

# Output 1 Insights into SME circularity: Desk & Field research results

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# INTRODUCTION

The COVID-19 crisis accelerated the need for modernisation and digital transformation of training systems in Europe. CIRCULAR SME SCAN (CSS) connects this with a circular economy which is a strategic approach to a greener economy in support of European economic recovery. Circular SME Scan project, financed by the Erasmus+ programme, aims at creating a self-scan and learning platform that develops SME circular economy skills competences by focusing on four main areas of the entire SME circularity value chain.

For the delivery of the main goal, four Intellectual Outputs (O) are defined as follows:

- 1. Skills and competences framework of SME circularity
- 2. Self-scan solution to assess SME circularity
- 3. Learning content and platform
- 4. Stakeholder guides

Preliminary research has provided a solid base to start a deeper desk research in O1 as a part of O1- A1 activity: Identifying best practices and methodologies. Key issues were considered and ensured that region specifics-characteristics are taken into account. Therefore, three regions were mapped according to a set of exact focus points. The three regions are the following:

- Province of Friesland in the Netherlands by BDF,
- Extremadura region in Spain by EOLAS,
- South Transdanubian region in Hungary by STRIA.

AVACA didn't contribute to A1 as being the technology partner.

The present report reflects the work done to define the skills and competences for SME circularity, to create a solid foundation and base for the development of the CSS self-scan and its contents in such a way that these are fully aligned and adapted to the reality and needs of the SMEs, and in particular micro-SMEs in the 3 participating regions and countries.

The report describes the different steps taken to ensure this. Chapters 1 to 3 focus on the desk research activities, Chapter 4 on the outcomes of the survey, and Chapter 5 on the conclusions of the focus groups. Chapter 6 provides the recommendations for the development of the CSS Self Scan.







# Chapter 1 - The research methodology

The starting point of the research is based on the informal dialogues with SMEs. Furthermore, to come to the extended report as it is now, we have applied several approaches to retrieve information relevant to set the skills and competence framework for SMEs in a circular environment;

- Desk research
- Surveys
- Best practices
- Focus groups

Starting with the desk research to identify the background of the different regions, followed by surveys of entrepreneurs in the field of sustainability and circularity. The partnership also identified best practices and gathered experts in focus groups, to retrieve the most reliable information and opinions possible. This document will provide the key information about these different approaches and their outcomes, to identify the foundation of the actual self-scan and platform.

All chapters are a summary of the actual outcomes, find more detailed information about the results in the comprehensive reports.

# Chapter 2 - Desk research reflections

The method of the analysis is a form of secondary research, namely desk research. The aim is to extend and to ensure the correct contextualisation for the development of the self-scan and learning materials.

There are basically two types of desk research techniques; internal (involving already existing organisational resources to organise the collected data within an already existing internal database) and external (online desk research, government published data, customer desk research).

This external desk research conducted in the frame of the project mainly consists of online desk research such as publications, studies, government published data on the topic of circularity skills and competences for SMEs. The project partners discussed and agreed on the focus points of the research in the first transnational project meeting based on preliminary data, experience and assessment carried out during preparation.







The information collected during the desk research in the chosen regions allows to compare, highlight and asses the similarities and the core issues in the analysed economic environment, which are essential to develop and implement the online platform with the suitable features for the target groups' needs while keeping market demands in mind in order to achieve real long-term impact.

As a base of CSS's desk research, informal dialogues with SMEs from the preparation phase are used which is one of the best ways to extract information. The information that is coming from direct communication with already involved or prospect companies and stakeholders in the topic, is the most accurate and useful data which can be used most effectively in the further process of research.

Besides, the characterisation document provided a theoretical background for this desk research and this can be compared with the three region's findings. The goal is to find the similarities among the regions that will be crucial to implement the online platform and educational materials.

#### Results

CSS addresses one of the most actual and pressing issues in Europe's economy. The need for SMEs to become more sustainable, not only in their production processes, but in the procurement and in the products/services they offer themselves, the retail aspects and waste streams. They have a high interest in resolving the challenges and making their business more circular and sustainable, and this contributes to sustaining the impact of the project.

Circular economy as a shaping force on a universal level in the present and in the decades to follow has to address how we manage resources, how we make and use products, and what we do with the materials afterwards.

The circular economy gives us the tools to tackle climate change and biodiversity loss together, while addressing important social needs. For SMEs, the challenge of sustainable transformation is balancing the need to keep business in motion while making changes to reach their sustainability ambitions. The project activities have to reflect on the EU framework, while addressing the issues of the present and give the opportunities to the economic actors to assess their situation, be aware of the obligations they have to fulfil and see potential in them rather than obstacles.

