

PR1- A2: Consultant Training Toolkit

Chapter no.:6 PART A

Partner:

***GrantXpert, FPIMM Brasov,
StoryTellMe***

Contents

<i>1.0 Information about Chapter</i>	3
<i>2.0 Information about each individual subchapter</i>	6
<i>3.0 Detailed Instructions for the trainer</i>	17
<i>4.0 References</i>	18

1.0 Information about Chapter

Chapter's title: Digital and Green: economic sustainability depends on environmental sustainability: basics of sustainability and eco-friendliness planning

Duration: 5 hours

Short introduction to the chapter:

SMEs compose approximately 99% of all businesses in the EU. Therefore, they are a significant partner of the EU economy since they assist to steer the economy towards a circular model. The past few years, representatives from the European institutions, SME associations and SMEs, standardisation organisations, as well as other key stakeholders at national and European level make efforts to identify the different aspects of how the SMEs can contribute to the implementation of the European Green Deal?

An increasing awareness of the need to involve SMEs in the development of standards to achieve the objectives of the digital and green transitions can be seen. The updated Industrial strategy has announced the publication of a standardisation strategy for Q3 of this year. This strategy should fully consider the needs of SMEs and help to strengthen the European standardisation system to make SMEs more competitive and support the twin transition^{1,2,3,4}.

However, SMEs do not always have a strong voice in the standardisation process which may lead to standards not meeting SMEs' needs or even placing disproportionate burdens on them. Therefore, more resources should be dedicated to the development of practical guides to facilitate their uptake. In this framework, the work of Small Business Standards is important to make sure the interests of SMEs are represented in the standardisation process^{5,6,7,8}.

This chapter aims to familiarize the learners with the current policies of the EU related to SMEs transition to a more sustainable and greener environment including digitalization. Aside from these, this chapter focuses on the financial aids provided to the SMEs by the EU promoting their transition to a greener, more environmentally friendly status. The chapter focuses on different business models and how these can be applied to SMEs in order to provide them with a smooth transition to the green, circular and sustainable scope of EU while it explores the general landscape of green and sustainable SMEs across Europe and explores good practises¹⁻⁸.

Methods of instructions:

This module is going to utilize a ppt presentation as a method of instruction. Learners will be able to go through slides with information on the topic and be guided to specific useful links with further information and videos related to the topics covered.

Prerequisites of the students:

No basic knowledge is required by the learners, however a basic knowledge on terms such as business models, business plan etc is suggested.

Learning aims and Objectives:

The main aims and objectives of this module focus on:

- Helping learners understand the support system provided to the SMEs by the EU in order to become green, digital and sustainable.
- Providing all available information of the funding opportunities provided by the EU for the SMEs that want to acquire a green and sustainable mentality and business model.
- Informing the learners what options they have in terms of financing through EU or at national level, in relation to their green and sustainable advancement.
- Exploring the available support options that the EU provides to different SMEs in terms of organisation, promotion, help, communication and market access.

Learning Outcomes Covered:

After completion of this module, the learners will be able to:

- Find all the support bodies and schemes provided by the EU for SMEs that want to go green and sustainable
- Understand how and when they can apply for funding for their company.
- Acquire knowledge of the major funding bodies from EU that are related to green and sustainable transition of SMEs
- Learn the different types of funding provision available from EU
- Acquire knowledge about the support system for SMEs in Europe
- Understand how they can utilize the bodies and schemes provided by the EU in order to promote their businesses in a more sustainable and greener environment.

Skills and Competences:

Skills:

training about support funds, having a support network, funding availability, case studies, basic training on how to transform your business based on EU sustainable and green environment

The transferable skills related to this chapter aim to upskill and reskill SMEs employees, managers and adults with no specialized education on the matter in an attempt to facilitate employment, enhance SMEs through information on funding, networking and support systems provided by the EU in an effort to become greener and more sustainable. This information will facilitate the knowledge of learners in an attempt to be able to find out about all the support systems provided by the EU, the finding opportunities and schemes in order to transform their company and become green and sustainable. The knowledge provided in this chapter also aims to support SMEs to be able to build a more sustainable and green business model, learn about the benefits of turning green for the employees, employers and the company and study numerous good practices from other SMEs who have already made these transitions.

