

# Sustainability as a Trend for Competitiveness Challenges



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By

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## ACKNOWLEDGMENTS

The idea behind the book *Sustainability as a Trend for Competitiveness Challenges* came across genuinely as part of my cross-cutting research. The chapters are a reflection of the current linkages and challenges associated with resource efficiency, circular economy, land degradation, and climate change.

Alongside the findings, the book offers suggestions for streamlining sustainability between economic, social, and environmental aspects. The synergies can reshape the present trends in many directions, either positive or negative. In this way, an integrative approach can always provide a more dynamic perspective throughout this process.

The passionate readers in the area of sustainability will be the ones that will most benefit from the multitude of information. In this regard, their feedback is essential in order to develop the current state of research.

Publishing the current work could not be done without the interest and support of Cambridge Scholars Publishing. The exchange of ideas and perspectives provided along the way by the family, friends, and colleagues helped to turn many ideas into reality.



## PREFACE

Our current reality is constantly changing and may differ from one year to the next. Due to this situation, neither sustainability nor competitiveness can be left aside from global influences. The available information sources can allow us to assess future development trends. As a consequence, sustainability increasingly started to be part of the international, national, or regional fora. Many times it is seen as a solution for the development pathway.

Adapting to change has become the new trendsetter, being more than just a fancy quote. It is a phenomenon influencing everybody in an interconnected world marked by various typologies of crisis. That is why reaching equilibrium between the economic, social, and environmental aspects has never been so urgent as in our days.

Apart from overcoming inherent implementation difficulties, we have to find suitable solutions and understand existing interconnections. Building a sustainable future can start from this present moment. Thus, we have to ask ourselves if the markets have in place the proper instruments to promote sustainable competitiveness. Another approach is to consider the perspective of a sustainable management approach as a solution to our current problems.

In recent decades, governments, business, and NGOs have started to embrace new approaches. This openness is an attempt to create a more balanced development pathway through concepts like resource efficiency, circular economy, or land degradation neutrality.

Increasing transparency is quoted frequently as a decisive factor for implementing sustainability. Moreover, a sustainable model for transition needs to ensure open access to information and to promote fair international trade. Also, in order to increase sustainability uptake, we have to better understand the cultural traits of any society. This dimension together with other aspects can influence education, gender issues, and consumption–production patterns.

Being aware of the shortage of our natural resources and the price volatility of production prices can determine us to search for new solutions and approaches. Developing a marketplace for innovative solutions, eco-friendly products, and services can be one of the keys for tomorrow's

challenges. From this perspective, competitiveness can stimulate the uptake of sustainability among local, national, and global communities.

All these perspectives are the starting points of the sections included in this book. The aim was to present the concepts of sustainability and competitiveness, and to jointly associate them as a trademark of a free market. The rationale behind this approach was to highlight the relations that could emerge between the two notions and to correlate them as part of a future development path.

Further research needs to be done in redefining the competitiveness aspects. Looking ahead, we have to include sustainability as a core element of the sectoral and cross-cutting planning (e.g., circular economy, adaptation to climate change, and land degradation neutrality).

Going beyond the simple relation of strong sustainability versus weak sustainability, the book proposes to investigate sustainable competitiveness as a linkage between the two perspectives. This approach is an attempt to move ahead to a new sustainability agenda through the lens of sustainable management. The rationale is to identify the environmental, economic, and social challenges that can allow a paradigm shift.

Overall, the book is a reflection on mainstreaming sustainability in other policy areas, but also an invitation for readers to come with new findings regarding the proposed topics.

# INTRODUCTION

In recent years, the multiplication of crises has determined the acceleration of natural resources depletion. This process generated negative synergies across countries. A type of ripple effect appeared at the economic, social, and environmental levels, and influenced the stage of development. The emergence of these situations urged targeted actions for obtaining a balanced development.

The current economic model is defined by industrialism, mainly focused on the automatization of production. New approaches have to correlate the technological aspects with human resources, especially as regards the future skills requirements for performing new tasks or jobs.

At this social turning point, sustainability came across as an alternative concept for a balanced approach. Generally, there is a consensus that sustainable development is the solution to implementing a more balanced development and to reach an equitable share of well-being for all.