As we saw in the research the most common barriers are the lack of a supporting supply, demand network, lack of capital, lack of structured, long-term government support in addition to the companies not supporting environmental culture and lack of networking.

In order to achieve the facilitation of circularity the following steps are recommended:

#### For government:

- Promote a circular economy culture,
- Creating the right framework conditions with harmonised definitions, transparent, available information and methods,
- Sharing of best practises through appropriate programmes and platforms,







- Enhance responsible consumption through transparent labelling, product information and traceability,
- Emphasise consistency between funding and environmental policy regulations.

### For business sector:

- Promote and support the paradigm shift from "waste" to "resource" with various activities,
- Support business resource efficiency through exchange of know-how and best practises,
- Promote Extended Producer Responsibility,
- Facilitate transparent labelling, product information and traceability,
- Promote circular businesses through certifications and awards,
- Foster capacity building for the circular economy with information, training, management,
- Implement Sustainable Public Procurement processes.

Our current, linear way of producing and consuming products is ruining fragile ecosystems, causing the loss of valuable natural resources. The above listed steps and initiatives utilise the potential of the SME sector and leads them to a liveable circular economy model that brings more sustainable solutions where products are in use longer and materials are reused to manufacture new products.

Circular economy is becoming more widespread and receiving increasing support from every aspect. The results also present both differences and common characteristics across the three regions, which are intended to cover the following in particular:

Circular economy is known on national and regional level and its advantages. Although the everyday audience doesn't have accurate information about what it is and what belongs to this model. SMEs are more informed and are more open for new opportunities since the pandemic situation.

Its integration is beneficial in every region, because it reduces the use of raw materials and consumption, increasing employment opportunities, encouraging innovation and growth, reducing pressure on our nature etc.

SMEs can connect to the circular world through improving production processes, Eco-design and procurement processes especially now that the pandemic situation made its methods and long-term effects even more attractive. Production processes can be improved by the introduced special programmes (for example: CIRCO TRACKS), raising awareness, getting more attention for recycling and reusing the materials. Eco-design made its stand, but more grant programmes/ public initiatives should support SMEs on their way to increased circularity. Procurement processes means taking into consideration sustainability and its standards. SMEs need to be aware of the risks in connection with procurements when choosing environment/ climate friendly or circular processes or products that might not be preferential in the current system.

SMEs cover the business forms almost in 100% in Friesland and Extremadura. For that matter, in the Netherlands the freelancer is the most popular form for becoming an entrepreneur. South Transdanubia lagged behind with only 42,5%, although the individual entrepreneurs provide 72% of all business organisations. Around 65% of total employment in Spain and in the Netherlands corresponds to SMEs as long as in Hungary







it's less than 27%. The four chosen sectors for the project are manufacturing, agri-food, packaging, retail/commerce and the hospitality in which economic sector they function. Businesses represented the highest number in retail/ commerce then in manufacturing in all three regions. Packaging is negligible. Hospitality is also important in the view that this sector suffered in the greatest degree during the COVID-19.

SMEs can enhance the circularity with industrial cooperation. The most known and used forms are reducing consumption of resources, waste re-evaluation and industrial symbioses. Reverse logistics, functional economy, community sharing seen by SMEs as fewer effective ways of cooperation.

COVID-19 affected the GDP hence the governments handed assistance and financial aids to the SMEs. SMEs struggled in many aspects especially with procurement because of logistic issues and the materials' prices increased. SMEs lost many employees, clients, suppliers and some of them had to close down. The positive side of the pandemic is that new SMEs started their activities. Support programmes offered by public institutions for SMEs are affected through their focus because the COVID-19 transferred the attention from development, circularity to the survival of SMEs.

From another point of view, SMEs and their workers are hard-hit by the present COVID-19 outbreak and related economic downturn. In response to the crisis, governments, employers' and workers' organisations, enterprises, and other social partners are implementing strategies to minimise the negative impacts, supporting business operations. The pandemic highlighted that new and existing SMEs need an easy-to-implement solution so they can change to a more circular model, in which the CSS project helps to accomplish via its platform and educational materials.

# **Chapter 3 – Mapping best practises**

The desk research allowed us to gain good insight into the current status of the circular economy, in particular among SMEs in the participating regions. It also allowed us to see how the COVID pandemic affected the SME operations in general, and their efforts to become more circular in particular.

It is clear that based upon the desk research it is necessary to drill deeper into key issues such as best practises and methodologies for development of circularity skills-competencies of SMEs, as well as into the views, perceptions and feelings of SMEs in the participating regions about circularity in SME processes of supply-acquisition, operation-production, retail, waste streams and the options to become more circular in these processes.

This chapter highlights the work done with regards to the mapping of best practises and explains how these will be embedded in the further work of the project.

