

Regional Action Plan for Circular Economy and Sustainable Business in Southwest Finland

Southwest Finland 2021-2023

REDUCES – Rethinking Sustainable Development in European Regions by
Using Circular Economy Business Models



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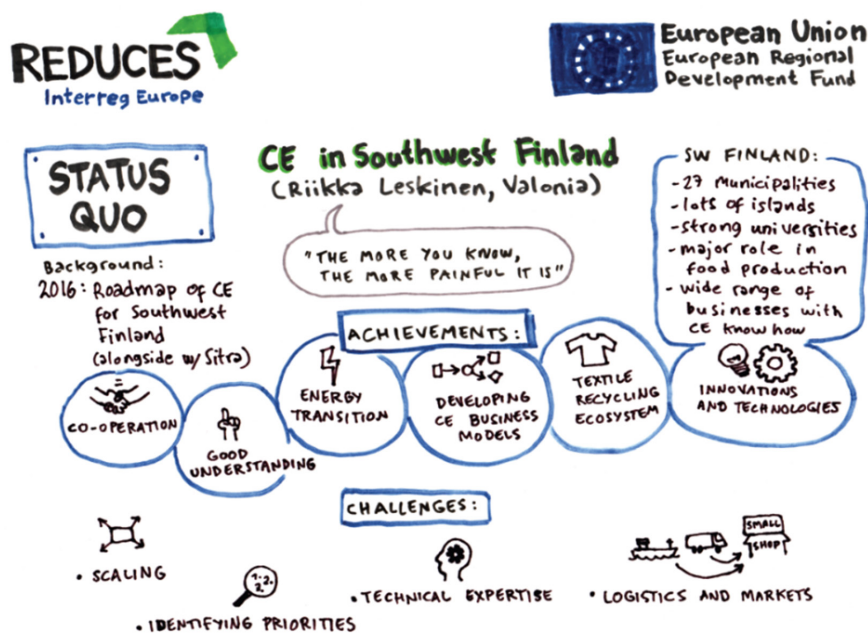
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1 General information

The regional action plan for circular economy in Southwest Finland promotes the development of circular economy business in the region and supports the transition to circular economy business for small and medium-sized enterprises, strengthens circular economy expertise in the region, and promotes innovation activities and product development. The action plan will also develop the possibilities of public funding, to identify and support the development opportunities of circular economy business, and assess the effectiveness of the funded measures. The action plan was prepared in 2021–2022, as part of the REDUCES project funded by the Interreg Europe programme.

Circular economy changes business practices and revenue models. Instead of traditional ownership, consumption is based on the use of services: Sharing, leasing, and reuse. The new method challenges countries and regions to develop and build new business models to respond to, for example, the global climate crisis. Ellen MacArthur Foundation estimates that the value of the circular economy market is up to EUR 700 billion (Sitra 2014).



Project: REDUCES – Rethinking Sustainable Development in European Regions by Using Circular Economy Business Models

Responsible partner organisation: Turku University of Applied Sciences

Country and NUTS2 target area: Finland, Southern Finland

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2 Strategies and programmes in the background

Southwest Finland is one of Finland's growth centres characterised by growth in employment and migration to the region. With its population of almost 500,000 inhabitants, Southwest Finland is Finland's third largest region (EURES 2019). The county plays an important role in food production and tourism, both in nature tourism and urban culture tourism. (Regional Council of Southwest Finland 2020.) Southwest Finland's business life is versatile. The main industries of the companies in the region are the bio and ICT industries, the maritime industry, the metal industry, construction, logistics, and the creative industry (Silvonen & Kaskinen 2019, 24).

According to a regional situation review implemented in the REDUCES project, there is a significant number of activities that comply with and promote the principles of the circular economy, in Southwest Finland. Identified sectors and operating fields that enable the development of the circular economy, are urban planning and administration, public procurement, industrial symbioses, municipal waste management, buildings and construction, the water-food-energy network, as well as circular economy teaching in the Turku region. (Silvonen & Kaskinen 2019.) According to the report, as many as three out of five industrial companies in the region say that circular economy is part of the company's business, and half of the companies sell their own waste or side streams for use by other operators. The waste or side streams of others are only used by one of the five companies interviewed for the situation review. The largest companies use the side streams of others and sell their own more than small companies, and circular economy is already part of everyday life for them and, for many of them, recorded in the strategy. Smaller companies have a shortage of resources to promote circular economy, although some micro and small enterprises have been created to meet the challenges and opportunities offered by circular economy (Silvonen & Kaskinen 2019, 24).

