Circular economy

Circular economy is not a new term. This concept has long existed in society, but its potential is not being fully utilized. The growing significance and application of the principles of the circular economy are linked to the growth of the global population, growth of the economy and dwindling natural resources. This leads to an increase in pressure on economic entities in terms of self-sufficiency and the development of new products, processes or services (Weetman, 2021).

Contrary to a so-called linear economy, a circular economy attempts to prevent the creation of waste. Ideally waste is never created, and resources circulate in the highest possible quality and

for the longest period of time as possible. The goal of the circular model is to close flows of materials into circles and cycles that never end.

Products and materials are thus preserved in use for as long as possible. When they reach the end of their use, they are subsequently recycled and returned to the circle. A certain amount of residual waste is created here, but it should be minimal (Nordic Circular Economy Playbook, 2021). The model of a circular economy is based on the circle of raw materials-design-production-distribution-consumption-collection-recycling-raw materials.

For clarification, it is the opposite of the present and primary economic model, the linear economy. This is based upon the chain of raw materials-production-distribution-consumption-waste. Most products are not subsequently recycled after completing their life cycle, and thus a large amount of waste ends up in dumps.

Circle Economy (2021) claims that, unfortunately, only 8.6% of the world is circular. This means that only this small percentage of all various input materials (such as minerals, fossil fuels and biomass) is returned to the cycle.

Sharing economy

The concept of a sharing economy is based on the mutual sharing of services and goods between individual actors. This exchange tends to be implemented via internet platforms. The technological boom and digitization of society thus allows for the advancement of such sharing. The most common areas that a sharing economy affects are the sectors of transport and accommodation services. The basic areas of a sharing economy thus include accommodation, shared transport, vehicle sharing, bicycle sharing, shared education, shared workspaces, time banks, microlabor, exchange of goods, sale of used goods and financial services (such as crowdfunding, peer-to-peer financing).

Thus, via its principle, a sharing economy can be seen as a part of the sustainable approach (it can be demonstrated precisely using the example of shared transport). A sharing economy can be understood as an economic system in which assets or services are shared among private individuals either for free or for a fee, usually via the internet” (Oxford Dictionaries 2018).

According to Koopman et al. (2014), a sharing economy created values using several fundamental methods:

- the first essential factor is the opportunity to utilize an unused asset, which as such is deemed to be “dead capital” or unused capital,
- the combination of users and providers, and hence of supply and demand, makes the market more competitive and specialized,
- the range of business is expanded, and costs (such as transactional costs) are decreased,

- the existence of evaluation mechanisms can significantly mediate the risk of asymmetrical information.

Orsi and Dostkow (2009) divide sharing goals into five basic categories. Based on the selected intention, the subject and method of sharing is then decided. These goals can be divided into the effort to:

- save money or acquire an asset or the right to its use,
- save time and reduce labor and effort,
- lead to a more ecological lifestyle or “green way”,
- build community,
- gain new skills and experience.

The sharing economy offers countless different ways for use and application, but at its core we can observe various shared principles that it is founded on (Boudreau et al., 2014).

These are the following:

- Value and its use – each value possesses a certain capacity for use, while the full non-use of this value can be deemed to be a useless value. Time is considered to be the representative of this value in the sharing economy (Boudreau et al., 2014).
- Ownership replaced by access – a transformation in the approach to ownership is the principle forming one of the cornerstones of the sharing economy. The classic need to own something permanently is thus gradually diminished. Users offer and share their own goods and services, while they are used by the other side for a necessary or limited time. By doing so, permanent ownership recedes into the background (Hammari et al. 2015).
- Trust – a significant part of the sharing economy is trust, which is a fundamental factor for all participants in this concept. The sharing economy is developing at a fast tempo and its field of operation is constantly expanding; therefore, the emphasis placed on this trust is constantly being increased (Woskow 2014).



Quiz questions

1. CSR is an abbreviation for:

- A. Corporate Social Relevance
- B. Consumer Society Rating
- C. Corporate Social Responsibility
- D. Cooperative Social Rating

2. The foundations of CSR were built when Howard Bowen published his work entitled:

- A. Society in the Current World
- B. Social Responsibilities of the Businessman
- C. Responsibilities in Society
- D. The Businessman and Ethics

3. A.B. Carroll defines CSR as:

- A. A combination of social and economic responsibility
- B. A combination of economic responsibility and efficiency
- C. A combination of environmental responsibility and economic efficiency
- D. A combination of philanthropic, ethical, legal and economic responsibility.

4. The most massive development of CSR took place in the:

- A. 1970s
- B. 1990s
- C. 1980s
- D. 1960s

5. Dahlsrud explored various definitions of CSR, and his analysis of CSR concept definitions revealed:

- A. 3 areas with the most frequent occurrence
- B. 4 areas with the most frequent occurrence
- C. 5 areas with the most frequent occurrence
- D. 6 areas with the most frequent occurrence

6. The concept of CSR is based on the:

- A. Triple bottom line
- B. Double bottom line
- C. Fourth bottom line
- D. None of the above

7. Social entrepreneurship is a concept that is closely linked to:

- A. Circular economy
- B. Linear economy
- C. Waste management
- D. Social economics

8. Within the triple bottom line, emphasis is placed on:

- A. Profit and society
- B. Society and people
- C. People and profit
- D. Profit, planet and people

9. Social entrepreneurship is linked to:

- A. Circular economy
- B. Business intelligence
- C. Social innovations
- D. Design of services

10. Circular economy is perceived as a(n):

- A. Economy in a circle
- B. Linear economy
- C. Economy of the poorer
- D. Perfect competition

11. A linear economy is based on the following chain:

- A. Raw materials-production-consumption-waste
- B. Waste-raw materials-production
- C. Raw materials-production-consumption-collection-recycling
- D. Raw materials-production-distribution-consumption-waste

12. A circular economy is based on the following chain:

- A. Raw materials-production-distribution-consumption-waste
- B. Raw materials-design-production-distribution-consumption-collection-waste
- C. Raw materials-design-production-distribution-consumption-collection-recycling-raw materials
- D. Raw materials-design-distribution-collection-raw materials

13. The concept of a sharing economy is based on:

- A. The promotion of ethical and economic principles
- B. The triple bottom line concept
- C. Upholding Sustainable Development Goals (SDGs)
- D. Sharing of services or goods

14. In the concept of a sharing economy, so-called “dead capital” is seen as:

- A. Unused capital that can be utilized thanks to a sharing economy
- B. Part of the market that is not specialized and thus not competitive
- C. Asymmetry of information
- D. Transaction costs

15. Exchange within a sharing economy is carried out most often via:

- A. Barter economy
- B. B2B sector
- C. B2C sector
- D. Internet platforms

Correct answers: 1. - C. / 2. - B. / 3. - D. / 4. - B. / 5. - C. / 6. - A. / 7. - D. / 8. - D. / 9. - C. / 10. - A. / 11. - D. / 12. - C. / 13. - D. / 14. - A. / 15. - D.

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Module 8

Social entrepreneurship in details



Social entrepreneurship

The concept of social entrepreneurship is applied when dealing with social, economic and environmental issues in society. The idea began to be expanded in the 1980s on both sides of the Atlantic. From a geographical perspective, it is divided into American and European schools of thought. Authors from European business schools (e.g. Mair & Marti, 2006; Nicholls, 2006) contribute to the discussion and rely on the concept of social entrepreneurship from the point of view of the American school of thought while supplementing it with a European background (Defourny & Nyssens, 2012).

According to Nicholls (2006), social entrepreneurship can be considered everything from volunteer activism, which is founded upon voluntary resources, to entrepreneurial social innovations that are characterized by risk capital focused on a social mission. These various models can include different types of non-profit organizations, which range from those fully financed by grants to those that are fully self-financed. According to Dees (1998), social entrepreneurship describes a set of exceptional behaviors that should be supported and rewarded.

Among others, the non-profit organization TESSEA ČR also lists its own definition of social entrepreneurship as “entrepreneurial activities benefitting society and the environment. Social entrepreneurship plays an important role in local development and often creates work opportunities for individuals with health, social or cultural disadvantages. The profit is largely used for the further development of the social enterprise. Achieving profit is just as important for a social enterprise as is improving the benefit to the public.” (TESSEA, 2022).

The American School

The idea of social entrepreneurship was elaborated upon in the 1990s in the United States, where two main directions were identified. On one side is the idea linked to a focus on ensuring financial resources via own income. This stream of thought is called “earned income”. On the other side is the direction of thought called “social innovation” (Defourny & Nyssens, 2012).

The first stream of thought regarding social entrepreneurship and social enterprises or “earned income” deals with the use of the commercial activities of non-profit organizations to support their missions (Kerlin, 2006). These entities strive to deal with issues concerning their financing, and they utilize their own commercial profit-generating activities to do so. This profit is subsequently used to support the social mission of the given entity. The entity’s multi-resource financing is thus augmented by own income from commercial activities (Defourny & Nyssens, 2012).

The second stream of thought, i.e. “social innovation”, focuses on the personality and behavior of the social entrepreneur, who is the creator of changes.

These changes bring new things, such as:

- new services,
- new quality of services,
- new methods of production,
- new factors of production,
- new forms of organization, and
- new markets (Defourny & Nyssens, 2012).

This direction is based on the broader vision of entrepreneurship linked to William Drayton, who founded the Ashoka non-profit organization in 1980. This non-profit focuses on so-called “public entrepreneurs”, who are able to create social innovations in various areas. An ecosystem for the agents of socially-beneficial changes is thus created (Defourny & Nyssens, 2012; Ashoka, 2020).

The first pioneers in the field of developing social entrepreneurship include the Harvard Business School, which launched the Social Enterprise Initiative in 1993 (Defourny & Nyssens, 2012).

The European School

The idea of social entrepreneurship began to be elaborated in Western Europe in the 1980s, creating a closer connection between it and social economics while emphasizing a clear social goal and benefit to people, groups or society (Dohnalová et al., 2016).

Italy can be seen as a country in which the fundamental building blocks of social entrepreneurship in Europe were laid. As early as the 1980s, initiatives in the form of cooperatives were created there as a reaction to unfulfilled needs in the field of work integration and other services (Defourny & Nyssens, 2012). The concept of social entrepreneurship first appeared in *Impresa sociale* magazine in 1990. In 1991, the Italian parliament adopted Law no. 381/1991 on social cooperation, which gave social cooperatives a new legal status (České sociální podnikání, 2013). This legal status was highly adaptable for pioneers in the field of social entrepreneurship.

From 1996 to 1999, research on the “*Emergence of Social Enterprises in Europe*” (“*L’EMergence de l’Entreprise Sociale en Europe*” in French), known primarily under the abbreviation EMES, was carried out. This was originally a network of researchers who were part of the research program financed by the European Commission. Later, this name came to be used for the international network. EMES was legally established in 2002. The goal of this expert organization is to create a European database on social economics (Dohnalová et al., 2016).

Other prominent research networks include CIRIEC, which was founded in 1947 by professor Edgard Milhaud. This international network focuses on research into public, social and cooperative economics (CIRIEC, 2020).

The whole of Europe in the 1990s was dominated by one primary type of social enterprise called a “work integration social enterprise” (WISE). This type of social enterprise focuses on integrating disadvantaged groups of individuals into the labor market. These people are integrated into employment and society via productive activity. Therefore, the concept of social entrepreneurship in Europe is often associated only with initiatives linked to creating work opportunities for disadvantaged groups of people (Defourny & Nyssens, 2012).

Other European countries began to instate new legal statuses of entrepreneurship. New cooperative-type legal statuses also began to appear in countries such as France, Portugal, Spain or Greece. On the other hand, countries like Belgium, Great Britain or Italy began to create more open models of social entrepreneurship that were not based exclusively on the tradition of cooperatives (Defourny & Nyssens 2012; European Commission, 2020). A law was passed in Great Britain in 2004 that founded so-called public interest organizations. In Italy, Law no. 118/2005 on social enterprises was passed; the law defines other legal statuses or social enterprises themselves by listing five conditions:

- formal establishment,
- private character of the legal person,
- non-division of profit,
- democratic proceedings, and
- volunteer work (České sociální podnikání, 2013).

In individual countries in Europe, social entrepreneurship has been defined over time in legislation.

Social economics

Social enterprises are on the borderline of the private, public and third sector. In scientific literature, this border is also known as **social economics**. Interest in this area and in the third sector continues to grow (e.g. OECD & LEED, 2013, or Noya & Clarence, 2007). This growth is primarily due to the effort to establish the importance of social economics in the local economy and simultaneously to describe its other functions, including addressing the problems of the welfare state. The primary goal of social economics can be considered the economic, social and environmental advancement of the population via mutually beneficial activities (Hunčová, 2007).

Generally speaking, social economics supports the values and principles that focus on the needs of people and their community and society (Dohnalová, 2006).

The term social economics can be used to label the part of the national economy that makes up the so-called “third sector” (Noya & Clarence, 2007). This sector supplements two basic sectors of the economy, i.e. the public and private sectors. Social economics thus partially includes the market sector and also partially the civil sector (Dohnalová et al., 2016).

The third sector is considered to be the part of the economy in which private economic entrepreneurial entities operate and create certain economic activity, are not dependent on the state, and simultaneously follow publicly beneficial goals that are social, environmental and local (Dohnalová, Deverová, Šloufová & Šťastná, 2012; Borzaga & Defourney, 2001).

Social enterprise

The term social enterprise is commonly used around the world but can represent a variety of things in reality. The possible reason for the diversity in the approach to the term may be that the terms “social” and “enterprise” themselves can be broadly defined, and issues of providing a unified explanation can grow when these terms are combined (Davister, Defourney & Gregorie, 2004). Two types of social enterprise are differentiated in the text – a general social enterprise and a work integration social enterprise.

- *General social enterprise*

A general social enterprise is founded on the mission of an enterprise whose aim is to fulfill publicly beneficial goals in the field of social, environmental or local benefit; these goals can also be accompanied by the fields of education and culture. A general social enterprise is not linked to the work integration of disadvantaged groups of people.

- *Work integration social enterprises (WISE)*

In all of Europe, social entrepreneurship is primarily linked to dealing with unemployment and socially integrating individuals back into society (EMES PERSE, 2018). This type of social enterprise focuses primarily on work and social integration (Defourney & Nyssens, 2012). Thus, these enterprises also focus on the creation of new jobs for individuals from disadvantaged social groups. This type of social entrepreneurship creates work for people from disadvantaged groups. These individuals have minimal opportunities to work in traditional companies (Nyssens, 2006). WISE thus focus on disadvantaged social groups that are in danger of permanent exclusion from the labor market. Disadvantaged groups are integrated back onto this market by work integration social enterprises via a combination of training and the development of their skills in the enterprise with a social dimension operating on the market (Spear & Bidet, 2005).

According to the definition by authors Davister, Defourney and Gregoire (2004), it is possible to view work integration social enterprises as autonomous entities whose main goal is the work integration of individuals who encounter significant barriers on the labor market. The work integration of these disadvantaged individuals is achieved primarily via production activity that respects their disadvantage, or the professional training of these disadvantaged individuals with the aim of heightening their professional qualification.

Social entrepreneur

Prominent social entrepreneurs include individuals such as Susan B. Anthony, William Drayton, Florence Nightingale, Vinoba Bhave, James Yen or also Muhammad Yunus. Although it is easy to identify these selected social enterprises, it is impossible to create a definition of a social entrepreneur that would embody the key aspects shared by both the aforementioned social entrepreneurs and other less known ones. Social entrepreneurs are like art – they defy unified definition and refuse to share a common denominator. This can perhaps explain why scholars and scientists have had problems until now in finding a definition that would encompass this term (Guo & Bielefeld, 2014).

Dees (1998) labels social entrepreneurs as an endangered species that has the ability and temperament for this type of work and that tries to find new paths to social improvements.

According to Bacq & Jansen (2011), a social entrepreneur is an individual who identifies, evaluates and utilizes opportunities to create socially beneficial activities via commercial activity and uses the resources at his/her disposal for these purposes.

Furthermore, Campbell (1998) sees the social entrepreneur as a provider of socially oriented enterprises offering the necessary products to communities.



Quiz questions:

1. What type of social entrepreneurship is dominant in Europe?

- A. Work integration social enterprise
- B. Environmental social enterprise
- C. General social enterprise
- D. Social innovation

2. Which two schools of social entrepreneurship exist from a geographical perspective?

- A. European and American school of thought
- B. Asian and American school of thought
- C. Asian and Australian school of thought
- D. European and Australian school of thought

3. In what year was the Ashoka non-profit organization founded?

- A. 1990
- B. 1980
- C. 2000
- D. 1960

4. Which of these individuals should not be considered a social entrepreneur?

- A. Donald Trump
- B. Susan B. Anthony
- C. William Drayton
- D. Muhammad Yunus

5. In what century did the expansion of the concept of / discussion about social entrepreneurship take place?

- A. 18th century
- B. 19th century
- C. 20th century
- D. 21st century

6. Who founded CIRIEC?

- A. Edgard Milhaud
- B. Vinoba Bhave
- C. James Yen
- D. Florence Nightingale

7. When was CIRIEC founded?

- A. 1947
- B. 1957
- C. 1978
- D. 1987

8. When was EMES founded?

- A. 1991
- B. 1996
- C. 2002
- D. 2012

9. What two types of social entrepreneurship does the American school of thought differentiate between?

- A. Social innovation and earned income
- B. Social innovation and WISE
- C. Social innovation and environmental social enterprise
- D. Earned income and WISE

10. What two types of social entrepreneurship does the European school differentiate between?

- A. Earned income and WISE
- B. WISE and a general social enterprise
- C. Social innovation and WISE
- D. WISE and an environmental social enterprise

11. Disadvantaged groups of individuals are integrated back into the labor market primarily via what type of social enterprise?