The data<sup>1</sup> show that the global population increased from a rise of 5% in 1960 to 9% in 2018 (7.8 billion inhabitants), and it is projected to rise to 16% by 2050 (9.7 billion). From this perspective, finding a suitable approach toward resource efficiency is not a smooth system transition when we need to change and challenge our current reality.

The book is proposing a short introspection related to the area of sustainability. It starts with the United Nations' Brundtland Commission Report *Our Common Future* (1987), *Limits to Growth*, and arrives at more elaborated initiatives like *2052: A Global Forecast for the Next 40 Years* (Randers, 2012) or *Shell Scenarios*.

Around the world, the interest in sustainability has gained momentum and support on the part of stakeholders. As a consequence, the sustainability aspects are part of the negotiations process of multilateral environmental agreements and the multilateral trading system.

A key point for this process was the adoption by the United Nations General Assembly (2015) in the 2030 Agenda for Sustainable Development. This strategic document is a milestone and a step ahead in reaching a global consensus to monitor the progress toward the 17 Sustainable Development Goals (SDGs).

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<sup>1</sup> <http://www.worldpopdata.org/>

When it comes to mainstreaming sustainability in other areas, there are multiple approaches. Developing initiatives related to sustainable competitiveness has to be in line with the concept of “doing more with less.” This approach is the central pillar of resource efficiency and a circular economy. In this context, a sustainable management approach can give us the chance of achieving a harmonious framework of action.

The sustainability challenges raise many questions related to their cross-cutting impacts and deliverables. The book offers various perspectives regarding the notions of sustainable development and competitiveness. The aim was to capture the economic reality from an angle that identifies new ways of action and solutions for future challenges.

At the global, regional, or national levels, the decision-makers are facing drawbacks in mainstreaming sustainability in their sectoral strategies or programs. Many times, implementing a concrete sustainable development model can be a real challenge.

For each of us, learning to adapt to tomorrow’s challenges is a pending issue when it comes to finding the most suitable solutions. Developing the current knowledge base and increasing awareness can avoid a process of general public rejection. We need to engage stakeholders in all the activities associated with sustainable management approaches, like the circular economy, as part of the social business models. In this regard, creating lasting public–private partnerships can be one of the tools to mainstream sustainability and to increase awareness at the societal level.

The book captures the role and impacts of various parameters such as competitiveness, new technologies, and well-being. Also, it connects them with emerging approaches related to the circular economy, resource efficiency or land degradation neutrality (LDN). Following this line, each chapter is offering particular insights for each thematic area.

*The first chapter* offers an in-depth analysis regarding sustainability and competitiveness. The aim is to connect the two concepts with other emerging sectors and to analyze approaches representative for the chosen theme.

*The second chapter* briefly describes the international negotiation on trade and environment. Within this section is a reference to the challenges associated with the Agenda 2030 for sustainable development, circular economy, and gender equality.

*The third chapter* identifies the vectors of change for both sustainable development and competitiveness. Other areas of interest focus on a series of aspects such as the fair-trade approach, sustainable consumption and production, and corporate social responsibility (CSR). This section presents several best practices and case studies.



*The fourth chapter* is an invitation to further consider sustainable management as an adaptive solution to real-time changes. This section presents the available scenarios and proposes a triple bottom line analysis applicable to the circular economy from a global/regional perspective. Other insights are offered by the relations that can be driven by well-being, sustainability, the role of research, innovation, intellectual property rights, and partnerships in setting the future choices of development.

The motivation behind this theme is the need to design an innovative perspective on sustainable development in relation to sustainable competitiveness. After all, a paradigm shift toward sustainability is a demanding process. From this perspective, finding the right balance within international negotiations is essential in promoting new avenues of development. In order to keep a fair perspective, the proposed connections reflect both opportunities and barriers toward promoting a sustainable management approach.



# CHAPTER ONE

## SUSTAINABLE DEVELOPMENT AND COMPETITIVENESS AT A CROSSROADS

### **1.1 Conceptual delimitations**

Some time ago, this book started as a research journey for discovering the existing links between sustainability and competitiveness. After investigating various research options, the responses determined new multiple-choice questions. The outcomes mostly depended on the parameters considered in the development equation. The preference for an integrative approach came as a natural and viable option tool for describing the current development stage. Still, in order to have robust outcomes, defining the right “share” of sustainability is always a challenge, especially when a proper implementation is at stake.