Based upon the methodology and initial stages of the desk research, EOLAS developed a matrix for the recollection of best practices.







Partners STRIA, BDF and EOLAS during the mapping exercise identified best practises cases which aligned with 1 or more of the circularity options as identified in the desk research, i.e., Life cycle assessment; ECO Design Reverse logistics; Functional economy; Community sharing; Revaluation of waste and Reducing consumption of resources (water, electricity, etc).

For each case they identified the name of the case; a link to a web page or article and included a short description of the case at hand. Apart from marking the circularity options concerned they also indicated whether the case included relevant cooperation with other stakeholders.

Understanding in this sense, relevant cooperation as the implementation of the circularity option or solution would not have been possible without their cooperation and that their role in the implementation has been significant. For instance, a grant from a public body is not considered relevant cooperation, nor is the participation or attendance of a training course.

Overall, a total of 27 practices were identified, 9 in Hungary, 8 in the Netherlands and 10 in Spain.

With regards to the circularity options, the following indicators can be found:

- Life cycle assessment 11 cases;
- ECO Design Reverse logistics 7 cases;
- Reverse logistics 1 case;
- Functional economy 1 case;
- Community sharing 6 cases;
- Revaluation of waste 19 cases;
- Reducing consumption of resources (water, electricity, etc) 15 cases.

Note: a case which was marked as relevant for more than one circularity option is counted under each of the options selected. This is the reason why the total case studies do not match the sum of the circularity options cases.

This mapping exercise will be the basis for the selection of those examples and cases which are considered most relevant for the CSS Self Scan, bearing in mind the outcomes of the survey on SME preferences, needs and demands with regards to circularity and with regards to the CSS Self Scan.

Depending on the relevance of the case and the interest of the CSS Self Scan, some cases will be merely included as examples (i.e., short to point examples, which describe in a summarised manner what has been done) or as a case study (more in-depth analysis of the specific situation and solutions and circularity options which were opted for). A template for both the examples and case studies will be developed as part of the O2 activities.

The number of cases indicated above provide a picture of the status of the activity at the end of November 2021. However, the mapping exercise will continue, as more cases might emerge when starting to develop the CSS Self Scan. Partners will agree on a







specific date when any additional cases identified will only be included as short examples, as the case studies will require time and resources to be developed.

# Chapter 4 - Survey outcomes

The aim of the questionnaire was to collect information in order to identify best practices and methodologies and assist focus group preparation in Circular SME Scan project regions. The survey targeted small and medium size enterprises (SMEs) that intend to improve their competitiveness through increased circularity and experts of the circularity issues as part of company operation.

The fill outs were received through the internet and summarized the answers in the Excel sheet.

The three partners received 89 responses altogether during the one month. The Dutch partner gathered 30 answers and the Spanish partner delivered 26 responses. The Hungarian partner received 33 replies. The survey results show similarities to the EU level statistics.

The main type of the business is the corporation across the three regions. This is the same compared to the data for the EU, where the businesses' principal form is the company. On the other hand, the size of the organization is mostly micro entrepreneurships which means less than 10 employees/ owners of the company. The main focus should be on micro businesses and try to address to them better the self-scan tool, but bearing in mind other SMEs and stakeholders.

The CSS project emphasized the following four economic sectors: agri-food, retail and commerce, manufacturing and hospitality. From that point of view, SMEs operate in several, even independent from one another, sectors and try to overcome the obstacles that COVID-19 caused. Participants would welcome the sector-specific recommendations, although the received results would require a quite large database for industry specific information as part of the self-scan tool.

SMEs are interested in circular economy topics, specially:

- Eliminating waste and pollution by consciously designing of your products/services,
- Recycling and reusing materials,
- Using renewable energy,
- Composting.
- Cooperation with organizations make promotion on natural production technologies,
- Agricultural production on natural farming technologies.

Some of the respondents apply the mentioned processes and only 28% of them don't use any of these options. They would like to read and hear more about industrial symbiosis, reverse logistics, waste re-evaluation and community sharing. These meet







with the European Green Deal, which will improve the well-being and health of citizens and future generations by providing:

- · Fresh air, clean water, healthy soil and biodiversity,
- · Renovated, energy efficient buildings,
- · Healthy and affordable food,
- More public transport,
- · Cleaner energy and cutting-edge clean technological innovation,
- · Longer lasting products that can be repaired, recycled and reused,
- · Future-proof jobs and skills training for the transition,
- · Globally competitive and resilient industry.

The SMEs are enquired in learning about the circular economy, because they are concerned about their processes and how to make them sustainable, more circular. Examples and case studies would be beneficial as the learning approach, although rather good practices than case studies. SMEs think that the most popular learning approach would still be the online learning tool and integrated with online workshops.