Competences:

promote sustainability, measure company's sustainability performance, advise on corporate social responsibility, green bonds, advise on sustainability solutions, adopt ways to reduce negative impact of consumption, circular economy, bioeconomy, green bonds, inform on government funding, apply for government funding, funding methods, find grants, apply for research funding, microfinance, check grant applications, identify support mechanisms to develop your professional practice, organise supporters, find supporters, motivate supporters, decision support systems, utilise decision support system, expand the network of providers, network management system tools, develop professional network, network with store owners, implement a virtual network⁶

2.0 Information about each individual subchapter

Subchapter title: **Introduction - What is sustainability, circular economy and green economy?**

Short introduction to the subchapter:

In the conditions of a consumer society, such as the current society, in which planetary resources are intensively exploited and industrial quantities of waste are produced, the concept of sustainable development has gained new valances, speaking of sustainability, circular economy and green economy.

The subject is important at a general social level, at an entrepreneurial and individual level, the goal being the need to understand the concept of circular economy and the need to promote it as a fundamental paradigm for future behavioral models, which are rethought from the perspective of a real stop to environmental degradation.



Adapted from:

<https://fuse.education.vic.gov.au/Resource/LandingPage?ObjectId=d1686333-aa4c-4475-95c0-d69ec612aa8c>

In recent years, after various debates and research studies, the concept of "circular economy" has been launched, aiming to restructure the linear "take-product-dispose" model in order to reduce the impact of human activity on the environment.

To achieve this objective, the circular economy proposes a set of measures aimed at preventing the spread of waste and facilitating their recycling processes.

The basic idea behind a circular economy is to propose a regenerative production model in which products and their components are reused multiple times.

"This gradual but irreversible transition towards a sustainable economic system is

an indispensable part of the EU's new industrial strategy."

Just as any human behavior can be framed in a certain social, personal or practical quality or competence for oneself and for society, and just as these competences must be adapted to the changes that have occurred during the development of society and their correlation to the new legislation that has been introduced, it is essential to identify those learning objectives that lead to these new competences required by the new directions of action for the implementation of the circular economy.

A circular economy would require technical skills which are currently not present in the workforce. Skills would for instance enable businesses to design products with circularity in mind, and to engage in reuse, refurbishment and recycling.

Missing technical skills could be particularly problematic for SMEs.

On the other hand, a circular economy would require systemic shifts in consumer behaviour and business models, with implications for everyday behaviour, in terms of waste sorting and food waste for instance.

What is circular economy, green economy and sustainability

The circular economy is an economic model based inter alia on sharing, leasing, reuse, repair, refurbishment and recycling, in an (almost) closed loop, which aims to retain the highest utility and value of products, components and materials at all times.

This extends the life cycle of products.

In practice, it means minimizing waste. When a product reaches the end of its life cycle, the materials from which it is made are kept in the economy as long as possible. They can be used in production again and again, creating even more added value.

It's an approach that differs radically from the traditional, linear, "use-produce-consume-throw-away" economic model. This traditional model relies on large quantities of cheap and easily accessible materials and energy.

The green economy results in improved welfare and social equity, while significantly reducing environmental risks and ecological deficits.

The transition to a green economy means policies and investments that will decouple economic growth from growth in current intensive consumption of raw materials and energy.

The green economy is roughly a synonym for the circular economy, with the circular economy being a term used at EU level, while at global level, according to the United Nations Environment Programme, the term used is the green economy, which however has a broader framework of manifestation.

Karl Burkart defines a green economy as being based on six main sectors:

1. Renewable energy (solar, wind, etc.);
2. Green buildings (e.g. LEED - Leadership in Energy and Environmental Design);
3. Alternative fuels (electric vehicles, hybrids or alternative fuels);
4. Water management (water treatment, rainwater harvesting systems, etc.);
5. Waste management (recycling, disposal, etc.);
6. Land management (including organic farming, habitat conservation, urban-park afforestation, reforestation and land stabilisation).

Sustainability or sustainable development is the ability to exist and develop without depleting natural resources for the future.

The United Nations defined sustainable development in the Brundtland Report as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It assumes that resources are finite and should therefore be used conservatively and

carefully to ensure that there are enough for future generations without diminishing the quality of life today.



Adapted from: <https://www.aexcelcorp.com/blog/eco-friendly-traffic-paint/5-ways-to-establish-a-culture-of-sustainability>

A sustainable society must be socially responsible, focusing on environmental protection and dynamic balance in human and natural systems.

The concept of sustainability is made up of three pillars: environmental, economic and social - also informally known as planet, profit and people.