The economic dimension described as an engine fueled the production of goods through the use of available resources (human and environmental capital). The consumption and production functions can establish sustainable trends among all the actors from the market.

The key elements proposed in the research helped to extend the area of sustainability. Thus, competitiveness came along as a vital force underpinning economic efficiency, progress, and innovation. The configuration of an optimal way to achieve and maintain competitiveness has to cope with various challenges. Among them can be technology, market volatility, and scarcity of natural resources.

Competitiveness has a meaningful potential impact at the national and international levels. Many times, it has been the driving force behind economic efficiency and progress. Due to its flexible approach, competitiveness is a sequential factor applicable at the same time at the national, regional, or international levels. It directly connects the market potential with the ability of companies to produce sustainable products and services. It can broadly promote sustainability and the circular economy as part of a new paradigm of development.

In order to obtain an optimum level of competitiveness, we must first analyze a mix of factors and situations. An overview of the market potential, the available resources, and the innovative strategies can offer insightful information regarding the new niches of development.

Both sustainability and competitiveness are not outside the evolution of society. Their relation should reflect all three dimensions of the development: economic, social, and environmental. Directly connected to these conceptual areas, we can have areas generically defined as key and emerging enablers (e.g., circular economy or adaptation to climate change).

When it comes to redefining the two concepts through a dynamic approach, we can obtain valuable insights as regards the evolution of perceptions at the societal level. This progress is the outcome of an increased awareness process. Moreover, the public policy cycle makes its contribution by supporting the current and future initiatives, allowing a constant involvement of stakeholders. All these actions have scaled-up the role of the environment within society.

### **1.1.1 Sustainable development**

Over the years, sustainable development has become an iconic concept. Currently, it can be considered as a reference point for everybody searching for an equitable approach. Over time, at the international level several conceptual rebrandings have been proposed such as “eco-development” or “sustainable development.” Lately, concepts like “green economy,” “circular economy,” “resource efficiency,” or “low-carbon economy” have come along, targeting various sectors from waste management to energy and climate change.

Within the report issued by the Club of Rome *Limits to Growth* (1972), the authors highlight the future challenges of humankind. If the current linear model of consumption and production remains unchanged and the population increases, our planet will reach its structural limit within the next one hundred years. A crisis point will be felt by all of us even before we reach that moment. The impact will be in relation to land needed to ensure the supply and demand for food resources. Moreover, the exponential growth of the future demands of the economic system will be directly faced by the finite status of the available natural resources. New thinking patterns require actions to tackle the existing trade-off situation. The solution proposed by the authors is in line with the necessity to find equilibrium between environmental protection and economic activity, which can be a stability factor in implementing a sustainable approach.

The document *Our Common Future: Report of the World Commission on Environment and Development* elaborated by the Brundtland Commission (1987) defined what sustainable development is. The report advocates the kind of progress that could reach a balanced approach in terms of “meeting the needs of present and future generations.”

The success of the idea of sustainable development at the international level was also laid down by the United Nations Environment and Development Conference in Rio de Janeiro (UNCED) in 1992. On this occasion, the Rio Declaration on Environment and Development was adopted at the UN level, which can be considered as a foundation stone in the history of negotiation processes. For the first time at an international level, twenty-seven principles for guiding the implementation of sustainable development were adopted.

Another important outcome of the conference was the adoption of Agenda 21, a non-binding action plan for deploying sustainable development. This document urged the development of the international law on sustainable development. The aim was to obtain a balance between environment and development, and to further integrate them at national, subregional, regional, and international levels.

A step forward was the initiative of the United Nations Millennium Summit (2000) that adopted the Millennium Declaration, including the eight Millennium Development Goals (MDGs), and set the year 2015 as a reporting timeline. The World Summit held in Johannesburg (2002) acknowledged the importance of sustainable development as a political engagement applicable to all the world’s states.

Further progress in the promotion of the sustainability agenda was the declaration “The Future We Want.” It was adopted by the UN Conference on Sustainable Development in Rio on 19 June 2012. Sustainable development, the green economy, and poverty eradication were considered as strategic areas for the present and future generations. All three initiatives became cross-connected themes, supporting the need for a future development pathway.

