



European Union  
European Regional  
Development Fund



# CircE Interreg Europe “European Regions Toward Circular Economy”



## Action Plan for the textile and beverage sectors in Catalonia

July 2019



Generalitat de Catalunya  
Departament de Territori  
i Sostenibilitat

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## Part I – General information

Project: Interreg Europe CIRCE “European regions toward Circular Economy”

Partner organisation: Department of Territory and Sustainability. Government of Catalonia

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NUTS2 region: Catalonia

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## Part II – Policy context

The Action Plan aims to impact:

- Investment for Growth and Jobs programme
- European Territorial Cooperation programme
- Other regional development policy instrument

Name of the policy instrument addressed: ERDF Operational Programme Catalonia 2014-2020.

Further details on the policy context and the way the action plan should contribute to improve the policy instrument:

The policy instrument selected by PP02 was the ERDF Operational Programme Catalonia 2014-2020.

The ERDF Operational Programme Catalonia 2014-2020 was elaborated in the framework of the Catalonia 2020 Strategy (ECAT2020) and the Research and Innovation Strategy for the Smart Specialisation of Catalonia (RIS3CAT). Both strategies identify priority areas for public policies aimed at promoting smart, sustainable and inclusive growth and advancing towards the objectives of the Europe 2020 strategy.

In accordance with the thematic concentration specified in Article 4 of Regulation (EU) No. 1301/2013 for the more developed regions, the ERDF Operational Programme Catalonia 2014-

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2020 accounts for 83.5% of European Union support (82.6% if the allocation for technical assistance is included) for thematic objectives TO 1 (R&D&I), TO 2 (ICTs), TO 3 (SMEs) and TO 4 (Low-carbon Economy). If the ERDF resources that the Government of Catalonia allocates to the SME Initiative Operational Programme are also included, these thematic objectives account for 84.6% of the total EU support. As regards non-concentration thematic objectives, the OP allocates 16.5% TO 6 (Environment).

The selection of investment priorities was based on the studies conducted within the framework of drafting the Research and Innovation Strategy for the Smart Specialisation of Catalonia (RIS3CAT) (SWOT analysis), the Digital Agenda (analysis of the state of ICTs in Catalonia) and the Catalonia 2020 Strategy ECAT 2020 (analysis of the strategy paper and report on the 2012-2014 period), and in accordance with the recommendations of the ex-ante evaluation of the ERDF OP.

Taking into account these factors, the ERDF Operational Programme Catalonia 2014-2020 proposes the following distribution of ERDF support:

- 40.4% for TO 1. The high concentration of financing in this TO is justified by the great commitment that Catalonia is making, in line with the provisions of the Europe 2020 Strategy and the EU's flagship initiative for innovation, to research and innovation as drivers for growth and employment. TO 1 concentrates the implementation of the RIS3CAT strategy, but this can also be considered a cross-cutting element throughout the entire programme, as many applications in the other TOs have a clear component of innovation.
- 18.8% is allocated to TO 3 (SMEs), reflecting the importance of supporting entrepreneurship in SMEs, which are the main generators of jobs in the region. The OP gives a leading role to financial instruments, which should help to overcome one of the basic weaknesses of SMEs, which is access to financing.
- 16.3% is allocated to TO 6 (Environment) to enable the implementation of a wide range of actions in the fields of biodiversity, natural and cultural heritage and urban development with great territorial impact.
- 15.9% is allocated to TO 4 (Low-carbon Economy), reflecting the commitment to advancing towards meeting the 20-20-20 Targets (reducing greenhouse gas emissions by 20%, reducing energy consumption by 20% through increased energy efficiency and increasing the renewable energy share by 20%) whilst also generating great economic and employment opportunities in the business sector.
- 7.4% is allocated to TO 2 (ICTs) to enable the implementation of the Digital Agenda for Catalonia, which is also planned in the RIS3CAT strategy, given its importance as a tool for increasing competitiveness and entrepreneurship.

Actions included in this Action Plan are in line with the specific objective (SO) selected in the Application Form, this is, Specific Objective 3. d) 1, since it includes:

- Programmes aimed at increasing business' competitiveness through a more efficient use of resources, the implementation of clean and intelligent technologies, the reduction of negative impacts on the environment and health and the production of more sustainable goods and services that generate value, wealth and jobs.
- Programmes to support the economic sustainability of companies.