- A. WISE
- B. General social enterprise
- C. Environmental social enterprise
- D. Non-profit organizations

12. On the borderline of which sectors is social economics located?

- A. Private, public and third sector
- B. Private and public sector
- C. Private and second sector
- D. Public and second sector

13. Areas of fulfilling publicly beneficial goals include:

- A. Environmental area
- B. Social area
- C. Area of local benefit
- D. All of the above

14. In what year did the Harvard Business School launch the “Social Enterprise Initiative”?

- A. 1983
- B. 1989
- C. 1993
- D. 1999

15. In what country were the foundations for social entrepreneurship built?

- A. Italy
- B. Belgium
- C. Great Britain
- D. Finland

Correct answers: 1. - A / 2. - A / 3. - B / 4. - A / 5. - C / 6. - A / 7. - A / 8. - C / 9. - A / 10. - B / 11. - A / 12. - A / 13. - D / 14. - C / 15. - A

Source

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Module 9

Circular economy in details



Circular economy in details

Circular economy is a new approach that contrasts with the linear economy model "produce, use, throw away". In fact, the circular economy is restorative and regenerative, aiming to redefine products and services based on reusing residuals. The circular economy is a new way of creating value, and ultimately prosperity. It works by extending product lifespan through improved design and servicing, and relocating waste from the end of the supply chain to the beginning—in effect, using resources more efficiently by using them over and over, not only once.

The circular economy is a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible. In this way, the life cycle of products is extended.

In practice, it implies reducing waste to a minimum. When a product reaches the end of its life, its materials are kept within the economy wherever possible. These can be productively used again and again, thereby creating further value.

This is a departure from the traditional, *linear* economic model, which is based on a take-make-consume-throw away pattern. This model relies on large quantities of cheap, easily accessible materials and energy.

Also part of this model is planned obsolescence, when a product has been designed to have a limited lifespan to encourage consumers to buy it again. The European Parliament has called for measures to tackle this practice.

Fig. 1: Circular economy



Source: EU, *Circular economy 2015*

The circular economy: historical grounds

According to the European CE, strategy is considered an innovative school of thought in sustainable development, but it is still in its infancy (Murray et al., 2017). However, its roots go back to the earlier work of Pearce and Turner (Sacchi et al., 2018), and even countries such as China implemented this paradigm in their economies several decades ago. Overall, the European CE concept tries to decouple economic growth from resources depletion, encouraging waste decrease in a transition from the 'cradle-to-grave' (linear economy) mindset towards the 'cradle-to-cradle' process (circular one) (Gregson et al., 2015). In this sense, the factors that guarantee the development of circular economy in a model on economic growth at the European level are 'renewable energy, productivity of the resources, recycling rate, environmental employment and innovation' (Busu, 2019, p. 10). The European CE strategy implies great challenges for socioeconomic stakeholders, especially for businesses, which must assume important risks to transition from the linear economy to an innovative circular one. However, if firms surpass these risks, business will be more competitive in markets (Jørgensen & Remmen, 2018). The implications of the CE strategy on firms justify the great variety of publications focused on the business concept of a CE and its implementation in firms (Merli et al., 2018).

Nevertheless, there is a lack of consensus on the definition of CE. Korhonen et al. (2018) stated that the European CE definition is superficial and unorganised, an amalgam of ideas from different scientific fields including industrial ecosystems, industrial ecology, material flows, economy, biology, environmental economics, etc. Other authors (Lewandowski, 2016; Lieder & Rashid, 2016; Sacchi et al., 2018) reviewed the diverse existing concepts of CE in their various acceptations. All these authors asserted that certain aspects of CE—even institutional, cultural, or legislative issues—are missing in the literature. Murray et al. (2017) have also criticised the current CE approach for: firstly, not including the social dimension, crucial for sustainability, and secondly, planning weakly-based superficial goals and not foreseeing the future consequences of its implementation.

Despite the limitations of CE, the current concept has two main contributions. First, CE recovers the importance of the material life cycle, its value, and its quality. Second, CE offers the possibilities of a sharing economy alongside sustainable production for more suitable production-consumption patterns (Korhonen et al., 2018), through CE business models such as slowing the loops (e.g. satisfying needs without the ownership of a product, extending product value, designing long-life products, encouraging sufficiency, or prolonging product life at the end-user level) or closing the loops (e.g. extending resource value or industrial symbiosis) (Bocken et al., 2016).

The world's population is growing and with it the demand for raw materials. However, the supply of crucial raw materials is limited.

Finite supplies also mean some EU countries are dependent on other countries for their raw materials.

In addition, extracting and using raw materials has a major impact on the environment. It also increases energy consumption and CO₂ emissions. However, a smarter use of raw materials can lower CO₂ emissions.

Measures such as waste prevention, ecodesign and re-use could save EU companies money while also reducing total annual greenhouse gas emissions. Currently, the production of materials we use everyday account for 45% of the CO₂ emissions.

Moving towards a more circular economy could deliver benefits such as reducing pressure on the environment, improving the security of the supply of raw materials, increasing competitiveness, stimulating innovation, boosting economic growth (an additional 0.5% of gross domestic product), creating jobs (700,000 jobs in the EU alone by 2030).

Consumers will also be provided with more durable and innovative products that will increase the quality of life and save them money in the long term.

In March 2020, the European Commission presented the circular economy action plan, which aims to promote more sustainable product design, reduce waste and empower consumers, for example by creating a right to repair. There is a focus on resource intensive sectors, such as electronics and ICT, plastics, textiles and construction.

In February 2021, the Parliament adopted a resolution on the new circular economy action plan demanding additional measures to achieve a carbon-neutral, environmentally sustainable, toxic-free and fully circular economy by 2050, including tighter recycling rules and binding targets for materials use and consumption by 2030.

In March 2022, the Commission released the first package of measures to speed up the transition towards a circular economy, as part of the circular economy action plan. The proposals include boosting sustainable products, empowering consumers for the green transition, reviewing construction product regulation, and creating a strategy on sustainable textiles.

The circular economy has come to stay. There can be no doubt about this: all one has to do is visit the webpages that the European Commission devotes to this theme, and that show the action plan of the circular economy package for the current year, as well as the initiatives in place for promoting the circular economy among a wide range of stakeholders. And this is how it will be in the years to come!

The rise of the circular economy and its tools

The circular economy is one that integrates the tools to recycle, propagates them at a systemic level, and takes them to a higher level. Its objective is to cut down on waste and the use of resources through the transformation of the products' life cycles.

There are many different interpretations of the circular economy, so it's not always possible to be certain what is circular and what isn't. Moreover, the issue has far-reaching implications – just take the differences in our resource, energy and waste management practices and their varied

consequences: these aspects and related areas deserve a separate analysis of their own and thus are not examined in this publication. Rather than describing existing, established practices, our aim is to provide an overview of what kinds of new, innovative, forward-looking – and also circular or sustainable – solutions are gaining ground.

The circular economy is not a new idea; it has been widespread in academia for decades now. The idea of decrease on the quantity of waste and resource usage has been in the public consciousness for a long time too, so why is the circular economy starting to really emerge only now?

There are three major trends behind the phenomenon, which together are the drivers of the circular economy:

1. Changing consumer needs;
2. Resource shortage;
3. Technological breakthroughs.

Tools of the circular economy – more than just recycling

It's easy to associate the circular economy with recycling, and recycling with the selective disposal of plastic, paper and metal waste. Although the spread of selective waste disposal is an important milestone on the path to a (more) waste-free world, in what follows we will demonstrate that the circular economy is about so much more than just recycling! What makes it more is that its tools are present throughout the value chain, from product design through the manufacturing process, to the way they are used by consumers. Moreover, these tools vary in terms of who is responsible for them within the value chain: the supplier, the manufacturer, the consumer – or possibly all of them together. Most of the tools are not new – their strength lies in the fact that they are used in concert by the participants in the value chain.

The different tools:

1. Sustainable design;
2. Sharing;
3. Maintenance, repair;
4. Renovation;
5. Remanufacturing;
6. Recycling;
7. Recycling during the manufacturing process;
8. Reuse.



Quiz questions:

1. The circular economy is based on three principles, which?

- A. Eliminate waste and pollution, Circulate products and materials and Regenerate nature
- B. Generate waste and pollution, Circulate products and materials and Regenerate nature
- C. Eliminate waste and pollution, Circulate products and materials and Pollute nature
- D. Eliminate resources and pollution, Circulate products and materials and Regenerate nature

2. The circular economy is a new way of...

- A. Creating value, and recession
- B. Creating value, and ultimately prosperity
- C. Poverty, and ultimately prosperity
- D. Stagnation, and ultimately prosperity

3. What is the circular economy?

- A. Is a model of construction and consumption
- B. Is a model of production and consumption
- C. Is a model of conversion and consumption
- D. Is a model of conversion and stagnation

4. The circular economy involves some different tasks, which?

- A. Sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible
- B. Sharing, leasing, using, repairing, refurbishing and recycling existing materials and products as long as possible
- C. Sharing, leasing, reusing, damaging, refurbishing and recycling existing materials and products as long as possible
- D. Sharing, leasing, using, damaging, refurbishing and recycling existing materials and products as long as possible

5. In practice, circular economy implies...

- A. Reducing air quality to a minimum
- B. Increasing waste to a maximum
- C. Reducing resources to a minimum
- D. Reducing waste to a minimum

6. Circular economy departure from which economic model?

- A. This model relies on large quantities of cheap, easily accessible materials and energy
- B. Multilinear economic model, which is based on a take-make-consume-throw away pattern
- C. Linear economic model, which is based on a take-make-consume-throw away pattern
- D. Traditional

7. The factors that guarantee the development of circular economy in a model on economic growth at the European level are?

- A. Renewable energy, productivity of the resources, recycling rate, environmental unemployment, and innovation
- B. Renewable energy, productivity of the resources, producing rate, environmental employment, and innovation
- C. Renewable energy, productivity of the resources, recycling rate, environmental employment, and continuity
- D. Renewable energy, productivity of the resources, recycling rate, environmental employment, and innovation

8. The European CE strategy implies great challenges for socioeconomic stakeholders, especially for businesses, which must assume important risks to...

- A. Transition from the multilinear economy to an innovative circular one
- B. Transition from the linear economy to an old-fashioned circular one
- C. Transition from the linear economy to an innovative circular one
- D. Transition from the linear economy to an innovative multilinear one

9. Moving towards a more circular economy could deliver benefits such as...

- A. Increasing pressure on the environment, improving the security of the supply of raw materials, increasing competitiveness, stimulating innovation, boosting economic growth, creating jobs
- B. Reducing pressure on the environment, getting worse the security of the supply of raw materials, increasing competitiveness, stimulating innovation, boosting economic growth, creating jobs
- C. Reducing pressure on the environment, improving the security of the supply of raw materials, increasing competitiveness, stimulating innovation, boosting economic growth, do not creating jobs
- D. Reducing pressure on the environment, improving the security of the supply of raw materials, increasing competitiveness, stimulating innovation, boosting economic growth, creating jobs

10. Why do we need to switch to a circular economy?

- A. The world's population is growing and with it the demand for raw materials. However, the supply of crucial raw materials is limited
- B. The world's population is growing and with it the demand for raw materials. However, the supply of crucial raw materials is unlimited
- C. The world's population is decreasing and with it the demand for raw materials. However, the supply of crucial raw materials is limited
- D. The world's population is stagnating and with it the demand for raw materials. However, the supply of crucial raw materials is limited

11. What are the benefits of the implementation of the circular economy?

- A. Moving towards a more circular economy could deliver benefits such as reducing pressure on the environment, improving the security of the supply of raw materials, increasing competitiveness, stimulating innovation, boosting economic growth (an additional 0.5% of gross domestic product), creating jobs (700,000 jobs in the EU alone by 2030)
- B. Moving towards a more circular economy could deliver benefits such as growing pressure on the environment, improving the security of the supply of raw materials, increasing competitiveness, stimulating innovation, boosting economic growth (an additional 0.5% of gross domestic product), creating jobs (700,000 jobs in the EU alone by 2030)
- C. Moving towards a more circular economy could deliver benefits such as reducing pressure on the environment, improving the security of the supply of raw materials, decreasing competitiveness, stimulating innovation, boosting economic growth (an additional 0.5% of gross domestic product), creating jobs (700,000 jobs in the EU alone by 2030)
- D. Moving towards a more circular economy could deliver benefits such as reducing pressure on the environment, improving the security of the supply of raw materials, increasing competitiveness, stimulating innovation, boosting economic growth (an additional 0.5% of gross domestic product), creating jobs (1700,000 jobs in the EU alone by 2030)

12. There are three major trends behind the phenomenon, which together are the drivers of the circular economy, which?

- A. Changing consumer needs, resource shortage and technological breakthroughs
- B. Changing producer needs, resource shortage and technological breakthroughs
- C. Changing consumer needs, resource abundance and technological breakthroughs
- D. Changing consumer needs, resource shortage and technological setbacks

13. What are the different circular economy tools?

- A. Sustainable design, sharing, maintenance, repair, renovation, remanufacturing, recycling, recycling during the manufacturing process and commercialization
- B. Sustainable design, sharing, maintenance, repair, manufacturing, remanufacturing, recycling, recycling during the manufacturing process and reuse
- C. Sustainable design, sharing, maintenance, spoil, renovation, remanufacturing, recycling, recycling during the manufacturing process and reuse
- D. Sustainable design, sharing, maintenance, repair, renovation, remanufacturing, recycling, recycling during the manufacturing process and reuse

14. What is the EU doing to become a circular economy?

- A. In March 2022, the Commission released the first package of measures to speed up the transition towards a circular economy, as part of the circular economy action plan
- B. In March 2021, the Commission released the first package of measures to speed up the transition towards a circular economy, as part of the circular economy action plan
- C. In March 2022, the Commission released the third package of measures to speed up the transition towards a circular economy, as part of the circular economy action plan
- D. In March 2022, the Commission released the first package of measures to slow down the transition towards a circular economy, as part of the circular economy action plan

15. What will it take to transform our throwaway economy into one where waste is eliminated, resources are circulated, and nature is regenerated?

- A. The circular economy gives us the tools to tackle climate change and biodiversity gain together, while addressing important social needs. It gives us the power to grow prosperity, jobs, and resilience while cutting greenhouse gas emissions, waste, and pollution
- B. The circular economy gives us the tools to tackle climate change and biodiversity loss together, while not addressing important social needs. It gives us the power to grow prosperity, jobs, and resilience while cutting greenhouse gas emissions, waste, and pollution
- C. The circular economy gives us the tools to tackle climate change and biodiversity loss together, while addressing important social needs. It gives us the power to decrease prosperity, jobs, and resilience while cutting greenhouse gas emissions, waste, and pollution
- D. The circular economy gives us the tools to tackle climate change and biodiversity loss together, while addressing important social needs. It gives us the power to grow

prosperity, jobs, and resilience while cutting greenhouse gas emissions, waste, and pollution

Correct answers: 1. - A. / 2. - B. / 3. - B. / 4. - A. / 5. - D. / 6. - A. / 7. - D. / 8. - C. / 9. - D. / 10. - A. / 11. - A. / 12. - A. / 13. - D. / 14. - A. / 15. - D.

Source

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Module 10

Sharing economy



Sharing economy

The principle of a sharing economy is that commodities or property are shared, either for money or for another equivalent. Specialized online platforms are most often used for this, where supply meets demand. In recent years, one can observe how the topic of the shared economy is gaining more and more attention at the world level. The speed, dynamics and scope of the change point to a substantial long-term trend, and like any change, this phenomenon of the 21st century of the shared economy brings its own risks, which can be, for example, the semi-legal way of its functioning.

Defining the sharing economy is quite difficult, there are currently many different definitions of the sharing economy. For example, Goudin (2016) in his study *The Cost of Non-Europe in the Sharing Economy: Economic, Social and Legal Challenges and Opportunities* emphasizes the need to determine clear criteria for the correct definition by analysing and compiling existing definitions. He defines the sharing economy as “the use of digital platforms or portals to reduce the scale for viable hiring transactions or viable participation in consumer hiring markets (i.e., 'sharing' in the sense of hiring an asset) and thereby reduce the extent to which assets are under-utilized.” In contrast, Frenken and Schor (2017) define the sharing economy as “consumers granting each other temporary access to under-utilized physical assets ('idle capacity'), possibly for money.”

Principles of the sharing economy

- Makes the use of resources more efficient.
- No value is wasted.
- The possibility of peer-to-peer (p2p) transactions while empowering individuals.
- Redistribution of assets. It promotes access over ownership.
- Trust is important, especially when building a reputation and building relationships in the sharing economy, so both sides of the transaction must be trustworthy.
- Sharing of information to enable users to gain access to resources.
- The sharing economy is a market-based system.
- The sharing economy is crowd-based.

