

GREEN POLICIES AND FINANCIAL SUSTAINABILITY TRAINING PROGRAM

MODULE 1

INTRODUCTION – SPECIFICITIES OF SMES

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This training program is part of the BALANCE project, whose aim is to develop and provide SME decision makers and consultants with an innovative program to help them transform SMEs into greener operations, while improving their financial literacy and enhancing their environmental awareness. Towards that goal this introductory module provides decision makers and consultants an overview of the project (with emphasis on the its training part) as well as the existing approaches to SMEs and the need for a new approach, which in turn requires the use of a set of attributes in examining and evaluating them and are related to: the advantages they exhibit; the enterprising environment within which they operate; and the greening aspects they apply.

1.1. BALANCE PROJECT

1.1.1 Overview

The need for climate action and sustainable resources management has been universally accepted as been more important than ever. The Green Deal presented by the European Commission on 11th of December 2019, sets the goal of Europe to be a climate-neutral continent by 2050. The Green Deal addresses the immediate need for specific actions that support Circular Economy; helping to reduce CO2 emissions, transform the energy industry, move the production to a more environmental-friendly stage and many more.

However, for Europe to become a Climate-Neutral continent presents new challenges. One of them is related to small and midsized enterprises (SMEs), which have an essential role in achieving a greener economy as it is indicated by EU Green Action Plan (GAP). But the upcoming regulations based on the GAP put many of the traditional SMEs' business models in a transitional situation. Indeed, SME businesses have struggled in the past decay to recover from a financial crisis and now are facing new challenges operating in COVID-19 world. As a result, this type of businesses finds it hard to adapt quickly to what is needed and EU has to address their issues and BALANCE is part of this effort.

1.1.2 Goals and Objectives

The BALANCE project addresses a key priority of the EU related to environmental and climate goals. More specifically, a horizontal priority underpinning this project is to support individual SMEs in acquiring and developing basic skills and key competencies. As a result, the BALANCE project caters to the need for climate action and sustainable resources management, which in turn follows the Green Action Plan for SMEs, presented by the European Commission.

The most sensitive area related to the SMEs, is in the changing of management, which is challenged by the lack of financial or human resources, sustainability and knowledge, especially for micro-SMEs. BALANCE is a project that addresses this issue. It steps on the key learning points from the Green Action Plan for SMEs, by combining best practices around EU and backing them up with financial knowledge. To achieve that goal, the major objective of BALANCE is to create a training program that will be accessible to all members of a target group





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(decision-takers, SME Consultants, and Entrepreneurs), accompanied with e-learning program materials, and whose curriculum will be based on ECVET. This will lead towards the transformation of the small business into becoming greener without having to sacrifice the financial sustainability of the enterprises and allow them to keep their employees.

More specifically, BALANCE project has to provide the following, which represent the objectives of the training program you are participating:

- Create a dedicated training program so SMEs can implement easier greener change into their operations
- Provide SME's consultants with a training program version in order to achieve better reach
- > Develop E-Learning program accessible to anyone

1.1.3 The Training Program

To achieve that objective the training program will provide the following modules:

Module 1: Introduction : Specificities of SMEs: This module introduces decisionmakers with essential information related to what SMEs are able to implement within the green economy. It presents the advantages and challenges specific to SMEs in terms of environmental action and specifies the enterprising environment within which SMEs can operate. This preliminary module is here to give a realistic depiction of what to be expected from SMEs, their needs as business, their potential and their limits. In addition, this module provides them with a better understanding of SMEs' specificities, their challenges and how they can implement a GAP. It will conclude providing a rationale of the training approach.

• Learning Outcomes

Decision-makers should:

- \checkmark Evaluate and determine the existing approach to SMEs.
- \checkmark Understand that a new approach towards SMEs is inevitable and necessary.
- \checkmark Accept that all the elements of the three components required in examining SMEs.

Consultants should:

- ✓ Critically evaluate the present approach to SMEs.
- ✓ Reinforce this need for a new approach.
- \checkmark Promote the use of all the elements of the three components required in examining SMEs.





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Module 2 – European SMEs and Environmental policies: The second module introduces small and medium enterprises decision-makers to the European Green Deal. It will include the EU's environmental objectives such as the EU's objective to turn Europe into a climate-neutral continent by 2050. The brief presentation of public policies will be put in parallel with the role of SMEs within the EU economy and how EU policies impact their activities.

• Learning Outcomes

Decision-makers should:

- ✓ Comprehend the current environmental policies and the importance of mitigating the environmental pressures.
- ✓ Acknowledge which policies might be effective for their company.
- ✓ Learn how to implement these policies and activities into their company.

Consultants should:

- ✓ Explain the current environmental policies and the importance of mitigating the environmental pressures.
- ✓ Assess and evaluate which policies might be effective for SMEs.
- ✓ Guide SMEs how to implement these policies and activities into their company.
- Module 3: Policy Implementation and Self-assessment of SMEs' Environmental Impacts: The third module is focused on the effort to apply and selfassess SMEs general impact on the environment. The module provides decision-makers with tools and indicators to assess their companies' environmental impact. Selfassessment, at the scale of individual organizations, is the first step to take before starting to implement green initiatives.

• Learning Outcomes

Decision-makers should:

- ✓ Understand the economic and environmental benefits derived from the implementation of an environmental management system.
- \checkmark Assess the basics of the implementation of an environmental management system.
- ✓ Identify the impacts of their company's activities.
- ✓ Evaluate the most important aspects on which to intervene in order to become greener.



 ✓ Get to know examples of successful environmental practices that can be applicable to their activities.

Consultants should:

- ✓ Understand the economic and environmental advantages derived from the implementation of an environmental management system.
- \checkmark Assess the basics of the implementation of an environmental management system.
- ✓ Identify the impacts derived by companies according to the industrial sectors to which they belong.
- ✓ Evaluate the most important aspects in which to intervene in order to become greener.
- ✓ Get to know examples of successful environmental practices that can be applicable to different business sectors.
- Module 4: Mobilizing Sustainable Finance: A widespread preconceived idea is that implementing green practices has significant business costs. This module demonstrates how SMEs decision-makers can make their companies greener without inflicting unnecessary financial stress on their structures. Furthermore, it shows how environmental-friendly practices can even be cost-effective.

• Learning Outcomes

Decision-makers should:

- \checkmark Understand well the financial risks and opportunities connected with the green transition.
- \checkmark Understand in depth the concept of financial risk and its types.
- ✓ Engage actively in creation of risk mitigation strategies.
- ✓ Practice financial and business modeling.
- \checkmark Know how to measure financial indicators of the green transformation.

Consultants should:

- \checkmark Understand well the financial risks and opportunities connected with the green transition.
- \checkmark Understand in depth the concept of financial risk and its types.
- ✓ Assess and suggest risk mitigation strategies.
- ✓ Be able to facilitate financial and business modeling for green transition.
- ✓ Be able to provide financial measurements and solutions in connection of the green transformation.





Module 5-Mobilizing Sustainable Finance: This module provides key points to SMEs decision makers to start implementing change within the organisation and an insight on process approach. Adapting processes to EU climate objectives and making efforts to make a company harmless for the environment requires changes of its practices. However, change often represents a challenging step for SMEs' decisionsmakers. This is the reason why this module focuses on Environmental business practices in order to transit more effectively.

• Learning Outcomes

Decision-makers should:

- \checkmark Understand what process approach is and what its purpose within a business is
- ✓ Understand how to design and achieve process approach within their business
- ✓ Understand the benefits of a Process Approach method
- \checkmark Setting green objectives within the business
- ✓ Implement environmental business practices based on the established green objectives

Consultants should:

- ✓ Understand the concept of Process Approach
- ✓ Understand, recognize and identify the elements of a Process Approach method
- ✓ Apply any process approach method within a business
- Setting green objectives for a business in order to evaluate its environmental performance and hence its environmental impact
- Module 6: Cost Effective External and Internal Practices and Methods: This module presents internal and external methods specific to green practices. External practices are concerned with making visible an internal initiative related to a green practice, thus fostering networking and finding opportunities to support green SMEs internal environmental practices, which are essential in maintain cohesion within a company, are pivot in a company's greening effort.