The circular economy/green economy falls under one of the pillars of sustainability, being those economic models that support socially sustainable development in dynamic balance between human and natural systems.

Why we need to move to a circular economy

At the present time, humanity has realized that it is not enough to simply take note of what it has observed for many years, but for which no real and sustainable enforcement measures have been taken. If we continue in the same style in which the natural resources of the planet we live on have been used, if we continue to load it with huge amounts of waste of all kinds, if we continue to increase CO₂ emissions and related pollution, the future looks very bleak, in which economic collapse and degradation of the quality of human life are inevitable.

That is why economic, social and environmental solutions are needed to sustain the use of the Earth's finite resources in a responsible and conservative way to reduce the adverse effects that can negatively influence the environment.

Also, as the world's population grows and with it the demand for raw materials, but the available quantity of essential raw materials is limited, the only economic solution is the circular economy.

Thus, it is necessary to move towards the circular economy, which has many advantages in the short term, but especially in the long term, among which can be mentioned:

- reducing total annual greenhouse gas emissions, which are responsible for the rise in global temperatures (production of everyday materials currently generates 45% of CO₂ emissions in the EU),
- reducing pressure on the environment by reducing the amount of waste produced,
- greater security of supply of raw materials,
- increased competitiveness,
- stimulating innovation,
- stimulating economic growth (by an additional 0.5% of GDP),
- job creation (by 2030, the number of jobs in the EU alone is expected to increase by 700,000),

- consumers will also benefit from more sustainable and innovative products, which will contribute to a better quality of life and save them money in the long term,
- increase quality of life in general, globally, not only for people, but also for land and sea life,
- development of smart cities

The challenges of a circular economy

It is true that the change in the way the economy should "turn" towards a circular economy is not without its challenges, but the advantages and opportunities attracted by the new system of thinking along the route raw materials - production - consumption - reintroduction into the economic circuit are much more important than the barriers that currently exist.

The main challenges we will have to face include:

- **Finance** - moving to the circular economy involves considerable costs. For businesses, especially small and medium-sized enterprises (SMEs), the cost of innovation and green business models is seen as one of the main barriers to adopting more sustainable practices. The lack of adequate financial instruments for mass market development of radical innovations is also seen as a problem.
- **Lack of key economic enablers** - these are those intermediate pathways that support the shift to the circular economy, such as: pricing systems that encourage resource efficient re-use and reflect full environmental costs; incentives for producers and recyclers to work together to improve performance within and along specific value chains; and markets for secondary raw materials.
- **Lack of skills needed for a circular economy** - today's workforce has little or no technical skills to facilitate the transition to a circular economy. These technical skills include, for example, the personal ability to think about and implement concrete ways of reusing, refurbishing and recycling products. Lack of these technical skills could be particularly problematic for SMEs.
- **Consumer behaviour and business models** - the circular economy requires changes in consumer behaviour and business models to reduce material waste (including food waste) and waste minimisation, including waste sorting and re-packaging - reuse at another level. Businesses and consumers have little knowledge of the potential benefits of a circular economy and tend to be reluctant (reluctant) to adopt new business models (e.g. renting instead of owning).

- **Multi-level governance** - action is needed at many levels (e.g. international, European, national, local, business and individual) and in many policy areas. External trade issues and existing EU policies such as the internal market should be taken into account.

Business benefits of the circular economy and sustainability

More and more entrepreneurs are looking for sustainable business ideas and adaptation to the circular economy, as they have realized that they can lead to business success.

Studies in recent years have shown that companies that meet environmental and social parameters in their business (a company's carbon footprint, community development efforts, water use, staff diversity and more), have improved financial performance, less debt and attract investors. Thus, "doing well" can have a direct impact on a company "doing well".

Practically, adapting to the circular economy brings many benefits to a business, including:

- avoiding repetitive work and focusing on innovative aspects of the business
- efficient management of stocks and raw materials used
- reduction of waste and the possibility of reintegrating some waste into the production cycle
- increasing productivity
- increased competitiveness
- increasing profit
- stimulating the economic growth of the business
- improving working conditions
- increased visibility for early loss prevention
- effective control over the business
- emergence of new professions

Companies have realized that it is more beneficial to pay close attention to their intentions before looking only at profit, if they want to maintain their long-term stability and financial health.

What the EU is doing to become a circular economy

Parliament called for EU and national targets to increase resource efficiency by 30% by 2030 compared to 2014 levels, and for a 'dashboard' of indicators to measure various aspects of resource consumption.

