



Circular Economy in textiles and clothing

A Policy Learning Platform peer review 28-29 September 2021

Final Report

1. Brief presentation of the beneficiary and its motivation to host a peer review

The Region of Central Macedonia is one of the thirteen (13) Regions of Greece, located in the north-central part of Greece and borders with two Balkan countries: Bulgaria and Republic of North Macedonia.

Central Macedonia is the main road and railway gate to the Balkans, linked with neighboring countries by modern Motorway (Pathe, Egnatia), railway, airport "Macedonia" and the port of Thessaloniki.

The Region of Central Macedonia has a total area of 18,811 square kilometers and consists of seven (7) Regional Units: Imathia, Thessaloniki, Kilkis, Pella, Pieria, Serres and Halkidiki.

The region has approximately 1.9 million inhabitants, according to provisional results of Census 2011 and ranks second in terms of population among the 13 Regions of the country (covering 17.3% of total population).

Thessaloniki is the regional capital with a population of 1.1 million inhabitants.

The mission of the Region is promotion of the financial development, competitiveness, and extroversion of its businesses, protection of the environment and public health, protection and promotion of cultural heritage, and the improvement of the living standards of people that live in it.

Its vision is to be the friendliest region in Greece for Investments, Innovation, and Entrepreneurship.

The Region's strategy focuses on:

- supporting the competitiveness, extroversion, and internationalisation of business efforts and linking the Region's innovative efforts with global markets;
- creating an effective innovation ecosystem;
- producing new knowledge in the most dynamic sectors of the economy;
- promoting networking of organizations, development of synergies and effective exploitation of the knowledge generated by the regional and the international economy;
- maintaining and strengthening human capital in the Region.

Regional Development Fund of Central Macedonia (RDFCM) on behalf of RCM, was interested in hosting a Peer Review in circularity in fashion, because:

-the sector of "textile and clothing" is one of the champion sectors in RCM according to the RIS3 Strategy,

-the Regional Operational Program is drawn up and implemented by RCM and in the next programming period 2021-2027 it is planned to publish Calls regarding the enhancement of SMEs competitiveness by integrating new technologies in innovative or high added-value products, processes or services and resource efficiency,

- -Regional Development Fund of Central Macedonia (RDFCM) on behalf of RCM, is participating in three INTERREG EUROPE projects (CESME-1st call, BIOREGIO-2nd call and SinCE-AFC-4th call) dealing with Circular Economy and has come to the conclusion that the transformation of SMEs is crucial,
- -during the implementation of CESME project, RCM has established the One Stop Liaison Office (OSLO) responsible for supporting in SMEs in getting in contact with the research community and boost innovation,
- -during the implementation of BIOREGIO project, RCM has published a Call about innovation coupons to develop new innovative products and services,
- -during the implementation of SinCE-AFC project, due to the pandemic crisis, RCM has noticed the reluctance of the SMEs in involving in new processes, since they are facing "survival" issues,
- -the Hellenic Fashion Industry Association is considered one of the most important stakeholders in the Region, who has already highlighted the specific needs and the problems of its members, stating that action should be taken in the fields of:
 - increasing consumers awareness primarily about the benefits of buying and using sustainable clothing
 - informing garment producers and traders of the benefits of implementing sustainability and circular economy practices
 - reducing the environmental footprint of textiles
 - sustainable design and use of biodegradable raw materials (mainly polymers) or recycled raw materials
 - optimal use of raw materials and the reduction even zeroing in some cases of stocks of finished products through personalized production using cutting-edge technologies (3D Printing, digital Printing, micro-factories, etc.)
 - energy savings and reducing water use in production processes since the cost of energy in Greece is very high, causing a structural disadvantage, in particular for dyers, finishers, knitters and spinners
 - adoption of the 5R principles (Refuse, Reduce, Reuse, Repurpose, Recycle) in the life cycle management of products after their production,
- -there is a need to close the loop of communication between Public Authorities Private Sector Academic/Research centers,
- -Greek SMEs should get in touch with both technological solutions and good practices, especially from other SMEs, business, marketing innovation and new business development experts from across Europe to be convinced that it will be profitable to invest in circular economy. Not only due to the fact that they are creating a more sustainable future for their kids, but also because following quickly new trends and technologies, they are building more resilient and competitive jobs, one of the most important challenge in the region.

All the above motivated RDFCM on behalf of RCM to seek for solutions by experienced peers, who would examine the thematic and regional context and make concrete recommendations on policy improvement by meeting the needs of the stakeholders by:

- directing investment, research and innovation in accordance with the roadmap for the EU strategy for sustainable textiles.
- publishing calls for funding for the modernization of equipment,
- · campaigns for circular economy in their sector,
- · campaigns to change the mind set of consumers,
- · consultation sessions with profitable SMEs applying circular economy.