2.1 From visions to reality - Regional Programme for Southwest Finland 2022–2025

The regional strategy for Southwest Finland 2040+ consists of a regional plan and a regional programme. The regional programme for Southwest Finland 2022–2025, which is updated every four years in, describes measures for achieving the long-term objectives of the regional plan. The regional programme consists of 18 objectives and 44 measures that implement the four visions of the regional plan. One of the visions is the Carbon-neutral pioneer in clean solutions, innovations, and sustainable growth, which also includes the circular economy. Implementation requires joint prioritisation and systematic action by the group of actors involved, during the programme period, as well as flexibility and experimentation, new thinking, not to forget the ability to adapt and solve. (Southwest Finland's Regional Strategy for Sustainable Partnerships 2040+.)

The objective of the vision „carbon neutral pioneer in clean solutions, innovations, and sustainable growth“ is to multiply the region's competitive potential and innovation capacity, through cooperation between higher education institutions, secondary education institutions, companies, the public sector,



and civil society (experiments, demonstrations, and new operating models). Another essential objective is to make bioeconomy and circular economy profitable for the region (regional circular economy ecosystems, public procurement). The vision is based on a carbon-neutral energy system, the role of which is strengthened in the region's economic structure by means of a climate roadmap. (Southwest Finland's Regional Strategy for Sustainable Partnerships 2040+.)

Objectives and measures in the regional programme have been drawn up in a way, which enables reassessment and targeting, if the situation and changes in the operating environment so require. The implementation of the measures will be funded by the local authorities, companies, and many other actors themselves, by state funding, as well as by national and European Union project funding (e.g. ERDF funding). (Southwest Finland's Regional Strategy for Sustainable Partnerships 2040+.)

The Regional Council of Southwest Finland evaluates the implementation of the regional strategy, in cooperation with the implementing authorities, using various methods. The evaluation of the implementation of the regional programme's objectives has been outsourced to an external evaluator, and it is carried out at least once during the programme period. Other annual evaluation methods include basic indicators of regional development, partnership barometer, annual reports, funding and project monitoring, and various monitoring groups.

2.2 European Regional Development Fund (ERDF programme, Sustainable growth and jobs 2014–2020, Innovation and skills in Finland 2021–2027)

The Sustainable Growth and Jobs 2014-2020 - Finland's structural funds programme consisted of seven priority areas and 17 specific objectives. Regional development funding is a combination of EU and national funding. (Sustainable Growth and Jobs 2014-2020.) During the programme period, circular economy was not a direct development target (as it is in the new 2021-2027 period), but it was promoted under energy and resource efficiency themes. In the ERDF programme, the competitiveness of SMEs, as well as the development of research, knowledge, and innovation hubs on the basis of regional strengths,

played an important role. Under these priority areas, the production and utilisation of new knowledge and expertise, the development of renewable energy and energy-efficient solutions were promoted. (Sustainable Growth and Jobs 2014-2020.) The structural funds programme was implemented in the regions, in accordance with the regions' own programme documents and strategies, as well as their key competences.

Partnerships between research, education, and innovation actors sought improvements in the quality and construction of regions and innovation hubs. The perspective of SMEs was emphasised in research and innovation cooperation and networking, both in Finland and internationally. In order to develop new applications and services, investments were targeted at experimental activities, demonstrating and piloting environments, as well as the introduction and commercialisation of products and services created in them. (Sustainable Growth and Jobs 2014-2020.)

Improving the quality of the environment and sustainable utilisation of natural resources were an important focus in development and innovation activities. Efforts were made to develop exportable, emission-reducing solutions for the business sector's environmental issues, especially in relation to the management, and sustainable and efficient use of natural resources and bioeconomy in the regions, as well as reducing environmental load. (Sustainable Growth and Jobs 2014-2020.)

During the new programme period, energy efficiency measures and the promotion of the circular economy will play an increasingly important role, in the ERDF contents of the Innovation and Skills in Finland 2021–2027 programme. The programme's priority area 2 Carbon neutral Finland contains specific objectives related to energy efficiency measures, reducing greenhouse gas emissions, and the transition to a circular economy (specific objectives T 2.1 and 2.6). Priority area 2 aims, for example, at developing energy-related learning environments, increasing circular-economy-related cooperation between RDI activities, RDI ecosystems, as well as public and private actors. (Innovation and Skills in Finland 2021–2027) The new ERDF programme objectives are linked to all measures in the action plan.