The respondents are looking for a self-scan tool to know their current environmental impact, as well as to know how to implement the circularity models and methods described in the survey in their companies. They expect practical, quick tips and tricks on the long and short term in everyday language. Furthermore, they are looking for inspiration and examples of other companies who changed their strategies. Others mentioned raising awareness for SMEs, sectoral evaluation and recommendation to reach more SMEs and urge them to use the self-scan tool other than external pressure from the government, partners, suppliers or just because the market competition requires.

The results correspond to the preliminary expectations.

# Chapter 5 - Focus groups

The survey gathered quantitative data about the CSS project target group. The research included focus group interviews as an alternative research technique to gather qualitative data collection to obtain valuable information. In the focus groups, the participants are able to interact, influence, complement each other and together come to a conclusion.

The participants were invited from the project direct and indirect target groups, such as:

Direct target group: SME owners and staff and entrepreneurs interested in improving the competitiveness of their companies through increased circularity Main users of the self-scan, learning content and platform.

Indirect target group: Those with whom the SME owners and staff and entrepreneurs will cooperate to in the process of making their business more circular (NGOs, consultancies, innovation hubs, VET training centres, etc)







As a precondition, the partners had to ensure that at least half of the participants in the focus group belonged to the direct target group. The main topic of the focus groups was to obtain input on the content of the self-scan, i.e., learning content, target industries and preferred ways of learning.

The three project partners (BDF, EOLAS and STRIA) held 3 focus group interviews in each region with a total of 15 participants. The aim of the focus group was to gather as much as relevant information to create a firm foundation for the other outputs of the CSS project and validate the skill set out in the project.

The interviews were held online due to COVID-19 and health regulations during December 2021 and January 2022. Participants were eager to share their thoughts and ideas. The focus groups were effective and the partnership concluded the following:

In general, there is widespread misinformation about the concept of "circular economy". Some of the SME are already circular but they are not aware of it.

SMEs need to raise their awareness and see the advantages that circularity can bring to their company.

The partnership has to highlight that the self-scan tool as well as the platform will be available in local languages and include local information. The participants were positive, but pointed out that, due to the limitations of a self-diagnostic and its online scope, this tool should be as easy to use as possible, and should not take up too much time.

It is particularly emphasised that this analysis should focus on the business model of the company in question, and not on its particular detailed activities. Some of the participants propose that the results achieved should not only focus on applying new processes and solutions aligned with circular economy practises

SMEs are interested in getting sector specific information and recommendations too. They are curious what type of input they need to provide to get suggestions.

The learning platform must be easy to understand and user-friendly. There should not be a registration required for the materials unless businesses would like to make the self-scan analyses and receive the advice to become circular.

All participants agree on the introduction of successful case studies and best business practises to inspire future changes which is a widely valued resource among participants.

# **Chapter 6 – Recommendations**

A circular economy aims to maintain the value of products, materials and resources for as long as possible by returning them into the product cycle at the end of their use, while minimising the generation of waste. The fewer products we discard, the less materials we extract, the better for our environment.







This process starts at the very beginning of a product's lifecycle: smart product design and production processes can help save resources, avoid inefficient waste management and create new business opportunities.

The literature review and the research indicate that SMEs from the three examined regions are in a similar position to most SMEs throughout the globe when it comes to transitioning from the linear economy to the circular economy.

The purpose of the Skills and competences for SME circularity report is to define the baseline for the self- scan tool and platform. Also, it should give a structure for related training content, best practices, case studies and design of the platform.

The complex research which has been carried out consists of desk research, questionnaire, focus groups interviews. Based on the gathered information and data, main findings were identified and described. Taking into account the results, we shall make the following recommendations:

The self-scan tool and platform need to be simple and user-friendly. The language has to be understandable for everyday people. As a start, we need to raise awareness for SMEs and show them the advantages that circularity can bring to their company. We have to highlight that it will be available in local languages and include local information as well. It needs to be fast, straight and provide simple directions and advice.

The platform needs to be attractive and include videos, infographics which can be also implemented and SMEs fall for it.

The learning materials should be brief thoughts, essential lessons. Then SMEs could decide whether they need more details, and want to learn more about, so the company could take a look more in details, theories, books, articles.

The self-scan tool itself will consist of more multiple questions and open-end questions and based on the given answers, advise the SMEs to become more circular.

During the focus groups, the partnership considered more business models which were presented to the focus groups. Based on the participants feedback, the aim of the self-scan based on the Value Hill (<a href="https://www.circle-economv.nl">www.circle-economv.nl</a>) business model is as follows:

To start the scan, entrepreneurs should know their processes and activities. This is key to know where to find your opportunities to become more circular. Secondly, entrepreneurs have to map their partners to know if circular opportunities could come from there. These 2 steps are essential to start the circular journey, so these should be integrated in the self-scan in the very beginning.