Concerning these programmes, and as stated in the report "Policy Instrument Analysis and Policy Options" elaborated by PP02 last year, it is worth mentioning that they may embrace different types of policy options, that according to the typologies defined in the CircE tool Step 6, could be:

- Business support schemes: Offering either technical or financial support.

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- Collaboration platforms: Promoting public-private partnerships (PPPs), industry collaboration platforms, R&D collaboration programmes.
  - Information & awareness programmes addressed to companies.

Although the programmes may embrace this type of policy actions, neither circular economy as a thematic issue, nor policy options like PPPs are currently included within the aforementioned programmes.

Thus, this Action Plan includes actions which are meant to improve the current OP through the development of information and awareness programmes or collaboration platforms. Besides, it incorporates actions, such as action 5, which has been designed to steer the next OP.

Actions	Typology of action
1. Awareness raising and capacity-building	Information and awareness programmes
2. Agreement on the transformation towards a circular textile sector	Collaboration platforms (PPPs)
3. Identification of tools regarding circular economy and food waste prevention, and support for implementation: Guide and workshop for different beverage subsectors	Information and awareness programmes
4. Analysis of RDI needs to increase the percentage of recycled plastic in new packaging and to seek new packaging materials	Collaboration programmes (RDI collaboration programmes)

Last but not least, it is worth mentioning that this Action Plan is also meant to respond to the strategy “Boosting Circular Economy in Catalonia” (2015) and to the forthcoming “Strategy for the prevention and management of textile waste in Catalonia”.

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## Part III – Details of the actions envisaged

### 1. INTRODUCTION

#### 1.1. Objectives

The working basis for the Interreg Europe projects is the exchange of experiences and best practices among regions with a view to inspiring other regions to improve their public policies.

The CircE Interreg “European Regions Toward Circular Economy” project is intended to strengthen the capacity of governments to establish policies that drive the economy towards a circular model that is coherent with the European Commission’s Circular Economy Package. On an interregional basis the secondary objectives are therefore:

- Interregional exchange of opportunities and barriers for technical improvement projects applied to productive economic sectors.
- Analysis of sectoral policies and instruments that may be implemented by the Administration.
- Awareness-raising among companies, business organisations and other interested parties.

In Catalonia the specific objectives are:

- Identifying best practices, barriers and opportunities with which to prioritise and define specific actions to encourage the circular economy in the textile sector and in the beverage sector.
- Implementing the actions defined from 2019 to 2021 by the Ministry of Territory and Sustainability of the Government of Catalonia.

The main policy instrument to which this project is addressed in Catalonia is the 2014-2020 Operational Programme of the European Regional Development Fund (ERDF), and other instruments such as the Strategy to Promote the Green and Circular Economy in Catalonia (2015) and the Strategy for the Prevention and Management of Textile Waste (currently in draft phase).

#### 1.2. Information and phases of the project

The CircE project has 8 partners from 8 European Union (EU) regions, with the region of Lombardy as the project’s lead partner. In Catalonia, the project is headed by the Ministry of Territory and Sustainability of the Government of Catalonia.

Project partners:

- Lombardy region (Italy)
- Sofia Municipality (Bulgaria)
- Government of Catalonia, Ministry of Territory and Sustainability (Spain)
- Creation Development EcoEntreprises (CD2E) (France)
- Province of Gelderland (Netherlands)
- Marshal’s Office of Lower Silesia (Poland)
- Association of Municipalities and Towns of Slovenia (Slovenia)
- London Waste and Recycling Board (LWARB) (United Kingdom)



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The project will last 4,5 years and is divided into two phases:

1. Phase 1 (2017- First half of 2019)

Context, analysis and exchange of experiences:

This phase included a selection of the priority economic sectors for the circular economy in each region and a process of learning and of exchanging circular economy experiences and best practices among partners, as well as meetings in the different involved regions. The selected sectors for the region of Catalonia are the textile and the beverage sectors.

During analysis, each region analysed the opportunities and barriers for the selected economic sectors in making progress toward a circular economy. An analysis for the priority sectors in Catalonia is summarised in section 2.