REDUCES

2.3 Objectives of the REDUCES project and link to the regional action plan

According to Sitra, increasing the efficiency of the resource cycle will provide Finland with an annual growth potential of between EUR 1.5 and 2.5 billion by 2030. Circular economy is a new model of the economy, in which the waste of materials and the generation of waste have been minimised. In the circular economy, the use of resources and materials is enhanced, in order to better maintain the value of raw materials in the cycle. In practice, products are already designed so that the materials can be separated and recycled. However, the largest value potential of circular economy is not in material flows or waste. More valuable methods of utilisation include maintenance, reuse, and re-manufacturing of equipment. Therefore, the starting point should be as efficient a cycle of value as possible, and prevention of the generation of waste, not the use of waste as a raw material or energy as much as possible, in terms of quantity. (Sitra, 2014.)

The REDUCES project supports the basic objectives of the EU2020 Strategy, linked to the separation of economic growth from the exploitation of natural resources, as well as the increased utilisation of renewable energy sources. The EU's Circular Economy Action Plan also emphasises the need to create conditions in which the circular economy can flourish, and resources can be mobilised. The plan recognises that new business models are needed to reflect on our production methods and consumption habits. The objective of the project is to improve the implementation of regional circular economy practices, in order to enable regions to adopt more environmentally sustainable production methods, and to reduce the negative environmental impacts of economic development. Circular economy business models can be applied to allow companies achieve resource efficiency and the resulting net income. This will also enable regions to achieve a more innovative, sustainable, and productive economic system. (REDUCES 2020a.)

REDUCES project's sub-objectives guiding the planned measures:

1. Increase knowledge and capacity of regional and European decision-makers and stakeholders on circular economy business models.
2. Improve the preparedness of partners and involved stakeholders to make informed decisions to promote the transition to a circular economy in the regions.
3. Find innovative and most viable circular economy business models in each region, which play a key role in transforming production value chains towards environmental friendliness and sustainable development.
4. Improve the competence of regional actors to assess the environmental impacts of circular economy business models, in order to select the most feasible and environmentally sustainable

models, that identify the regional benefits, barriers, needs, and strengths required for the transition to a circular economy.

5. Improve financial instruments (4 ERDF programmes and 2 regional plans) through six action plans to better implement or integrate circular economy business models into policy instruments, and to support the theme by proposing new project ideas or funding.

In Southwest Finland, stakeholder cooperation on circular economy, environmental business, and sustainability themes has been active even before and during the REDUCES project. Southwest Finland was the first region in Finland to publish its own roadmap for the circular economy, in 2017. The most important stakeholder network during the project has been the Circular Operators in the Turku Region network, which consists of key organisations promoting circular economy in the region. Actors in the network include urban and municipal organisations, higher education institutions, development companies and public companies, for example in waste management and recycling themes. The common objective of the network is to actively share information on the development of the circular economy in the region and to enable the creation of new partnerships and project ideas. In the implementation of the action plan, the network has played an important role in defining the key measures, launching focus areas and cooperation, and at a later stage, also in assessing and implementing the introduction of the measures.

Of the stakeholders, the Regional Council of Southwest Finland, which also owns the defined strategies and programmes, is the most important party for the project. The Regional Council of Southwest Finland is also part of the regional network of circular operators, and is responsible for the circular economy roadmap work. Another key partner throughout the project has been Sitra, The Finnish Innovation Fund, whose circular economy programme supports several regional measures. The project has focused on five circular economy business models, defined by Sitra, based on which all good practices of the project were collected. Sitra is also responsible for the national circular economy roadmap work.



3 Regional Action Plan

The Regional Action Plan for Circular Economy and Sustainable Business in Southwest Finland has been drawn up on the basis of the strategies and programmes presented in the previous chapters. In addition, all measures have been inspired and refined on the basis of the information learned in the REDUCES project and through shared good practices. The partner of the Southwest Finland REDUCES project, Turku University of Applied Sciences, with the help of the Regional Council of Southwest Finland and the circular operators in the region, has defined the following measures in the action plan for promoting circular economy business:

1. Better measuring and identifying the business potential and impact of circular economy projects in the region of Southwest Finland.
2. Development and promotion of business based on renewal and energy efficiency competence.
3. Developing business, product development, and support services, in accordance with the circular economy for SMEs in Southwest Finland region.