It also requested a review of eco-design legislation and relevant product-policy legislation, to gradually include mandatory resource efficiency requirements, measures promoting the development of markets for secondary raw materials, compulsory green public procurement, and mobilisation of EU funds for resource efficiency.

Parliament also pointed out that education and training policies would have to take into account the 'green skills' needed in the shift towards a circular economy.

On 2 December 2015, the European Commission presented its new circular economy package containing a communication (action plan for the circular economy, together with a list of measures in annex) and four legislative proposals on EU waste policy.

These four proposals relate to:

1. the Waste Framework Directive (2008/98/EC);
2. the Landfill Directive (1999/31/EC);
3. the Packaging and Packaging Waste Directive (1994/62/EC);
4. the Directives on end-of-life vehicles (2000/53/EC), on batteries and accumulators and waste batteries and accumulators (2006/66/EC), and on waste electrical and electronic equipment (2012/19/EU).

The action plan for the circular economy aims to "close the loop" by complementing the measures contained in the legislative proposals and to contribute to meeting the United Nations "Sustainable Development Goals" (SDG) adopted in 2015, in particular Goal 12 on sustainable consumption and production.

The Commission has also adopted an Ecodesign and Energy Labeling Roadmap for the period 2022-2024 to cover new energy-using products and to update and raise the level of ambition for products that are already regulated, as a transitional measure until the new Regulation enters into force. The work plan addresses in particular consumer electronics products (smart phones, tablets, solar panels), which represent the fastest growing waste stream.

Subchapter title: **6.3 Sustainable and Circular business models**

Sustainable and Circular business models

An organization's circular business model is a way to create, offer, and deliver value to its broadest range of stakeholders while minimizing environmental and social costs. Circular companies today are more focused on creating value for their customers and shareholders through innovative and efficient business practices. Instead of working on redesigning and restructuring product service systems from the top down, they focus on developing and implementing bottom-up service systems that will ensure the future viability and competitiveness of the business.

Circular companies are deeply involved in the product use phase and generate revenue by providing services rather than selling physical products. A shift to a circular business model is a necessary step for a company to focus on its customers and provide the best possible customer experience. The identified circular business model can be used to implement the idea of circularity on a practical level. There are some key elements that are essential for a successful business model that includes the use of a circular economy.

These include:

Reducing waste



Using recycled materials



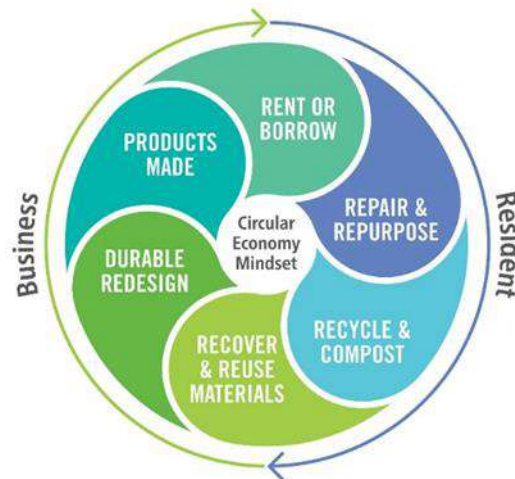
Using sustainable practices

There are no specific boundaries between different groups of people, but each has unique characteristics that make them stand out. Companies can use these features to achieve massive natural resource productivity by using a combination of them.

Circular economy

The circular economy is a model of sustainable production and consumption that involves sharing, renting, reusing, repairing, refurbishing, and recycling materials and products for as long as possible. So, the life span of products is prolonged. In practice, this means reducing the amount of waste that is produced. When a product is no longer useful, it is discarded according to the laws of supply and demand. These products can be used repeatedly to create more value. It's a way of life focused on waste prevention and the reuse and recycling of materials.

This new economic model is different from the traditional one. This model relies on many cheap and easily accessible resources and energy. In addition, it is predicted that part of this model will become obsolete and be replaced by a newer model within a few years.



Source: York Region

In a circular economy, growth is not based on the consumption of finite resources, but rather on the reuse and recycling of those resources. This course defines the concept of an economy and explores the different dimensions of an economy, including the difference between a biological and technical economy, the different opportunities to keep materials and products in use, and the history of ideas about an economy. The benefits of moving from a linear economy to a circular economy are emphasized. A society that is designed to be healthy and regenerative. A circular economy means that economic activity builds and rebuilds the overall health of the system by recycling and reusing materials and resources more often. The concept recognizes the importance of the economy working at all scales. This includes large and small businesses, organizations, and individuals, globally and locally.