• Learning Outcomes

Decision-makers should:

- ✓ Gain a deep understanding of the importance of green initiatives in a competitive market
- ✓ Cultivate knowledge of various communication channels, both formal and informal



- ✓ Utilize feedback
- ✓ *Respond to challenges*
- ✓ Organize appropriate action

Consultants should:

- ✓ Gain a deep understanding of the importance of green initiatives in a competitive market
- ✓ Cultivate knowledge of various communication channels, both formal and informal and share this knowledge with SMEs
- ✓ Utilize feedback
- ✓ *Respond to challenges*
- ✓ Organize appropriate action

This portion of the training program is focusing exclusive on Module 1, which is presented next.





UNIT 1: PRESENT APPROACH TO SMEs

Small and medium-sized enterprises (SMEs) are an essential element of the European production and deeply woven into the fabric of Europe. They are essential to Europe's competitiveness and prosperity, as well as economic and technological sovereignty. Thus, it is not surprising that EU with the SMEs Strategy for a sustainable and digital Europe, attempts in various ways to support and empower SMEs of all sizes and sectors. Therefore, for SME's decision-makers and consultants it is imperative that they understand and appreciate the three major components of the existing approach to SMEs.

1 DEFINITIONS OF SMEs

The criteria for defining the size of a SME business differ from country to country. The European Commission (European Commission, 2015) has categorized these enterprises based on the following staff headcount and either the turnover or balance sheet total definitions:

Company category	Staff headcount	Turnover	Balance sheet total
Medium-sized	< 250	≤ €50 million	≤ €43 million
Small	< 50	≤ €10 million	≤ €10 million
Micro	< 10	≤ €2 million	≤€2 million

Resulting in three categories, which define SMEs:

- > Micro-enterprises that have up to 10 employees
- > Small enterprises which have up to 50 employees
- > Medium-sized enterprises having up to 250 employees.

Therefore, the European commission's definition of SME (2003/361/EC 2003) is the following: "The category of micro, small and medium-sized enterprises (SMEs) made up of enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding EUR 50 million, and/or an annual balance sheet total not exceeding EUR 43 million." (EU





Commission, 2015). It should be noted that the term small and medium-sized enterprises is widely accepted and used by the European Union, the USA (without the clear definition of the EU) and many international organizations such as the World Bank, the United Nations and the World Trade Organization.

From this definition two questions immediately arise first, why is necessary to have a definition for SMEs? Second how appropriate are such definitions?

1.1 The Need for a Definition

The answer to the first question is simple, yet paramount, because the SME definition applies to all policies, programs and measures that most countries develop and apply to support SMEs, because they are based on their definition in determining state aid.

1.2 Definition Based on Economic Terms

In answering the second question, relating to deciding whether or not a company is an SME, is not as simple as one might think, as well as not as complete as the present-day conditions require. In determining whether or not an enterprise is an SME, the enterprise's size (employees, turnover and balance sheet total amounts) are not the only factors that should be taken into account. In fact, an enterprise can be very small in these terms, but if it has access to significant additional resources (i.e., it is owned by, linked to or partnered with a larger enterprise), it might not qualify for SME status. In a similar manner, the necessity to: reduce CO2 emissions, transform the energy industry, move the production to a more environmentalfriendly stage and many managing issues cannot be ignored when obtaining a complete picture of an SME in order to provide state aid.

2 THE ROLE OF SMEs

Jean-Claude Junker, the former President of the European Commission had proclaimed that: "Jobs, growth and investment will only return to Europe if we create the right regulatory environment and promote a climate of entrepreneurship and job creation. We must not stifle innovation and competitiveness with too prescriptive and too detailed regulations, particularly when it comes to small and medium-sized enterprises. SMEs are the backbone of our economy, creating more than 85 % of new jobs in Europe and we have to free them from burdensome regulation."

Indeed, globally SMEs have relatively different characteristics, face different obstacles, and differ on the mechanisms used in assisting economic growth. What is universally common is that SMEs have the ability to fuel economic growth because they create new jobs, expand the tax base, and are the primary vehicles by which new entrepreneurs provide the economy with a continuous supply of ideas, skills, and innovations. In other words, SMEs are regarded as the key drivers of the national economy, because they represent the major contributor in sustaining modern-day economy.

2.1 The Role of SMEs in the World

SMEs are playing today a significant role in the economic development, the social uplifting and the political stability of both developed and developing countries. SMEs can be established for any kind of business activities, in urban or rural area, are focused on diverse aspects of the







economy and can be considered as the back bone of national economy (Peters & Waterman, 1982; Amini, 2004; Radam et al., 2008).

Therefore, it should not be a surprise that SMEs greatly outnumber the number of large-scale companies operating in all countries in the world. Actually, the World Bank estimates that the SMEs represent about 90% of the businesses and contribute more than 50% to employment worldwide. The important role of SMEs in the world, which varies across regions, countries and continents, can be seeing in two revealing examples. First, the Australian SMEs make up 98% of all Australian businesses, produce one-third of the total GDP and employ 4.7 million people. Second in Europe the Poland SMEs generate almost 50% of the GDP, and out of the total of 1,784,603 entities operating in Poland, only 3,189 were classified as "large", so 1,781,414 were micro, small, or medium SMEs employed 6.3 million people out of the total of 9.0 million employed in the private sector or 36.2 SMEs per 1,000 of inhabitants (Walczak & Voss, 2013).

2.2 The Role of SMEs in Europe

The definition of an SME may vary from country to country (for example, the definition in Germany has a limit of 255 employees, while in Belgium it can be 100), but all of them are regarded as the basis of the national economy. In the EU, small and medium-sized enterprises are indeed the backbone of Europe's economy. There are over 22 million SMEs in the EU providing over 133 million jobs, 99.8% of all enterprises in the non-financial business sector in the EU28, and they generate 58 cents in every Euro of value added. They also employ practically 90 million people representing 67% of the total EU employment (Eurostat, 2018). Most importantly, however, SMEs provide innovations spread throughout Europe's regions to solve a series of European challenges like climate change, resource efficiency and social cohesion. They are, therefore, fundamental in attaining EU's twin goals of a sustainable and a digital economy. Moreover, they are essential to EU's competitiveness and prosperity, industrial ecosystems, economic and technological sovereignty, and resilience to external shocks.

In addition, SME enterprises are considered important in Europe because they involve: job creation, unemployment reduction, significant contribution to growth in GDP, achieve sustainable growth as a centralized theme, enable proper money flow across the economy, the nursery from which large companies are created, contribute directly and often significantly to aggregate savings and investment, are involved in the development of appropriate technology, and in most cases charge lower rates to their clients by providing a quality business. Moreover, SMEs are a crucial element in the supplier network of large enterprises which are already on their way of becoming an Industry (Lutz, 2015) According to German economist Hans-Heinrich Bass, "empirical research on SME as well as policies to promote SME have a long tradition in [West] Germany, dating back into the 19th century. Until the mid-20th century most researchers considered SME as an impediment to further economic development and SME policies were thus designed in the framework of social policies. Only the Ordo liberalism school, the founding fathers of Germany's social market economy, discovered their strengths, considered SME as a solution to mid-20th century economic problems (mass unemployment, abuse of economic power), and laid the foundations for nonselective (functional) industrial policies to promote SMEs." (Hans-Heinrich Bass, 2017).