Production of the Action Plan:

The goal of this phase is to draft the regional Action Plans adapted to each region (AP) that integrate the opportunities prioritised in the project in the shape of sectoral policies, instruments and technical projects for improvement that the public administrations may implement. Joint consortium activities for continuing the process of learning and exchange among the partners are also explored.

2. Phase 2 (Second half of 2019 – First half of 2021)

Implementation of the Action Plan

Once the Action Plan has been drafted, the proposed actions will be implemented and monitored. This document refers to the Action Plan drafted by Catalonia.

All information on the project can be consulted on the following webpages:

- Global webpage of the project: <https://www.interregeurope.eu/circe/>
- The project's page in Catalonia: [http://mediambient.gencat.cat/ca/05\\_ambits\\_dactuacio/empresa\\_i\\_produccio\\_sostenible/economia\\_verda/interreg/](http://mediambient.gencat.cat/ca/05_ambits_dactuacio/empresa_i_produccio_sostenible/economia_verda/interreg/)

### **1.3. Involvement of Local Stakeholder Groups**

The CircE project involved an exchange of experiences at 9 interregional events that took place during the first phase of the project in the different regions.

Furthermore, as established in all the Interreg Europe projects, partners must also work regionally on the learning acquired at the interregional exchanges with other project partners. In order to work in greater depth on the two main objectives of the project in Catalonia, in May 2017 two Local Stakeholder Groups were therefore established in Catalonia (LSG), one for each prioritised sector, and included the following profiles:

Cross-sectoral stakeholders:

- Public institutions associated with the circular economy: Waste Agency of Catalonia, Ministry of Vice-presidency and of the Economy and Finance, Agency for Business Competitiveness ACCIÓ, Ministry of Agriculture, Livestock, Fisheries and Food.

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- Business organisations: General Confederation of Chambers of Commerce of Catalonia, Foment del Treball Nacional (Catalonia Employers' Association), Multisectoral Business Confederation (CECOT), PIMEC.
  - Universities, research and technology centres: Universitat Politècnica de Catalunya (UPC), Universitat Rovira i Virgili (URV), Leitat, Eurecat, Catalan Cork Institute.

Participants from the textile sector:

- Thread and fabric production companies
- Tailoring companies
- Chemical companies that synthesise products for the textile industry (dyes, etc.)
- Distribution and retail companies
- Textile waste recyclers
- Business associations and sectoral clusters
- 3rd-sector organisations
- Materfad

Participants from the beverage sector:

- Wine cooperatives and producers
- Institutes from the grape and wine-growing sector
- Beer sector producers
- Juice sector producers
- Water bottlers
- Business associations and sectoral clusters
- Not-for profit foundations

These LSGs were involved in phase one of the project at 7 work sessions held from May 2017 to May 2019, with the specific objectives detailed below:

1. Two work sessions (one for the textile sector and one for the beverage sector) featuring an introduction to Circular Economy and an identification of opportunities and barriers  
After these initial sessions, a further 20 individualised interviews were held to yield in-depth analysis of the levers and barriers for development of the opportunities identified (over 10 for each sector).
2. A joint work session of the two sectors with representatives of technological and digital supply.
3. Two work sessions (one for the textile sector and one for the beverage sector) to incorporate and validate criteria for the prioritisation of the opportunities identified.
4. Two work sessions (one for the textile sector and one for the beverage sector) to share and compare proposals for actions to be included in the CircE Action Plan, in line with the opportunities identified, and the sector's reality and needs. The specific objective of this last session was to yield answers to the following questions:
  - a. Are the proposed actions useful and relevant for implementing the CE in the sector?
  - b. Do they help to overcome existing barriers to the development of the CE?

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- c. Is their implementation feasible in the short term (2 years)?
  - d. Are there any significant actions missing?

Lastly, in addition to the sessions with the LSGs and interregional events, during the CircE project's first learning phase, a series of reports on opportunities and barriers was produced (a summary of which appears in the following section) and this Action Plan was drafted.



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## 2. SECTORAL DIAGNOSIS: CHALLENGES AND OPPORTUNITIES

After selecting the priority sectors of the project in Catalonia, the next step was to identify areas of opportunity for the transformation and generation of effective policy instruments for deploying the Circular Economy all over the region and in its main economic sectors.