In order to find out the most relevant areas and indicators, the debate on the Post-2015 Development Agenda proposed several interactive dialogues between stakeholders as a working procedure. The specific themes were eradicating poverty, tackling climate change, building resilient economies, peaceful societies, and sustainable development goals (SDGs) for all. After extensive discussions held over two years, in 2015 countries adopted a set of seventeen goals to end poverty, protect the planet, and ensure prosperity for all as part of a new sustainable

development agenda. Each goal has specific targets that have to be achieved by all the countries in the next 15 years.

As a result of the MDGs' partial implementation success, it was time for a new, upcoming, and challenging approach. In this context, the synergies created between MDGs and SDGs were described as a building block in terms of the steps needed for better streamlining environmental protection. For the first time in history, SDGs are part of an agreement for accomplishing a global agenda for sustainability applicable for both developed and developing countries.

The theme of sustainable consumption and production was recognized at Rio+20 as being an essential overarching objective for sustainable development. The adoption of the 10-Year Framework of Programs (10YFP) on sustainable consumption and production (SCP) can be considered as a milestone process. It envisaged a series of actions toward implementing resource efficiency and sustainability, facilitating knowledge exchange, and funding dedicated projects. From a global perspective, the 10YFP entails a global shift in the direction of sustainability. The tailor-made programs target several areas such as sustainable public procurement, consumer information for SCP, sustainable tourism, sustainable lifestyles, and education, sustainable buildings and construction, and sustainable food systems.

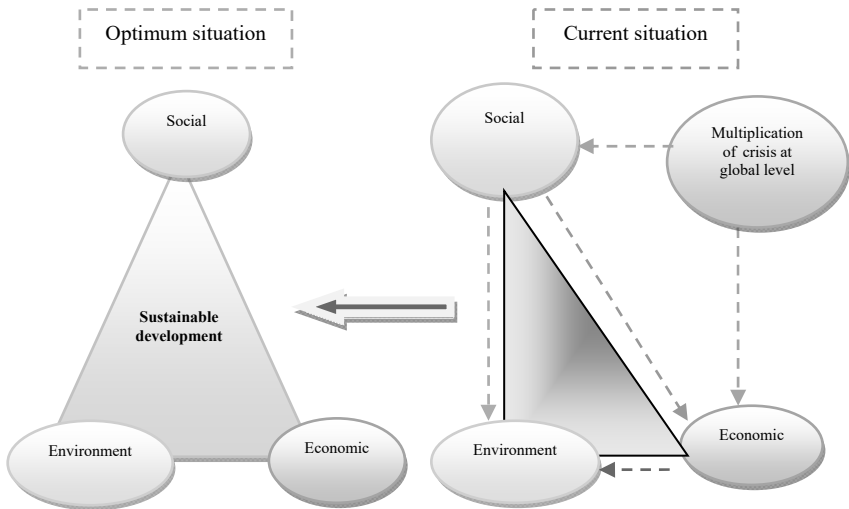
The 10YFP contributes to the implementation of various SDGs, such as goal 4: quality education, goal 8: decent work and economic growth, goal 9: industry, innovation, and infrastructure, goal 11: sustainable cities, and communities, goal 12: sustainable consumption and production and goal 17: partnerships.

Due to the high degree of involvement on the part of all stakeholders, the expectations from sustainable development were high, particularly in creating the premises for a new approach to the economic growth pathway. The classic representation of sustainable development brings to the forefront the need to ensure a dynamic balance between all the economic, environmental, and social aspects. Unlike this goal, the current state of development can often be characterized as a "no-sustainably triangle" as regards to the optimal balance between economic, social, and environmental components.

In order to change the typology described as a triangle of "no-sustainability," we need to implement significant transformations at the national level. This approach can allow achieving equilibrium between all three components, namely economic, environmental, and social. The previous figure points out that the social aspects (e.g., population growth, lack of social engagement) and economic (e.g., ensuring a certain standard

of living for the citizens of a country, increased domestic material consumption) have a significant impact on the environmental capacity. Our current exponential growth determines an irrational resource overexploitation. The imbalances created between all these components have a decisive role in the generation, multiplication, and diversification of crises at national, regional, and international levels.