3.1 Action 1: Better measuring and identifying the business potential and impact of circular economy projects in the region of Southwest Finland

Background and objective

This action will improve the measurement and identification of the circular economy impact of ERDF programs (2014–2020, 2021–2027) in the region. In addition, the measure is indirectly linked to the regional program of Southwest Finland, which also aims to promote business in accordance with the circular economy. In particular, the action aims to improve the management and monitoring of the implementation of these instruments. The result is an evaluation method for ERDF-funded circular economy projects, which provides information on how to improve project application criteria and possibly selection evaluation in order to increase the effectiveness of projects.

The need for measures is a report carried out by Turku University of Applied Sciences, at the request of the Regional Council of Southwest Finland, to improve the transparency and impact of regional ERDF funding. A total of 11 project implementers were interviewed for the study (implementation time for general development projects between 11/2020–1/2021), and the themes of the projects were related in particular to the circular economy, sustainable development, energy efficiency, and material efficiency. Based on the study, it was found that the instrument owner could better control the effectiveness of the measures so that the activities take place at the business interface. With circular economy it is often such an uncertain venture that without funding it will not be possible to start operations. Therefore, funding is crucial, to enable the practising of circular economy. Without funding, activities in accordance with the circular economy in SMEs are not easily created. The purpose of public funding is to support the creation of new, but creating new activities with project funding alone is challenging. Public funding is particularly

helpful in the initial efforts, by enabling important surveys and experiments related in the development of new business. For companies, the projects provide a basis for new business.

The instrument owner monitors the implementation of the measures during the project period. In the responses to the study, it was also noted that the impact assessment on behalf of the project implementer is often unclear. It would be useful for the funding body to be responsible for monitoring the evolution of the various processes after the completion of the projects. It would be important to consider whether the information is available to the right people and whether it will be returned to it if necessary. In long-term development work, this should be done. In addition, there is a demand for more tools to assess the impact, to avoid each project having to come up with and apply methods on their own.

Link to REDUCES project

The third interregional meeting of the REDUCES project (09/2020 Utrecht) confirmed the idea that the role of the public sector and project activities should be stronger, in promoting circular economy business. The REDUCES project collected over 50 good examples of circular economy business models, based on five key business models, and the main challenge identified, was to describe the role or impact of public actors, in the development of a circular economy business model. The role of the public body is often to be the initiator or facilitator of experimentation, but measuring wider impact is challenging because the monitoring period in public projects is short. The second Study Report, drawn up in the REDUCES project, emphasises that a more precise definition of the circular economy and closer support for private actors will lead to public projects, on the basis of which, the progress of the circular economy business models is progressing. A stronger criterion for project funding, should also be the scalability of the measures implemented in the project, in the longer term, and the later business potential. (REDUCES 2020b.) Romania's example of a project, which developed recyclable composite materials from natural fibres (Good practice: New Generation Materials) inspired the development of the assessment tool, as the business benefits of the project were clearly demonstrable and numerically measurable. On the basis of the pilot project, it was also possible to demonstrate the scalability and transformation of the idea into business.



The Dutch example of the Werkspoorkwartier project, which is based on the circular economy, also launched a discussion and cooperation on measuring the impact of public projects. As a thesis, Turku University of Applied Sciences carried out comparative research on the emphases and successes of ERDF funded projects, aiming at circular economy (Iloniitty 2020). The second project under consideration was the Werkspoorkwartier area, and based on this, Utrecht University of Applied Sciences has continued its work, by developing its own assessment tool to identify and better measure the added value of urban development, in addition to traditional numerical indicators. As far as possible, the model developed by Utrecht will be used as the basis for the analysis of the measures in Southwest Finland and the results of the assessment tool developed.

The assessment tool created by the REDUCES consortium has also contributed to the development of the measure. The structure created for the assessment work, is a new way of assessing the impact of good practices and operating models on the environment, their business scalability, and the possibility of utilising the operating model in other areas or sectors. Four study reports were produced on the basis of five circular economy business models (REDUCES 2021). All of the good practices presented have been opened and assessed as part of the reports. The assessment tool acted as an inspiration and basis for developing the business impact measurement of ERDF-funded circular economy projects. In addition, Turku University of Applied Sciences conducted a short survey in other partner areas, with a view to analysing, whether a broader assessment tool is being utilised for other financial instruments. It was found that there is no similar model for public projects in other regions. In other words, there is a great interest in expanding and sharing the model created in the measure.