Meeting this objective entailed sectoral analysis for each of the two priority sectors (textile and beverages), including the following elements:

1. Market analysis
  - Analysis of industrial value chains
  - Dimension and classification of economic sectors in Catalonia
  - Global state of the art of the circular economy in the economic sectors analysed
  - Trends and main developments in each sector
  - Identification of market drivers in the development of sustainable practices and in the circular economy
2. Sector analysis of circular economy barriers and opportunities
  - Use of the CircE Tool, a repository that systematically compiles a standardised format of the data gathered by all partners on best practices, opportunities and barriers (among other items).
  - Analysis of existing barriers for implementing opportunities by means of a interregional survey by sectors and by regions (coordinated by Catalonia)
  - Identification of other circular economy best practices and sectoral opportunities, other than those gathered by the partners
3. Prioritisation of opportunities detected
  - Application of the CIRCE multifactorial-type prioritisation model that considers impact, timescale, feasibility, investment and replicability factors.

These 3 steps have yielded 4 main results, which can be consulted in Annex 2:



In-depth analysis of the value chain



Heat map of the barriers to the circular economy associated with each opportunity

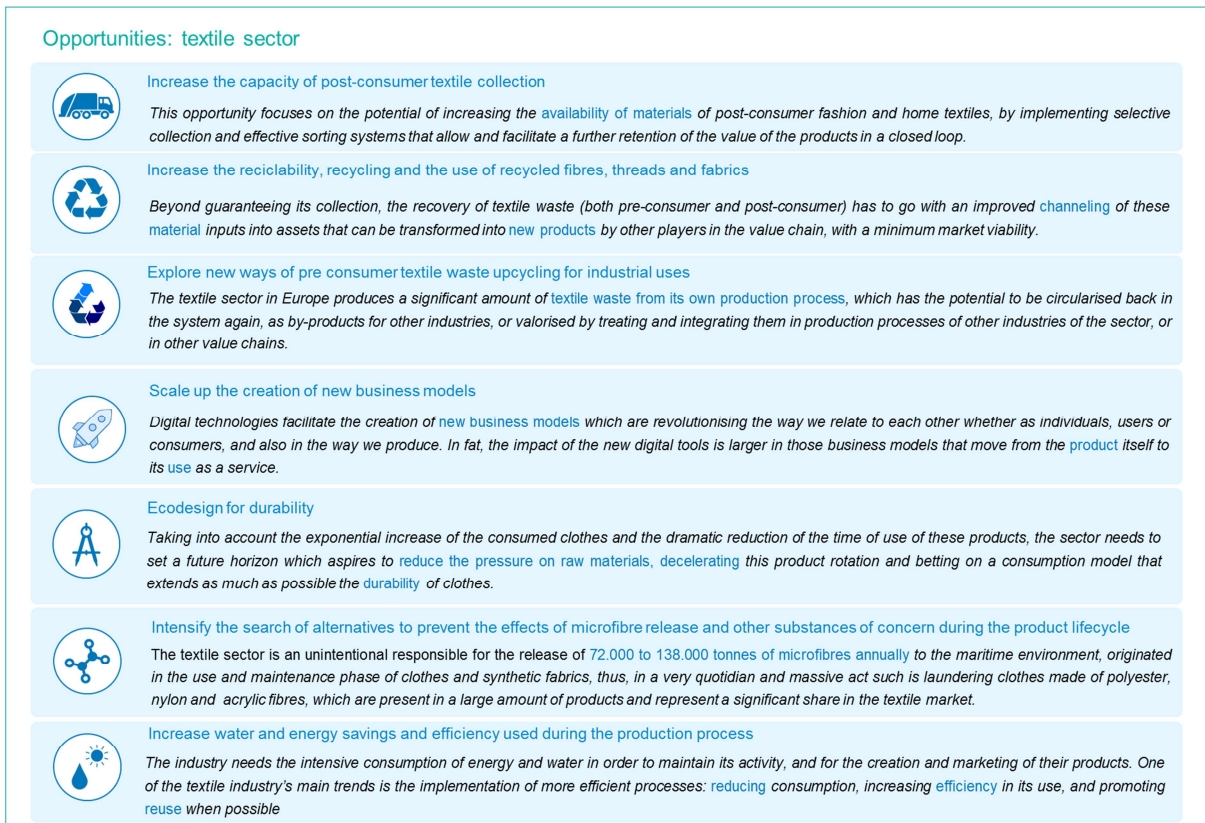


Prioritisation of the circular economy opportunities for each sector



Summary sheets of opportunities

By way of a summary, the 2 figures below show the circular economy opportunities with the greatest impact and interest for each sector. They are listed in order of prioritisation.