Advantages of the sharing economy

- Reduction of transaction costs
- Increasing the size of the market and its efficiency
- Development of new internet platforms facilitating trade

- New job opportunities
- Saving resources
- Innovation support
- Increase in product or service variation

Disadvantages of the sharing economy

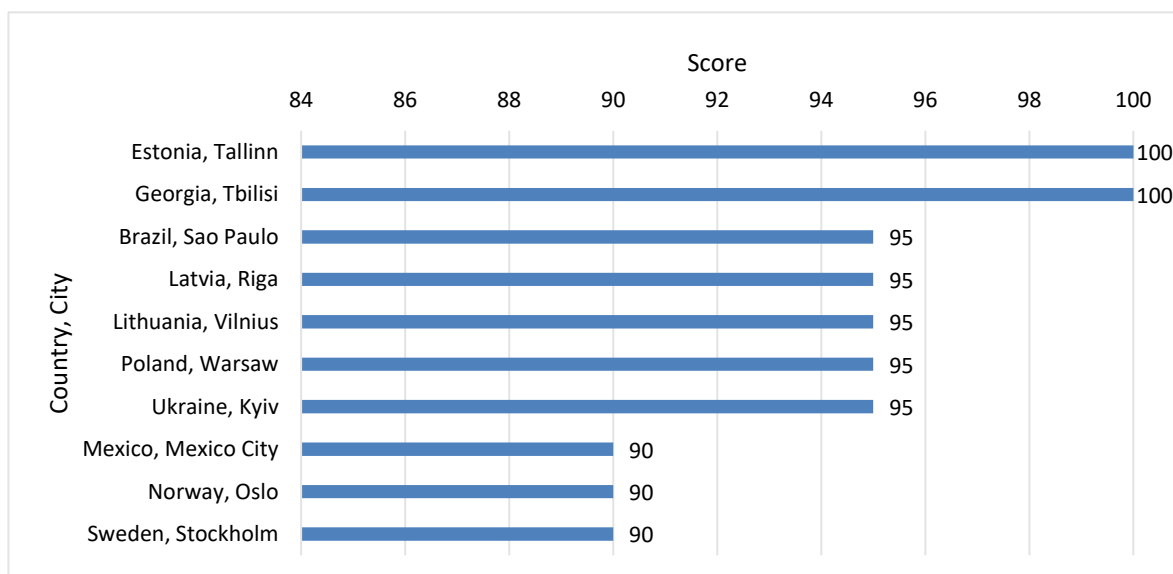
- Grey area / unfair competition
- Information asymmetry
- Externalities
- Monopolistic power of intermediaries
- Accountability issues

Statistics

The sharing economy index takes into consideration the following factors: ride-hailing services (max. 25 points), flatsharing services (max. 25 points), e-scooters (max. 15 points), carsharing apps (max. 30 points), gymsharing (max. 10 points).

The maximum value that can be reached is 105 and a total of 50 countries were involved. In 2021, according to Statista, the friendliest countries for the sharing economy are Tallinn, the capital of Estonia, and Tbilisi, the capital of Georgia, with an index value of 100. The Scandinavian capitals, as well as the Latin American cities of Sao Paulo and Mexico City, also ranked high.

Chart: 1 Cities most friendly to the sharing economy worldwide in 2021



Survey requested by the European Commission was carried out by TNS Political & Social network in the 28 Member States of the European Union between the 15th and the 16th of March 2016.

Some 14 050 respondents from different social and demographic groups were interviewed via telephone in their mother tongue. Respondents were given this description before the questions: A collaborative platform is an internet-based tool that enables transactions between people providing and using a service. They can be used for a wide range of services, from renting accommodation and car sharing to small household jobs.

Based on this statistic men use collaboration platforms more often (21% vs. 15%) and less often say they have never heard of these platforms (43% vs. 48%). Respondents aged 25-39 used these platforms most often. Respondents over 55 have the least awareness of these services. Self-employed (26%) and employees (25%) are more likely than manual workers (14%) to use the services of collaborative platforms. Respondents who have offered services on a collaborative platform at least once are more likely than those who have not done so to say that they use the services of these platforms regularly (35% vs. 20%).

Table 1: Which of the following matches your experience regarding this type of platform? (% - EU)

	You have never heard of these platforms	You have heard of these platforms but you have never visited them	You have been on one or more of these platforms and paid for a service once	You use the services of these platforms occasionally (once every few months)	You use the services of these platforms regularly (at least every month)
EU 28 average	46	35	4	9	4
Sex					
Male	43	35	5	11	5
Female	48	36	3	8	4
Age					
15 - 24	44	36	6	8	4
25 - 39	38	34	7	15	5
40 - 54	39	38	4	11	7
55 +	55	33	2	6	2
Respondent occupation scale					
Self-employed	43	31	6	12	8
Employee	34	41	5	14	6
Manual workers	56	30	3	7	4
Not working	54	32	3	6	2

New forms of business models

- Flat renting (Airbnb, CouchSurfing...)
- Means of transport (Uber, Liftago, Rekola...)
- Finance (KickStarter, Zonky, GoFundMe a Indiegogo...)
- Technology (GNU, otevřený software...)
- Workers (TaskRabbit, Freelancer...)
- Online training courses (edX, Coursera, Khan Academy...)
- Music and Video (Spotify, YouTube, Netflix, Google Music, Amazon Prime...)
- Cloud services (Google drive, Dropbox, Microsoft...)

P2P sharing vs B2C sharing

Sharing economy models can be divided according to who they are provided by, i.e. it depends on whether they are offered by the community or are provided on a commercial basis. We can further divide the shared models into P2P (peer-to-peer), which includes, for example, Uber, Airbnb, Couchsurfing, and B2C (business-to-consumer), which includes DriveNow.

Sharing economy and current problems

- Taxation of sharing economy in EU countries. There is no unified procedure within the European Union. Member States have introduced different rules for taxing the sharing economy.
- As new companies constantly entering the sharing market, there's the chance that it's the companies themselves that could pose a threat to the industry. Problems and failures are reported more often than successes, causing consumer mistrust.
- In practice, the success of the sharing economy is built on data. Therefore, there are differing views on privacy and security solutions in relation to data collection and use.

Sharing economy and Sustainable Development Goals (SDGs)

Karobliene and Pilinkiene (2021) claims in their research that the sharing economy encourages economic growth, entrepreneurship, and job creation, contributes to the GDP and impacts other economic criteria associated with sustainable development, so the sharing economy has a relationship with Sustainable Development Goals (SDGs). The results of their research support previous studies stating that the sharing economy is stronger in high-income countries and contributes more to their SDGs and that the sharing economy is significant in economically and digitally developed small countries, for example, Estonia, Malta, and Luxembourg.

If we focus on the principles of the shared economy, we can state that they are in line with the SDGs of the UN Development Program for the next 15 years (2015-2030), namely SDGs 12 (ensure sustainable consumption and production) and SDGs 17 (revitalize the global partnership for sustainable development and strengthen the means for its implementation). Cotrim (2020) cites, for example, Uber's services aimed at mitigating the overproduction of cars, or the Airbnb platform, which offers room and apartment sharing and has contributed to the rationalization of the construction sector of new residential buildings, as examples of good practice supporting 12 SDGs. Mi and Coffman (2019) also report positive environmental impacts of the sharing economy by reducing pollutants, emissions and hydrocarbons. As an example of good practice, he cites bicycle sharing, specifically in Shanghai, where carbon dioxide emissions were reduced by 25 000 tons and nitrogen oxide by 64 tons.

Sharing economy platforms also have the potential to create a means to implement more sustainable practices and thus contribute to the revival of a true global partnership for sustainable development (SDG 17). An example of good practice is also the Handbook for the development, monitoring and evaluation of the mobility plan, created by the Nadace Partnerství, which provides inspiring mobility solutions for employees of public institutions responsible for mobility and transport issues, mobility experts, managers, but also a wide public



Quiz questions:

1. The sharing economy does not involve

- A. people selling their used things to others.
- B. people offering their services to others.
- C. businesses selling their goods to people.
- D. businesses acting as a middleman for people who want to sell a product and people who want to buy it.

2. People can now sell things more easily because

- A. people nowadays buy more things.
- B. businesses want to buy the things they don't use.
- C. there are now more market stalls and car boot sales.
- D. there are now online platforms where they can meet people who want to buy their goods and services

3. Which of the following are examples of sharing economy?

- A. eBay
- B. Uber
- C. Airbnb
- D. All of the above

4. What does P2P stand for?

- A. Private-to-Public
- B. Person-to-Person
- C. Planet-to-Profit
- D. Peer-to-Peer

5. To properly build a sharing economy what resource is required?

- A. A Phonebook
- B. The Internet
- C. A Facebook account
- D. Apple iPhone

6. Which of the companies are not considered to be 'peer-to-peer?' in the sharing economy?

- A. Blablacar
- B. Uber
- C. Public Library
- D. Airbnb

7. Why are reviews so important?

- A. They replace the customer service
- B. To build trust and as a safety guarantee
- C. They are not so important, this question is a trap!
- D. To give a feedback on the service you just used

8. How is called the sector of undeclared work?

- A. Green Economy
- B. Second-hand market
- C. Primary labour market
- D. Grey Economy

9. What are the two main types of model sharing economy?

- A. Non-profit
- B. Commercial
- C. Both A & B
- D. Neither A nor B

10. Which one is an activity of the sharing economy?

- A. Buy a second-hand car
- B. Deposit savings in the bank
- C. Share an office with others
- D. Watch movies in cinemas

11. Sharing economy help to

- A. Augment the environmental waste
- B. Create a new brand
- C. Delete the environmental waste
- D. Reduce environmental waste

12. Which one of these is not an advantage of the shared economy?

- A. The consumer saves money
- B. Reduces underuse of resources
- C. Services offered in the shared economy are better
- D. Takes care of environment

13. Which one of these is a disadvantage of the shared economy?

- A. People don't take care of other people stuffs
- B. No one really trusts the shared economy
- C. There is a lack of legislation
- D. Cheaper items affect negatively our economy

14. Select the correct statement:

- A. Trust is very important in the shared economy and companies work very hard to win the consumers trust
- B. Since people is getting used to online purchases they trust more the websites and do not requiere secure payment checks.. etc
- C. People are less trusting now due to social media profiles and reviews
- D. Trust is not very important in the shared economy, it's not really needed it.

15. Which of the following are examples of sharing economy?

- A. Zonky
- B. Google drive
- C. Netflix
- D. All of the above

Correct answers: 1. - C. / 2. - D. / 3. - D. / 4. - D. / 5. - B. / 6. - C. / 7. - B. / 8. - D. / 9. - C. / 10. - C. / 11. - D. / 12. - C. / 13. - C. / 14. - A. / 15. - D.

Source

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Module 11

Managing sustainable approach
(SDG Compass)



Managing sustainable approach (SDG Compass)

The Sustainable Development Goals (SDGs) establish global objectives and ambitions for 2030. SDGs are an opportunity to overcome global sustainability related challenges and guide the world on a sustainable path. These goals have already been agreed upon by governments from all across the world. How to integrate sustainability to company's operations is a wide spread challenge among companies. The SDG Compass explains how the SDGs affect firm's business and provides the tools and knowledge to incorporate sustainability into company's strategy.

The SDG Compass's aims to assist businesses on how to align their plans, as well as monitor and manage their contribution to the Sustainable Development Goals. This is a practical approach to manage sustainable approach on a company level. Originally SDG Compass has been developed for larger corporations, but it can be adapted also in small and medium sized enterprises and public sector organizations. The SDG Compass is intended for usage at the company level, but it may also be used at the product, site, divisional, or regional levels as needed. This means that all types of organizations may adapt the tool to their unique situation.

Depending on where they are on the route of ensuring that sustainability is a result of core business strategy, companies may use the five steps to define or align their route. These five steps are based on the acknowledgment of all firms' responsibilities to comply with all relevant legislation, follow international minimum standards, and resolve all negative human rights consequences as a priority.

The SDG Compass progresses in five steps:

1. Understanding the SDGs
2. Defining priorities
3. Setting goals
4. Integrating sustainability development measures
5. Reporting and communicating

Figure 1: The linkages between different steps for the SDG Compass



Source: SDGCOMPASS (2022)

Step 1 - Understanding the SDGs

The core objective of the Step 1 is to familiarize the SDGs from own company's perspective and understand the related opportunities and responsibilities for the company.

Step 2 - Defining priorities

This phase focuses on defining company's priorities. Defining the priorities is important while it makes it possible to focus SDG related development efforts.

A practical approach to define SDG priorities could be to map the value chain so that impact areas can be identified. Also, opportunities to contribute to SDGs can be found when observing the value chain upstream or downstream.

Step 3 - Setting goals

Defining concrete and measurable goals for sustainable development. This is directly based on the impact assessment and prioritization which are covered in Step 2. The goal setting is important while aiming for good performance regarding various SDGs. Typically, firms choose environmental goals, but also goal setting related to social dimensions of SDGs could provide opportunities to contribute towards SDGs. A concrete set of Key Performance Indicators (KPIs) is an example of an outcome of setting goals.

Step 4 - Integrating sustainability development measures

Managing the sustainability related development activities and integrating them to any type of significant organizational change or transformation.

In this phase it is important to create a shared understanding of how potential progress towards sustainability related goals adds value for the company. One approach is to apply concrete business case examples for this. Additionally, sustainability related goals can be integrated into performance reviews and remuneration schemes throughout the organization.

Step 5 - Reporting and communicating

Step 5 of SDG compass focuses on reporting and communicating the firm's progress against the set KPIs supporting change and transformation towards SDGs. It is possible that issues are reported differently but in a coordinated manner to various stakeholders so that their needs are understood and met.

The SDG Compass intends to enable the strategic implementation of the Sustainable Development Goals as well as the strengthening of in-company sustainability policies. The tool's goal is twofold: 1) to explain how the SDGs affect business activities, and 2) to provide recommendations for SDG implementation and management. Businesses can use the SDG Compass as an overall framework to define, steer, communicate, and report on their plans, goals, and actions.

Each management tool has its own challenges. The SDG Compass provides assistance to prioritizing and goal setting, but it still remains on company's responsibility to choose the actual activities intended to support sustainability and carry them out. As good as the SDG Compass is, it still lacks a reflective and cyclical approach which is included to a widely used PDCA (plan, do, check, act) approach for continuous improvement. It could be that the SDG Compass emphasis on external reporting and communication comes at the expense of internal review and follow-up on activities performed.



Quiz questions

1. Whom was the SDG Compass originally planned for?

- A. Small and medium sized companies
- B. Large companies
- C. Countries
- D. Public-sector organizations

2. How many steps does the SDG Compass have?

- A. 6
- B. 5
- C. 8
- D. 3

3. What is a benefit of applying the SDG Compass?

- A. It allows companies monitor their energy consumption
- B. It allows companies to align their plans
- C. It allows to move physically to the right direction
- D. It identifies immediate opportunities for cost-savings

4. What kind of an approach the SDG Compass is to manage sustainable approach within a company?

- A. Hypothetical
- B. Theoretical
- C. Practical
- D. Unsustainable

5. On what level the SDG Compass is not intended for use?

- A. Team
- B. Divisional
- C. Regional
- D. Product

6. What is the aim of the first step of the SDG Compass?

- A. Reading sustainability related articles
- B. Familiarizing the SDGs and understand related opportunities
- C. Assessing growth opportunities
- D. Promoting circular economy

7. What is the aim of the second step of the SDG Compass?

- A. Listing all opportunities for further improvement
- B. Communicating with various stakeholders
- C. Defining priorities
- D. Promoting sustainability related activities

8. What is the aim of the third step of the SDG Compass?

- A. Assessing historical performance
- B. Increasing profitability
- C. Setting concrete and measurable goals
- D. Reducing waste

9. What is the aim of the fourth step of the SDG Compass?

- A. Integrating sustainability development measures
- B. Review competitors achievements
- C. Establish new business units
- D. Recruit new personnel

10. What is the aim of the fifth step of the SDG Compass?

- A. Evaluating outcomes
- B. Planning further
- C. Developing organizational culture towards sustainability
- D. Reporting and communicating

11. What is the time horizon of the Sustainable Development Goals (SDGs)?

- A. 2025
- B. 2030
- C. 2040
- D. 2050

12. What is a wide spread challenge among companies?

- A. Making profit
- B. Integrating sustainability to company's operations
- C. Recruiting new personnel
- D. Growing sales of their products

13. How the SDG Compass contributes towards companies' sustainability related objectives?

- A. It provides relevant tools and knowledge to incorporate sustainability with strategy
- B. It guides where to start with sustainability related activities
- C. It guides how to partner with various stakeholders
- D. It provides new business opportunities

14. How does the SDG Compass NOT promote company's SDG related activities?

- A. Monitors company's contribution towards SDGs
- B. Aligns company's plans towards sustainability
- C. Manages company's contribution towards SDGs
- D. Reduces sustainability related activities

15. Who has agreed on SDGs?

- A. Governments
- B. Companies
- C. Company's owners
- D. Company with its competitors

Correct answers: 1.-B./2.-B./3.-B./4.-C./5.-A./6.-B./7.-C./8.-C./9.-A./10.-D./11.-B./12.-B./13.-A./14.-D./15.-A.

Source

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Management of sustainability in details

Step 1 and 2 (Understanding the SDGs
and Defining priorities)



Management of Sustainability in details Step 1 and 2 (Understanding the SDGs and Defining priorities)

According to the shareholder approach, enterprises focus exclusively on one stakeholder: shareholders. This point of view received public awareness when Milton Friedman published an article in the New York Times stating: „there is one and only one social responsibility of business – to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, (...) engages in open and free competition without deception or fraud. Although this view was largely understood as legitimizing profit orientation irrespective of any other stakeholders, it triggered public discourse in the following years. Nowadays, Stakeholder Theory has gained broad acceptance. Since the discussion on the role of stakeholders started, the philosophy of strategic management changed from short-term profitability and only obeying the rules of the game to a more integrative approach, considering stakeholders and dealing with their needs.

A company is a socio-economic system. In this system, different groups with different interests come together and it is the task of management to balance their interests.

Each group makes its specific contributions to the company and makes claims on the company in return. According to the stakeholder model, management has the task to bring together the interests of the stakeholders in “peacemaking negotiations” and to allow all stakeholders to participate appropriately in the company’s actions and successes.