Based on the project examples and interregional cooperation, clear regional need and benefits were identified, to measure the effectiveness of public funding projects, and utilise it as a tool for evaluating future project funding.

Implementation steps and timetable

- Step 1: Carry out a feasibility study on the need for an evaluation tool, analyze the results and implement them. Start of spring 2020, completed in autumn 2020.
- Step 2: Development and construction of an impact tool on an electronic platform (survey tool). Start: 01/2021, End: 07/22.
- Step 3: Piloting the impact tool for designated Structural Fund projects related to circular economy. Start: 09/2022. End: 03/2023.
- Step 4: Further analysis of the results, possible improvements and developing wider utilization plan. Start: 01/2023, end: 03/2023.

Key stakeholders, cooperation, and roles

The Regional Council of Southwest Finland is the owner of the impact assessment and will be responsible for the implementation of the assessment, the analysis of the results, and the utilisation of the results in its own activities. Turku University of Applied Sciences is responsible for planning the content of the impact assessment, and for building and developing an electronic survey tool, in cooperation with the Regional Council of Southwest Finland. A key stakeholder is also the coordinators of the funded projects,

and the organisations applying for the projects, which were interviewed, as well as projects in accordance with the circular economy, that were already involved in the preliminary study and the pilot project of the assessment tool. Based on the results, a broader discussion will also be held with the Helsinki-Uusimaa Regional Council, to enable the impact assessment to be expanded to cover the entire region.

Costs and funding

No separate external funding is required to create and pilot the impact tool. It has been tentatively estimated that the cost required to develop and test an impact tool consists only of the salary costs of the personnel who implement it. The piloting and development costs of the operating model will be covered in full by the Regional Council of Southwest Finland and the Turku University of Applied Sciences as part of the normal operations of the organizations.

3.2 Action 2: Development and promotion of business based on renewal and energy efficiency competence

Background and objective

This action promotes the special objective arising from the Regional Program for Southwest Finland 2022-2025 and the objectives of ERDF funding for the development of energy efficiency and renewable business in Southwest Finland. The measure will also improve co-operation with the business sector, municipalities, research and the third sector on energy efficiency and related renewable energy. This objective will be met by a new project to develop an energy efficiency and renewable energy testing environment to be developed under the action, for which funding is sought from the new ERDF program. The measure will result in a project plan that includes the development of an energy efficiency testing environment and a network of related experts and businesses.

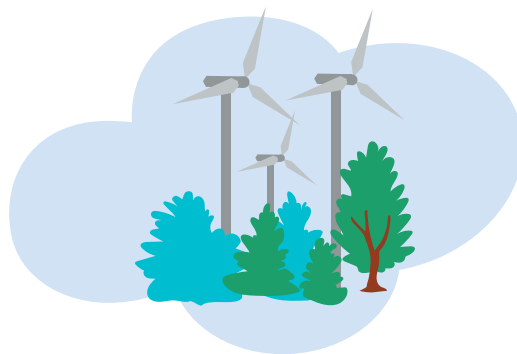
In the former and current ERDF funding period, as well as in Southwest Finland's new regional programme for 2022–2025, renewable and carbon-neutral energy solutions play an important role. Construction, renewable energy sources, and energy efficiency solutions are potential sectors in the development of circular economy business. Finland's climate and energy policy is particularly guided by the objectives and measures of the European Union's climate and energy policy. In Southwest Finland, the share of renewable energy sources is only about ten per cent. Therefore, reducing the share of fossil fuels and increasing renewable energy sources are key challenges for the region, but also opportunities. Demand for energy efficient technology and renewable energy technology is growing worldwide. This creates new business opportunities. Operating methods in both the private and public sectors have changed to support the objective of carbon neutrality, and this has a positive impact on the region's business life. (ELY Centre for Southwest Finland 2020.)