3 SMEs GREENING

Small and medium-sized enterprises in Europe are confronted with rising pressures from society, the market and governments to meet environmental standards. At the same time, the demand for green products and services is rising, because the international green market is rapidly growing, by 5% a year, and is expected to triple by 2030. These two facts force a global shift towards a greener economy, which helps SMEs to address environmental challenges, such as resource depletion and emissions. In addition, they bring economic benefits because many SMEs in order to improve their corporate image they try to cut their costs, while complying with GAP standards and improving their compliance with environmental regulations.

In general, 'greening' has been the buzzword across Europe, and the development of green skills has assumed great importance in the EU. Within this environment, SMEs are playing a vital role in the transition to a low-carbon economy by developing new green business models for different industrial sectors. In fact, medium and small firms can become the main drivers of radical eco-innovation in the industrial and services sectors.

3.1 Greening Conditions in Europe

Integrating the economy with the environment represents the paramount greening condition for SMEs in Europe. This in turn provides the greatest opportunities for SMEs towards green growth, which is a way of reconciling economic growth with environmental sustainability (Samimi et al., 2011; Demaria, 2018; Robertson, 2019; Cohen, 2020). It is related to a sustainable development, which is seen as a way to achieve a green economy, by means of balancing the economic and environmental objectives or balancing short-term costs with longterm gains.

Greening conditions in Europe are the results of EU environment policies, which date back to the European Council held in Paris in 1972, which declared the need for EU environment policy flanking economic expansion. This resulted in the Single European Act of 1987, which provided the first legal basis for a common environment policy with the aims of preserving the quality of the environment, protecting human health, and ensuring rational use of natural resources. Subsequent treaty revisions strengthened EU's commitment to environmental protection. Finally the EU initiated the integration of environmental concerns into other EU policy areas in December 2019, when the Commission launched the European Green Deal, which should help to focus EU policies on making Europe the first climate-neutral continent in the world.

As a result providing optimum greening conditions is one of the priorities in the EU, expressed by the flagship initiative dedicated to a "Resource-efficient Europe". It is related to a strategy that enables SMEs to turn environmental challenges into opportunities, which is one of the ten principles of the Small Business Act. Of course, there are several other EU green initiatives applying to SMEs such as the Eco-Innovation Action Plan (EcoAP), the Green Employment Initiative and the Circular economy, which provide zero waste programs for Europe. In general,





EU's environmental concerns are increasingly mainstreamed into most SMEs economic activities, which help them cope with globalization and competition.

3.2 The Importance of SMEs Greening

The importance of SMEs greening is expressed with the opportunities provided to them in the concept of Green growth, related to sustainable development, which in turn are supported by the EU environmental policies and programs. That importance is exhibited by the capability of SMEs to participate in: sustainable use of resources; increased share of renewable energy; preserving natural capital (air, water, land and wildlife); as well as reducing emissions and waste. Such entrepreneurship by the SMEs offers in addition important synergies between environmental protection and economic development, turning green investments into a driver of economic growth and competitiveness.

3.3 SMEs involvement in Greening

Although SMEs comprise an enormous large part of the European economies, their involvement in EU's Greening efforts cannot be considered satisfactory, since a relative small numbers of them have adopted and integrated greening principles in their business strategies and daily operations. There are many reasons, which vary by country and sector, which need to be addressed, such as luck of:

- > Access to affordable financial resources.
- > Skills and management developed practices
- > Awareness among employees about the importance of Greening.
- > Awareness of business owners of the benefits of Greening.
- > Information in order to implement Greening strategies and daily operations.





Unit 2: NEW APPROACH TO SMEs

The Literature (Baron and Shane, 2007; Bölükbaş and Güneri, 2017; Deepa and Manalel, 2016; Dutta, 2020) and experience has shown that for an appropriate way to deal with SMEs there is an axiomatic need to accept that there have been changes both in terms of the way SMEs are regarded and operate. This leads to the realization that the present approach to SMEs is now absolute and we are in a new SMEs era. The justification of such a shift is based on the following substantiated propositions: first, the determining factors in the observed changes in SMEs are the results of the changes in societal perceptions and beliefs, which have taken place in Europe; second, there are ample evidence that SMEs entrepreneurship is in the process of a new approach shift; third, the approach shift that has been catalytic in altering the way society and the economy is reacting to SME; fourth, all evidence suggest that the SMEs approach has to be integrated; and fifth, the new approach should be understood as representing the "confrontation" of SMEs with the societal and economic conditions imposed by the real world. These propositions clearly indicate that in order to understand the nature, the role, the operation and the impact of SMEs, it is imperative that they should be addressed.

Responding to that need the EU has established the Green Action Plan for SMEs that set out a series of objectives and corresponding actions, which can be grouped into the thematic areas shown in figure 1. The importance of this concept lies in the recognition that the many SMEs activities have to be seen as different manifestations of "a whole", the entity of SMEs. This indicates that an integrated approach towards SMEs is required and thus accepted by the EU.



Fig.1: GAP Objectives for SMEs (source: EU commission)





The implementation of these objectives, which are accompanied by a set of actions, is within the framework of the Multiannual Financial Framework 2014-2020. Practically, these actions are conditioned on the potential of SMEs for resource efficiency and access to green markets. But more importantly, these actions address two set of challenges: first, the means to persuaded SMEs to gain the benefits of resource efficiency, which in turn requires a second necessity to devise an integrated approach in examining and evaluating SMEs.

Based on these it should be evident that the excising approach to SMEs cannot be accepted anymore. There is a need for a different approach to SMEs, which must consider at the same time internal and external factors in harmony and with respect to all dimensions of their entrepreneurship. That is, an approach is needed, which leads to the integration of all concerns, in order to overcome the fragmentation of knowledge and approaches related to SMEs operation and management as well as of their social ramifications. To deal with issues related to such an integrated approach as well as the metrics required to address them, there is a need to answer the following questions: first, how appropriate is the present-day SMEs definitions; second, how the enterprising environment and internal and external challenges impact the SMEs role in the economy; and third how necessary are their greening attempts in order to meet their societal obligations and environmental operational needs. Each of these concerns provides complementary views of the SMEs landscape: the first question helps identify the pitfalls and limitations of the current SMEs definitions; the second indicates that SMEs exist within a specific enterprising environment, which determines their success or failure; while the third concern highlights the social importance of their greening process without constraining their growth and success. As a result, their examination is necessary.

1. SMEs New Approach in defining them

Changes in the perception of SMEs provided by scientific knowledge (Hamidatum and Sabariah, 2020; National SME Development Council, 2012; Selamat et al., 2011) and practicing experience, clearly indicate that a new approach towards defining EMEs is required. Indeed, for an effective and efficient use of SMEs in order to facilitate economic activities and consequently development, their nature and all aspects related to the factors determining them have to be fully understood, because in turn they determine how they operate and managed in real economic conditions.

The new approach in defining SMEs is simple in its explanation, but radical when is considered in terms of the existing beliefs and practices in the community concerned with SMEs. Today's decision-makers, consultants, industrialists, SME owners, as well as academicians and researchers consider them in a one-dimensional (economic) manner. However, due to the shift that has taken place in the way SMEs are operating, a new multidimensional approach in considering their entrepreneurship nature is required. Basically, more than economic factors must be considered in defining SMEs in order to have successful administrative, economic and development results. In other words, assessing SMEs only in terms of economic indicators (staff headcount and either the turnover or balance sheet), cannot be acceptable anymore and needs to be modified to include all aspects of their entrepreneurship.

2. SMEs New Role

Europe's continuous economic development over many decades has reached almost an impasse. Today it faces multiple challenges related to stimulating growth, ensuring jobs and





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the well-being of its citizens. It faces serious issues such as securing ecological sustainability, addressing climate change, and social cohesion, among others. There is also a growing concern for resource scarcity, growing prices for materials, dependence on outside resources and mainly in attaining sustainable and digital economy, which are dependent on efficient and effective production processes.