2. Specification of the policy challenge encountered

Region Central Macedonia's Policy Challenges:

- 1. Identify Circular Economy horizontal strategies and tools, in the Textile (and Textile products) value chain, with immediate results in increasing sustainability and competitiveness in the global value chains.
- 2. Identify business models, tools, funds, policy instruments and actions that increase funding leverage through PPP collaboration to boost total investment and increase Circular Economy strategies effectiveness.
- 3. Identify tools, funds, policy instruments and actions that increase consumer's and producer's awareness for circular economy in fashion (National, PPP, OP of RCM or other funding tool).

Based on these policy challenges, two thematic blocs were introduced in the peer review:

1st thematic bloc: State-of-the-art tools and experiences to increase sustainability and implement the circular economy in the regional textiles and clothing sector (policy measures and programmes aiming at waste reduction and avoidance as well as increased resource efficiency through innovative processes in textiles and clothing; awareness-raising actions and campaigns that increase consumers and producers support for circularity in textiles and clothing).

2nd thematic bloc: State-of-the-art tools and experiences to increase competitiveness of the regional textiles and clothing sector (policy actions and funds that boost investments for a circular and resource efficient textiles / clothing sector; solutions to leverage increased funding through PPP collaboration, steer innovation and foster collaboration among SMEs).

3. Participants

Region of Central Macedonia

- · Konstantinos Gioutikas, Vice Governor of Development and Environment, Region of Central Macedonia
- Konstantinos Michailidis, Director of Innovation and Entrepreneurship Support, Region of Central Macedonia
- Maria Goulaptsi, Head of Innovation Support Department, Region of Central Macedonia
- Konstantinos Tertivanidis, Director, Regional Development Fund of Central Macedonia, Region of Central Macedonia
- Chrysanthi Kiskini, Head of the Department of European Union projects, Regional Development Fund of Central Macedonia, Region of Central Macedonia
- Lamprini Tsoli, Department of European Union projects, Regional Development Fund of Central Macedonia, Region of Central Macedonia
- Ioannis Spandos, Department of European Union projects, Regional Development Fund of Central Macedonia, Region of Central Macedonia
- Asteria Boura, Temporary Staff, Department of European Union projects, Regional Development Fund of Central Macedonia, Region of Central Macedonia
- Stavros Mantzanakis, One Stop Liaison Office (O.S.L.O.) of the Region of Central Macedonia
- Christina Lagkani, One Stop Liaison Office (O.S.L.O.) of the Region of Central Macedonia

Peers

- David Allo, Texfor, Spain
- Roberto Vanucci, Centrocot Spa, Italy
- Lucyna Bilinska, Textile Plant Bilinska, Poland

Carmen Madalina Cozma, Ministry of Environment, Waters and Forests, Romania

Stakeholders

- Theofilos Aslanidis, Hellenic Fashion Industry Association
- Christina Edippidi, Managing Authority of the Operational Programme of RCM
- Athanasios Kakoudis, Business and Cultural Development Centre (KEPA)
- Eleni Tsaliki, Hellenic Agricultural Organization DEMETER Institute of Plant Breeding and Genetic Resources (IPB&GR)
- Spiros Nikolopoulos, Centre for Research and Technology-Hellas (CERTH)
- Bikiaris Dimitrios, Aristotle University of Thessaloniki, Laboratory of Polymer and Colour Chemistry and Technology
- Nikolaidis Nikolaos, Aristotle University of Thessaloniki, Laboratory of Polymer and Colour Chemistry and Technology
- Vlachos Dimitrios, Aristotle University of Thessaloniki, Laboratory of Quantitative Analysis, Logistics and Supply Chain Management
- Christos Zikopoulos, Aristotle University of Thessaloniki, School of Economics, Division of Business Administration
- Anastasia Zabaniotou, Aristotle University of Thessaloniki, Design of Thermochemical Processes of Recyclable and Reusable Raw Materials
- Venetia Koutsou, International Hellenic University, Department of Creative Design and Clothing
- Niki Tsouka, PhD candidate
- SMEs members of the Hellenic Fashion Industry Association

Interreg Europe Programme

- Magdalini Anagnostou, Policy Learning Platform Coordinator
- Luka Messmer, Policy Officer

Interreg Europe Policy Learning Platform

- Elena Ferrario, Thematic Manager
- Astrid Severin, Thematic Expert, Environment and resource efficiency
- Katharina Krell, Thematic Expert, Low Carbon Econom

4. Policy Recommendations

➤ Help SMEs access sources of funding (Norway Grants, National funds, LIFE Programme, Regional Operational Programme, Interreg – training Platforms) through training and support in drafting applications. Access funding for environmental projects as well, such as drip irrigation, waste water, waste treatment, etc. Consider specific Interreg Europe project for Circular Economy in textiles and clothing under the new programming period.