Carroll & Näsi (1997) describe stakeholders as “(...) any individual or group who affects or is affected by the organization and its processes, activities and functioning”. In contrast, Jones (1999) defines stakeholders as “(g)roups and individuals with the power to affect the firm’s performance and/or a stake in the firm’s performance”. Clarkson (cited from Friedman & Miles, 2006) adds that stakeholders also “(b)ear some form of risk as a result of having invested some sort of capital, human or financial, something of value, in a firm (...) (or) are placed at risk as a result of a firm’s activities. “

According to Starik’s (1993) point of view that stakeholders are “any naturally occurring entity that affects or is affected by organizational performance”, nature and environment can also be seen as stakeholders contributing to organizational performance and claiming a stake.

Concepts, such as the Tripple Bottom Line (Elkington), Sustainable Development, several CSR approaches and the Sustainable Development Goals, should guide organizations towards resilient and sustainable business behavior.

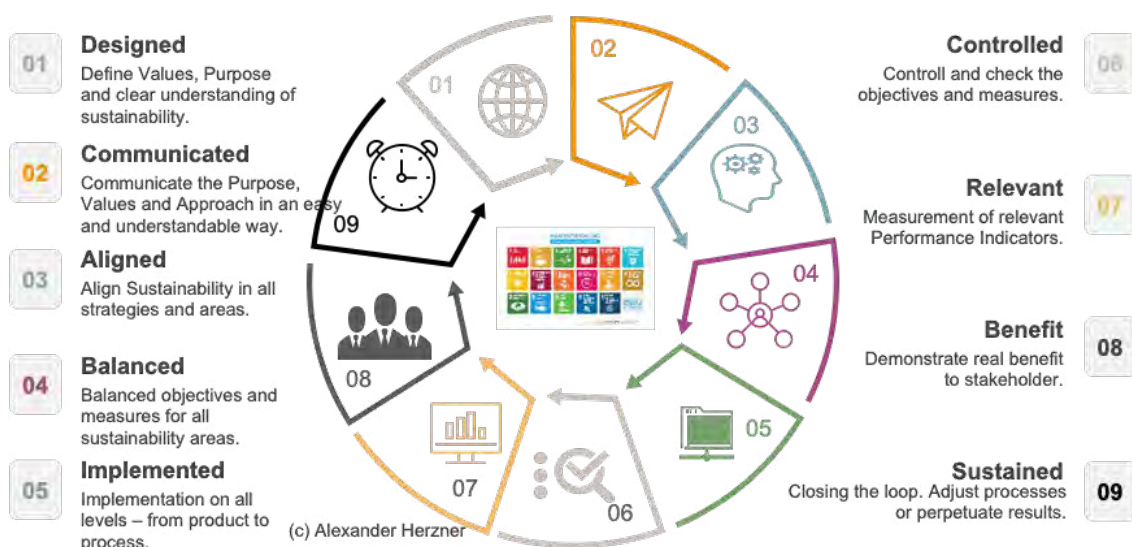
Strategic steps to implement a sustainable development approach

Since the United Nations published the SDGs in 2015, business organizations face the question of how to implement them into business activities. Most strategic approaches start with vision and mission statements. When it comes to sustainability, they should also reflect the relevance of SDGs and whether some goals are influenced by the organization’s activities.

As Herzner (2021) recommends, an organization should implement a holistic approach on sustainability in its strategy, strategic actions and business models. Starting with designing a sustainability understanding connected to moral values, this vision and purpose should be communicated in an understandable way.

While these normative statements should be linked to the SDGs, the SDG compass is a concrete five-step guide on how companies can align the SDGs and their strategy and normative DNA.

Figure 1: Sustainability Assessment Model



Source: Alexander Herzner, 2021

Step 1 - Understanding the SDGs

The SDGs succeed the Millennium Development Goals that ended in 2015. While the MDGs had a strong focus on reducing poverty and improving health in developing and emerging countries, the SDGs expand the challenge of ending poverty by widening the range of the inter-connected topics. UN addresses these goals for universal application, while governments are supposed to translate them into national action plans, policies and initiatives where companies can contribute to. What makes the SDGs complex for organizations it that all 17 goals offer specific and actionable sub-targets and actions (www.sdgcompass.org).

Developing and delivering solutions to contribute to accomplishing sustainable development creates value for companies not only in their innate business activities, but also in the relation to and interaction with their stakeholders.

As far as business activities are concerned, companies' ambitions to drive the achievement of the SDGs can trigger technological and product innovations aiming to provide more effective and efficient solutions to key sustainability challenges, such as energy production or emission reduction. These innovations then enable companies to open up new markets and market segments and thus increase sales. From an internal perspective, innovative sustainable solutions can also take the form of technologies helping to improve operational efficiency and thereby reduce cost. In addition, efforts to integrate sustainability considerations across the value chain can strengthen the corporate brand, as well.

Moreover, a company's efforts to realize sustainable development will prove beneficial to the interactions with and relations to its stakeholders, which, in turn, results in positive effects on business. Working towards the SDGs is likely to strengthen the company's license to operate, to uphold or improve its reputation among its stakeholders and enables the company to better engage with them.

When it comes to employees, striving towards sustainable development is expected to promote employee morale, engagement, and productivity. Ultimately, this will lead to lower turnover rates. Apart from that, a strong sustainability performance serves as a competitive advantage in the so-called "war for talent", i.e., the fierce competition on the labor market to attract highly qualified candidates.

In the long term, investment into the promotion of specific SDGs will help the company to secure its future workforce. For instance, strengthening education (SDG 4) and empowering women and girls (SDG 5) in areas where the company operates, will sustain, and increase the supply of skilled and engaged potential employees.

Besides that, corporate efforts to advance sustainable development are also well received by the company's customers, as more and more consumers tend to base their purchasing decisions on their perception of a company's sustainability performance. Here again, investing into the advancement of specific SDGs promises long-term benefits for the company. Support in the combat against poverty (SDG 1), for example, is expected to increase the purchasing power of the poorest ones and hereby prepares future consumer markets across the globe.

Whenever speaking about sustainable development, the natural environment is an essential stakeholder. In a corporate context, promoting environmental sustainability primarily means not consuming more natural resources than the capacities of the planet provide. This will prove beneficial to the company in the long run, as it secures the supply of resources indispensable for production also in the remote future.

Ultimately, government is a key stakeholder exerting considerable influence on a company's contribution to the achievement of the SDGs. Sustainability is becoming a top priority on the political and fiscal agendas on international, national, and regional levels. Government can spur a company's efforts for sustainable development by introducing taxes or fines that punish non-

sustainable behavior. These financial mechanisms will incentivize a company to strive towards or switch to more sustainable solutions.

Step 2 - Defining priorities

Over the last years, various standards and initiatives supporting the definition of priorities of sustainability in organizations were launched. For companies, the most applied regulatory frameworks are UN Global Compact, OECD and International Labor Organization guidelines, and the ISO 26000 standard. These frameworks always cover human rights, labor conditions, environmental protection, and anti-corruption measures. While all of them focus on Corporate Social Responsibility in general, the SDGs are not addressed in general. The same holds true for NGOs. Here, standards regulating specific areas of the organization are available, but they do not tackle the SDGs.

The SDG Compass serves as a guide for companies on how to realign business activities towards the SDGs. In doing so, companies that seriously seek to contribute to sustainable development can seize a variety of business opportunities, as described above.

The process of realigning business activities towards the SDGs consists of three steps:

- First, the SDGs have to be mapped against the value chain of the company to identify impact areas.
- Second, indicators for progress on sustainable development must be defined and data has to be collected.
- Third, priorities need to be defined based on the previous assessment.

Mapping the SDGs against the value chain

At the very beginning of this realignment, a company has to analyze its value chain. For this, it is advised to consider the entire value chain, upstream as well as downstream. Then, the individual segments of the value chain have to be assessed regarding their impacts on the sustainable development issues represented by the SDGs. This assessment is supposed to identify those areas of business activity that have the highest current and future impacts on the SDGs, positive as well as negative ones. Such an impact assessment is typically done at entity level but can be narrowed to the site or product level or broadened to the regional level, if required. The overarching aim of the realignment is to increase the positive impacts on sustainable development and to minimize the negative ones.

The illustration below shows an adaptation of the value chain scheme developed by Porter. In this generalized value chain, the segment „procurement“ can, for instance, be mapped to SDG 7 „affordable and clean energy“. In this exemplary case, the company would identify as a priority to increase the share of renewables in the energy mix it uses to run its operations.

Figure 2: Own adaptation based on Porter’s Value Chain



Source: Alexander Herzner, 2021

Furthermore, when analyzing the impact of the value chain on the SDGs, the context surrounding the company needs to be considered, as well. If the company's operations or other segments of its value chain are located close to areas that lag behind in terms of sustainable development, the company can have a high impact there. If a company employs, for instance, a large share of its workforce in regions with low wages and poor enforcement of labor rights, it possibly has significant impact on SDG 8 “decent work and economic growth”.

The impact assessment should not be a company-internal analysis but should also involve external stakeholders to get to know their opinions about the company's current or potential impacts on sustainable development. When choosing the stakeholders to engage with, the company should focus on those impaired by its business activities. The remaining ones can then be prioritized based on the influence they exert on the company and vice versa. Marginalized and vulnerable groups, such as women, children, and migrant workers, and stakeholders unable to articulate their positions, e.g., future generations or the natural environment, must not be neglected either.

In practice, the mapping of the SDGs against the value chain to identify impact areas can be done with the help of several tools and methodologies. Life Cycle Assessment (LCA) methodologies and environmentally extended input-output (EEIO) models are some of the most frequently used tools.

Selecting indicators for performance and collect data

Once the areas with high impact on the SDGs have been identified, the next step is to determine indicators that quantify the influence of the company's business activities on the SDGs. Thus, the company's performance in advancing sustainable development can be measured and progress can be tracked over time. Such indicators can be well-established ones, already defined by the

Global Reporting Initiative (GRI) or the Carbon Disclosure Project (CDP). Besides that, the company can also decide for its own indicators.

When compiling the indicators aiming to track the company's progress on sustainable development, indicators referring to the company's inputs, activities, outputs, outcomes, and impacts have to be taken into account. Moreover, a balance between indicators predicting the company's outcomes and impacts and indicators measuring its outcomes and impacts has to be found.

After the performance indicators have been defined, data for each of the indicators can be collected. Frequently used methods of data collection and aggregation include, for instance, reporting systems, field visits, questionnaires, focus groups and interviews. When data collection turns out to be complex, the cost-benefit ratio must be considered. Exploiting existing business systems, as for example used in sales or purchasing, provides an efficient way of data collection. Lastly, the company should guarantee data quality and integrity by implementing adequate control mechanisms.

Defining priorities across the SDGs

Based on the identified and quantified current and potential, positive and negative impacts of a company's value chain on sustainable development, the next step is to define priorities for action. These priorities are supposed to help the company to gradually align its business activities towards the SDGs.

On the one hand, this prioritization task should take into account opportunities resulting from the company's current or potential positive impacts on the SDGs. Such an opportunity may be the possibility to innovate or to open up new markets and thus grow.

On the other hand, the defined priorities should also consider the magnitude, severity, and likelihood of current and potential negative impacts of a company's business activities on the SDGs and how these negative impacts can be mitigated. Over time, the challenges that the business practices pose to sustainable development may materialize in costs or risks for the company.

Finally, all three steps of the process of realigning business activities towards the SDGs involve subjective judgments. It is therefore recommended to document this process in a transparent way and to repeat it periodically to track the evolution of impacts and priorities.



Quiz questions

1. In which segment of the value chain do CO2 emissions play a significant role?

- A. Human Resources
- B. Sales & Sales
- C. Supply Chain
- D. Research & Development

2. According to a famous quote by Milton Friedman, the social responsibility of business is...

- A. to promote wealth
- B. to increase its profits
- C. to strengthen its societal reputation
- D. to provide corporate benefits for employees

3. According to a comprehensive definition, stakeholders are...

- A. any naturally occurring entity that affects or is affected by organizational performance
- B. groups and individuals who have a stake in the organization's performance
- C. placed at risk as a result of a firm's activities
- D. groups that make a claim on the organization

4. When assessing its current and potential impacts on the SDGs, a company should engage with external stakeholders. Which stakeholders are especially relevant here?

- A. Those that provide an objective perspective
- B. Those that benefit from the company's business activities
- C. Those that directly contribute to the company's business activities
- D. Those that are impaired by the company's business activities

5. When selecting indicators for the company's impact on the SDGs,...

- A. only well-established indicators should be considered to ensure comparability.
- B. own indicators can be combined with well-established ones.
- C. only own indicators should be considered to ensure appropriateness.
- D. Indicators developed by external sources should be preferred.

6. How many steps does the SDG compass provide for companies to align their business activities to the SDGs?

- A. three
- B. four
- C. five
- D. six

7. Why should an organization prioritize its identified impacts on the SDGs?

- A. to distinguish positive impacts from negative ones
- B. to develop indicators
- C. to gradually align its business activities
- D. to measure the performance of business opportunities

8. Which SDG is possibly relevant at the end of a product's life?

- A. SDG 3: "Good health and well-being"
- B. SDG 11: "Sustainable cities and communities"
- C. SDG 12: "Responsible consumption and production"
- D. SDG 15: "Life on land"

9. Which SDG is probably not relevant for the company as employer?

- A. SDG 4: "Quality education"
- B. SDG 5: "Gender equality"
- C. SDG 10: "Reduced inequalities"
- D. SDG 14: "Life below water"

10. When mapping the SDGs against its value chain, a company should consider...

- A. only those segments that it has full control of
- B. all upstream activities by suppliers as well
- C. all upstream and downstream activities as well
- D. all upstream and downstream activities, as well as the context of its operations

11. True or False: A company's efforts for sustainable development proves beneficial only for its stakeholders, but not for the company itself.

- A. False, as more sustainable solutions can bring about new business opportunities.
- B. True, as the company has to bear higher cost for switching to more sustainable solutions.
- C. False, as more sustainable solutions always result in increased productivity.
- D. True, as the demand for more sustainable solutions weakens the bargaining power of the company vis-à-vis its stakeholders.

12. True or False: Government can play a major role in steering companies' activities towards sustainable development.

- A. False, as the role of government is reduced to a minimum in a free market economy.
- B. True, as government can implement financial mechanisms to incentivize companies to work towards sustainable development.
- C. True, as government keeps close track of all business activities anyway.
- D. False, as this would interfere in the companies' discretionary powers.

13. From an HR perspective, which of these four options does a company not consider as a desired outcome of its sustainability ambitions?

- A. Employee productivity
- B. Employer attractiveness
- C. Lower turnover rates
- D. Talent scarcity

14. From a sales & marketing perspective, which of these four options does a company not consider as a desired outcome of its sustainability ambitions?

- A. Increased competition
- B. A strong corporate brand
- C. A favorable perception among customers
- D. The opening up of new markets

15. How can the relationship between the SDGs and corporate innovation be best described?

- A. The SDGs can hamper corporate innovation because sustainability regulations restrict the company's scope of action.
- B. The SDGs can stimulate corporate innovation aiming to provide more sustainable solutions.
- C. Corporate innovation is not affected by the SDGs at all.
- D. Corporate innovation should be a greenfield process, neither influenced by the SDGs nor by any other factors.

Correct answers: 1. - C. / 2. - B. / 3. - A. / 4. - D. / 5. - B. / 6. - C. / 7. - C. / 8. - C. / 9. - D. / 10. - D. / 11. - A. / 12. - B. / 13. - D. / 14. - A. / 15. - B.

Source

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Management of sustainability in details

Step 3 and 4: Setting goals and

Integrating



Management of sustainability in details

Step 3 and 4: Setting goals and Integrating

This module takes a closer look at steps 3 and 4 of sustainability management: Setting goals and Integrating. Step 3 refers to goal setting and is directly linked to the outcomes from the influence appraisal and prioritization falling under step 02. This is a critical factor in achieving good outcomes since setting specific, measurable, and time-bound sustainability goals help promote communicated preferences and conduct routine across the organization. The SDGs enable companies to establish clear goals and effectively share dedication to sustainable development (Izzo, Granà, Izzo & Busco, 2020). The step 03 can be divided into:

- specify the scope of goals and KPIs,
- specify baseline and choice goal kind,
- specify the level of ambition,
- declare commitment to SDGs.

The organization's strategy determines how it plans, supervises risks, and maximizes opportunities; therefore, companies should develop their strategic objectives in order to support suitable and effective SDGs via their business model. It means including resource distribution plans and clear, quantified short, medium, and long-term targets (UN Global Compact, 2015).

After goal setting, specific KPIs are recognized together with individual goals suitable for each organization's strategic priorities. At this point, step 04 occurs; integrating sustainability into the business and embedding targets across processes and operations plays an essential role in managing these goals (SDG Compass, 2015a). Integrating sustainability helps convert all aspects of an organization's core business (product and service, customer segments, supply chain management, managing raw materials, transport and distribution networks, and product end-of-life) (Verboven & Vanherck, 2016). Companies are increasingly working with partners to enhance their impact and reach to pursue shared objectives or address systematic changes. This step consists of actions (SDG Compass, 2021):

- anchoring sustainability goals within the business,
- ingrain sustainability across all operations and processes,
- encounter in partnerships.

Step 3 - Setting goals

The scope of the company's sustainability goals should be steered by the strategic priorities determined in step 02 to include opportunities to contribute positively to the SDGs and decrease present and possible adverse effects (Business&Sustainable Development Commission, 2017). This procedure guarantees that the goals wrap up the company's processes and create opportunities to progress across the value chain. For years, many companies in this field have concentrated on issues such as carbon emissions, the use of water, and other natural resources. However, goal setting connected to the social extents of sustainable development (deprivation eradication and anti-corruption) is less standard; such issues can mean challenges in monitoring and estimating success (PricewaterhouseCoopers, 2015b). Regardless of these methodological challenges, companies should set goals that surround all their described priorities across sustainable development's economic, social and environmental aspects (PricewaterhouseCoopers, 2015a).