There is a need for a transition to a new role of SMEs in the economic production, which will address these issues required for sustainable economic growth of the European countries. Given that small and medium businesses and industries are the most important actors in economic production as well as in building a circular and more resilient economy, the adoption of a new multi-faced role of SMEs is imperative, in order to respond to Europe's new road to development and growth based on alternative economic production models.

As a result, another issue that needs to be considered is SMEs role and potential. SME are regarded as the key drivers of the national economy, representing the major contributor in sustaining modern-day economy. Small and medium-sized enterprises by creating the biggest portion of the gross value added can play a key role in adding value in every sector of a country's economy. Most importantly, however, SMEs can provide innovations spread throughout most regions to solve a series of national or regional challenges such as: climate change, resource efficiency and social cohesion. They can be fundamental in attaining the twin goals of a sustainable and a digital economy. Moreover, they can be essential to: a region's or to a nation's competitiveness and prosperity, industrial ecosystems, economic and technological sovereignty, and resilience to external shocks. Therefore their role should be widening to efficiently and effectively accommodate the potentials described previously.

3. The New Approach to SMEs Greening

From the previous discussion, it should be clear that a demand also exists for building a different philosophy in addressing SMEs' Greening. Indeed, over the last few years, public institutions and non-governmental institutions as well as the financial community and in particular the market have explicitly demanded that all enterprises increase their greening efforts in order to improve their environmental performance. However, in spite of such pressure, recent studies have highlighted the fact that only large corporations adopt a pro-active environmental strategy, whereas SMEs tend to barely comply with administrative and market pressures, thus adopting a re-active strategy. In the light of this issue, the SMEs' shift from a re-active to a pro-active pattern of environmental behavior represents an important issue in determining the new EMEs Greening approach.

Reducing the environmental impact of SMEs in both manufacturing and services by shifting from re-active to pro-active represents not only a key factor in greening the economy, but also a significant business opportunity for SMEs themselves as important suppliers of goods and services. As a result, the EU has initiated a project on SME greening, which is conducted within the framework of the "Greening Economies in the Eastern Neighbourhood" (EaP GREEN) Programme. It includes a component to prepare an SME Greening Guide and pilot projects in several EU countries.





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However, despite the benefits and EU's efforts for EMSs greening only a few EU countries have addressed this challenge by implementing new policies and tools as well as regulatory and economic incentives to encourage SMEs to improve their environmental performance by shifting their greening approach. On the other hand, many countries have so far given little consideration to SMEs greening by not providing the legal, policy and institutional means to enhance their environmental performance.

Unit 3: THE DIMENTIONS TO APPROACH SMEs

In the previous presentation it was evident that an important need has surfaced, namely important changes are required in the way we approach and consider SMEs. More specifically, it became clear that in examining and evaluating SMEs three dimensions play an important role: the nature of the SMEs, their entrepreneurship operation and the application of the GAP. That is, to address Climate-Neutral SMEs, an integrated approach is necessary, which has to simultaneously deal with: the degree an SME fulfils its multiple advantages (i.e., Informal Management, Flexibility etc.); the enterprising environment it conducts its business (i.e., Development Potential, Network and Supply Chains etc.); and the degree it applies the Green Action Plan (GAP) (i.e., eco-innovation, reduce CO² emissions etc.), in an integrated manner respecting all these aspects. In other words, all factors related to the SMEs existence should be considered in assessing any SME (Figure 2). As a result, for an appropriate way to deal with SMEs there is a need: first, to clarify the major issues related to the way they are regarded and assessed, which have an impact on the success of any SME examination and evaluation; and second, to have a good understanding and a detail definition of the elements of each of these three major dimensions.







Fig. 2: Conceptualization of European SMEs Dimensions

1 FIRST DIMENSION: OPERATING ENVIRONMENT

This dimension concerns the understanding of the many advantages that SMEs possess as enterprising entities (Bölükbaş & Güneri, 2017). As Ahmed (1019) has written, SMEs "... are able to do things that can be difficult for larger companies" It is believed that in the coming days they will become the unforeseen revolution for improving EU's economic growth. Among the most important SME advantages are:

1.1 Operational Flexibility

- > Encourage Team Spirit: In a big company many employees might work for many years, but on different floors and buildings, thus meeting other co-workers is not easy. In addition, aspirations for positions and staffing are very competitive and usually not friendly. On the other hand, in SMEs, it is easier to form bonds and know the qualities of others, while the owner recognizes every employee and understands their importance, which can be used to increase performance and improve teamwork.
- Closer to their customers: This is the most obvious advantage of SMEs, as they can deal more directly with their customers. That enables them to meet customer needs accurately and effectively by offering an individualized service. SMEs by establishing some bond with their customers they know their business better than large companies.





- Direct involvement: SMEs owners directly control their enterprise's output and customer's interaction as opposed to big companies. The owner of an SME is practically in a position to scrutiny the product quality and rectifies any problems that might occur, and thus any risk is minimized and any crisis can be prevented at an early stage.
- Better detect and take advantage of small market niches: Generally, an SME has a greater ability and interest to detect and satisfy the very specific needs of customers and demands when compared with a large company
- > Able to change their market: In the SMEs, due to their uncomplicated operational needs and the simplicity of the required infrastructure, it's easier to change their market niche (the space where the consumers of their services or products are).
- Communication within the enterprise is easier: Owners and employees of an SME by being closer makes it easier for them to communicate with each other. This allows not only problems to be solved fast and efficient, but mainly to enable new ideas to flow.
- > Informal management style: For small and medium enterprises, the management is usually informal. The owner has to do almost everything and employees are normally expected to be also able to everything, because there is no permanent or even clear division of tasks.
- Informal management style: A competitive advantage for SMEs is that customer interaction with the management takes place on a regular basis, because every customer is important to them. This is not true for big companies who don't rely on repeat business from any individual customer. An SME owner knows what his customers specifically want through many forms of interaction (emails, phone calls, and social media). As a result, he caters better the customers' needs (additional products, a change in pricing and customer service enhancements).
- Cost effective: SME owners can directly contact potential customers as well as promote his company's products with minimal or no cost. Due to the digital revolution, the cost of advertisement is cut down. Plenty of costs effective, professional solutions are available for start-ups and SMEs to promote their catchy brands and other marketing materials.
- Taking immediate decision: In SMEs, decision-making normally falls on a person or a small group that does not require any official hierarchy which might slow down the process. As a result, they can quickly react to the marketplace changes. Moreover, an SME owner if he sees an opportunity to challenge his competitors, he can do it momentarily without waiting for any approval. On the contrary, in large companies decisions often require complex decision-making mechanisms involving a lot of people and teams.





- Dependence on individual decision makers: (Feltham & Barnett, 2005). The firms are managed and operated by the owner. The entrepreneurs of the business lead the company and play a role as both employee and employer. The growth of the firms is determined by the owner.
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- Internal mobility: An employee in an SME can easily have the opportunity to learn the work in another area of production, if he is willing and shows an interest to advance his carrier. But big companies have strict work descriptions, limiting employees to position changes hindering an employee's growth potential.