**Figure 1.** Summary of circular economy opportunities identified for the textile sector.

## Opportunities: beverage sector



### Preventing food waste along the value chain

Beverage manufacturers are able not only to implement actions to prevent food waste in their production process but also they can be **protagonists in preventing food waste in the food value chain**: redirecting resources to feed people and animals, as they have the capacity to transform and preserve a set of food products into new formats.



### Increase the reuse of glass packaging

The reuse of resources has a **preferential position** in the waste hierarchy and the principles of the circular economy. Reuse allows to create strategies that move the linear industrial model towards a more efficient management of assets, minimising environmental impact, and reducing the need to maintain redundant processes.



### Use of recycled packaging materials

Recycling is a **necessary but not sufficient condition** to create a circular economy. Recycling is a minimum and essential condition to maintain material flows inside the system, and also prevents those materials to move from the technical to the natural cycle, as negative externalities to the environment



### Increase the implementation of smart packaging solutions

Smart applications such as Radio frequency identification (RFID) and the creation of new applications such as the near field communication technologies (NFC) transform the package into an important asset for improving market knowledge and accelerating the **transition to circular supply chains**.



### Minimising material use for beverage distribution

In order to develop a more circular productive model, beyond ensuring that the product and material flows do not leave the loop, the preferred option in managing waste is the one focused on practices that do not generate waste or generate waste as less as possible.



### Increase water savings and water efficiency during production

Among other aspects, the circular economy provides a new model for the management of resources and raw materials. It allows a new future scenario for the industry where waste waters cease to exist or get minimised as much as possible. It provides the possibility to **close the water loop** in the production process, maximising its use cycles (both reducing consumption and treating it for its reuse).



### Scaling the creation of new valuable industry products from by-products

The large **volume of organic waste** produced by the beverage sector generate several problems in its management and treatment. On the other hand, these **by-products** and waste can be transferred to other sectors or treated to create **new valuable products**, generating new economic and social opportunities.



### Use of biobased and/or compostable materials for plastic packaging where beneficial

There are **prioritary strategies** such as prevention, reuse, recycling of conventional plastics. However, the Ellen MacArthur Foundation also highlights that these processes are not yet enough taking into account the future global demand levels that plastic production will not meet. In this sense, **separating plastics from its fossil base** represents an interesting case to consider in certain contexts.

**Figure 2.** Summary of circular economy opportunities identified for the beverage sector.

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### 3. ACTIONS

This section summarises the 5 key actions that will be implemented by the Ministry of Territory and Sustainability of the Government of Catalonia from 2019 to 2021 in order to encourage the circular economy in the two priority sectors: the textile sector and the beverage sector.

The context and the relevance of the action for the Interreg project, a description of the action, the stakeholders involved, the period of implementation, the estimate costs, the sources of financing, and the monitoring indicators are described for each action.

#### **ACTION 1: Awareness raising and capacity-building**

##### **1. Context and relevance to the Interreg project**

###### **General context**

The circular economy opportunities identified in the CircE project – through cross-regional, cross-sectorial and value chain analysis (see the project formal reports for further details) – can be considered as gaps in the circularity of the region involved. In order to boost circular economy, it is necessary to work on these gaps. The project ran also a barrier analysis, analysing the general barriers and the opportunity-specific barriers hampering any opportunity (see the project formal reports for further details).

The project activity showed that awareness and knowledge are key aspects and priorities in order to develop circular economy, from a business to business point of view (inside the companies: business awareness), from a business to customer point of view (enhance the role of customers) and, more generally speaking, from a social point of view, where also the citizen education is crucial. In particular, this was pointed out by the opportunity analysis and the barriers analysis. This evidence emerges from all the PPs analysis.