Link to REDUCES project

Renewability was one of the key circular business models addressed in the REDUCES project. The success of this action was due in particular to the successful example in the Netherlands of a publicly funded project focusing on urban development, the Circular Renovation in Werkspoorkwartier. Werkspoorkwartier acts as a common circular economy testing environment for construction and energy solutions. It's also a test platform for companies in the creative industries, especially in the region, to promote their know-how and business opportunities. The example inspires a similar simulation in Southwest Finland but focusing on the theme of energy efficiency and renewable energy for a wider target group and region through a development project. The example also taught the importance of close regional co-operation and the importance of engaging different actors and thus enabling experiments to generate new knowledge.

Implementation steps and timetable

- Step 1: Writing a project plan for a regional energy efficiency and renewable energy testing environment and submitting an ERDF funding application to develop the testing environment. Start: September 1, 2021. Estimated Completion: May-June 2022.



Key stakeholders, cooperation, and roles

The key stakeholders are Turku University of Applied Sciences, which is responsible for coordinating and preparing the action, in close cooperation with Åbo Akademi University. Both have a high level of expertise on the topic, but additional knowledge and testing is required, to better support regional competence and business development. Turku Business Region offers an extensive business network and expertise in business development. The main target group of the measure is companies linked to the sector that offer commissions for testing, and utilise the results obtained, as part of their own circular economy and renewable business and product development process. The Regional Council of Southwest Finland supports the content of the project and acts as the issuer of possible funding application.

Costs, and funding

All costs of the action will be covered by the own funding of the organizations participating in the project consortium and applying ERDF funding. The total cost estimate for the energy efficiency and renewable energy test environment development project is approx. € 400,000.

3.3 Action 3: Developing business, product development, and support services, in accordance with the circular economy for SMEs in Southwest Finland region

Background and objective

The measure is particularly linked to the broader objective of the Southwest Finland's regional programme 2022–2025, to increase competence in accordance with the circular economy in the region, and thus to support business opportunities, especially for small and medium-sized enterprises. In general, the objective of the regional programme and the promotion of circular economy business, is closer co-operation between, for example, higher education institutions and companies. In Southwest Finland, the role of higher education institutions is particularly emphasised in raising the general level of competence, and the educational services offered by higher education institutions can be used to support SMEs' opportunities to increase staff competence in the circular economy. In recent years, cooperation with companies in the region has been successfully intensified in Southwest Finland, and especially at Turku University of Applied Sciences. As a result of the measure, a regional and national support service for SMEs will be created, which will promote the development of business in accordance with the circular economy and the growth of know-how in the green transition.

As part of the regional situation report, carried out in connection with the project, the difference between large and small to medium-sized enterprises was strongly highlighted, in developing and implementing the circular economy, as part of their own business. In the region, larger companies already use other companies' side streams and sell their own, more than small companies. For large companies, circular economy is already part of everyday life, and for many, it is even included in the strategy. Smaller companies have a shortage of resources to promote circular economy, although some micro and small enterprises have been created to meet the challenges and opportunities offered by circular economy. (REDUCES 2020a.) Hence, the measure aims to better support small and medium-sized enterprises in the region, in promoting and consolidating circular economy business, as part of the company's operations. The measure thus also corresponds more broadly to the objectives of the regional programme and the structural fund instrument, to support and develop SMEs, and to increase competence more extensively, which in turn promotes the attractiveness and competitiveness of the region.

The need for the measure has arisen especially by Sitra and in close cooperation. According to Sitra, the opportunities for SMEs in the circular economy are still more limited and the need for concrete support is greater. Sitra considers especially higher education institutions, as public actors and experts in circular economy, as key actors in the upcoming service centre, and thus as broader regional networks, in terms of circular economy.

Link to REDUCES project

The key lesson of the REDUCES project, as a whole, has been an understanding of the significant role of companies in promoting circular economy business and product development. This has been mentioned in several interregional meetings, as well as highlighted in study reports assessing regional operating models. The role of public actors, in particular, is to support and ensure that the operating conditions

and opportunities for experiments are equal, and that expertise in circular economy is strong. This is specifically emphasised in the policy recommendation report published in the project.

The discussion on how public actors can better support circular economy SMEs in business development, was already at the centre of the regional stakeholder meeting, organised by Turku University of Applied Sciences, on 8 October 2020. The meeting was organised in cooperation with Sitra and Lounais-Suomen Jätehuolto Oy. A key lesson from the meeting was the opportunity and need to develop a type of service centre, through which circular economy business would be an opportunity for all companies in the region. Already then, Sitra understood that the promotion of competence and the creation of a service model could be possible through higher education institutions.