1.2 Capabilities for Enterprising Actions

- Innovation capability: SMEs are by nature candidates for innovation, because they foster an entrepreneurial culture, which provide resilience in the economy and thus increase innovation and competitiveness of the economy. Because of their size, SMEs are often much better at identifying and embracing new trends in the industry and, therefore, driving the innovation within their respective sectors. This allows SMEs to be pioneers in emerging technologies, paving the way for bigger and braver investments. The most important factors that influence SMEs innovative activities include the following:
 - Strong leadership: usually a highly educated owner or manager, who play a major role in setting innovation goals and in pursuing these goals for the enterprise.
 - Small number of managers: who provide the SMEs with less bureaucracy, a flat • organizational structure, less diversification (Forbes and Milliken, 1999).
 - Flexible organizational culture: and the use a smaller number of formal systems, ٠ procedures, and planning measures.
 - Highly qualified scientists and engineers: as a result of SMEs commitment to develop human capital, signalled by the abundance of formal and informal training programs.
- > Adapting to change: SMEs can be much more adaptable to change than larger and more complex organizations. Because of this adaptability, SMEs exhibit not only a better ability to withstand difficult economic conditions, but they can faster recover from crises.
- Flexibility (Aragon-Sanchez & Sanchez-Marin, 2005). SMEs have the needed flexibility and capacity to adapt to changes in the economy, due to their size and informal structure. In addition, SMEs by been closer to their customers allow them to know variations in the market, before the big companies and adjust faster.





- Learning: Sectors dominated by SMEs usually facilitate learning geographically and across the sectors. Due to the SMEs dynamics and mobility, these sectors usually generate higher levels of competition, which in turn forces higher levels of learning. This is of course the basis for creating sustainable growth.
- Learning: SMEs social role is more efficient than big companies especially in resource allocation, because SMEs can raise employment at lesser capital costs. In addition, SMEs usually are actively involved in the community, because they view themselves as members of the community. Big companies are practically independent of the community, especially if it is the home office.

2 SECOND DIMENSION: ENTERPRISING

The second dimension is related to understanding the various internal and external conditions that determine the entrepreneurial ability of an SME to freely operate. The literature (OESD, 2017; KfW, 2016; Christos, Peter & Nicholas 2007; Adler & Shenbar, 1990; Lumpkin & Dess, 1996; Cogliser et al., 2008; Deepa, Babu & Manalel,. 2016) has shown that many SMEs have difficulties adjusting their business processes that are crucial to tap their full competitive potential, and pursue their business advantages. The main barriers faced by SMEs on achieving such a goal are related to the entrepreneurial environment within which they operate and constraint or challenge their business. The basic categories are the following:

2.1 SME's Own Characteristics

These represent the most important factors that determine the successful operation of an SME. Internal and external factors shape the operating environment of the SMEs. The internal factors are those concerning the enterprise itself, and they have a greatest impact on how it operates. Among them the most important are:

- Enterprise characteristics: The success of an SME depends in addition to characteristics such as size, age, location of the firm, and economic indicators (staff headcount, balance sheet and economic stability) important role play: first, the products or services or a combination of both it offers and second, how well the firm is able to differentiate them from what the competitors offer.
- Owner's characteristics: The owner's characteristics or the managing director of a medium size firm also play an important role. For example, the educational background of the owner is widely believed to be a key source of the firm's management and marketing approaches as well as its innovative efforts (Hoffman, 1998). Because the attained education level of an SME owner or manager contributes to his: cognitive ability, capacity for information processing, tolerance for ambiguity and receptivity to new ideas and innovation





- Qualified Personnel: Highly qualified employees are considered, among others as: an invaluable asset, a knowledge base of the company, a tool to absorb information from external sources (implying higher dependence of SMEs on external sources) and a source of ideas and inspiration for innovations (Radas & Božić 2009). According to Tessa (2004) qualifying personnel represent the most essential resource of any EMS.
- Limited resources: An SME generally has limited resources, because it does not have money to purchase the required machinery and to hire many workers. This is extremely true for new SMEs (starts-up) due to an absence or lack of track record on the firm to convince and attract potential investors and bankers. As a result, they are extremely dependent on the capability of the owner to generate resources (Welsh, White & Dowell, 1981).

2.2 Enterprising Challenges

- Planning: Planning is a necessary process, representing a major challenge for SMEs in order to a guide them in their day-to-day decision-making, but mainly in evaluating their operation, their progress and their decisions in changing operation. The primary objectives/challenges in Strategic planning are the below following key areas:
 - Mission: Defining SME business purpose represents the first and most important step in strategic planning, because it synthesizes and clarifies the dominating enterprise's concepts, which in turn determine their practical strategies. They should be broad enough to guide both management and employees, and narrow enough to enable them to clearly define their actions and decisions, consequently saving time.
 - Vision: It describes what an SME wants to achieve at some point in the future and expresses what the enterprise would like to be in order to achieve its goals and be successful. Given that a strategic planning process represents measurable goals (specific objectives expressed in terms of quantities and timelines), it enables managers and employees to evaluate progress and pace developments in concrete terms.
 - Plan: It refers to the process that outlines the way an SME wants to achieve its ultimate goals. This challenge entails the identification of the SME's objectives, which in turn lead to the formulation and monitoring of the specific strategies to achieve them and the resource allocation of the enterprise
 - **Evaluation:** It represents the assessments of what an SME can achieve, by evaluating the progress of the plan objectives based on realistic information related to what the enterprise can achieve. The evaluation process' as a value achievement' has to be concerned with assessing plan goals within a well-defined time period and not in general, because unforeseen conditions might change the operating situation any time.
- Infrastructure and Facilities: Like any other enterprise an SME needs general infrastructural facilities such as: power, water, transportation, telecommunication, drainage and pollution control, banks, as well as SMEs specific facilities such as: distribution network, raw materials, storage and marketing outlets, service facilities and technological backup





services. Both of these facilities represent challenges for SMEs, but the specific for the SMEs facilities are controlled by them and thus they are the ones that can reduce the cost of SMEs production and services and increase their overall profit margin, which help them compete with existing local and foreign enterprises.

- > Maintaining profitability: Independent of the product or services an SME maintaining profitability is a challenge, which every one of them has had to consider at some point. However, there are a number of things that can help during that effort: Reduce costs, increase turnover, increase productivity and efficiency, which can be accomplished by: looking at their suppliers, premises, production processes and finance facilities
- > Increasing revenue: It is a fact that most SMEs struggle to maintain and sustain growth. While it is impossible for an SME to control all the market forces that are present in the environment it operates in, there are a number of things the enterprise can do to increase revenue. For example, if a SME is operating within a market that is too small to generate the desired revenue, it can consider offering additional products or services.
- > Market commitment: This concept is composed of two factors. First, the amount of resources committed, for example, the size of investment in the market (marketing, personnel, organization etc.); Second, the degree of commitment, for instance, the difficulty of finding an alternative use for the resources and transforming them to practice.

2.3 External Challenges

There are a big variety of external factors or challenges related to the operations and management functional areas of SMEs. For example, a recent survey by Dutta (2020) in the UK listed as fundamental worries of the SMEs the following: Financial challenges 36%; Technology risks 21%; Regulatory compliance 17%; Societal changes 13%; Supply and logistics 5%, which are presented next:

- > Financial Challenges: The principal financial challenges of SMEs are the cash flow and the pricing structure, because they represent the determining factor in driving them forward. This especially true in the EU where late payments remain a leading concern for SMEs, as opposed to larger companies who can push suppliers into accepting lengthier and more flexible payment terms. Cash flow problems lead SMEs to detrimental measures such as prompt invoicing, strict credit controls and other restrictions aimed at protecting cash flow. Maintaining cash flow and building up working capital are critical to SMEs operating in volatile economy as well as in supporting their growth.
- > Technology risks: These risks are concerned with the potential for technology shortfalls that affect EMSs, and which might result in losses. They include the potential for project failures, operational problems and information security incidents (i.e., a SIMPLICABLE report mentions 36 types of technology risks). In general, SMEs having small resources must adopt at risk management measures by facilitating well known efficient technology processes.