Step 3 "What circular opportunities do you see"

is the main focus of our self-scan. Where are the gains to be made and in which process can it be implemented? What are the short- and long-term wins? We can use the R-strategy in this approach, as per phase different "Rs" can be used. SMEs also welcome this strategy during the research.







Step 4 might be a step too far for our scan, this can be done by the entrepreneurs themselves or we can link them to external partners who can support them in making a new business model. In our self-scan, we should inspire entrepreneurs and equip them with easy short- and long-term tools to become more circular.

The results of the self-diagnosis should be easy to understand. It is particularly emphasised that this analysis should focus on the business model of the company in question, and not on its particular detailed activities. Some of the participants propose that the results achieved should not only focus on applying new processes and solutions aligned with circular economy practises, but that they should focus in the first instance on resolving internal practices considered as deficient or inadequate to improve and strengthen their internal value chain before launching into new products/services.

All participants agree on the introduction of successful case studies and best business practises to inspire future changes. This is a widely valued resource among participants.

# **Annex – Characterisation across the regions**

## Chapter 1. Why is a circular economy beneficial?

A circular economy is an economic model designed to minimize resource input, as well as waste and emission production. Circular economy aims to reach the maximum efficiency in the use of finite resources, the gradual transition to renewable resources, and recovery of the materials and products at the end of their useful life.

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

The definition and the benefits of circular economy has a common understanding among all the three regions. Although its meaning is not clear for the ordinary audience. Circular economy usually identified as one of its appearances such as:

- reducing the use of raw materials and consumption (or: keeping products and materials in use),
- the term of "reusing" (refurbishing, remanufacturing, recycling),
- sharing economy (or: community sharing),
- planning the economic processes differently (or: design out waste and pollution),
- circularity is an option only in a case when circularity is economically viable, too.

All regions take into consideration the most significant factors just like geography, legislation, economical structure, when it comes to circular economy. Geographical factors emphasise the significance of physical endowment while the population and agglomeration provide the frame for the necessary access to resources, knowledge and collaboration, as well as accessible and viable markets. The territorial factors, specifically the connectivity infrastructures, state-of-the-art technologies, softer factors like







governance and institutional systems, support collaboration among companies and between different actors, as well as among consumers and public institutions give the basic tools for the development of a circular economy model.

All over in the EU, every member states have to face with the climate change, but Extremadura's geographical situation implicates to focus on the climate change and represent a new development approach even better to generate benefits and jobs through investments in new environmental infrastructures, use of clean technologies, renewable energy, products based on biodiversity, sustainable management of chemical products and waste, and the empowerment of green cities, which can happen with circular economy.

The governments cover the circular economy in their strategy on different levels.

Friesland's government adopted the "Strategy of the North" (RIS3), which is an initiative of the European Commission to encourage economic growth and enhance a common focus on region specific targets. The slogan of the Strategy of the North is "the North of the Netherlands: Circular, fortunate and inclusive", which implies a lot about the strategy. Friesland has 3 lines of action when it comes to circular economy "Doing. Learning. Telling" that is shown in specific public policies on circular economy, financing of circular SMEs with budget from the economic department, research activities, transparent economic structure with no dominant company, open communication and cooperation between institutes and local governments.

The Extremadura 2030 strategy developed by the regional government and defined its own meaning such as: "An economy where the value of products and materials is maintained for as long as possible; Waste and resource use are minimised, and resources are conserved within the economy when a product has reached the end of its useful life, so that it can be repeatedly reused and continue to create value." This region fulfils the requirements of Nature 2020, as Extremadura provides a large portion of solar energy in Spain but protects the environment at the same time.

The Hungarian central government focuses in the 2021 Agenda on the following issues: waste management and treatment, development of landfills, and creation of economically viable business models based on the waste produced by households and business units in terms of circular economy. The National Clean Development Strategy of Hungary handles the circular economy as a solution in decarbonisation in order to protect the climate. Almost in parallel, the Circular Economy Platform was established by the initiative of the Business Council for Sustainable Development in Hungary, Embassy of the Netherlands in Hungary and the Ministry for Innovation and Technology. It shows that SMEs want to change and are aware of their needs of action.

The economic structure is another determinant factor for the benefits of a circular economy. In a sense, which economic sectors are worth enhancing the circularity.

It must be mentioned, that these directions are shown in the following sectors in the South Transdanubian region:

- Fashion textile, leather products,
- Construction,
- Food and beverages,







Machinery / Engineering.