Therefore, actions to steer the policy instrument towards the increasing of awareness and knowledge in all the actors of the value chain are very relevant. The activity supported and boosted by this action can be developed with different nuances in the different policy instruments. However, the common point is to support awareness, knowledge and capacity building in all policy instruments.

Moreover, the CircE project has identified a wide range of circular economy opportunities, connected to different economic sectors. For this reason, actions regarding capacity-building are very suitable as common actions for all partners since they can be implemented in all regions regardless their differences in the opportunities identified and the sectors tackled.

This action will be performed by several partners of the consortium and, therefore, is of a highly interregional nature and is also very replicable in other regions.

###### **Specific context**

###### Relevance to the Policy Instrument

This action is clearly aligned with specific objective (SO) 3. d) 1 of the ERDF Operational Programme for Catalonia 2014-2020, as this includes:

- Programmes intended to increase business competitiveness through a more efficient uses of resources, the implementation of clean, smart technologies, a reduction in

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- negative impacts on the environment and health and the production of more sustainable goods and services that generate value, wealth and jobs.
  - Programmes of support for the economic sustainability of companies.

These types of programmes normally take into consideration capacity-building activities, as a basis for the future development of other types of actions. Increasing the circular economy capacities of companies extends beyond traditional training courses and should include activities with which to work on true circular economy challenges with other groups of interest such as the action that we put forward here.

**Beyond the alignment of this action with SO 3 d) 1, according to our Intermediate Body of ERDF this action contributes to improve the ERDF Operational Programme for Catalonia 2014-2020 enhancing one of the impact indicators of the OP, this is indicator EO20: Number of companies impacted by awareness raising actions. This enhancement is two-fold:**

- This indicator is measured considering the awareness raising campaigns undertaken by the Institut Català de Finances (ICF, Catalan Institute of Finance) and Barcelona Activa with regards to the instruments financed by ERDF that they offer. Both the ICF and Barcelona Activa will include circular economy and the results of the CircE project in their campaigns.
- Both the ICF and Barcelona Activa will be invited to participate in the challenge so as to a) spread their ERDF instruments in the challenge events and b) work hand by hand with students, companies and other public organisations.

This action may therefore help to gear our main policy instrument towards raising the awareness and knowledge on circular economy and the OP of all the stakeholders in the value chain: producers, distributors, retailers, recycling companies and consumers.

#### Relevance to the Interreg project

As mentioned in the previous point, increasing the circular economy capacities of companies extends beyond traditional training courses and should include activities with which to work on true circular economy challenges with other groups of interest. Two examples of such activities that have been successfully implemented in Catalonia in recent years and that may serve as an inspiration and benchmark for implementation are the “Recircula Challenge” (Recirculate Challenge) of the Universitat Politècnica de Catalunya (UPC) and the “Idea Generation Programme” of the Universitat Autònoma de Barcelona (UAB).

Bearing these experiences in mind, the CircE project has particularly analysed the Recircula Challenge which run from September 2018 to July 2019 and was identified as a best practice by the CircE project during Phase 1.

The challenge that we propose in this action **will not be a replication of the existing Recircula Challenge (2018/2019), but it will be improved** so as to adapt it to the project’s results. More specifically, it will incorporate the **following new elements** deriving from the exchange of experience that took place during Phase 1 and especially from the good practice undertaken by London Waste and Recycling Board (PP05) and introduced in the CircE tool as PP50522 “City Fashion Challenge”<sup>1</sup>:

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<http://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0ahUKEwjmJC0wOnZAhVM46QKHcDFBxcQFggtMAE&url=http%3A%2F%2Fwww.climate-kic.org%2Fwp-content%2Fuploads%2F2017%2F11%2FLondon-City-Challenge-Information-Pack2.pdf&usq=AOvVaw2W4z0yLfbxHmYY-WX42TqD>