- **Regulatory compliance:** The regulatory and compliance obligations of a SME depend on the area in which it operates. In general SMEs are required to comply with all relevant consumer rights legislation among which the most burdensome are the Consumer Protection Act and Protection of Personal Information Act. Compliance with rules and regulations is necessary and socially accepted, but it represents a major challenge, especially for small firms.
- Societal changes: Too many societal challenges remain without solutions, while too few SMEs are engaged in social contributions and innovations. There is a need for SMEs to become stakeholders dealing with social or societal issues and seize the opportunities to contribute towards alleviating social needs or societal challenges. Few SMEs have developed concrete solutions to these issues, which should be described in the form of innovation opportunities, suitable to SMEs. Thus, synergies between social enterprises and them is a necessary step to follow
- Supply and logistics: The literature (Kherbach & Mocan, 2016; Hong, & Jeong, 2006; Arend & Wisner, 2005) has shown that trade logistics and supply chain management are needed by SMEs in order to improve their competitiveness and increase their market share. Indeed, a SMEs market with well-organized logistics and supply chain management facilities has a qualified advantage over other economic sectors, whereas improving logistics infrastructure may a competitive tool in increasing their market share.

2.4 External Constrains

In addition, however, there are many more external determining factors, among which are:

- Access to Capital: As SMEs increasingly challenge big firms, access to funding is becoming more and more important for them. Generally, in both the developed and the less developed countries banks and other traditional lenders are reluctant to lend to SMEs stiffening their growth.
- Strong Competition: SMEs are finding that competitors are more often relying on price as a key point of gaining market share. But strong price competition is decreasing cash flow and profitability, which often involves changing the business' approach to stock control, reducing inventory on hand. On the other hand, it leads to better management and the creation of a better customer experience, including by selling boutique or artisan products
- > Attracting New Customers: Willment (2020) has mentioned that for 79% of the UK SMEs their toughest challenge was how to attract new customers, which creates a serious problem for SMEs. Big companies with a strong brand supporting them find it easier to attract new customers, but EMSs they do not have such an instrument
- > Social Media: Many SMEs are thinking that by having a website they have an online presence. Nowadays present serious constrain in their operation. There is so much more





Development Potential: In the EU, SMEs play a significant role in the vitalization and the economic development of the country as a whole but especially in the countrywide. An SME is creating job opportunities, promotes stable work markets, supports development of regional economies, produces creativity and invention that fuels economic progress, promote the competition and cooperation and produce quality value added products. Therefore, nowadays the contribution of SMEs in creating a sustainable

economic development across cities, rural areas, regions and countries is indisputable.

Environmental Entrepreneurship: The demand for environmentally-friendly products and services are increasing all over the world (climate change accord). This has created two types of environmental practices in the EU: the practices related to production processes (greening processes) and the practices related to products and services (greening product and service offerings). Both these practices, however, create complexity, administrative burdens and high costs in complying with the innumerable and various rules and regulations demanded by the EU legislation. The result is that SMEs owners and entrepreneurs are discouraged from apply them and meet the costs involved.

2.5 Market Challenges

- Environmental Entrepreneurship: Innovation is a complex and multidimensional process, (it concerns ideas, approaches, methods, processes, structures, behaviours, attitudes, cultures, technologies and capabilities) which is reflected in the relationship between technological or internal innovations (product innovation and process innovation) and the administrative system innovations or external (organizational innovation and marketing innovation) (Armbruster et al., 2008; Varis & Littunen, 2010). This relationship can be easily observed in the way SMEs are operating by balancing different types of innovation in accordance with their needs. As a result, innovative performance is practically a construct made up of the different forms of innovation carried out by an individual SME. The most important enterprising innovation determinants, in addition to internal factors, are:
 - Factors Bearing to SME's innovativeness: The external factors are connected with the major characteristics of the entrepreneurship environment an EMS operates and the policies, mechanisms utilized by the overseen legislative and administrative entities of the area, region, country and the EU. The external factors sometimes help SME's (mostly the environment), but mainly constrain their operation requiring their constant alertness and wiliness to comply.
 - IT Capabilities: The literature (Roman, 2012; Carbonara, 2005; Banker, 2006) has shown that SMEs IT capabilities such as computer-aided design (CAD),computer-aided manufacturing (CAM) processes, and the application of other commonly used software are linked to: increased performance, internalization of successful practices, facilitating



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exchanges of opinions, information sharing, work coordination, as well as significant increase in the extent and quality of product design and decrease time spent on it which lead to their innovativeness. In a wider context, ICT (information-communication technologies, which are mainly telephone, computers and Internet) play a role in reduced uncertainty and transaction costs, growth of information and knowledge flow, productivity and cross-border competition, which again lead to the rapid spread of innovations

- Owners Perception of Innovation: In the SMEs the personal characteristics of the owner, and exclusive decision maker, are determinants in his perception of innovation and in adapting innovation at least during the initial phases of the business, as well as later in leading towards innovative success (Koellinger, 2008; Marvel & Lumpkin, 2007) and economic performances (Robinson & Sexton, 1994). Generally, the influence of education and other mental capabilities such as cognitive complexity (Thompson et al., 2010) of the owner are paramount in the motivation and management style, the promotion of creativity, the discovery of business opportunities, and his capacity for technological absorption.
- Internationalization: Nowadays technology, abolition of trade barriers and a series of other factors are forcing the world economy, willingly or unwillingly, to become dependent and integrated. The creation of such a globalization has a positive effect on SMEs by allowing them to fast become international in an effective way. SMEs by playing an increasingly active role in international markets they are rapidly expand their businesses to international markets and mainly use these international activities as an important strategic role to grow. In most cases, however SMEs are motivated to internationalize due to reasons such as: increasing sales, diversifying operations, getting closer to its clients, reducing costs (production and supply) and compensating for home market decline. To achieve internalization can be a simple described process, but difficult to apply, requires a set of difficult actions such as:
 - Eliminating Risks: Any internationalization process, including that of the SMEs by its nature involves risk and uncertainty, which have significantly impact upon enterprises and their strategy. Therefore, for SMEs to internationalize successfully, they have to lower these risks and uncertainty. These can be done by choosing the right strategy and methods, and mainly to have the experience or information about foreign markets to avoid risking the survival of the enterprise or the competition to undermine their activities.
 - Eliminating Risks: Knowledge is a key element in any SME strategy and method for internationalization. Incorporating internationalization into the competitive strategy of an SME requires gaining knowledge about other clients and markets, the capacity of competitors and even the cultural diversity the areas of interest. Although, gaining knowledge rarely appears in SMEs plans, yet it is of crucial importance because all enterprises companies need to work in international markets in order to be exposed to the need for excellence that international competition brings.





- Creating competitive advantages: It is imperative that SMEs define the competitive advantage they trying to gain. As a result, they should consider the following:
 - \checkmark Offer better value than its competitors, either by offering enough differentiation or a lower price to be able to sustain a competitive advantage. They should realize that this is true not only in their national market, but it is also relevant within a global context.
 - \checkmark Choose appropriate ways of entering and consolidating a market that is the base for any international expansion. The literature (Ricart & Llopis, 2014) and experience has shown that there is a wide range of options available
 - \checkmark Apply differentiation: One size does not fit all. Selling is not the same as manufacturing; commercializing any product cannot be the same across space, time and operating conditions.
 - \checkmark Adapt to different cultures, languages, religions, administrative norms, modes of consumption, competition and distribution, as well as lack of resources, infrastructure and labour characteristics.
 - \checkmark Accept that internationalization is a long and complex process, requiring planning, flexibility, and, above all patience.
- > Adapting to local frameworks: The adaptation strategy consists of increasing income and market share by tailoring products and services to the local context and the key is to arrive at the correct adaptation of the business model and the product and service offered to the target market.
- > Entrepreneurial orientation and SMEs performance: SMEs need to exploit the differences between national and international markets in order to convert them into opportunities for optimizing market share and available resources. The key is to locate independent parts of the demand and the supply chain in different places in order to exploit the advantages of their production on a global scale. On the other hand, taking advantage of economies of scale through the creation of international operations can become the key to standardize products, grouping together activities on the basis of areas or geographical zones and thus optimize costs. In other words, internationalization reveals the linkage between entrepreneurial orientation and firm performance.
- Competitiveness: Given that SMEs are the backbone of EU economy, the competitiveness of SMEs is at the forefront of the EU commission, which is creating strategies for competitiveness leading towards smart, inclusive and sustainable growth. The latest data (2020, EU commission) show that 1.2 million SMEs enterprises are created in the EU every year, yet only half of those survive the first five years. As a result, the challenge for member states and regions is to improve policies that can boost entrepreneurship and support SMEs competitiveness.