At the same time, Friesland highlight the following sectors:

- Agriculture,
- Plastics.
- Organic waste streams,
- Construction,
- Silted water / salifying agricultural lands.

Most of the sectors listed align with the sectors which have special attention in the CSS project.

Extremadura is the largest provider of solar energy in Spain, which could be extended further in addition to the other relevant industries in the region such as:

- Renewable energy,
- Agri-food,
- ICT,
- Logistics and Transport.

## Chapter 2. How do your regional SMEs connect to the circular world?

The circular economy is a model of production and consumption, which relies on large quantities of cheap, easily accessible materials and energy. The fact that the supply of crucial raw materials is limited, influence their costs as well. We have to pay attention to the use of materials, their costs, their role in the workflow and the effect on the products, services lifecycle.

The CSS project covers three major issues regarding how SMEs can connect to the circular world:

- Improving production processes,
- Eco-design,
- Procurement processes.

The improvement of the production processes is at different levels in the three regions in terms of its development.

The improvement is present just as a need in the South Transdanubian region. Offering the requested amount of recycled raw materials makes the upscaling of the businesses providers/manufacturers necessary so as their supply could meet the market demand, which motivates them to move forward and expand to recycling, reusing etc. which is the consequence of the above mentioned limited raw materials.

In Spain, improving production processes is on the next level. The report "Circular Economy in SMEs in Spain" stands out, presented by the Spanish Chamber of Commerce and MAPFRE, which estimates that the circular economy could generate up to 160,000 jobs in Spain before 2030 if it increases recycling and reduces the cost of production and thus the overall environmental impact.

Most of the SMEs have processes for waste reduction and reduction of resources in the Extremadura.







SMEs, who are interested in circularity, have the best support system in Friesland compared to the three regions. They can receive support from experts in the field of innovation and business support to upgrade their business model and implement circularity into their operation. Another opportunity is the Circular Friesland, which is a widen community network. Its goal is to help connect companies, organisations, institutions and contribute to the circular economy. They founded a programme called CIRCO TRACKS for businesses and organizations who want to explore the circular world. At the same time, other organizations also support SMEs towards a more circular business model.

One of the crucial parts of the circular economy business model that creates cross-sectoral effects of SMEs is Eco-design which means designing more sustainable products. That requires a balance between the freedom of designers and the environment-climate requirements to be met. Circular products should be of good quality, durable and repairable. All three regions show similar results, Eco-design is still in its infancy. There are companies which are eco-design based and that is their core business as well, but this doesn't apply to most SMEs. The concept of LCA is gaining ground and becoming increasingly important in Spain, however the adoption is taking place by bigger companies. Although Circular Friesland has to be mentioned again. They offer a programme for housing associations. Furthermore, entrepreneurs who are interested in Eco-design can go to the website of Circular Friesland, where multiple sources are offered to find information on Eco-design.

They have also developed procurement processes which aim to use fully renewable, secondary and/or biodegradable raw materials made from waste or using waste materials.

In this matter, SMEs have to satisfy sustainability criteria (no harm should be made to the environment) by public entities. The risk should be highlighted, if SMEs want to enter into the environmentally friendly or circular market. They have to calculate with a higher production cost and higher price of the products/goods offered in procurements / bidding processes as a consequence to satisfy the circular standards. That is why a cautious approach is advised especially in Hungary, where public tender is widespread.

On the other hand, there is an increasing number of Spanish businesses that also take sustainability into account besides the two main criteria (price, quality) for the selection of providers. Locally produced renewable energy technologies can be the possible solutions for energy dependence at the procurement processes. As Extremadura is the main solar energy provider in Spain, SMEs have the advantage to use this energy for their procurement.

In the Netherlands, SMEs have the opportunity to cooperate with Circular Friesland, if they have any concern in the procurement processes. All Frisian governments support this case by setting up "Frisian Circular Procurement Academy". Where the stakeholders can learn about all stages of circular procurement.

#### **Chapter 3. Distribution and presence of SMEs**







SMEs are the backbone of Europe's economy. They represent 99% of all businesses in the EU. They employ around 100 million people, account for more than half of Europe's GDP and play a key role in adding value in every sector of the economy. SMEs bring innovative solutions to challenges like climate change, resource efficiency and social cohesion and help spread this innovation throughout Europe's regions. They are therefore central to the EU's twin transitions to a sustainable and digital economy. They are essential to Europe's competitiveness and prosperity, industrial ecosystems, economic and technological sovereignty, and resilience to external shocks. However, it is becoming increasingly difficult for SMEs to develop and maintain a competitive advantage.