Comments

Sources of funding: HORIZON, LIFE Programme

Interreg Programme is for soft actions, mainly for intermediaries.

European Social Fund (ESF) has training programs for staff.

There is a need for new executives - lack of human resources, but little interest in productive / manufacturing activities. We need to make the industry attractive.

Labor & Taxation depends on governmental policy.

EURATEX has educational material.

Feasibility in time: long-term implementation potential

Proactively encourage regional players (R&D centres, companies, etc.) to access European funding for research to improve recycling and waste management of textiles.

Comments

A relevant Call could be probably issued in (early) 2023. A prioritization of the needs for calls should be implemented (Axis 1 Budget: ~ 183 m).

Feasibility in time: medium-term implementation potential

Request an Interreg Europe matchmaking to address the specific opportunity of introducing Cascading funds to support sustainability and innovation in textiles and clothing.

Feasibility in time: medium-term implementation potential

➤ Use the existing voucher schemes to support textiles and clothing SMEs with innovation and technology vouchers. Try to find ways to ensure better absorption of the vouchers by textile SMEs for example through specific promotion schemes.

Comments

Vouchers with low budget are not attractive for textile companies. There is a need for research / studies. Part of the production is out of the country. Simplification of procedures is not very likely. Take the example of Portugal (extroversion). Come up with a targeted program for the industry (the last program for the industry/sector was in 2010).

Feasibility in time: long-term implementation potential

Set up a stakeholder group for textiles and clothing in Central Macedonia.

<u>Feasibility in time</u>: medium-term implementation potential

Devise and launch a survey (Listen to your SMEs and other stakeholders – Invite them to express their needs with regard to sustainability and other needs such as internationalisation).

Comments

Organization of a meeting on CE & Sustainability between companies / members of SEPEE and representative of RCM.

Feasibility in time: medium-term implementation potential

Develop a strategy and action plan for a sustainable and competitive textiles and clothing sector in Central Macedonia (Design the support according to the needs expressed).

Feasibility in time: long-term implementation potential

> Support the development and promotion of a regional brand for 'Made green in Central Macedonia'.

Comments

There is a problem with the name. This seems as not applicable at the moment.

Feasibility in time: long-term implementation potential

Create dedicated intermediate structures/bodies that can act as networking nodes (The example of Centrocot & Texfor) and bring together the triple helix actors (academia, business, public sector) to provide regular information on sustainbility issues and funding opportunities, organise trainings and networking events, etc.

Comments

EVETAM can serve as Centrocot (for certificates)

SEPEE can serve as Texfor

RCM for Networking & Best practices from other countries

Feasibility in time: long-term implementation potential

➤ Identify and support a technical centre in Central Macedonia that can provide specific services to SMEs willing to address a sustainability issue (based on the example of Centrocot).

Comments

Creation of a Cluster / Structure / Network

A relevant Call could be probably issued in (early) 2023 (fall 2022 is very close especially for clusters).

The textile sector is one of the priorities of RIS3 Strategy.

Managing Authority is positive for the creation of a cluster and the issue of relevant calls targeted to the sector, it is taken into account in the designing of the new program, but any relevant invitation/call should logically aim in principle at the time continuity of the projects already implemented, (and at the same time in the creation of new ones) which will be completed in 2023.

Feasibility in time: long-term implementation potential

> Support companies through the technical centre to introduce and maintain labels, standards and certifications - help them prove that they comply with sustainability criteria and communicate about quality and environmental performance.

Comments

EVETAM has high cost for certifications. Although there might be a high demand from customers, the cost for certifications is unbearable for small businesses. SEPEE could inform its members if a relevant Call comes out.

Feasibility in time: long-term implementation potential

Support companies with a series of workshops, trainings and study visits to address the sustainability issues of the textiles sector such as production of raw material (i.e. drip irrigation, green cotton), energy efficiency and CO2 reduction in production processes; production of renewable energy (i.e. PV); wastewater reduction and treatment; waste reduction and treatment; and more for example through OSLO or a dedicated intermediate structure / body.

Feasibility in time: long-term implementation potential

Encourage the use of energy efficient equipment. Support own renewable energy production.