Fig. 1.1: The classic representation of the sustainable development in relation to the “no-sustainability triangle”



Source: Author’s interpretation based on the Brundtland report

From the perspective of methodological rigor, the definition of sustainable development is rather general. It mostly expresses the intergenerational ethics related to the rights of present and future people. As a consequence, the sustainable development law came as an emerging field in international law by incorporating at the same time the areas of economic, environmental, and social aspects.

A step forward was taken in 2002 when the International Law Association adopted the New Delhi Declaration of Principles of International Law Relating to Sustainable Development. This initiative resulted from the need to offer further clarification and guidance on the legal status of the concept. There are various antagonistic opinions, such as on one side the supporters of the concept were arguing that sustainable

development is part of the normative dimension of international law, and from the other side the critics of the concept were arguing that it is only a clear notion that has no normative consistency.

When it comes to the implementation stage, we need proper sustainable development planning in order to achieve tangible results (Ștefănescu et al. 2008). In this way, the private sector could become an active partner in taking over sustainable development by

- promoting the principle of ecological efficiency, sustainable use of economic resources, sustainable consumption and production patterns, and corporate social responsibility;
- ensuring active feedback to public bodies in order to improve the overall framework of strategic planning;
- creating competitive advantages for companies that are widely promoting environmental strategy and environmentally friendly products.

### 1.1.2 Competitiveness

The concept of competitiveness has multiple perspectives in an attempt to capture all its relevant peculiarities. On the one hand, the classical approach is linking competitiveness with the notion of the absolute advantage of nations in the production of goods (Smith 1776), the cost of opportunity, and relative and reciprocal advantage of the nation when it comes to the gains from trade (Ricardo 1817). On the other hand, the neoclassical approach is focusing on the idea of perfect competition (e.g., perfect information, divisibility of production factors). In this case, countries will specialize in producing the type of goods and services in line with the available production factors (the Heckscher–Ohlin model). Through the Keynesian approach a comprehensive picture of the macroeconomic level is offered, mainly focusing on labor and capital as complementary factors within an economy.

Competitiveness can also highlight the perspective of a “center–periphery” model applicable in the case of the development of various regions (Friedman 1966). Other aspects associated with competitiveness are referring to achieving economic growth as an outcome of increased productivity (Solow’s model).

Currently, several international reports aim to provide a quantifiable picture of the degree of competitiveness attained by countries. Thus, from a general perspective the concept can have three-dimension areas,



respectively national, regional, and international, including various impacts and actors.

### **1.1.3 Competitiveness at national, regional, and company levels**

Some analysts have expanded the conceptual sphere of competitiveness to the *national dimension* of a country. The aim is to provide a macro vision of competitiveness as a direct result of globalization. Even if the impacts are difficult to assess, we do not have to underestimate the role played by national economies, because it is a pivotal one. When it comes to international competition, most of the time the competitive advantage is created at the regional or local level.

Due to the new international competitive conditions, the process of adaptation to change could be better supported by the state. This action can be in terms of adopting appropriate economic, social, and environmental policies, developing a smart specialization approach.

Starting from a simple question of why do some countries succeed and others fail in international trade, Porter (1990) attempted to provide a relevant response in this regard. The outcome of this approach was to identify a series of features associated with the competitive advantage (e.g., available natural resources, management practices used, or existing employment relationships).

In any country, the ultimate goal of any national development program is to ensure an increased standard of living for its citizens. In this context, the author emphasizes the importance of linking national competitiveness with national productivity.

In his famous works related to competitiveness, Porter describes the competitive advantage of sectors and industries (clusters) based on relevant aspects. The interactions achieved within the national “diamond” are key determinants for increasing competitiveness.

On the other hand, regional competitiveness can also follow the principles defined by Porter in the case of national competitiveness. In addition to the standard components of the model, one can add other factors, such as the quality of life within a region. This approach should consider the role of local and regional public administrations in stimulating companies to develop competitive advantage by taking into consideration the diversification and specialization that could take place at the regional level.

The EU Regional Competitiveness Index 2016 defines regional competitiveness as:

the ability of a region to offer an attractive and sustainable environment for firms and residents to live and work.

Competitiveness can be at the level of the product line or sector of the economy influenced by a series of factors related to the company's external environment. In this context, globalization is launching a series of challenges for companies to find suitable real-time responses. Moreover, at the international level there is fierce competition for new markets, natural resources, and consumers.