In the three investigated regions SMEs are also present and significant. They give almost 100% (99,9% and 99%) in terms of the total number of companies in Friesland and Extremadura. In the South Transdanubian region it shows that only 42,8% of the companies belong to SMEs. We must highlight that the Frisian data include the freelancers too, which gives 67,5 % of the SMEs. Friesland produces a similar number (32,5%) as South Transdanubia without the self-employment. Employment is directly proportional by the coverage of the total number of companies.

That's why SMEs employment produced similar results as the total number of companies. The Spanish and Dutch reached 60% and 60,5%, but Hungarian employment is barely higher than 25%. The employment is linked to the sector in which the businesses operate.

CSS Project partners identified the five main sectors: the manufacturing, agri-food, packaging, retail/commerce and the hospitality. Also, the construction sector has a significant part with 13% and 12,7% in Spain and in Hungary, which is worth to note.

First of all, retail and trade should have the biggest emphasis, because it got 19,5% in Extremadura, 17% in South Transdanubia and 12,5% in Friesland. Manufacturing got around 7% in each region, but hospitality got a bigger role with 10% in Spain than in Hungary or in the Netherlands. Agri-food got between 7% to 11% among the studied areas. Packaging is negligible compared to the other economic sectors. It should be mentioned that the service sector covers around 70% in Spain.

## 4. What SMEs can do in your region in favour of enhanced circularity?

SMEs have many options to increase their circularity, which are described detailed in the characterisation (Please see Final Characterisation Document pp.8.):

- industrial symbiosis,
- reverse logistics,
- functional economy,
- community-sharing,
- waste re-evaluation,
- reducing consumption of resources.

Industrial symbiosis means a kind of matchmaking activity that connects different enterprises and SMEs in a way that the waste / by-product of one enterprise serves as the input for the other one. Industrial symbiosis is easily applicable in the agricultural and agri-food sector. In Spain this option could be hard to implement in the service sector. On the other hand, in Hungary a national level initiative assists the industrial symbiosis, it is







called NISP, "Nemzeti Ipari Szimbiózis Program" (National Industrial Symbiosis Programme). The NISP has a focus on responsible company / enterprise management, greening of offices, raw material saving production, environment conscious management, life cycle analysis.

Reverse logistics is widely applied at large enterprises and corporations. In the construction sector, there are companies which use recoverable materials. Although SMEs do not automatically apply reverse logistics, with the exception of the ones that usually operate in the wholesale and retail sector. Another option is to team up with each other to provide for the critical size that makes operating such functions in an economically feasible way.

Functional economy is not common in the three regions. It requires the application of a different business model at SMEs and the expectations are that the opportunities are more in the B2B sector, then in the B2C, which are significant for SMEs when they take into consideration their opportunities.

Community sharing has an issue, that's why it is less widely used. The sharing of specific products or goods can only be done whenever one of the parties does not need it for sure at a certain point in time, not being able to have access to a shared good at a time when one needs it generates a risk for the businesses. When it comes to public transport, it is extended. Just think about renting e-bikes, scooters or cars. Other than that, the same problem, not everyone has access at the same time.

Waste re-evaluation is a great new model, which requires a change of thinking at SMEs. Across the regions this gains ground and businesses see as a feasible idea. More and more companies make their vote beside waste re-evaluation, especially recycling and reusing.

Reducing consumption of resources is an evident goal, because the higher consumed resources bring higher costs as well. Furthermore, the resources are limited. SMEs are able to decrease their need for raw materials and resources. But they also must find an alternative to replace or change these. They have to keep in mind their processes or any alternatives.

The Friesland region doesn't have a specific programme in the field of industrial symbiosis, reverse logistics, functional economy, community-sharing, waste re-evaluation and reducing consumption of resources yet, but again, Circular Friesland is able to advise SMEs in the field of circular economy or any related issues and encourage SMEs to use circularity in their current business strategy. In many cases this support means a greater help than any other programme. The willingness to help change and motivate SMEs.

## Chapter 5. The COVID-19 and your regional circularity processes

COVID-19 relevant regional context/background







The pandemic situation caused GDP to drop regardless of the regions. Whole Europe suffered from the strict regulations and recommendations by the EU. The European Parliament handed out recommendations to keep distance, work from home, wear masks etc. At the national level, the governments decided to close their country in many cases and use more severe regulations. All these events affected SMEs operations and threatened their everyday life. The governments tried to compensate the SMEs by the allowed salaries, wages and fixed costs to be paid. The aim of these measures was to prevent redundancies, bankruptcies and big financial problems. It looks like it was just expelled for a later period.