Achieving SMEs competitiveness is complex and requires great efforts in areas such as: internationalization, access to markets, financing, growth capacity, networking and clustering, innovation capacity, business transfer, entrepreneurship development and







3. THIRD DIMENSION: COMPLIANCE WITH GAP

The third dimension is related to the SMEs quality of a good or service or a combination of both, and the efficiency of production as well as of the recycling processes that are as important, and which are dimensions in which SME's enterprises can benefit from the implementation of resource efficiency measures or the application of the SMEs Green Action Plan (EREK, 2018).

3.1 Objectives Related to GAP

the GAP objectives address a set of challenges by increasing awareness, offering tailored information, technical and advisory support, as well as facilitation of the investment schemes for enterprises, in order to:

- > Provide Information to SMEs with practical information, advice and support on how to improve their resource efficiency in a cost-effective manner.
- Support efficient technology transfer mechanisms for green technologies.
- Facilitate the access to finance for resource-related improvements and energy efficiency in SMEs.

3.2 Support Entrepreneurship

- > Support Green Entrepreneurship: the GAP actions concerning SMEs entrepreneurship address issues, which can create the conditions for the necessary solutions associated with providing incentives for: research; development and demonstration; formulating entrepreneurship skills; and supporting networking and collaboration. More specifically:
 - Promote all forms of eco-innovation, including non-technological eco-innovation. •
 - Facilitate business partnering, skills and knowledge for green entrepreneurship.
 - Exploit better the role of clusters in support of eco-innovative SMEs.
- > Provide Opportunities of Greener Value Chains: the GAP actions related to this area of SMEs activities are focused on fostering circular economy and long-term resource independence. They are addressed by financing actions such as in-depth analysis of existing barriers and how to tap into the potential of European clusters and cross-regional exchanges. More specifically:







- Address systemic barriers to cross-sectoral and cross-national value chain collaboration and business creation and cooperation.
- Facilitate the creation of service business models.
- Re-use of materials, products and waste.
- Facilitation of Market Access for Green SMEs: the GAP actions concerning SMEs market access, address the problem associated with their weak internationalization. They address this issue by helping in matchmaking activities, in creating appropriate platforms, and in providing special support services. More specifically:
 - Promote a greener European internal market
 - Facilitate access to international markets for green entrepreneurs
 - Facilitate the uptake of resource efficiency technology in partner countries through cooperation with European SMEs
- Resolving Administrative issues o Environment: from an administration (Governance) point of view the Green Action Plan for EMEs aims at helping SMEs turn environmental challenges into opportunities, reconcile economic growth with environmental sustainability and take advantage from the transition to a green economy, which offer numerous business opportunities for them. The basic aims are:
- > Improving SME Resource Efficiency: This can be achieved by
 - Providing information and advice to SMEs on how to improve their resource efficiency in a cost-effective manner.
 - Supporting green technology transfer.
 - Facilitating access to finance for environmental improvements.
- **Green entrepreneurship, green skills and eco-innovation:** This can be achieved by
 - Developing, financing.
 - Putting green ideas on the market.
 - Promoting eco-innovative business ideas.
 - Promoting green entrepreneurship.
 - Innovative clusters.
- Since the second second
 - Enhancing cross-sectoral cooperation across the value chain.
 - Cross-regional cooperation across the value chain.
 - Share specialized knowledge.





CONCLUSIONS

Nowadays the condition, benefits and the impacts of SMEs in the economy and the society in general, can be assessed only through an integrated approach related to their entrepreneurial processes. Based on these principal, important changes in the way we approach and consider SMEs have to take place. There is a need to view SMEs in a new approach, which requires changes of their perception and assessment. Present day scientific knowledge (Baron & Shane2007; Omerzel, & Antoncic. 2008; Urban & Naidoo. 2012; Baron & Shane,2007) clearly indicate that a new integrated approach to SMEs consideration needs to be utilized to have successful results. The goal of this presentation is to substantiate that in achieving an effective and efficient approach to SMEs, the nature of all the factors involved in determining their successful operation have to be fully understood, because in turn they determine the way the dual goals of EU (circular and more resilient economy) can be implemented, which include the greening of the SMEs.

This presentation provides a conceptualization for a strategic consideration of SMEs, which is based on a framework of the principal entrepreneurial concerns, whose objectives and actions were identified and presented. It was shown that within an integrated philosophy of SMEs, which is based on a three-dimensional space consisting of the Advantages they exhibit, the Enterprising Environment within which they operate, and the aspects of GAP they apply, any EMSs consideration, appraisal or examination is not only necessary, but possible. More specifically, any SMEs consideration should be seen as defining a point in this threedimensional space, which:

- > Provides a very efficient and effective SMEs assessment tool.
- Helps any administrative entity (from local to the EU level) to recognize the context, in which SMEs operate.
- > Helps in understanding the integrated nature of SMEs.
- Provides a comparison tool differentiating SMEs operation.

In addition, the presentation provided some important insights such as:

- ➤ The BALANCE project can provide SME decision makers and consultants with an innovative program to help them transform EMEs into greener operations, while improving their financial literacy and enhancing their environmental awareness.
- The training program by utilizing e-learning materials and a curriculum based on ECVET is providing a holistic view of all the major aspects of the green policies and the financial sustainability of SMEs.





- SMEs are essential to Europe's competitiveness and prosperity, as well as economic and technological sovereignty. Thus, for SME's decision-makers and consultants it is imperative that they understand and appreciate the three major components of the existing approach to SMEs.
- There is a need for a transition to a new model of SMEs economic production and management, which in turn requires the adoption of a new road to development and growth, based on alternative economic production models.
- Assessing SMEs only in terms of economic indicators (staff headcount and either the turnover or balance sheet), cannot be acceptable anymore.
- The awareness of Environmental Policies and the topics of financial sustainability can be utilized as valuable tool to promote green operations to SMEs.
- The conditions, benefits and the impacts of SMEs on the economy and the society can be assessed only through a holistic approach related to their integrated entrepreneurial processes.
- SMEs respond to internal and external factors or challenges in a re-active manner, mainly by internal adjustments to their entrepreneurial practices.

Concluding it should be noted that the EU is focusing on helping GMEs to alleviate their burdens and challenges in order to allow them to grow in regional, national and international markets. Koutsopoulos (2021) has created the following Decalogue of major areas that EU should concentrate at helping SMEs:

- ➢ Lack of financing.
- Lack of technical knowledge.
- Lack of managerial skills.
- Lack of market research.
- > Lack of sector specific skilled manpower.
- Lack of compliance with administrative and market conditions.
- Market competition.
- > Poor infrastructure.
- High bank interest rates.
- Government regulation.





REFERENCES

Adler, A., & Shenbar, C. (1990). Adapting your technological base: The organizational challenge. Sloan Management Review. 25 (3), 25-37.

Amini, A. (2004). The distributional role of small business in development. International JournalofSocialEconomics.31(4),370-383.Availableathttps://doi.org/10.1108/03068290410523395

Aragon-Sanchez, A., & Sanchez-Marin, G. (2005). Strategic Orientation, Management Characteristics, and Performance: A Study of Spanish Smes. University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship. Available at : SSRN Electronic Library - PIP Journal Information.