When it comes to competition, Porter (1998) describes it as a critical element for achieving the success or failure of a firm. The state represents another actor, having a significant factor in managing the whole process effectively. Its imprint on competition is felt directly by the business environment through the quality and quantity of regulations.

### **1.1.4 Competitiveness: economic prosperity and well-being**

Competitiveness is increasing the level of productivity, which is a central pillar of a nation's standard of living.

The report Global Competitiveness Index 2017–2018 of the World Economic Forum offers an overview regarding the determinants of long-term growth. It proposes to further include institutions, policies, and various factors that could stimulate the productivity of an economy.

Another perspective is provided by the report *World Digital Competitiveness Ranking* (IMD 2017). The concept of digital competitiveness refers to a societal change when it comes to the process of adoption and exploration of new technologies by all stakeholders. In this respect, the core elements used refer to knowledge, technology, and future readiness. Moreover, innovation is directly linked with technological and organizational change, as well as with institutional factors.

Achieving an acceptable level of sustainable competitiveness should be seen as a driving force capable of stimulating the development of new best practices and adapting to an ever-changing international environment. (Ștefănescu et al. 2009).

Another possible perspective is the relation between competitiveness and well-being. From this perspective, the pending question is to what extent can the two concepts be connected. Certainly, an environment that ensures proper conditions to create sustainable competitiveness will allow a high level of well-being to be reached.

Generally, the concept of well-being includes aspects related to living standards, quality of life, happiness, and life satisfaction. Still, the measurement of well-being is a pending issue. It is subject to various

interpretations which transform the conceptual definition into a rather difficult task. To have an objective overview regarding its extended conceptual area, one has to search deep into the aspects related to what can make people happy.

The relationship between economic, social, environmental factors, and well-being is advancing a series of debates at the frontline focused on the efficiency of the public policy framework, income security, natural resources consumption, and production patterns.

### **1.1.5 Cross-cutting concepts**

In the last few years, the area of sustainability has been enriched by including new approaches regarding environmental protection:

- ***The green economy***

The UNEP's Green Economy Report provided an exhaustive overview regarding the potential of various sectors of the economy to become greener. The concept is defined as follows:

an improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities (UNEP 2011).

The green economy is not supposed to replace sustainable development, but rather to build on it. The aim is to provide essential insights for the sectoral transition to a new development pathway.

A key role in "greening" economic activity is the ongoing technological development and developing actions to combat the side effects of climate change.

Increasing resilience is a core element in implementing sustainability. Many countries are going in the direction of adopting strategies and action plans for adaptation to climate change and for promoting land degradation neutrality (LDN).

Assessing the progress toward implementing sustainability has always been a concern. The SDG Index and Dashboards Report is offering insights regarding country performance on meeting the SDGs of the 2030 Agenda for Sustainable Development. This approach is proposing to take into consideration the existing spillover effects among sectors (hence the economic, financial, and governance dimensions, and their impact on the environment).

Initiatives aiming to promote sustainability are excellent examples of cooperative engagements at the international or regional level. The Batumi

Initiative on Green Economy (BIG-E)<sup>2</sup> is a pan-European framework aiming to support voluntary commitments toward implementing the goals of the 2030 Agenda for Sustainable Development through the Green Growth Knowledge Platform. The UN Partnership for Action on Green Economy (PAGE) is proposing a holistic approach when it comes to natural capital by encouraging the exchange of good practices among countries. The Green Economy Barometer 2017 developed by the Green Economy Coalition is offering an overview of the existing actions, initiatives, or projects developed in the last years. An essential part of the report is analyzing the market trends and potential in assessing the value of natural capital.

- ***The circular economy as a relation between resource efficiency and sustainable consumption, and production patterns***

The well-known classical linear consumption patterns (“take–make–dispose”) are not working any more in a world of finite natural resources. This type of model determines resource scarcity, price volatility, and increased supply risk for companies.