The REDUCES project also taught us about the way the Oldham region works in close cooperation with various actors, and a strong culture of inclusion for both residents and SMEs, has inspired the measure throughout the project. For example, the way in which the municipality has, through the project, sought to provide affordable, sustainable, and low-carbon energy, by using both council and community buildings in solar installations (Good practice: Oldham Community Power) is an excellent example of both providing support and sharing expertise. In addition, an operating model for SMEs for developing and optimising their own waste treatment and recycling (Fundwaste: Stimulating SME Recycling through Income Generation) inspires to work with SMEs as concretely as possible and, in particular, to highlight and demonstrate the benefits of circular economy for companies. The aim of the operating model, created in the measure, is also to better share information and examples of the business benefits of circular economy.

As part of the REDUCES project, Manchester Metropolitan University, in cooperation with the UN, organised a webinar, Transforming Communities: Demystifying CE in late 2021. The objective of the webinar was to highlight regional examples through the project, learn from each other, and find new forms of cooperation. Based on the webinar, Turku University of Applied Sciences, Utrecht University of Applied Sciences, and the municipality of Oldham, in particular, identified similarities in regional operating methods with regard to developing the circular economy competence of SMEs, and the aim is to engage in close cooperation on the theme. For example, Utrecht University of Applied Sciences is developing a similar operating model for companies as Turku University of Applied Sciences is aiming for, as part of the measure. A similar approach is being developed by the University of Mining and Geology "St. Rilski" (later UMG) and is also part of the action plan of the Bulgarian region. Following the progress of the measures, the aim is to organise a new event, where best practices of different models are shared and, where possible, cooperation is carried out. Furthermore, an Erasmus+ application is pending, in cooperation with Utrecht University of Applied Sciences (HU) and UMG, in which increasing the competence of companies and involving companies in the definition and measurement of circular economy competence, are at the core.

Implementation steps and timetable

- Step 1: Writing a project and execution plan for the Circular Economy Service Center and submitting a funding application. Start 01/2022. End: 06/2022.
- Step 2: Development and execution of the operating model of the Circular Economy Service Center and establishment of the University of Applied Sciences network. Start: 08/2022. End: 05/2023.

Key stakeholders

At the national level, Turku University of Applied Sciences, LAB University of Applied Sciences and Lapland University of Applied Sciences coordinate the development and implementation of the operating model, in close cooperation. The purpose is to involve all Finnish universities of applied sciences (possibly also universities later), in order to make the operating model as widely available as possible, and to make circular economy competence versatile. The aim is to create a new kind of service business for universities of applied sciences, through the operating model. Key cooperation in the testing and implementation of the model is carried out with regional business development organisations, such as Turku Business Region and business organisations (Federation of Finnish Enterprises South-West Region). In both cases, the role and support of business advisers is important, and reaching the regional business network is smooth. Sitra supports the development of the operating model, by funding its pilot phase, as well as through the implementation of its own Circular Economy Playbook for Finnish SMEs operating model. The Regional Council of Southwest Finland supports the development and regional implementation of the operating model, as well as serves as the key party in public funding, whereas the ELY Centre for Southwest Finland serves as the key party in the coordination of business funding.

Costs and funding

All costs of the action will be covered by Turku University of Applied Sciences' own funding and external funding from Sitra's circular economy program. The total cost estimate for the development and piloting of the service center for the circular economy business is € 150,000, of which € 120,000 will be covered from the separate funding of Sitra's circular economy program and € 30,000 from the self-financing of the polytechnics coordinating the operating model. The financing decision will be received from Sitra no later than 06/2022.

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4 Monitoring of actions

The regional action plan for promoting the circular economy business in Southwest Finland, is part of the region's strategic focus area of circular economy. The implementation of the action plan will be monitored by Turku University of Applied Sciences, in cooperation with various stakeholders. The progress of the measures will be actively reported, for example, at the meetings of the central Turku Region's Circular Operators network, 1-2 times during the reporting period. The results are also communicated by other means.

For the REDUCES project, the monitoring period of the Regional Action Plan for Promoting Circular Economy and Sustainable Business in Southwest Finland, is 1 August 2022–31 July 2023, during which the achievement of the objectives will be reported to the Interreg Europe programme.

Operation-specific monitoring plan and assessment of results

A preliminary monitoring plan for three different procedures is described below. Changes and clarifications are possible, as the implementation of the measures progresses.