Products are designed to be reused or recycled as often as possible. This helps reduce emissions from traditional manufacturing and transportation. The ultimate goal is to preserve and enhance natural capital by controlling finite stocks and balancing renewable resource flows.

The European Parliament has called for measures to solve this problem. Measures such as waste prevention, eco-design, and reuse can save companies money while reducing their total annual greenhouse gas emissions. The production of materials we use every day produces 45% of CO2 emissions. If we move towards a more circular economy, we can save a lot of energy, reduce pressure on the environment, improve the security of the supply of raw materials, increase competitiveness, stimulate innovation, and increase economic growth. Jobs could also be created in the EU by 2030. Consumers will benefit from more durable and innovative products that will make their lives easier and save money in the long term.

Governments want to reduce waste. In Europe, municipal waste recycling (40% of all waste) was 47% in 2019. The target is 60% by 2025 and 65% by 2030, along with the goal of reducing landfill to less than 10% by 2035 from 24% in 2019. One of the key drivers has been the use of an expanded producer responsibility regulation (EPR), in which producers are responsible for the environmental impacts of their products when they become waste. There are more than 400 EPR systems (source: OECD) in operation worldwide, with the majority related to electronic and electrical equipment, packaging,

tires or batteries. In Europe, over 87% of cars were recycled in 2018, but less than 50% of electronic equipment (source: Eurostat).

Key strategy elements

There has been a fundamental shift in the way companies operate in recent years, and this shift requires a different way of thinking and doing business. This circular business model typology offers opportunities to implement the idea of circularity on a practical level. The companies briefly described do not necessarily present new strategies for complete business models, but rather key elements that contribute to a circular activity. There are no boundaries between the different types, but there are definitely differences between them. There are many ways to use them to achieve massive natural resource productivity.



Circular supplies



*Access and
performance*



Extending product value



Bridging

Circular supplies

The company is based on the availability of renewable, recyclable or biodegradable resources that support circular systems of production and consumption. The product focuses on providing a substitute for critical, scarring materials that are harmful to the environment.

Access and performance

Access and performance are important to provide the capability or services needed to satisfy user needs without having to purchase or use physical products. The value proposition for the company is to offer a combination of products and services that seek to provide customers with a functional solution.

Extending product value

The company focuses on exploiting the residual value of products and providing high-quality, long-lasting products that are supported by design for durability, repairability, upgradeability, and modularity. Values that would otherwise be lost through waste of materials are maintained or even improved through repair, modernization, refurbishment, remanufacturing, or remarketing of the product.

Bridging

It encourages collaboration among producers and consumers, either individuals or organizations. The value proposition is about enabling people to interact and work together to meet the needs of both supply and demand.

The Circular Business Model

It's easy to see why more and more manufacturing companies are talking about what is often called the circular economy - where companies create supply chains that recover or recycle the resources used to create their products.

But creating a circular business model is challenging and taking the wrong approach can be costly.