• COVID-19 impact on the regional SMEs & target groups

As a result of the COVID-19 crises, many people lost their job and had to find another. Many of them tried to establish new SMEs in the three regions. The number of starters increased in the second half of 2020. The strict regulations gave no choice to many SMEs, but to close down especially hospitality, leisure, personal care. The service sector suffered the greatest loss, till then the agri-food and agricultural sector affected just a little. The construction and building sector involved at first, later on it could come over the pandemic damages. Due to the struggle in logistics almost every price rose and there's been shortage in many products, raw materials etc. in retail and commerce.

Support programmes of public institutions for SMEs affected by COVID

At regional level, public institutions offered several programmes and grant opportunities in Friesland region and Extremadura region. Some of the programmes are national level, but managed by the regional governments. At regional level, the lack of support programmes in the South Transdanubian region is because of the lack of financial resources. At national level the governments managed several grants and different funds, recovery packages. The main aim of these measures was to help survive the situation, but not move forward and develop, become circular.

# Sources of information

Source used for the elaboration of the aggregated report are:

http://aei.pitt.edu/12383/1/20100114122130\_Eipascope\_2009\_2\_Article3.pdf

http://ias.jak.ppke.hu/hir/ias/20194sz/10 BartaGyurkoB IAS 2019 4.pdf

http://www.hermanottointezet.hu/sites/default/files/hozd%20magad%20korforgasba\_te\_lies.pdf

http://www.hermanottointezet.hu/sites/default/files/hozd%20magad%20korforgasba\_te\_lies.pdfhttps://www.europarl.europa.eu/news/en/headlines/economy/20151201ST0056 03/circular-economy-definition-importance-and-benefits







#### https://akjournals.com/view/journals/446/17/1/article-p101.xml

https://bcsdh.hu/wpcontent/uploads/2020/01/KorforgasosGazdasagPlatform 2019 HU N\_final\_final.pdf

https://circulairfriesland.frl/circulair-ontwerpen/

https://corporatefinanceinstitute.com/resources/knowledge/economics/circular-economy/

https://designforsustainability.medium.com/circular-economy-101-designing-regeneration-into-the-system-585c912e0886

https://ec.europa.eu/clima/sites/lts\_hu\_hu.pdf

https://ec.europa.eu/environment/strategy/circular-economy-action-plan\_en

https://ec.europa.eu/environment/topics/circular-economy/first-circular-economy-action\_plan\_en

https://ec.europa.eu/eurostat/web/circular-economy/overview

https://ec.europa.eu/growth/smes\_en

https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal\_en#thebenefits of the european green deal

https://fissacproject.eu/hu/mi-is-az-ipari-szimbiozis/

https://friesland.databank.nl/Jive/Report?id=4

https://friesland.databank.nl/report/Wurkgelegenheid%20Frysl%C3%A2n%202019.pdf

https://g7.hu/adat/20210528/a-magyarok-85-szazaleka-nem-ismeri-azt-a-gazdasagi-modellt-amely-fele-a-kormany-elindult/

https://ifka.hu/hu/article/green\_economy/projects/432

https://pbkik.hu/2020/05/19/hirek/korforgasos-gazdasag-es-megis-forog/?cn-reloaded =1

 $\underline{\text{https://pbkik.hu/2020/05/19/hirek/korforgasos-gazdasag-es-megis-forog/?cn-reloaded}} \underline{=1}$ 

https://statinfo.ksh.hu/Statinfo/haViewer.jsp

https://www.ellenmacarthurfoundation.org/explore/the-circular-economy-in-detail

https://www.europarl.europa.eu/news/en/headlines/economy/20151201ST005603/circular-economy-definition-importance-and-benefits







https://www.itcilo.org/courses/supporting-smes-during-covid-19

https://www.ksh.hu/stadat?lang=hu&theme=gsz

https://www.ksh.hu/stadat\_files/gsz/hu/gsz0035.html

https://www.ksh.hu/stadat\_files/mun/hu/mun0078.html

https://www.oecd-ilibrary.org/sites/6039c015-en/index.html?itemId=/content/compone nt/6039c015-en

https://www.portfolio.hu/ingatlan/20201202/ujabb-javaslatcsomagot-nyujtott-be-a-kor many-a-gazdasagot-a-zold-ut-fele-terelnek-459774

https://www.seasidescavenge.org/blog/how-to-keep-products-and-materials-in-use

https://www.seasidescavenge.org/blog/the-circular-economy-designing-out-waste-and-pollution

https://www.seasidescavenge.org/blog/ways-to-regenerate-our-food-and-natural-systems

https://www.southeastasia-iprhelpdesk.eu/en/what-support-available-european-smes

https://www.switchtogreen.eu/the-eu-green-deal-promoting-a-green-notable-circular-economy/

https://www.ups.com/hu/hu/services/returns/reverse-logistics.page