Arend, R.J. Wisner, J.D. (2005). Small business and supply chain management: is there a fit? Journal of Business Venturing, 3: 403-436.

Armbruster, H. Bikfalvi, A. Kinkel, S. Lay, G, (2008). Organizational innovation: the challenge of measuring non-technical innovation in large-scale surveys. Technovation 28(10): 644–657.





Baron, R.A. & Shane, S.A. (2007), Entrepreneurship: A Process Perspective. (2nd Ed.). Mason, OH: Thomson South-Western,

Bölükbaş, U. & Güneri, A.F. (2017). A fuzzy multi-criteria decision approach for measuring technology competency performance of SMEs. Sigma Journal of Engineering and Natural Sciences. 8 (1), 31-40.

Cohen, S. (2020). Economic Growth and Environmental Sustainability. working paper, Earth Institute, Columbia University.

Cogliser, C.C., Brigham, K.A., & Lumpkin, G.T. (2008). Entrepreneurial orientation (EO) research: A comprehensive review and analyses of theory, measurement, and data-analytic practices. Paper presented at the Entrepreneurship Research Conference in Babson College (accessed 10 June 2021).

Deepa, B. & Manalel, J. (2016). Entrepreneurial orientation and firm performance: A critical examination. Journal of Business and Management. 18 (4), 21-28.

Demaria, F. (2018). Why economic growth is not compatible with environmental sustainability. Paper presented at the Ecologists Informed by Nature conference. Accessed 10 June 2021Available at hhtp://theecology.org/2018/Feb/22/ whyeconomic-growth-not-compatible-environmental-sustainability (accessed 10 June 2021).

Dutta, D. (2020). Here are the biggest challenges SMEs in the UK are facing. Accessed 10 June 2021. Available at http://dataconomy.com/2020/02/here are the biggest challenges SMEs in the UK are facing.

European Commission. (2015).What is an SME? - Small and medium sized enterprises (SME).Web conference European Journal of Business and Management www.iiste.org ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online) Vol.13, No.13, 2021 31 Enterprise and Industry (ec.europa.eu). Accessed 10 June 2021. Available at http://ec.europa.eu/eurostat/statistics explained/index.php/Statistics_on_small_and_mediumsized_enterprises.

Forbes, D.P. and Milliken, F.J. (1999) Cognition and Corporate Governance: Understanding Boards of Directors as Strategic Decision-Making Groups. Academy of Management Review, 24:489-505.https://doi.org/10.5465/amr.1999.2202133

Hamidatum, M. & Sabariah, Y. (2020). SMEs' Perception on Supply Chain Risk: Does Size Matter? International Journal of Accounting, Finance and Business. 5 (27), 30-46.

Hans-Heinrich, B. (2006) KMU in der deutschen Volkswirtschaft: Vergangenheit, Gegenwart, Zukunft, Berichte aus dem Weltwirtschaftlichen Colloquium der Universität Bremen Nr. 101, Bremen. Accessed 1 Feb. 2021 at the Wayback Machine.

Hong, P. & Jeong, J. (2006). Supply chain management practices of SMEs: from a business growth perspective. Journal of Enterprise Information Management, 19: 292-302.





NO. 2020-1-KA204-079048

Kherbach, O. & Mocan, M. (2016). The importance of logistics and supply chain management in the enhancement of Romanian SMEs. Procedia - Social and Behavioral Sciences 221 (2016) 405 - 413

Koellinger, P. (2008). Why are some entrepreneurs more innovative than others? Small Business Economics. 31, (1), 21–37.

<u>Kotey</u> B. (1999). Debt Financing and Factors Internal to the Business. International Small Business Journal. 17 (3): 11-29.

Koutsopoulos, C. K. (2021). Small and Medium-Sized Enterprises (SMEs): Towards a New Paradigm. European Journalof Business and Managment. 13, (13), on line.

Lumpkin, G.T. & Dess, G.G. (2001). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. Journal of business venturing. 16 (5), 429-451.

Lutz, S. (2015). Revolution - industry 4.0: Are German manufacturing SMEs the first victims of this revolution? Journal of Industrial Engineering and Management. 8 (5), 1512-1532, DOI:10.3926/jiem.1470.

Marvel, M.R. & Lumpkin, G.T. (2007). Technology entrepreneurs' human capital and its effects on innovation radicalness. Entrepreneurship Theory and Practice. 31 (6), 807–828.

National SME Development Council. (2012). Summary SME masterplan 2012-2020: catalyzing growth and income . accessed 10, June 2021. Available at, https://www.researchgate.net/publication/342735407_SMEs'_Perception_on_Supply_Chain _Risk_Does_Size_Matter ().

OECD. (2017), Enhancing the Contributions of SMES in a Global and Digitalized Economy. In Meeting of the OECD Council at Ministerial Level (pp. 1-24). Paris: OECD. Available from: https://www.oecd.org/mcm/documents/C-MIN-2017-8-EN.pdfKfW.

Omerzel, D.G. & Antoncic, B. (2008). Critical entrepreneur knowledge dimensions for the SME performance. Industrial Management and Data Systems. 108 (9), 1182-1199.

Peters, T.J. & Waterman, R. (1982). In Search of Excellence. New York: Harper & Row.

Radam, A. Abu, B. L. & Abdullah, C.M. (2008). Technical Efficiency of Small and Medium Enterprise in Malaysia: A Stochastic Frontier Production Model. International Journal of Economics and Management. 2 (2), 508-515

Radas, S. & Božić, L. (2009). The antecedents of SME innovativeness in an emerging transition economy. Technovation 29 (6-7), 438-450.

Ricard, J. <u>Llopis</u>, J. (2014). Next Stop: Making SMEs International", IESE's Alumni Magazine. 132 Accessed 1 Feb. 2021: Available athttps://www.forbes.com/sites/iese/2015/04/20/how-smescan-internationalize



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Robertson S. (2019). Can economic growth be environmentally sustainable? Lending Works. Available at: https://www.lendingworks.co.uk/blog/economy/Can Economic Growth Be Environmentally Sustainable? | Economy News (lendingworks.co.uk).

Robinson, P.B. & Sexton, E.A. (1994). The effect of education and experience on self-employment success. Journal of Business Venturing. 9 (2), 141–156.

Selamat, N. H., Abdul-Razak, R. R., Gapor, S. A. & Sanusi, Z. A. (2011). Survival through entrepreneurship: Determinants of successful micro-enterprises in Balik Pulau, Penang Island, Malaysia. British Journal of Arts and Social Sciences. 3 (1), 23-37.

Samimi, J. A., Ghaderi, S. & Ahmadpour, M.(2011). Marginal intra-industry trade and adjustment costs: the case study of Iran's manufacturing industries. Advances in Environmental Biology. 5 (5), 961-966.

Thompson, P. Jones-Evans, D. Kwong, CY. (2010). Education and entrepreneurial activity: a comparison of white and South Asian men. International Small Business Journal. 28(2): 147–162.

Urban, B. & Naidoo, R. (2012). Business sustainability: empirical evidence on SME operational skills in South Africa. Journal of Small Business and Enterprise Development. 19 (1), 146-163.

Varis, M. & Littunen, H. (2010). Types of innovation, sources of information and performance in entrepreneurial SMEs. European Journal of Innovation Management. 13 (2), 128–154.

Walczak, D. and Voss, G. (2013). New Possibilities of Supporting Polish SMEs within the Jeremie Initiative Managed by BGK. Mediterranean Journal of Social Sciences. 4 (9): 760-761.

Welsh, A. White, J. f. & Dowell, P. (1981). A Small Business is not a Little Big Business. European Small Business Journal. 1 (1), 95-95.