Establishing key performance indicators (KPIs) is the basis for driving, monitoring, and communicating progress. If an organization focuses on broad and ambitious goals (challenging to measure the progress), the solution is to pick several KPIs that each forms the basis for a specific, measurable, and time-bound target, from the spectrum of indicators used to assess impacts. For each priority, the company can restrict the selection down to a few key indicators that best express its impact on the sustainable development topic (SDG Compass, 2015b).

Companies have to define the baseline for each goal, which can be linked to a particular point in time or a particular period. It is the necessary company to decide on which type of goal to set. In general, it can be chosen from two categories (Reuters Event, 2015):

- absolute goals, which take only the KPI into account,
- relative (also called intensity) goals, which compare the KPI to a unit of output.

The first group most suitable expresses the anticipated impact on society but does not consider company growth. The second one measures the company's performance more accurately, but the goal's impact is uncertain. Making the time horizon long enough to set goals representing a significant turning moment for the industry will allow better transmission (United Nations Statistics Division, 2021). Publicizing all or some of the company's goals can be an effective communication tool for expressing the company's aspirations for sustainable development in simple and practical terms. Inspiring and engaging employees or business partners help deliver a reasonable basis for constructive dialogue with external stakeholders. The benefits of publicly announcing goals should be compared with the potential risk of criticism if the company does not meet its targets in time.

Business Tools and Indicators

An overview mapping existing business instruments concerning the allows for exploring commonly used business tools that may be useful in assessing an organization's impact (SDG Compass, 2015c). This web-based tool provides the ability to filter by essential criteria such as the SDGs themselves and the tool developer. The ranking is done according to 17 basic objectives: No Poverty, Zero Hunger, Good Health, Quality Education, Gender Equality, Clean Water and Sanitation, Affordable and Clean Energy, Decent Work and Economic Growth, Industry, Innovation and Infrastructure, Reduced Inequalities, Sustainable Cities and Communities, Responsible Consumption, Climate Action, Life Below Water, Life on Land, Peace and Justice, Partnership for the Goals. Some tools can be used for multiple purposes (SDG Compass, 2015d):

- *Corporate Human Rights Benchmark (CHRB)*

The Corporate Human Rights Benchmark (CHRB) is the corporate human rights commission's first open and public benchmark. Dropped in international and industry-specific standards on human rights and reliable business behavior, the CHRB Methodology concentrates on companies' policies, processes, and practices and how they reply to severe allegations. The CHRB assessment is based on the publicly available information (used for goals: No Poverty, Good Health, Quality Education, Gender Equality, Decent Work and Economic Growth, Reduced Inequalities, Sustainable Cities and Communities).

- *Impact Reporting & Investment Standards (IRIS)*

IRIS is the catalog of generally-accepted execution metrics that conducting influence investors use to measure social, environmental, and financial success, evaluate deals, and grow the credibility of the impact investing industry.

- *ISO 14000 Series*

The ISO 14000 group of standards delivers practical tools for companies and organizations looking to manage their environmental responsibilities.

- *Social Hotspots Database/Portal (SHDB)*

The SHDB project presents an online database that allows users to browse data on social risks by sector, country, risk theme, with 227 countries and 57 economic sectors. The data thoroughly manages social issues on human rights, working conditions, community impacts, and governance issues via a set of nearly 150 risk indicators grouped within 22 themes.

- *UN Global Compact – Oxfam Poverty Footprint*

A partnership-based assessment tool helps companies and civil society partners understand poverty's effects on a company's value chain, helps companies establish pro-poor business strategies, and promotes greater corporate transparency and meaningful stakeholder engagement.

Step 4 - Integrating

To integrate SDGs into business, leaders must be at the top; additionally, boards' critical role in integrating sustainable development into a long-term strategy is increasingly acknowledged (Bexell & Jönsson, 2021). For example, boards of directors can play a crucial role by integrating the Sustainable Development Goals into the recruitment and compensation criteria for executives. Two principles are essential:

- developing a common understanding of how to progress in implementing SDGs to create value for society, by clearly communicating the business case and how they can complement progress in meeting other business goals;
- incorporating SDGs into the organization's performance assessment and reward systems, with additional incentives reflecting the function or person's role in achieving the relevant objectives (Hub, 2018).

To be influential, sustainability goals should form an integral part of the company's comprehensive set of financial, strategic, and operational goals, along with goals in areas such as sales and performance (Fabrizio, et. al, 2015).

While specialized teams and sustainability specialists can play an essential role in achieving a company's sustainability goals, the key to integrating sustainability into a company's strategy, culture and operations is to support and account for corporate functions such as research and development, business development, supply management, operations, and human resources. There are many different approaches to promoting organizational change and fostering business integration, from awareness raising and training to using knowledge and inspiration that can be obtained through relationships with external experts and stakeholders. To support the development and implementation of the company's strategy in the context of sustainable development, many companies have established interdisciplinary boards, boards, or working groups for sustainable development. In some cases, the governance structures may also include a board-level sustainability committee, which allows time to be devoted to strategic discussions on sustainable development priorities, which can be especially valuable in the early stages of business integration (Avieco, 2021).

Successfully addressing sustainability issues cannot be done in isolation. There are at least three types of partnerships to explore: value chain partnerships where companies in the value chain combine complementary skills, technologies, and resources to bring new solutions to the market; sectoral initiatives that bring together several industry leaders to raise standards and practices across the sector and overcome common challenges; multilateral partnerships where governments, the private sector, and civil society organizations join forces to solve complex problems. Building effective partnerships for sustainable development requires a high degree of stakeholder commitment. Partners should strive to set common goals, use their core competencies, depoliticize projects, create clear management structures, establish a unified

monitoring framework, focus on impacts, anticipate future resource needs and build a knowledge management process (Bexell & Jönsson, 2021).

Key performance indicator

While setting specific KPIs, organizations can rely on some guidance. The global indicator framework was developed based on the availability of existing data at global and national levels, the quality of the data, and its relevance to specific objectives, which was conducted to categorize 231 indicators into three levels as described in the IAEG-SDGs report for the Statistical Commission. Many indicator levels' classification changes as methodologies develop and data availability increases. Therefore, the IAEG-SDG groups review the level classifications as needed at bi-monthly online and in-person meetings (Q1 and Q4 of each year). The individual levels are as follows (Business for 2030, 2020):

Tier 1: The indicator is conceptually straightforward, has an established international methodology and standards available, and regularly provides data for at least 50% of countries and populations in each region where the indicator is relevant.

Tier 2: The indicator is conceptually clear, has an internationally agreed methodology, and standards are known, but countries do not produce data regularly.

Tier 3: There is no internationally agreed methodology or standards yet for the indicator, but the methodology/standards are (or will be) developed or tested.

All indicators are equally essential. For tier I and II indicators, data availability at the national level may not necessarily align with the global category, and countries can create their own classification for implementation (Learn2improve, 2020). It is possible to track individual indicators, again sorted according to the 17 SDGs core targets. At the same time, each indicator contains the following sections: Indicator Name, Target and Goal, Definition and Rationale, Data Sources and Collection Method, Method of Computation and Other Methodological Considerations, Data Disaggregation, References, International Organization(s) for Global Monitoring

SDG Industry Matrix as industry-specific examples

The SDG Industry Matrix aims to encourage and report the private sector to do more for sustainable and inclusive prosperity. As opportunities vary from sector to sector, the matrix provides ideas, practical examples and presents opportunities for companies to expect to create shareholder and societal value (due to the relevant sector).

The SDG Sector Matrix was developed and maintained together by the United Nations Global Compact and KPMG International (UN Global Compact, 2015), by transforming interest driven by the SDGs into strategic sector actions that gain scale and impact. This can be by stimulating new innovative approaches, encouraging companies to replicate successful activities in new markets, encouraging new collaborations, and increasing participation in existing collaborations.

Through shared value (combination of market potential, societal needs, and policy actions to create a more sustainable and inclusive pathway to economic growth, prosperity, and well-being), the private sector can identify opportunities to address social and environmental challenges. The SDG Industry Matrix is based on the belief that all companies must comply with all relevant legislation, maintain internationally recognized minimum standards, and respect universal human rights regardless of their size, sector, or geographic coverage. UN website Global Compact contains critical tools and resources that can help companies to meet their minimum obligations and guide them to promote actions beyond these minimum obligations to achieve social and environmental goals.

Six specific industry matrices provide industry-specific practical examples and ideas for action for each Sustainable Development Goal. They profile opportunities companies expect to create value for shareholders and society. The industries are as follows: Financial Services, Food, Beverage and Consumer Goods, Healthcare & Life Sciences, Industrial Manufacturing, Transportation, Energy, Natural Resources & Chemicals.



Quiz question

1. Which activities do not belong to step 3:

- A. specify the scope of goals and KPIs,
- B. specify baseline and choice goal kind,
- C. specify the level of ambition,
- D. encounter in partnerships.

2. Which activities do not belong to step 4:

- A. anchoring sustainability goals within the business,
- B. ingrain sustainability across all operations and processes,
- C. reducing environmental waste
- D. encounter in partnerships

3. What categories a company can choose from when setting goals:

- A. absolute goals
- B. linked goals
- C. relative goals
- D. ambitious goals

4. The web ranking of existing SDG business instruments is done according to:

- A. 13 basic objectives
- B. 17 basic objectives
- C. 19 basic objectives
- D. 21 basic objectives

5. Complete the sentence “Publicizing all or some of the company’s goals can”:

- A. be an effective communication tool for expressing the company's aspirations for sustainable development in simple and practical terms.
- B. pose a threat to the company in terms of strategy disclosure.
- C. help the business define a more precise strategy.
- D. help forge new partnerships.

6. Corporate Human Rights Benchmark is:

- A. concentrates on legal matters in society.
- B. concentrates on companies' policies, processes, and practices and how they reply to severe allegations.
- C. is the catalog of generally-accepted execution metrics that conducting influence investors use to measure social, environmental, and financial success, evaluate deals, and grow the credibility of the impact investing industry.
- D. presents an online database that allows users to browse data on social risks by sector, country, or risk theme.

7. What does not belong to the basic principles of Step 4 – Integrating:

- A. developing a common understanding of how to progress in implementing SDGs to create value for society,
- B. incorporating SDGs into the organization's performance assessment and reward systems,
- C. reflecting the function or person's role in achieving the relevant objectives,
- D. promoting greater corporate transparency and meaningful stakeholder engagement.

8. What does not belong to the keys to integrating sustainability into a company's strategy, culture and operations:

- A. research and development
- B. supply management
- C. operational goals
- D. business development

9. What does not belong to the types of partnerships for integrating SDGs:

- A. value chain partnership
- B. sectoral initiatives
- C. multilateral partnerships
- D. none of the answers is correct

10. How many levels of KPIs do we differentiate:

- A. 2
- B. 3
- C. 6
- D. 9

11. How many specific industries can we find in SDG Industry Matrix:

- A. 4
- B. 6
- C. 9
- D. 10

/ 11. - B. /

Correct answers: 1. - D. / 2. - C. / 3. - C. / 4. - B. / 5. - A. / 6. - B. / 7. - D. / 8. - C. / 9. - D. / 10. - B.

Source

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Management of sustainability in details

Step 5: Reporting and communicating



Management of sustainability in details

Step 5: Reporting and communicating

SDGs provide a holistic, comprehensive approach towards solving world's most pressing problems. If SDGs Agenda is to succeed it has to consider sustainable approach of various stakeholders, including business sector, which through SDGs conducted activities and proper reporting has a crucial role in achieving SDGs. Through business reporting and improvements in firms sustainability reporting, society edges closer towards achieving SDGs. Transparent reporting and communication are important since it enables and fosters firms to align their activities with societal expectations (GRI, UN Global Compact, n.d., pp. 9-10).

Sustainability reporting and communications were often in the past considered as a compliance activity, whereas today it is seen as an important new strategic business approach (Amfori, 2019, p. 4). Sustainability reporting and disclosure practices have increased due to stakeholder's expectations on business information transparency and openness. Continuous reporting and communication on firms progress regarding SDGs helps to comprehend and fulfill stakeholders needs. Vast majority of firms today disclose their sustainability results, progress and impact (GRI, United Nations Global Compact & WBCSD, 2015, p.25), where 80% of firms all over the world report on sustainability, and third-party assurance of business sustainability information in reports has become a normal business practice (KPMG, 2020, p.5).

Reporting on the SDGs

Sustainability reporting has a significant role in informing stakeholders on the activities and initiatives firms embark on in order to contribute to creating more sustainable and just society. It also enables firms to indicate, be transparent and disclose their motivation, efforts and goals they are trying to accomplish, and project their strategic perspective, value creating strategy, resilience and "doing good" potential, where stakeholders can accordingly compare various firms and often value and reward sustainable ones (World Business Council for Sustainable Development & Radley Yeldar, 2021, pp. 4-5). Understanding and taking action on basis of what firm is doing is key to achieving SDGs (Adams et al., 2020).

17 SDGs are largely interconnected ranging from social to environmental goals (Business and Sustainable Development Commission, 2017, p. 22). According to Better Business, Better World report, achieving the SDGs could create more than 380 million jobs (WBCSD, 2017, p. 8). Accordingly, a shift needs to happen from corporate social responsibility (CSR) approach to more holistic sustainable development goals (SDGs) approach. Firms that implement SDGs into their strategies tend to be more prepared for the future, as topic of sustainability will be increasingly more significant and disruptive in many sectors, similar to digital technologies, whereas firms that

do not timely adjust their approach can fall behind their competitors in the future (Business and Sustainable Development Commission, 2017, pp. 23-25).

SDGs attainment requires a multi-stakeholder, collaborative approach that includes governments, international institutions and NGO's, whereas without the significant expected contribution of business sector, SDGs cannot be accomplished, as firms significantly provide needed financing, technological innovations, where businesses can have especially major impact on human rights improvements (WBCSD, 2017, p. 10). Firms can through contributing to SDGs along with contributing to society also ensure long term growth (Business and Sustainable Development Commission, 2017, p. 42).

There are also business opportunities present in several sectors for the firms in process of SDGs realization and among other activities it includes (Business and Sustainable Development Commission, 2017, p. 14).

- Food and agriculture (reducing consumer food waste; product reformulation; restoring degraded land; reducing packaging waste; technology in large scale farms, etc.);
- Cities (affordable housing; energy efficient buildings; public transportation in urban areas; autonomous vehicles, road safety equipment, etc.);
- Energy and materials (expansion of renewables; energy storage systems; energy efficiency; resource recovery; green chemicals; shared infrastructure, etc.);
- Health and well-being (telehealth; advanced genomics; tobacco control; better disease management; healthcare training, etc.).

In order for firms to implement SDGs the following activities can be done by management teams (WBCSD, 2017, p. 9):

- Promote SDGs as future oriented, appropriate business strategy;
- Integrate SDGs into business strategy;
- Focus on sustainable investments;
- Connect and collaborate with various stakeholders in order to attain a wider number of SDG goals;
- Collaborate with industry participants to drive transformation towards sustainability;
- Cooperate with policy makers.

Further activities that firms can do in order to align their activities with SDGs include: informing about the SDG development and best practices, understand business activities and its contribution to the social and environmental challenges, set firms SDGs targets, develop business solutions, communicate about SDGs with stakeholders about firm's actions taken, cooperate with firms in sector to jointly contribute to SDGs, and report on advancements (WBCSD, 2017, p. 17).

Sustainability reporting benefits and challenges

The advantages of implementing SDGs are that "First movers will have a 5 to 15 year advantage" (Business and Sustainable Development Commission, 2017, p. 7).

According UNGC (p. 8, 2021) good ESG performance results: in 50% lower cost of capital; 88% better operational performance; 80% better stock price performance; 7% higher Return on Equity (ROE). According to Bloomberg, firms with higher ESG score during the COVID-19 pandemic had better business results than their competitors (UNGC, 2021, p. 8).

Aim of SDGs is to link business strategy with current global challenges, whereas the advantages are (GRI, UN Global Compact & WBCSD, 2015, p. 4):

- Identifying future business opportunities (e.g. new investment and innovation);
- Enhancing the value of corporate sustainability (business model more in line with sustainable practices);
- Strengthening stakeholder relations and keeping the pace with policy developments (reduced legal and reputational risks);
- Stabilizing societies and markets (helps strengthen institutions, business ethics and provide examples of positive business practices);
- Using a common language and shared purpose (improves communication and relations with stakeholders about firms contribution to and completion of the stated SDGs targets).

Several studies found that firms with clear social and environmental purpose and contribution to SDGs are preferred by millennials, where they are 5 times more likely to work and stay in such firms (working for employers they respect and can relate to). Also, such firms tend to have higher moral and more productive employees, lower cost of capital, their brands can grow at a faster rate and customers, as well as business partners tend to have higher trust in such firms (Business and Sustainable Development Commission, 2017, p. 43-44).

According to McKinsey Global Institute research, benefits of achieving SDGs for firms include (Business and Sustainable Development Commission, 2017, p. 27):

- Increases in labor productivity due to better health and education;
- Reduced political uncertainty due to reduced social inequality and environmental stress, translating into reduced business risks.

Sustainability reporting has a broader purpose than just informing and communicating with stakeholders. It serves as an instrument of trust and relationships building, as well as for fostering internal improvements in organizations (GRI, United Nations Global Compact & WBSCD, 2015, p. 26).

Even though a large number of firms reports on SDGs in their sustainability reports, SDG reporting still poses a challenge for firms, since it is often unbalanced and disconnected from business goals, meaning that certain SDG goals, such as climate change, economic growth and responsible consumption are more prioritized in comparison to biodiversity protection (KPMG, 2020, p. 6). In addition, there are firms that are struggling on how to most effectively report their successes. Appropriate reporting on sustainability can help firms make changes in their business models while simultaneously responding to stakeholder demands (World Business Council for Sustainable Development & Radley Yeldar, 2021).