Three Strategies for Circularity

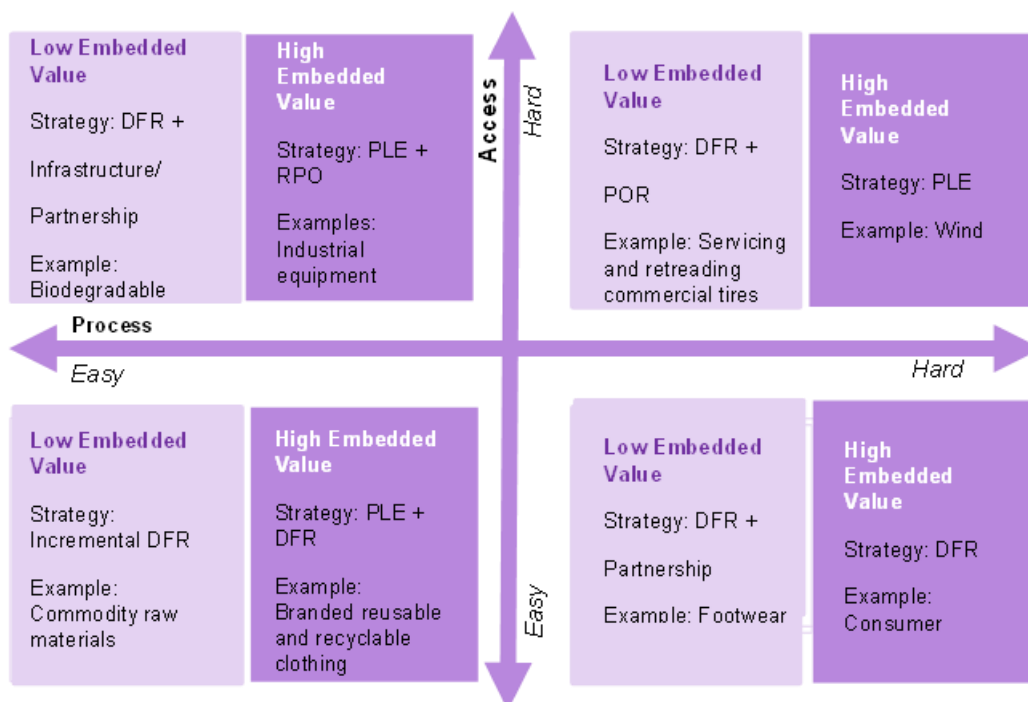
Retain product ownership (RPO). In the classic version of this approach, the producer rents or leases his product to the customer instead of selling it. Thus, the producer is responsible for the products when consumers are done with them.

Product life extension (PLE). Companies applying this strategy focus on designing products to last longer, which can open up possibilities for used product markets.

Design for Recycling (DFR). Companies that apply this strategy redesign their products and manufacturing processes to maximize the recoverability of the materials involved for use in new products.

The Circularity Matrix

For companies seeking to make a circular business model for their products, the right model will involve one or more of three basic strategies: retaining product ownership (RPO), product life extension (PLE), and design for recycling (DFR). The right strategy for recovering a product is based on how easily the manufacturer can get it back and how much value can be extracted from it. Each company faces different challenges along each dimension depending on its abilities and competitive environment. Changes in the company's abilities and competitive environment can affect which challenges it faces.



Source: Harvard Business Review

Five Elements for a sustainable business models

Diversity

The company needs to find ways to bring in a diverse set of resources, people, and investments so that they are better prepared for possible challenges or disruptions. A single line of business, a single source of income, or people sharing the same interest can expose a company to greater risks. There is no longer a "safe" way for companies to limit themselves to knitting. This trend is slowly dying as people are learning more about creating their own clothes and having more fun learning new things.

Modularity

In a matrix organization, knowledge flows are usually facilitated by the modularity of the organization. However, these organizations are not only resource-intensive, but they also put the entire organization at risk, causing wide repercussions. Organizations need to be more independent and focus on modularity (keeping functions separate) so that they are not affected by shocks.

Openness

Companies that are open and responsive to the outside world will be able to thrive in today's environment. These companies are concerned about future problems. They are constantly monitoring the outside world and projecting possible future scenarios. People expect to be able to help shape their potential futures and also help deal with the present. The link between the organization and the outside business is important and can be easily changed or adapted to meet the needs of the outside business.

Slack resources

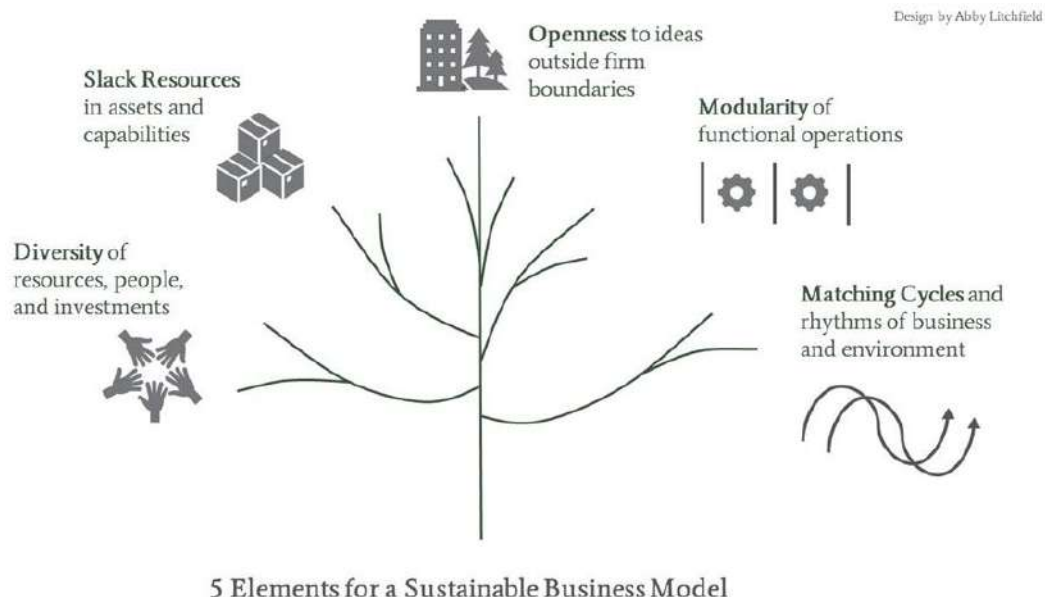
In an era of just-in-time production, it is often seen as a waste to have free or spare resources. Despite the challenges, innovation and adaptation require financial and creative investments, as well as room to change direction. Companies that may face storms should give themselves some time to adjust to new ideas, scenarios, and changes in thinking. It is always important to have sufficient resources to fuel a sustainable business model.