Feasibility in time: long-term implementation potential

> Encourage use of sustainable wastewater management.

Comments

Inform the 5 dyers that exist in RCM about the Good practice from Poland.

Feasibility in time: medium-term implementation potential

Waste material: Disposal methods of textile waste.

Comments

Low percentage of recycling in yarns / fabrics (biomass / reuse), mandatory, project / pilot TedMexAlliances, Municipal Green Points (forecast for textiles as well). Problem with the management of the recycled material. National Strategy. Promotion / TV advertising.

Feasibility in time: long-term implementation potential

Support process innovations with CO2 reduction.

Comments

Publish of a Call for reduction of CO2 emissions (provision for bonus on scoring for environmental benefits, this must be proven though and has a degree of difficulty).

HORIZON Programme is easier to submit and implement, but has tougher competition.

Feasibility in time: long-term implementation potential

> Support the mainstreaming of smart precision farming with drip irrigation - Rural Development Programme co-funded by EU (EAFRD) could specifically support this.

Comments

This is beyond regional scope. Consider other sources of funding or provision of information / promotion etc.

Feasibility in time: long-term implementation potential

5. Possible calendar of implementation

| Peer Review on "Circular Economy in textiles and clothing" online, 28-29 September 2021 | | | | | | | | | | | | | |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|--|
| Calendar of implementation of the proposed recommendations | | | | | | | | | | | | | |
| Recommendations | month 1 | month 2 | month 3 | month 4 | month 5 | month 6 | month 7 | month 8 | month 9 | month 10 | month 11 | month 12 | Comments |
| Help SMEs access sources of funding (Norway Grants, National funds, LIFE Programme, Regional Operational Programme, Interreg – training Platforms) through training and support in draftling applications. Access funding for environmental projects as well such as drip irrigation, waste water, waste treatment, etc. Consider specific Interreg Europe project for Circular Economy in textiles and clothing under the new programming period. | | | | | | | | | | | | | HORIZON, LIFE Programme Interreg -> is for soft actions, mainly for intermediaries, European Social Fund (ESF) -> Training programs for staff, there is a need for new executives - lack of human resources, but little interest in productive / manufacturing activities, need to make the industry attractive, Labor & Taxation -> depends on governmental policy, EURATEX -> educational material |
| Proactively encourage regional players (R&D centres, companies, etc.) to access European funding for research to improve recycling and waste management of textiles | | | | | | | | | | | | | A relevant Call could be probably issued in (early) 2023. A prioritization of the needs for calls should be implemented (Axis 1: 183 m) |
| Request an Interreg Europe matchmaking to address the specific opportunity of introducing Cascading funds to support sustainability and innovation in textiles and clothing | | | | | | | | | | | | | |
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| Set up a stakeholder group for textiles and clothing in Central Macedonia Devise and launch a survey (Listen to your SMEs and other stakeholders – invite them to express their needs with regard to | | | | | | | | | | | | | Organization of a meeting on CE & Sustainability, between companies / members of SEPEE and |
| sustainability and other needs such as internationalisation) Develop a strategy and action plan for a sustainable and competitive textiles and clothing sector in Central Macedonia (Design the support according to the needs expressed) | | | | | | | | | | | | | representative of RCM |

| Support the development and promotion of a regional brand for 'Made green in Central Macedonia' | | | | | | | | | | | |
|---|-------|------|---|-----|---|------|---|-----|-----|-----|---|
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| and treatment; waste reduction and treatment; and more for example | | | | | | | | | | | |
| through OSLO or a dedicated intermediate structure / body | | | 1 | 80 | | 160 | | | | | |
| Encourage the use of energy efficient equipment. | | | | | | | | | | | |
| Support own renewable energy production | | | | | | | | | | | |
| | 8 | 63 | | | | (C) | | 83 | - 4 | 3 | Good practice from Poland -> inform the dyers (5 |
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| | | | | | | | | | | | of the recycled material, National Strategy, promotion |
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| codia specifically support this | v | | | | | | | | | Co. | promotion etc. |

6. Conclusions

In this section, very brief considerations on the peer reviewed recently experienced can be indicated, including possible desired follow up activities to stay in contact with the peers or with the Policy Learning Platform (if deemed relevant).

Peer review has succeeded in introducing to the Region of Central Macedonia state-of-the-art tools and experiences to increase competitiveness, sustainability and implement the circular economy in the regional textiles and clothing sector.

An Interreg Europe matchmaking event may be desirable, in order to address the specific opportunity of introducing Cascading funds to support sustainability and innovation in textiles and clothing.

Thessaloniki, 29/12/2021