Sustainability reporting framework and standards

In sustainability reporting and communication field, difficulties exist regarding indicators used at different levels of analysis and reporting (global, national and corporate) that are often not directly comparable, which significantly hinders comparative analysis (Adams, 2017, p. 15). Currently there are various applicable ESG reporting standards present, which adds to complexity and sometimes even differences regarding reporting comparison and disclosure (EY & Oxford Analytica, 2021, p. 4). Hence, lawmakers are mandating and trying to make sustainability reporting more unified, comparable and specific (World Business Council for Sustainable Development & Radley Yeldar, 2021, pp. 4-5). For instance, The European Commission through its European Financial Reporting Advisory Group (EFRAG) is developing a nonfinancial reporting standards for the European Union which will become mandatory from 2023 for certain groups of firms (EY & Oxford Analytica, 2021, p. 15). Since various different sustainability reporting frameworks and standards exist, there is a growing need for establishment of global sustainability reporting framework.

Firms should align their sustainability strategies in line with the changes in environment and society, as well as their stakeholders expectations (Adams, 2017, p. 28). Accordingly, each firm should identify and assess the activities and initiatives that contribute to attainment of SDGs. Firms can have positive contribution to one or more SDGs, and very seldom will firms contribute to all 17 SDGs, as some SDGs targets are not relevant, or not material to certain firms. Relevance of firm's impact and possibilities to contribute are affected through materiality assessment conducted with stakeholders (Adams, 2017, pp. 24-26). Therefore, firms should report on SDGs attained results in comparison to set targets that affect value creation (Adams, 2017, pp. 31-32). Firms should continuously strive to improve their practices in order to contribute to a more sustainable, responsible and just world. Businesses have a key role in attaining stated goals. One of the tools in that regard is the SDG Compass developed by following organizations- GRI,

the UN Global Compact and the World Business Council for Sustainable Development (WBCSD), enables guidelines for alignment of SDGs with business strategy, which aims to help firms commit to, prioritize and contribute to SDGs (mainly for large multinational firms, but small and medium sized enterprises can adjust it and use it as well) (GRI, United Nations Global Compact & WBCSD, 2015).

When preparing a non-financial report, firms are offered the option of choosing between several non-financial reporting frameworks, and they are obliged to indicate on the basis of which frameworks the non-financial report was compiled. The international frameworks according to which it is possible to prepare and publish a non-financial report are (Ravlić Ivanović et al., 2022, p. 38):

- EU Guidelines on non-financial reporting;
- Global Reporting Initiative (GRI);
- United Nations Global Compact (UNGC);
- The UN Guiding Principles on Business and Human Rights;
- The Organization for Economic Co-operation and Development (OECD) Guidelines for multinational enterprises;
- (ISO) 26000 Guidance on Social Responsibility of the International Organization for Standardization;
- Tripartite Declaration on Principles Concerning Multinational Enterprises and Social Policy of the International Labor Organization.

Investor and CEO's alike have difficulties comparing and benchmarking firms ESG activities and achievements, as various firms use different standards, and there are no universally agreed international standards for sustainability reporting. However, certain firms such as Vigeo, EIRIS, MSCI and SustainAlytics make such analysis and comparisons for their clients (Business and Sustainable Development Commission, 2017, p. 70).

European Union in the last decade had enacted several significant acts that improve disclosure and reporting comparison of firms sustainable activities, where one of the regulation acts was the EU Directive 2014/95/EU of the European Parliament and of the Council on non-financial reporting (NFRD) (Markota Vukić, Vuković, Calace, 2017: 14 in Ravlić Ivanović et al., 2022, p. 6).

In order to meet global climate and sustainability goals, another two significant regulatory acts were adopted by the European Parliament and the Council are the Sustainable Finance Disclosure Regulation- SFDR Regulation (Regulation (EU) 2019/2088 of the European Parliament and the Council of November 27, 2019) dealing with sustainability and reporting practices in the financial services, and Regulation (EU) 2020/852 of the European Parliament and of the Council of June 18, 2020 providing guidelines regarding sustainable investment (Ravlić Ivanović et al., 2022, p. 22).

It is also significant to mention the Regulation (EU) 2020/852 of the European Parliament and of the Council, establishing a framework to facilitate sustainable investment- EU Taxonomy- a classification system in the EU that lists environmentally sustainable economic activities (European Commission, 2022).

With regards to reaching the goals of the European Green Deal, and the goal of climate neutral economy by 2050, the EU plans to adopt EU Corporate Social Reporting Directive (CSRD) which will replace the Non-Financial Reporting Directive (NFRD). The CSRD goals are public disclosure of firms sustainability risks and opportunities and its effect on the sustainability, where it should help reporting become easier to compare and understand, and more cost efficient to produce sustainability reports (Wollmert, Hobbs, 2022).

In the future, accountants and CFO's will have more prominent roles in SDGs through information analysis, optimization of processes and providing help in decision making process (International Federation of Accountants, 2015, p. 20). Also, audit committees and assurance provider will have a greater role in sustainability reporting, as they will monitor the effectiveness of systems and control their setup (Wollmert, Hobbs, 2022).

Communicating sustainability

Firms that are “doing well” want to tell their story, connect and engage on topics of sustainability with various stakeholders, especially since stakeholders have constantly higher expectations. Firms have a wide variety of methods on how to engage and communicate transparently and authentically with their stakeholders on various sustainability topics (Amfori, 2019, p. 4). Besides formal sustainability reporting, firms can use a number of channels to communicate to stakeholders their strategy and progress regarding SDGs. Those channels include: corporate websites, social media channels, events, product and service labeling, market and advertising (GRI, United Nations Global Compact & WBSCD, 2015, p. 26).

SDG reporting can be based on some of the leading international standards for sustainability reporting (GRI, UNGC), or specific firms standalone custom report as means of information disclosure (GRI, United Nations Global Compact & WBSCD, 2015, p. 27). Various frameworks and documents intend to help firms adjust their activities and impact on society and environment in line with SDGs (Adams, 2017: 11).

Furthermore, the sustainability reporting should focus on firms major economic, social and environmental contribution (material issues), whereas communication should use the SDGs methodology and terminology to more effectively engage in dialogue with interested parties (GRI, United Nations Global Compact & WBSCD, 2015, p. 28).

Regarding specific SDGs, firms can communicate the following (GRI, United Nations Global Compact & WBSCD, 2015, p. 28):

- Through which analysis and why certain SDG has been identified as significant for the firm;
- The effects of firms certain SDGs activities;
- Set targets for SDGs and measurement of progress towards achieving targets;
- Strategies and activities for reaching firms declared SDGs targets.

One of the possible ways to communicate about SDGs commitment and activities is to use visual tools to highlight certain SDGs activities (GRI, United Nations Global Compact & WBSCD, 2015, p. 28). Reporting and communication can also be segmented based on socio-economic criteria to provide a more specific and precise information for certain groups (GRI, United Nations Global Compact & WBSCD, 2015, p. 13).

Today's access to information in sustainability reports by users should be easy to access in digital and machine readable formats. Hence, in the EU it is advised that firms prepare their reports in regulated European Single Electronic Format (ESEF) (Ravlić Ivanović et al., 2022, p. 34).



Quiz questions

1. In the past, sustainability reporting and communication were considered as:

- A. Risk management activity
- B. Compliance activity
- C. Procurement activity
- D. IT activity

2. According to some studies, achieving the SDGs could create more than:

- A. 80 million jobs
- B. 180 million jobs
- C. 280 million jobs
- D. 380 million jobs

3. SDGs attainment requires a multi-stakeholder, collaborative approach that includes:

- A. Governments
- B. International institutions and NGO's
- C. Business sector
- D. All of the above

4. In process of SDGs realization there are business opportunities present in:

- A. Food and agriculture sector
- B. Cities
- C. Health and well-being
- D. All of the above

5. Business sector contribution to SDGs is especially significant in:

- A. financing
- B. technological innovations
- C. human rights improvements
- D. marketing

6. According to Bloomberg, firms with higher ESG score during the COVID-19 pandemic had:

- A. Worse business results than their competitors
- B. Better business results than their competitors
- C. The same business results as their competitors
- D. The results were inconclusive

7. Sustainably responsible firms tend to have:

- A. lower moral and more productive employees
- B. less competitors
- C. higher marketing expenses
- D. lower cost of capital

8. Current challenge in the field of SDGs reporting is:

- A. The existence of one sustainability reporting framework
- B. The existence of various sustainability reporting frameworks
- C. Absence of institutions that provide guidance of SDGs reporting
- D. Unified sustainability reporting

9. SDG Compass:

- A. Is an SDG award
- B. Is mandatory to use for SDGs reporting
- C. Provides guidelines for alignment of SDGs with business strategy
- D. None of the above

10. The international frameworks according to which it is possible to prepare and publish a non-financial report do NOT include:

- A. (ISO) 26000 Guidance on Social Responsibility of the International Organization for Standardization
- B. The UN Guiding Principles on Business and Human Rights
- C. Global Reporting Initiative (GRI)
- D. EIRIS

11. SFDR Regulation:

- A. Is dealing with sustainability and reporting practices in the financial services
- B. Is dealing with sustainability and reporting practices in SME's
- C. Is dealing with sustainability and reporting practices in all large firms
- D. Is dealing with sustainability and reporting practices in all the non-financial services

12. In the future, more prominent roles will in SDGs will be held by:

- A. CEO's
- B. COO's
- C. CFO's
- D. CMO's

13. Sustainability reporting should focus on:

- A. Government regulators
- B. Material issues
- C. Competitors
- D. International organizations

14. One of the possible ways to communicate about SDGs commitment and to highlight certain SDGs activities is through:

- A. Use of Excel tables
- B. Use of meta-data
- C. Use of visual tools
- D. None of the above

15. The future of sustainability reporting:

- A. Expects multiple reports
- B. Expects less interest for sustainability reporting
- C. Expects more reporting frameworks
- D. Expects more digital and machine readable formats

Correct answers: 1.- B. / 2.- D. / 3.- D. / 4.- D. / 5.- C. / 6.- B. / 7.- D. / 8.- B. / 9.- C. / 10.- D. / 11.- A. / 12.- C. / 13.- B. / 14.- C. / 15.- D.

Source

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Module 15

Sustainability as business opportunity



Sustainability as business opportunity

Current crisis demonstrates that business needs to transform and must change toward a more ecological and social but also economic sustainability again. For that, Business has to contribute to that by business models creating an added value for business but also society (Porter and Kramer 2011).

For several years now, the term Corporate Social Responsibility has been on everyone's mind. What began as a defensive/reactive (compliance-oriented) strategy is now increasingly developing into an innovative/proactive management concept (sustainable entrepreneurship). The term sustainable entrepreneurship has been used for some time in business to describe this current, very entrepreneurial and business-oriented view of business and society. Now, Sustainability must be understood as an integrative social and environmental concept in the business models.

Latest trends like circular economy, de-growth or donut economy are providing a good entrepreneurial potential. Business Models on sharing economy, mobility, health care or on efficiency should ideally be both: creating positive impact on SDGs by ensuring economic growth by considering planetary boundaries (Club of Rome 2022).

The future for business opportunities should consider an increasing well-being for people and planet by decoupling of wealth from resources.

The entrepreneurship must consider a long-term stability and viability instead of finding the best exist-strategy for making money. The business model should create a social and ecological value. It is the answer to the question of "how the business makes money".

One detail in discussion should be about social entrepreneurship dealing with long-term social innovation as extended approach of CSR. It is about the lens on social and environmental issues. The core of business is social or environmental impact by being profitable.

Changing from CSR to CSR 2.0.

While the earlier term of CSR 0.0 was understood as doing business creating profit (Friedman 1970) where activities can be called green washing, the actions of the corporation aren't sustainable or responsible.

With increasing awareness and defensive approach CSR 1.0, taking responsibility is an add-on to everyday business. Mostly donations, single engagements and damage limitation are on the agenda.

Now, with CSR 2.0, entrepreneurship must be purposing driven business where CSR is integrated into core business activities and understood as potential.

While consumer and market segments are requesting more sustainability in business models, this offers the business opportunity to develop products and services meeting the needs of latest consumer demands. This is also, why of the major companies believe that they have to change 30-40 % of their value creation. That is why sustainable business models play a major role in corporate success (Schmidpeter and Bungard 2022).

Opportunities from product to systemic change

The UN and UN Global Compact recommend the SDGs as source for opportunities, the UN Global Compact principles provide the way of how these opportunities should be used for innovation, creating value for stakeholders and implementing them in business models.

Sustainable ideas can be understood as a comprehensive notion that may be applied to various levels of analysis, e.g., the single company, the industrial sectors, the region or the entire economy. Besides it may be achieved in many ways including behavioural changes. However, the focus of policy should be on all innovation – like social innovation as well, not just on technologies. By the way the design of a product and values embedded in it can also bear some opportunities as the end of the lifecycle (recycling, upcycling or re-use)

As an example, eco-efficiency innovation contributes to company competitiveness in at least four ways:

1. Operational advantages thanks to greater resource efficiency resulting in lower resource costs.
2. Commercialisation of the innovation.
3. Reduced environmental costs of pollution control and waste management
4. Improvements in image, marketing and stakeholder relations

The WBCSD has identified seven elements to improve eco-efficiency (since 2000's - World Business Council for Sustainable Development (2000)

According to that this measure should lead to less environmental impact and can also contribute to the SDGs.

1. Reduce material intensity
2. Reduce energy intensity
3. Reduce dispersion of toxic substances
4. Enhance recyclability
5. Maximize use of renewables

6. Extend product durability
7. Increase service intensity

How can sustainability be a source of opportunity?

- By enhancing innovation for exceeding norms and standards, it creates transparency about resource consumption and e.g. emissions. This is good for ratings but also avoiding risks. By being eco-efficient, it also is an incentive by reducing costs
- Increasing the efficiency of the entire value chain, this creates transparency about impact in the supply chain and creating incentives and obligations for value-added partnerships.
- Developing sustainable products and services offering or reshaping existing ones positively impact the competition, determine the willingness to pay for.
- Implementing new business models changes the competitive environment through new ways of creating value. This should lead to positive ratings and less risks in business plans.
- By questioning the logic of present economy in the perspective of sustainability and re-thinking the systematics of the market can also lead to new markets. A first mover advantage should create value for people and planet.

Figure 1: Sustainability as business opportunity - stages

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Viewing compliance as opportunity	Making value chains sustainable	Designing sustainable products and services	Developing new business models	Creating next-practice platforms
Central challenge	Central challenge	Central challenge	Central challenge	Central challenge
To ensure that compliance with norms becomes an opportunity for innovation	To increase efficiencies throughout the value chain	To develop sustainable offerings or redesign existing ones to become eco-friendly	To find novel ways of delivering and capturing value, which will change the basis of competition	To question through the sustainability lens the dominant logic behind business today
Competencies needed	Competencies needed	Competencies needed	Competencies needed	Competencies needed
The ability to anticipate and shape regulations	Expertise in techniques such as carbon management and life-cycle assessment	The skills to know which products or services are most unfriendly to the environment	The capacity to understand what consumers want and to figure out different ways to meet those demands	Knowledge of how renewable and nonrenewable resources affect business ecosystems and industries
The skill to work with other companies, including rivals, to implement creative solutions	The ability to redesign operations to use less energy and water, produce fewer emissions, and generate less waste	The ability to generate real public support for sustainable offerings and not be considered as "greenwashing"	The ability to understand how partners can enhance the value of offerings	The expertise to synthesize business models, technologies, and regulations in different industries
	The capacity to ensure that suppliers and retailers make their operations eco-friendly	The management knows how to scale both supplies of green materials and the manufacture of products		
Innovation opportunity	Innovation opportunity	Innovation opportunity	Innovation opportunity	Innovation opportunity
Using compliance to induce the company and its partners to experiment with sustainable technologies, materials, and processes	Developing sustainable sources of raw materials and components	Applying techniques such as biomimicry in product development	Developing new delivery technologies that change value-chain relationships in significant ways	Building business platforms that will enable customers and suppliers to manage energy in radically different ways
	Increasing the use of clean energy sources such as wind and solar power	Developing compact and eco-friendly packaging	Creating monetization models that relate to services rather than products	Developing products that will not need water in categories traditionally associated with it, such as cleaning products
	Finding innovative uses for returned products		Devising business models that combine digital and physical infrastructures	Designing technologies that will allow industries to use the energy produced as a by-product

Source: Zu, L. (2013)

Key strategies

What kind of strategies are available for companies to do so:

- Making companies proactive
- Improving sustainability assessment by companies and customers
- Improving the system of innovation for green innovation
- Targeted policies
- The use of market-based instruments
- Policy integration

Sustainable value requires excellence in eight disciplines:

1. Understanding the firm's current shareholder and stakeholder value position: Knowing where and how the company is creating, destroying, and transferring value to shareholders and stakeholders.

2. Anticipating emerging issues: Tracking key trends and identifying emerging issues that may change the firm's shareholder and stakeholder value position.
3. Setting sustainable value goals: Establishing specific strategic intent and goals, aligned with corporate strategy, for creating additional value for shareholders and stakeholders.
4. Discovering sustainable value: Identifying sources of value through a stakeholder approach and designing initiatives to capture that value.
5. Developing the business case: Creating a compelling business case that aligns line managers and financial managers around the initiatives.
6. Capturing the value: Executing and managing initiatives to ensure value capture.
7. Validating results and capturing learning: Tracking and assessing shareholder value and stakeholder value and communicating the connection between the two.
8. Building sustainable value capacity: Developing the mindset and capabilities needed to capture shareholder and stakeholder value.