Matching cycles

Companies often think about optimizing performance and getting more out of less. Companies are on a treadmill where they are doing the same thing over and over again, and this is causing them to face resource constraints. Resilient companies don't think about constant growth, but about cyclical processes: up and down cycles, production cycles, and consumer buying pattern cycles. By

understanding the rhythms of business and the environment, a company can better synchronize with them and not overdo what is likely to be just one cycle.

Source: Network for Business Sustainability



Subchapter title: **References**

Short introduction to the subchapter:

References and bibliography related to the subject of the chapter.

3.0 Detailed Instructions for the trainer

Chapter 6

Step 1: Trainer must first become familiar with the introduction, aims and objectives and learning outcomes of the chapter

Step 2: Trainer must teach the ppt file related to the topic of Chapter 6

Step 3: At the end of the presentation, trainer must show the following readings to the participants.
[How to create a successful sustainable business model](#), [Circular business models1](#), [Circular business models2](#), [The seven pillars of the circular economy](#)

Resources:

PPT:

Readings: [How to create a successful sustainable business model](#), [Circular business models1](#), [Circular business models2](#), [The seven pillars of the circular economy](#)

Exercises: /

Videos:

Additional materials: /

4.0 References

1. What sustainable development and the green economy mean -
<http://green.gov.md/pageview.php?l=ro&idc=30>

-
2. Closing the loop - New circular economy package -
[https://www.europarl.europa.eu/RegData/etudes/BRIE/2016/573899/EPRS_BRI\(2016\)57389_9_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2016/573899/EPRS_BRI(2016)57389_9_EN.pdf)
 3. Green deal: new proposals to make sustainable products the norm and increase Europe's resource independence - https://ec.europa.eu/commission/presscorner/detail/ro/ip_22_2013
 4. Circular economy: definition, importance and benefits:
(<https://www.europarl.europa.eu/news/en/headlines/economy/20151201STO05603/circular-economy-definition-importance-and-benefits>)
 5. THE CIRCULAR ECONOMY IN DETAIL:
<https://archive.ellenmacarthurfoundation.org/explore/the-circular-economy-in-detail>
 6. Explaining the circular economy: Rethink progress:
<https://ellenmacarthurfoundation.org/videos/explaining-the-circular-economy-rethink-progress>
 7. Circular economy business models: <https://www.edisongroup.com/edison-explains/circular-economy-business-models/>
 8. Circular Business Models: <https://sustainabilityguide.eu/methods/circular-business-models/>
 9. 5 Principles of a Sustainable Business Model: <https://nbs.net/five-principles-of-a-sustainable-business-model/>
 10. Circular Economy business models explained: <https://www.boardofinnovation.com/circular-economy-business-models-explained/>
 11. The Circular Business Model: <https://hbr.org/2021/07/the-circular-business-model>
 12. 5 circular economy business models that offer a competitive advantage:
https://www.weforum.org/agenda/2022/01/5-circular-economy-business-models-competitive-advantage/?DAG=3&gclid=CjwKCAiA68ebBhB-EiwALVC-NsuHnkarOt-N8T8pdXxedyC6JzL22xX3EO137XSqbqd1kRtXEaQ0uxoC-0gQAvD_BwE
 13. How to Create a Sustainable Business Model: <https://www.business.com/articles/how-to-create-a-sustainable-business-model/>