The Ellen MacArthur Foundation proposed a pioneering approach related to circularity and resource efficiency. The main focus is on transforming the status of waste into new products. Following this line, the definition is synthesizing the main elements as follows:

[the] circular model builds economic, natural, and social capital. It is based on three principles: design out waste and pollution; keep products and materials in use; regenerate natural systems.<sup>3</sup>

Moreover, the report *Towards the circular economy: Accelerating the scale-up across global supply chains* (2014) jointly prepared by the World Economic Forum and the Ellen MacArthur Foundation mentioned among other aspects the link between circular business models and competitiveness aspects. This approach is an attempt to create value per each resource unit used.

Various authors offer other perspectives in defining the circular economy. The conceptual area primarily includes all the economic activities in order

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<sup>2</sup> It was promoted by the United Nations Economic Commission for Europe and the United Nations Environment Programme.

<sup>3</sup> <https://www.ellenmacarthurfoundation.org/circular-economy/concept>

to extend the service-life of goods, components and materials, through reuse and re-marketing, repair, re-manufacturing and technological updating of goods [...] (Stahel 2014)

On the other hand, Sauvé et al. (2016) are proposing to define the circular economy by referring to the following:

production and consumption of goods through closed loop material flows that internalize environmental externalities linked to virgin resource extraction and the generation of waste (including pollution)

The World Resource Forum is proposing to describe the conceptual area from the industrial economy

in which material flows keep circulating at a high rate (in terms of quality, property, function, range of use) without the materials entering the biosphere, unless they are biological nutrients (WRF 2012)

Understanding the linkages created between the circular economy and sustainable development is an important step forward. Changing the traditional design pattern toward a more circular one will stimulate the creation of innovative business models. We have to consider that around 80%<sup>4</sup> of the environmental impact is in the design phase of products.

Recently, the debates on circularity have been evolving toward new understandings that are going beyond waste management. The concept links other policy areas, institutional aspects, and new growth opportunities.

Promoting a circular economy policy can be a business opportunity for all. In this regard, the EU took a step forward by adopting a dedicated circular economy package as part of the efforts to seize the new market opportunities. This initiative included several legislative proposals and a circular economy action plan.

Exchanging ideas and good practices between stakeholders are important steps forward whenever innovative ideas and approaches need to be taken up. As part of the efforts to improve communication, dedicated platforms were created, such as the European Circular Economy Stakeholder Platform, the Platform for Accelerating the Circular Economy – PACE or LOOP Ventures.

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<sup>4</sup> <https://ec.europa.eu/jrc/en/research-topic/sustainable-product-policy>

- ***Low-emission development, adaptation to climate change, and land degradation neutrality (LDN)***

The concept of low-carbon development<sup>5</sup> was introduced in the framework of the UN negotiations, particularly in the *Rio Declaration on Environment and Development* (1992). Currently, the term used is low-emission development. It refers to national economic development plans or strategies of the parties aiming to promote a resilient climate growth with low emissions.

At the international level, adaptation to climate change is an emerging area to strategical policy planning. Any intersectoral vulnerability assessment has to take into account the adaptation measures as a core part of any impact. Furthermore, the Adaptation Fund under the United Nations Framework Convention on Climate Change (UNFCCC) is an essential instrument for encouraging the development of vulnerable country parties to implement actions to tackle climate change.

Another perspective is the one developed through land degradation neutrality (LDN). This concept is a core element of the United Nations Convention to Combat Desertification (UNCCD). The initiative represents a step forward in the negotiation process that took place in the framework of the United Nations Conference on Sustainable Development (Rio+20) and the 2030 Agenda for Sustainable Development. In this regard, the Land Degradation Neutrality Target Setting Program under the UNCCD is a practical tool to support countries for implementing a proper land management policy, especially for defining their national baselines, targets, and measures.

Overall, both adaptation to climate change and LDN are interlinked concepts within the policy cycle in terms of assessing cumulative risks. Their contribution to the 2030 Agenda for Sustainable Development is essential when it comes to SDG 13 and SDG 15.3.

- ***Trade, fair trade, and CSR***

Shifting the classical model of business toward creating new market opportunities could be analyzed from many perspectives when it comes to promoting sustainable production patterns.

Trade can be one crucial element that could influence the development path. In this regard, the United Nations Conference on Environment and Development (1992), through the Rio Declaration, recognized the role of the multilateral trading system in achieving sustainable development.

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<sup>5</sup> <https://sustainabledevelopment.un.org/index.php?menu=1448>