Cases studies and best practices

- JOKOLADE with Tonys Open Chain: Start-Up addressing Slavery and child labour in the chocolate supply chain. With strong partnerships and a purpose driven business model, that will change the market systematics.
- EcoBrain is a thinktank developing products made from coffee grounds and eco-friendly glue to produce a new kind of raw material. First products are guitars, bags, tables. This idea shows more than just to make eco-friendly products, but also to create new business models and market opportunities.
- Innovation & Sustainability in Action: [Sprout World](#) (Youtube) is a cradle-to-cradle or upcycling idea of a pencil you can plant also for herbs



Quiz questions:

1. What is the most important factor when considering using sustainability as a business opportunity?

- A. Maximizing profits
- B. Minimizing the environmental impact
- C. Ensuring customer satisfaction
- D. Creating innovative and sustainable products

2. What is an example of a sustainable business opportunity?

- A. Selling organic food
- B. Offering renewable energy services
- C. Developing energy-efficient building materials
- D. All of the above

3. What is a key benefit of incorporating ecologic sustainability into business operations?

- A. Increased customer loyalty
- B. Improved public relations
- C. Reduced energy consumption
- D. Lower labor costs

4. How can sustainability-focused businesses gain a competitive edge in the marketplace?

- A. Offering discounts to environmentally conscious customers
- B. Creating eco-friendly products
- C. Leveraging innovative but sustainable technologies
- D. All of the above

5. What role does the SDGs play for business opportunity?

- A. Source for Innovation
- B. Framework to implement ecological factors
- C. Goals replacing business goals
- D. Audit standards for CSR

6. What are the four ways eco-efficiency innovation contributes to company competitiveness?

- A. Operational advantages, commercialisation of the innovation, reduced environmental costs and improved image
- B. Improved image, lower resource costs, environmental pollution control and waste management
- C. Operational advantages, commercialisation of the innovation, environmental costs of pollution control and improved image
- D. Lower resource costs, improved image, commercialisation of the innovation and waste management

7. What is the first step in creating shareholder and stakeholder value?

- A. Anticipating emerging issues
- B. Setting sustainable value goals
- C. Discovering sustainable value
- D. Understanding the firm's current shareholder and stakeholder value position

8. What can be understood as CSR 2.0

- A. CSR is understood as opportunity because of integration in business model
- B. CSR is after CSR 1.0 an add-on
- C. CSR is a philanthropic way of business
- D. CSR 2.0 are activities to create a good image

9. Which of the following is the last step for creating shareholder and stakeholder value?

- A. Anticipating emerging issues
- B. Setting sustainable value goals
- C. Building sustainable value capacity
- D. Validating results and capturing learning

10. Which of the following implications will triple-P concepts have on innovation?

- A. Increased costs
- B. Increased complexity
- C. Increased creativity
- D. Increased efficiency

11. Which of the following is a characteristic of a truly Sustainability Oriented Innovation (SOI)?

- A. Cost-effective, High Quality, and Low Environmental Impact
- B. Low Cost, High Quality, and High Environmental Impact
- C. Low Cost, High Quality, and Low Environmental Impact

12. What is the difference between traditional and 3-P sustainability-oriented business practice?

- A. Relying on natural resources, reducing waste and pollution, and investing in renewable energy
- B. Relying on natural resources, minimizing waste and pollution, and preserving renewable energy
- C. Releasing natural resources, minimizing waste and pollution, and investing in renewable energy
- D. Relying on natural resources, minimizing waste and pollution, and investing in renewable energy

13. Sustainability is the source of what kind of innovation?

- A. Resource innovation
- B. Business Model innovation
- C. Marketing communications
- D. Health innovation

14. CSR is

- A. the corporate sustainable resource.
- B. the corporate service resources.
- C. the corporate service responsibility.
- D. the corporate social responsibility.

15. How many start-ups nowadays understand Sustainability already as business opportunities?

- A. 1/3 of all start-ups are so called green start-ups
- B. 1/5 of all start-ups are so called green start-ups
- C. 4/5 of all start-ups are so called green start-ups
- D. 2/3 of all start-ups are so called green start-ups

Correct answers: 1. - D. / 2. - D. / 3. - C. / 4. - C. / 5. - A. / 6. - C. / 7. - D. / 8. - A. / 9. - C. / 10. - C. / 11. - C. / 12. - D. / 13. - B. / 14. - D. / 15. - A.

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Module 16

Sustainable business model innovation



Sustainable business model innovation

Many businesses are restructuring their business models, goods, and services in order to provide environmentally responsible, stakeholder-oriented offerings and strategies while also ensuring financial profitability.

A sustainable business model is one that generates a competitive advantage through superior value creation for the customer and helps to the company's and society's sustainable growth.

A sustainable business model describes, analyses, manages, and communicates to stakeholders a firm's value proposition and how that value is produced, delivered, and preserved while preserving or expanding natural, social, and economic capital.

Sustainable business model innovation relates to creating completely new business models or altering the existing ones so that sustainability perspectives like natural environment and society are considered.

This learning module consists of three submodules:

1. Introduction to sustainable business models,
2. Applying (design/innovation) thinking on sustainable business model innovation,
3. Transitioning towards more sustainable business models.

Introduction to sustainable business models

This submodule covers a business model in general and why more sustainable business models are required?

Businesses should adapt such business models that contribute to sustainable development, which is defined as development that can meet the demands of current generations without putting at risk the needs of future generations.

Sustainable business models can be characterized as long-term business models that include proactive management of monetary and non-monetary value generation for a diverse set of stakeholders. They are also characterized as models in which firms' decision-making processes are guided by sustainability principles

Considering the sustainable development goals, the innovative business models have brought a competitive advantage to improve the sustainability performance of organizations. The concept of the sustainable business model describes the rationale of how an organization creates, delivers, and captures value, in economic, social, cultural, or other contexts, in a sustainable way.

Design thinking and sustainable business model innovation

This submodule introduces phased approach to design sustainable business models. It has a direct linkage to Module 17 – Sustainable business model canvas.

Business model is an abstract sketch of the value flow and interactions between value elements inside a company. Company's essential value elements are focused with proposition, creation, delivery, and capturing value. The ability to communicate the connection and contents of these elements in a simplified manner is critical to the success of any business. The process of sustainable business model design forms an innovative part of a business strategy. Different industries and businesses have utilized sustainable business models' concept to satisfy their economic, environmental, and social goals simultaneously.

Sustainable business models incorporate sustainability concepts and goals into the value proposition, value creation, and value capture activities of a company. To achieve sustainability goals, sustainable business models incorporate proactive multi-stakeholder management, innovation, and a long-term vision. As a result, sustainable business models have effectively contributed to decreasing the negative effects of business operations on the environment and society by providing solutions to assist companies fulfilling their economic and sustainability goals at the same time.

A sustainable business model provides a company with a competitive edge by enabling traditional businesses to satisfy sustainable development goals while retaining productivity and profitability. Sustainable business model design aims to develop approaches that organizations may use to evolve their business models toward sustainability.

Circular economy is one concept that is closely related to sustainable business. Circular business concepts are comparable to sustainable business models in this regard. They do, however, have additional properties that are primarily concerned with delaying, intensifying, and narrowing resource cycles.

A four phase approach to create a sustainable business model:

The first phase in creating a sustainable business model is to create sustainable value, which includes economic, social, and environmental advantages as forms of value.

The second phase in developing a sustainable business model is to establish a system of sustainable value flows among many stakeholders, with the natural environment and society serving as key stakeholders.

The third phase toward a sustainable business model is to create a value network with a new purpose, design, and governance.

The fourth phase in developing a sustainable business model is to examine stakeholder interests and obligations for reciprocal value generation on a systemic level.

Business model innovation may strengthen and deepen organizational resilience, resulting in a sustainable competitive advantage. As a result, it progressively becomes a major source of company's performance improvement and growth.

A sustainable business model addresses a far broader range of stakeholders than traditional business models, including the environment, climate and society as main stakeholders. Sustainable business models can be considered as an extension of traditional business models (including value proposition and creation, value capture and delivery), with the environment, climate and society as primary stakeholders. Here the value creation can be considered from the perspectives of both monetary and non-monetary value.

A business model needs to maintain sustainability and requires constant change. Within an ongoing business the business model innovation process is often considered as a change from one business model to another. This refers to business model substitutions that provide customers such items or services that were previously unavailable. Sustainable business model innovation can result in the creation of a new business model, the updating of an existing business model, or the reconfiguration and integration of several business models. As a result, innovation provides a new value offer to consumers and creates a new value framework to support an organization's long-term success.

It is worth noting that business model innovation is an iterative process rather than a one-time occurrence. A sustainable business model innovation intends to add, upgrade, or rearrange various value generating aspects and resources. It is typical that stakeholders in sustainable business innovation are multifaceted. From innovation process perspective it could be considered that the process of sustainable innovation within a company is iterative and continuous. Business model innovation is important in a start up phase of a company while it is defining the contents and relationships of various core elements of doing business.

Transitioning towards more sustainable business models

Sustainable development can be integrated into business model innovation. A company's approach to do sustainable business necessitates an expansion from economic sustainability to social sustainability and ecological sustainability. The development of the design thinking component raises the complexity of the innovation process and places greater demands on the organization's collaboration and co-creation abilities to incorporate its partners.

A solid business model should be evaluated from the perspective of the customers, since they are the core component of business models and critical resources for the company's existence. Although business models do not have to be totally built with customers in mind, their perspectives should be incorporated into the innovation and assessment process.

Even if core elements of a more sustainable business model can be identified and defined the adoption within the firm nor among its customers does not necessarily take place immediately. Sustainability approach requires a long-term and determined transition towards more sustainable business practices. A widely used change management model ADKAR (Awareness, Desire, Knowledge, Ability, and Reinforcement) is an example of a phased approach to manage sustainable business model transition.



Quiz questions

1. What is the aim of sustainable business model innovation?

- A. Innovate new products
- B. Creating new or altering existing business models while considering sustainability perspective
- C. Develop Human Resources
- D. Improve profitability

2. Why sustainable models are important?

- A. Promoting sustainability in general
- B. Adapting company's business model to sustainable development
- C. Creating value for customers
- D. Increasing company's profitability

3. Why innovative business models are important?

- A. They increase competitive advantage of organizations while improving sustainability related performance
- B. They challenge to think out of the box
- C. They encourage companies to start new business areas
- D. They improve company's short-term profitability

4. What is not linked with sustainable business model?

- A. Creating value
- B. Capturing value
- C. Delivering value
- D. Destroying value

5. Sustainable business design is linked with ...

- A. Company's product offering
- B. Business strategy
- C. Business processes
- D. Human Resources

6. What guides sustainable business model design?

- A. Shareholder value creation
- B. Sustainability principles
- C. Company's growth objectives
- D. Customer profitability

7. Which describes essential value elements of a company?

- A. They deliver value
- B. They destroy value
- C. They multiply value
- D. They consume value

8. What is important is critical to the success of any business?

- A. Accounting
- B. Marketing
- C. Ability to communicate the connection and contents of value elements
- D. Leadership

9. Why a sustainable business model is important to a company?

- A. It improves growth
- B. It allows to support SDGs
- C. It brings new customers to a company
- D. It makes easier to recruit new personnel

10. Why are sustainable business models important?

- A. They renew company's business
- B. They decrease negative effects of business operations on the environment and society
- C. They make it easier for a company to grow
- D. They support short term growth of a company

11. What is not linked with circular economy relate business models?

- A. Delaying resource cycle
- B. Intensifying resource cycles
- C. Wasting resource cycles
- D. Narrowing resource cycles

12. Which is not among steps to create a sustainable business model?

- A. To create a value network
- B. To create sustainable value
- C. To merge with a competitor
- D. To establish a system of sustainable value flows

13. Which of these is not among main stakeholders within a sustainable business model?

- A. Climate
- B. Environment
- C. Government
- D. Society

14. Which of these is not a form of sustainable business model innovation

- A. Creation of a new business model
- B. Maintaining an existing business model
- C. Updating of an existing business model
- D. Reconfiguration of an existing business model

15. What is characteristic to sustainable business model innovation

- A. It is an interactive process
- B. It upgrades various value generating resources
- C. Involved stakeholders are multifaceted
- D. It seeks to improve short term profitability

Correct answers: 1. - B. / 2. - B. / 3. - A. / 4. - D. / 5. - B. / 6. - B. / 7. - A. / 8. - C. / 9. - B. / 10. - B. / 11. - C. / 12. - C. / 13. - C. / 14. - B. / 15. - D.

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Sustainable business model canvas



Sustainable business model canvas

This learning module consists of three submodules:

1. introduction to sustainable business model canvas,
2. elements of a sustainable business model canvas,
3. adapting sustainable business model canvas to an organization.

Introduction to sustainable business model canvas

While using the business model canvas the aim is to document and organize various assumptions regarding nine closely related building blocks. Later these building blocks are introduced individually as each element of a sustainable business model canvas is covered further.

There are several options to utilize a business model canvas. One alternative is to visualize and explain the current state of business model. Alternatively, it is possible to map out competitive position while considering what kind of business models company's competitors currently have, and whether there are any likely changes in their business models in foreseeable future.

In a start up environment business model canvas can be applied to design and document completely new business models.

Strengths of a business model canvas as a management tool are as follows:

It brings clarity to the existing business model or the potential business model that we would like to apply. Communicating the idea about the current or future business model to various stakeholders makes it possible to improve an existing business model further. One approach could be to apply it as a one-page business plan integrating various core elements of doing business.

While innovating a sustainable business model a business model canvas allows the company and potential innovation partners to apply it as a platform to collaborate on various ideas to improve overall sustainability on various perspectives.

Elements of a sustainable business model canvas

The following introduces the nine elements of a sustainable business model canvas as introduced by Joyce and Paquin (2016). Three types of aspects are considered among the elements: economic aspects (blue); environmental aspects (green); social aspects (yellow). This implies that various aspects related to sustainability can be considered while mapping out the various elements of a sustainable business model canvas described in Figure 1 below.

Figure 1: Sustainable Business Model Canvas



Source: based on Osterwalder & Pigneur (2010); modified by Joyce & Paquin (2016)

In the following each of the nine elements of sustainable business model canvas are introduced shortly.

- *Input-related stakeholders*

The input-related stakeholders element describes the stakeholders directly involved in the upstream phases of the company’s core activity. Direct engagement of stakeholders is critical for establishing a sustainable business model, since these stakeholders may provide a direct overview of their requirements and preferences, as well as recommend viable solutions for a company’s social, economic, and environmental challenges.

While input-related stakeholders are important, they are not considered core to the organization. A few examples of integrating the environmental dimension of the business model include water or energy consumed within the company (generally supplied by partners). The social dimension is dominated by relationships with stakeholders and local communities, namely, changes in local employment and other community-related aspects.

- *Activities*

The activities element of a sustainable business model canvas includes the key activities that are core to the organization. Sustainable activities are those that benefit the company while also contributing to the overall goal of sustainability. Corporate social responsibility initiatives, for example, can contribute to both of these goals, as well as actions that assure a waste-free manufacturing process and maximal waste treatment. From environmental perspective those activities that generate environmental impacts are listed. Such activities with social perspective like organizational structure can be listen under social dimension.

- *Resources*

The resources element in a sustainable business model canvas represents the key resources for a company's core activities. These key resources can be physical, financial, or human. Raw materials, manpower, technology, capital, and other resources are examples of sustainable resources. This covers the raw materials and equipment used in manufacturing. The human resources and their relationship with the company represent a resource with a social dimension of a sustainable business model canvas. From an environmental standpoint, those resources having an environmental impact are listed in a sustainable business model canvas. Sustainable resources could imply, from the perspective of the personnel, integrating an organizational culture based on sustainability values, incorporating clean raw materials, green energy, and other such sources for the company's processes and activities, which would reduce environmental burden while also contributing to the well-being of the consumers.

- *Value proposition*

A sustainable value proposition indicates a distinct offering from the competition that adds value to customers while also meeting with sustainability related principles. Companies must redesign their products or services, either to limit or eliminate waste, or to assure the recycling, treatment, or reintegration of waste in the manufacturing process or other processes or offerings. In practice this means that company's management must have an overview of the entire production-consumption-disposal-and-recycling process from the start of value proposition design to coordinate the entire process towards sustainability. A sustainable value proposition can also refer to the conversion of products into services that do not generate waste or produce as little waste as feasible.

- *Channels*

The channels element of a sustainable business model canvas informs how a company sells or delivers its product or service to its customers. This includes both distribution and sales channels. Sustainable distribution channels may be utilized to raise customer awareness of the company's value proposition as well as the company's sustainability activities. Online platforms or websites that sell digitalized products and services, can be considered sustainable distribution channels since they do not generate waste or, at the very least, produce less waste. As a result, if possible, the current tendency is to sell services rather than physical products. To build an appropriate and sustainable distribution channel, stakeholders must collaborate and participate themselves in order to reach the optimal results from their perspective while avoiding waste in the distribution process.

- *Output-related stakeholders*

Output-related stakeholders is closely related company's customers, but is a broader concept. This allows taking into account those stakeholders affected during the use and end of life cycle of a product or a service.

Various stakeholders, particularly customers or directly involved business partners should be viewed as direct and permanent partners and not external stakeholders. Environment including among other soil or climate can be considered as output-related stakeholders. From a social perspective, this element represents the stakeholders impacted by the business model, which include both end-users and the society involved in the downstream phases of the product's life cycle. The social perspective focuses on the impact of the organization on society, considering how certain actions can positively or negatively influence society.

Sustainable consideration of output-related stakeholders allows to maximize sales with an intention to maximize financial profitability. There should be an attempt to reduce excessive consumption and streamline the process between production and consumption to meet sustainability related objectives.

- *Output-related stakeholders relationships*

Sustainable output-related stakeholder relationships may have a shared objective to reach economic objectives while simultaneously reducing environmental consequences. One example could be to assure waste recycling.