Action	Monitoring Schedule	Monitoring Methods	Further Utilisation of Results
A1: Better measuring and identifying the business potential and impact of circular economy projects in the region of Southwest Finland	Starting discussion with the policy owner 09–10/2022 Interim feedback 01/23 Final feedback 04/23 Analysis of results and further development of the tool 05/23	Starting Interim and Final discussion with instrument owner Numerical assessment: Number of projects and number of assessments	Analysis and further utilisation as desired by the owner of the instrument
A2: Development and promotion of business based on renewal and energy efficiency competence	Construction and content planning of the test environment and submission of the project application 09/21–05-06/22	Submission of a funding application and a positive funding decision	Possible new follow-up projects and cooperation networks
A3: Developing business, product development, and support services, in accordance with the circular economy, for SMEs in Southwest Finland region	Planning of national cooperation and operating model 11/2021–04/22 Development of the national operating model and start of testing 08/22 Broader analysis and further development of the operating model 05/23	Positive funding decision Broader assessment of the operating model Numerical assessment: Number of participating universities of applied sciences/higher education institutions, number of events organised and participants, analysis of participating companies	The operating model will become a permanent service regionally and nationally, and create new types of cooperation between public actors and SMEs Possible implementation of the operating model and cooperation between other European regions.

5 More detailed risk analysis of the regional action plan and measures

For each of the proposed measures, a broad examination has been carried out, considering possible risks which may affect the implementation of the action plan and prevent certain measures from being implemented in the region. In addition to the identified risks, the table below presents an assessment of the level of risk and how the identified risk can be avoided or, alternatively, corrected.

Identified Risk	Risk Level (low, medium, high)	Risk Avoidance Measures
A1: The number of responses received in the pilot phase of the impact assessment tool remains low, and thus the analysis of the responses will remain deficient.	Low	<p>The assessment is implemented by the owner of the financial instrument, and as a rule, the activity of the recipients is high when the requirement comes from the funding provider.</p> <p>The aim is to keep the content and usability of the evaluation tool as simple as possible, and to emphasise the recipient's own interest in assessing the outputs of their own project, and thus improving the quality of their activities.</p>
A2: Negative decision on the funding application for the development of the energy efficiency testing environment	Medium	<p>The laboratory and testing environment of Turku University of Applied Sciences already enables small-scale piloting and testing. In order to expand the activities, it is also possible to apply for other external funding.</p>
A3: The operating model of the circular economy service centre cannot be implemented due the lack of the commitment of the actors and measuring the results remains inadequate	Low	<p>Creation of the higher education network has already begun at an earlier stage (as part of another publicly funded project), thus it is not difficult to involve key actors. Cooperation between higher education institutions is already active.</p> <p>The creation phase of the operating model, funded by Sitra, takes approximately 1 year, and it is possible to apply for additional funding, for example at the ministerial level, in order to expand the activities.</p> <p>Regionally, higher education institutions already have good and close relations with business organisations and development companies, through which contacting and involving companies is also possible. The services of the operating model have also been tested in the past, for example as business training, thus there is still demand for them.</p>

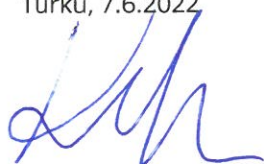
6 Toimintasuunnitelman hyväksyntä ja allekirjoitus / Approval and signature of the action plan

Varsinais-Suomen liitto tukee toimintasuunnitelman tavoitteita niiltä osin, mihin se pystyy vaikuttamaan myöntämiensä EAKR-rahoitusten ja maakunnallisten tavoitteiden sekä strategioiden kautta.

The Regional Council of Southwest Finland supports the objectives of the action plan insofar as it is able to contribute through its ERDF funding and regional objectives and strategies.

Paikka ja Pvm/Place and Date:

Turku, 7.6.2022



Kari Häkämies

Allekirjoitus ja nimenselvennys/Signature and name clarification:

Leima/Stamp:



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Turun ammattikorkeakoulun puolesta osoitan tuen ja sitoumuksen edistää edellä kuvatus toimintasuunnitelman toteutumista.

On behalf of the Turku University of Applied Sciences, I agree to support and promote the implementation of the action plan described above.

Paikka ja Pvm/Place and Date: Turku (FI), 13.6.2022

Allekirjoitus ja nimenselvennys /Signature and name clarification:



Juhani Soini, vararehtori/Vice Rector

Leima/Stamp:



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