While the economic dimension of output-related stakeholder relationships is often focused on the relationships with customers as output-related stakeholders and on the resources to achieve economic objectives. The environmental aspects of output-related stakeholder relationships could include green policies supporting ecology. When it comes to social aspects between company and society such activities as integrative practices among different countries, areas, or cultures while promoting sustainable consumption practices.

- *Burdens*

The burdens element relates to potential negative environmental, social, and economic impacts that are due to company's way of doing business. In a sustainable business model, a sustainable cost structure is an example of economic impacts of doing business. Companies must focus on cost reduction while also developing lasting value in order to have a sustainable cost structure. Producing goods in large quantities may be less sustainable than producing a single piece of a product since they frequently encourage bulk purchasing, excess inventories, and waste, as well as driving mass sales and overselling to customers at low prices.

- *Benefits*

The benefits can be considered as positive environmental, social, or economic outcomes which are generated by the company. The structure of sustainable income or revenue streams is a difficulty for most companies aiming to integrate sustainable business strategies. One option is to target recurring payments from consumers, such as subscriptions, as well as the long-term service of product maintenance, repair, and recycling at the end of the life cycle. In this structure, the product or service is provided continuously, creating revenue for the provider while simultaneously assuring the long-term maintenance and integration of old products and product components to reduce waste and environmental burden.

The difficulty with sustainable income and revenue streams is that it may require more work from the company. It is possible that in the beginning being sustainable actually costs more and reduces overall revenues, although these expenses decrease with time. In each sustainability perspective of analysis various aspects described above should be considered while analyzing and defining the potential benefits.



Quiz questions:

1. Which was not among the topics of the submodules of this learning module?

- A. Adapting business model canvas to an organization
- B. Introduction to sustainable business model canvas
- C. Outcomes of business model innovation
- D. Various elements of a sustainable business model canvas

2. Which is not a typical alternative to utilize a business model canvas?

- A. Map out competitive position
- B. Planning cash-flow of business operations
- C. Visualize and explain current state of business model
- D. Consider whether there are any likely changes in company's business model

3. Which of these is not among strengths of a business model canvas?

- A. It brings clarity to the existing business model
- B. It makes possible to improve an existing business model
- C. It can be applied as a collaboration platform among innovation partners
- D. It consumes lots of energy

4. How many elements there are in a sustainable business model canvas?

- A. 6
- B. 10
- C. 9
- D. 8

5. What does input-related stakeholder mean?

- A. It describes who is involved with in the upstream phases of the company's core activity
- B. They are core to the organization
- C. They have social inputs
- D. They input water to the system

6. How can sustainable activities be described?

- A. They deal with doing business in a sustainable way
- B. They keep activity level low
- C. They benefit the company but also contribute to the overall goal of sustainability
- D. They focus on environmental conservation

7. What is not among sustainable key resources?

- A. Human
- B. Physical
- C. Mental
- D. Financial

8. What is typical to a sustainable value proposition?

- A. It is highly competitive
- B. It adds value to customers and meets sustainably related principles
- C. It provides opportunities for cost savings
- D. It adds value to potential competitors

9. What is crucial in the channels element of a business model canvas?

- A. Channels open new avenues of doing business
- B. It informs how products are sold or delivered to customers
- C. It channels web traffic to company's server
- D. It minimizes time to market

10. Output-related stakeholders does not include?

- A. Customers
- B. Owners
- C. Directly involved business partners
- D. Soil

11. What does not describe an output-related stakeholder relationship?

- A. Environmental aspects
- B. Social aspects
- C. Archeology related aspects
- D. Economic aspects

12. What can be considered as an example of a burden in a sustainable business model?

- A. A non-sustainable cost structure
- B. Energy savings
- C. Social interaction
- D. Cost reduction

13. What is not a benefit generated by a company?

- A. Social outcome
- B. Economic outcome
- C. Environmental outcome
- D. Cultural outcome

14. What could be an example activity to adapt a sustainable business model canvas to an organization?

- A. To assume that everything will be fine
- B. To release a business model canvas template that can applied within a company
- C. To run faster
- D. To rise prices for company's customers

15. Why it is important to communicate an existing business model?

- A. It allows improving an existing business model
- B. Communication itself is always important
- C. Business can not be managed without a business model canvas
- D. It informs customers about company's future products

Correct answers: 1. - C. / 2. - B. / 3. - D. / 4. - C. / 5. - A. / 6. - C. / 7. - C. / 8. - B. / 9. - B. / 10. - B. / 11. - C. / 12. - A. / 13. - D. / 14. - B. / 15. - A.

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Module 18

Sustainable investment



Sustainable investment

Social and environmental change is happening faster than ever. Global warming and the technology revolution are reshaping our planet. In this fast changing world, there are a growing number of investors who want to understand how social and environmental change is affecting their investments and how the way they invest affects the society and environment. Sustainable investing involves considering more than just traditional financial analysis though. Sustainable investing, also known as ESG investing or socially responsible investing, is the process of incorporating environmental, social and governance factors into investment decisions (EY Global, 2020). More specifically, sustainable investing is a means of investing in which an investor strongly considers environmental, social, and governance (ESG) factors before contributing resources and money to venture or a particular company (VentureXchange, 2022). Individuals who invest sustainably choose to invest in organizations, companies and funds with the purpose of generating measurable environmental and social impact alongside a financial return (Berry, T.C. and Junkus, J.C.,2013).

The idea is that those actively preparing themselves for future opportunities and risks by recognizing their environmental and social impact will have better long-term prospects than those that don't. Their competence to generate sustainable financial returns should therefore be superior to those that take a shorter term view (Schroders, 2020). Also, the issue of sustainable investing has multiple aspects, all of which need to be considered if sustainability is to be guaranteed. Impacts are spread across different sectors, from climate change and renewable energy, to safety, health and community development. In other words, sustainable investing ensures that firms aren't judged solely on short-term financial gains but on a broader picture of what and how they contribute to society at large (Harvard Business School, 2022). Also, at the start of 2020, global sustainable investment reached USD 35.3 trillion in the five major markets including Europe, United States, Canada, Australasia and Japan, a 15% increase in the past two years (2018-2020) and 55% increase in the past four years (2016-2020) (Global Sustainable Investment Alliance (GSIA), 2019). In summary, sustainable investing is about generating returns that are sustainable into the future.

The importance of sustainable investment

It is clear that we are facing enormous challenges in the area of climate change and also from an economic and social perspective. In order to successfully tackle these issues, companies and governments will need to make drastic measures in the way they operate, and investors have the authority to influence how they do this. From the largest asset manager to the smallest individual investor they can decide to support sustainable enterprise. An increasing number of people no longer select investments based solely on their ability to generate financial returns.

They want sustainable solutions that do no harm, reflect their values and that make a contribution to the things they consider important. This basic shift in demand encourage the growth of sustainable investing. The range of products on offer is also expanding, giving investors an option as to the extent of positive impact they make (GWM Asset Management, 2022).

Sustainable investing directs investment potential to the companies that combat climate change, while promoting corporate responsibility. Consequently, over the last few years there has been a growing number of voices which have stressed the significance of incorporating sustainability into the investment process. With rapidly growing interest from investors, it has become clear that there is an urgent need to better define the financial characteristics of this new investing paradigm, especially concerning performance. Indeed, this was arguably the most important barrier for institutional players who were concerned about breaching their fiduciary duty when integrating sustainability principles in their investment decisions. However, the numerous studies published to date have largely dispelled the myth about the trade-off between financial performance and impact (Friede, Busch, & Bassen, 2015).

Further, companies with good ESG performance incline to have better corporate governance, and hence the advantage of long-term sustainability, so it seems clear that ESG sustainable companies and brands are notably more likely to be well placed to seize long term opportunities in the future. In other words, sustainable investing is important not only because of helping shape the world by contributing to positive social change, but it's proven that both businesses and individuals can benefit financially by seeking to make their companies and investments more sustainable (Harvard Business School, 2022). Simply said, sustainable investing is important because it can help contribute to a better world.

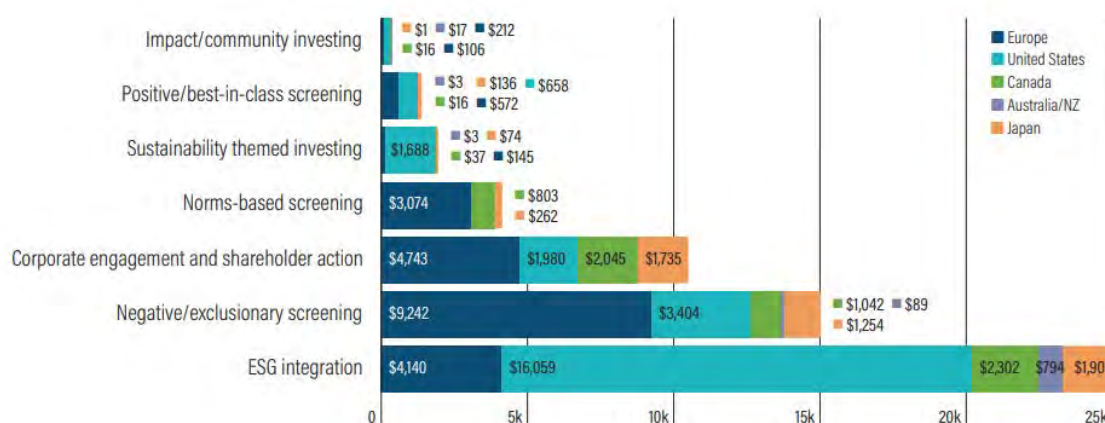
Sustainable investing strategies

A sustainable investing strategy is any method of investing that considers an investment's impact in addition to its financial return. A few strategies can be continued when it comes to investing sustainably. First of all, avoiding investing in industries or companies which conflict with moral values. For example, people who care a lot about global warming may choose not to invest in gas and oil companies, while those concerned with health may choose not to invest in tobacco companies. Individuals that are concerned with global warming may instead choose to invest in the clean energy sector. While individual investors may perform a basic initial analysis of companies, fund managers or professional analysts will often rate exchange-traded funds (ETFs), stocks and mutual funds by their ESG scores (Jackson, E.T., 2013).

Further, the largest sustainable investment strategy globally is ESG integration, as shown in Figure 1, with a combined USD25.2 trillion in assets under management employing an ESG integration approach, also being the most commonly reported strategy in most regions. The next most commonly deployed sustainable investment strategies include negative/exclusionary screening (USD15.9 trillion) followed by corporate engagement/shareholder action (USD10.5

trillion). This result shows a change from 2018 when negative/exclusionary screening was reported as the most popular sustainable investment strategy. Also, the United States and Europe continued to represent more than 80% of global sustainable investing assets during 2018 to 2020. The proportions of global sustainable investing assets in Canada (7%), Japan (8%) and Australasia (3%) have remained relatively unchanged over the past two years (Global Sustainable Investment Alliance (GSIA), 2020).

Fig. 1: Sustainable investing assets by strategy & region 2020



Source: Global Sustainable Investment Alliance (GSIA), 2020

ESG factors

Environmental, social, and governance (ESG) criteria represent a set of principles for a company’s operations that socially conscious investors use to screen potential investments. Environmental criteria take into account how a company performs as a steward of nature. Social criteria investigate how it manages relationships with customers, suppliers, employees and the communities where it operates. Governance criteria deals with a company’s leadership, internal controls, audits, executive pay and shareholder rights (Corporate Governance Institute, 2021).

More specific, an ESG score typically consists of:

- *Environmental*

This category considers the impact a company has on the environment, such as its waste, treatment of animals, carbon footprint, pollution, natural resource conservation, water use and conservation and clean technology it creates and uses in its supply chain or its compliance with government environmental regulations. This criteria can also help assess any environmental risks a company might face and how the company is managing those risks.

- *Social*

This category analyzes the company's business relationships. In other words, this refers to the social impact an individual company or fund has within society and how it advocates for change within the wider community and social good. Analysts look closely at a company's participation and stances on social issues such as community engagement, human rights and the health and safety of its employees and board members.

- *Governance*

About governance, investors may want to know that a company uses transparent and correct accounting methods and that stockholders are allowed to vote on important issues. Plus, governance encompasses reviewing the quality of management and the board, shareholder rights, executive compensation and diversity, overall transparency and revealing, anti-corruption, and even corporate political contributions (Corporate Governance Institute, 2021).

Sustainable investors

Sustainable investors include individuals, including average retail investors to very high net worth individuals and family offices, as well as institutions, such as religious institutions, nonprofit organization and so on. There are numerous of investment management firms that offer sustainable investment funds and vehicles for these investors.

More specific, investments managed by professional asset managers are often classified as either institutional or retail. On the one hand, retail assets are personal investments by individuals in professionally managed funds purchased in banks or through investment platforms with relatively low minimum investment levels. On the other hand, institutional assets are managed on behalf of institutional asset owners such as universities, pension funds, foundations and insurers through investment products with higher minimum investment levels (International Institute for Sustainable Development, 2020).

Even though investors within each group can be quite diverse, it is still probable to identify a common set of drivers behind their interest in sustainable investing:

PRIVATE INVESTORS

- Demand for investments in line with their moral and personal values

INSTITUTIONAL INVESTORS

- Demand from their components to integrate sustainability considerations
- Policy risk—new regulations addressing ESG concerns
- Better understanding of how to price ESG and climate-related risks and therefore better consciousness about their financial materiality

The future of sustainable investing

Sustainable investing has undergone a number of phases during its development. Each of these have contributed methodologies and tools that sustainability focused investors still use today. The most important there has been a shift from a moral or ethical assessment of business activities to the integration of financially material environmental, social and governance opportunities and risks (Lazard Asset Management, 2020). Adapting to a sustainable investment environment will be a challenge for firms and will claim changes to the existing technology, culture and processes. Therefore, it is decisive to recognize that progress in this area can vary notably across different jurisdictions and geographies.

For sustainable investing to become mainstream, financial professionals need to have the necessary skills and understanding of how to merge ESG considerations in their investment decisions and when advising clients. In addition, any financial institution that tends to provide services in this area needs to have mandatory ESG training for relevant staff. This would enable front-office employees, such as investment advisors, to raise awareness about this new way of investing by talking about it in relevant events and to educate their own clients. ESG training would also be fundamental for middle and back-office staff responsible for reporting, risk management and sustainability-related disclosures.

However, if the key drivers discussed earlier can create the expected demand, and if there is a preparedness from market participants to transmute the traditional way of doing finance, it is only a matter of time (International Institute for Sustainable Development, 2022).

As ESG-minded business practices gain more attention, investment firms are increasingly tracking their results. Financial services companies such as and Goldman Sachs (GS), JPMorgan Chase (JPM) and Wells Fargo (WFC) have published annual reports that comprehensively review their bottom-line results and ESG approaches (DSI Insights, 2022). Indeed, sustainable investing presents the future of finance. Certainly, there is still a lot of progress to be made before it becomes truly mainstream.



Quiz questions:

1. Process of incorporating environmental, social and governance factors into investment decisions is:

- A. sustainable investing
- B. sustainable development
- C. A and B
- D. none of the above

2. At the start of 2020, global sustainable investment reached:

- A. USD35.3 trillion
- B. USD53.3 trillion
- C. USD55.3 trillion
- D. USD35.5 trillion

3. At the start of 2020, global sustainable investment reached trillions in the five major markets including:

- A. United States, Canada, Austria, Australasia and Japan
- B. Europe, United States, Canada, Australasia and Japan
- C. Europe, United Kingdom, Canada, Australasia and Japan
- D. Europe, United States, Canada, Australasia and China

4. Any method of investing that considers an investment's impact in addition to its financial return is:

- A. a social media strategy
- B. a sustainable investing strategy
- C. marketing strategy
- D. all of the above

5. People who care a lot about global warming may choose:

- A. to invest in oil companies
- B. to invest in renewable energy industry
- C. to invest in the clean energy sector
- D. B and C

6. The largest sustainable investment strategy globally is:

- A. technology integration
- B. ERP integration
- C. ESG integration
- D. all of the above

7. The next most commonly deployed sustainable investment strategies include:

- A. negative screening
- B. exclusionary screening
- C. A and B
- D. none of the above

8. Countries that continued to represent more than 80% of global sustainable investing assets during 2018 to 2020 are:

- A. The United States and Europe
- B. Japan and Europe
- C. The United States and Japan
- D. Japan and Australasia

9. Criteria that investigate how to manage relationships with customers, suppliers, employees and the communities where it operates:

- A. environmental
- B. social
- C. governance
- D. A and B

10. This category take a look at the company's business relationships:

- A. social
- B. social and governance
- C. social and environmental
- D. none of the above

11. Demand for investments in line with their moral and personal values is specific for:

- A. institutional investors
- B. private investors
- C. A and B
- D. banks

12. This category considers the impact a company has on the carbon footprint:

- A. governance
- B. social and environmental
- C. environmental
- D. A and C

13. Criteria by which investors may want to know that a company uses transparent and correct accounting methods:

- A. governance
- B. social
- C. environmental
- D. all of the above

14. Policy risk is specific for:

- A. private investors
- B. angel investors
- C. institutional investors
- D. none of the above

15. The proportions of global sustainable investing assets have remained relatively unchanged over the past two years in next 3 countries:

- A. Canada (8%), Japan (7%) and Australasia (3%)
- B. Japan (7%), Japan (7%) and Australasia (3%)
- C. Canada (3%), Japan (8%) and Australasia (8%)
- D. Canada (7%), Japan (8%) and Australasia (3%)

Correct answers: 1. - A. / 2. - A. / 3. - B. / 4. - B. / 5. - D. / 6. - C. / 7. - C. / 8. - A. / 9. - B. / 10. - A. / 11. - B. / 12. - C. / 13. - A. / 14. - C. / 15. - D.

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