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- **Incorporate the sectorial dimension** and focus the second 2019/2020 challenge on the textile sector (inspiring on the “City Fashion Challenge”), given that the Recircula Challenge has hitherto been focused on challenges of a general kind.
  - **Propose a challenge to be solved based on the approach proposed by the “City Fashion Challenge”: The London Fashion Loop**, this is “creating circular fashion loops specifying that a solution for this challenge would focus on finding ways to bring two or more elements of the Circular Canvas together to create localised loops: origin, material, equipment / processes, use, post-use”.
  - **Involve companies, particularly SMEs**, in all phases of the challenge, taking into account that the “City Fashion Challenge” involved big thinkers, start-ups, SMEs and researchers, as the previous Recircula Challenge (2018/2019) was basically limited to universities and research centres.
  - **Involve other stakeholders** from the textile sector value chain, inspiring on the value chain analysis developed by the LP with the information provided by all PPs.

Finally, taking into account the logical framework underlying the CircE project, which includes: gathering good practices with regards to CE in specific sectors selected by each PP, identifying CE opportunities, pointing out barriers to their development, prioritizing opportunities and then defining actions that can boost prioritized opportunities and overcome barriers (which is the aim of this Action Plan), emphasizing that this action provides a response to one of the priority opportunities identified in phase 1 of the CircE project “Explore new ways of pre-consumer textile waste upcycling for industrial uses” (see Figure 1 of this Action Plan). This action is thus fully in line with the logical framework of the project.

## 2. Description

The “university challenge”-type programmes are intended to identify real challenges and seek solutions (either technological or social) involving university students, companies and public administrations. Students have the chance to work on real challenges with the support of trainers (experts in each challenge: non-academic members who act as tutors throughout the process) and professionals.

This action will be focused on the textile sector and it will be inspired by **one of the challenges proposed by the “City Fashion Challenge”: The London Fashion Loop**, this is “create systemic change, articulating circular fashion loops” in Catalonia specifying that “a solution for this challenge would focus on finding ways to bring two or more elements of the Circular Canvas together to create localised loops: origin, material, equipment / processes, use, post-use”.

This action will therefore, first, involve textile companies (particularly SMEs) and textile clusters, many of which are members of the LSG of the CircE project. Business involvement will consist in:

- Proposing real circularity gaps with regards to the creation of circular fashion loops in Catalonia and work upon them with students.
- Taking part as students’ advisors.
- Taking part in sponsoring awards.
- Taking part as a jury.
- Offering students the application of ideas in their business context by means of a work experience programme.
- Proposing other kinds of support to perform the action.

Second, and following the UPC’s methodology, the programme also includes a call to university students from all Catalonia’s universities to create multidisciplinary groups: each group makes a 2-minute video in which they present themselves and the reasons for participating in the

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challenge. For five months, these groups of participating students work on proposals on how to create circular fashion loops from the circularity gaps identified by companies, with the support of trainers and of professionals from companies and/or public administrations (who confirm that the solutions can be adapted to companies and the region and are suited to the context of the policy framework). During these months, groups will also benefit from:

- Detailed information on the challenge (visits, networking)
- Training in matters of communication and design thinking
- Training in innovation and entrepreneurship.

After these five months, a public presentation will be given by all groups to present their proposals to create circular fashion loops in Catalonia. Groups defend their proposals and a jury (formed by members from universities, companies and public administrations) select the three best proposals. These three best proposals are awarded:

- First prize: €3,000 + incubation of the idea.
- Second prizes (2): €1,500 each.
- All finalists:
  - a) Entrepreneurship advice on developing/implementing the proposal.
  - b) Communication of the results (by universities and public administrations)

The universities of the students taking part in the challenge will also be asked to become living labs in which to test the solutions identified.

### **3. Stakeholders involved**

A list of the stakeholders necessary to perform the action and the tasks that must be performed appears below:

Polytechnic University of Catalonia (UPC)

- Organisation of the challenge

Ministry of Territory and Sustainability of the Government of Catalonia (DTES)

- Co-organisation of the challenge

Other public administrations: Metropolitan Area of Barcelona, Waste Agency of Catalonia, ACCIÓ

- Participation as tutors and jury

Other universities from Catalonia

- Participation as tutors and jury
- Provision of spaces to test the solutions identified

Business clusters and companies (particularly SMEs)

- Proposal of circularity gaps
- Participation as advisors and jury
- Sponsorship of awards
- Provision of work experience associated with the challenge
- Other types of support to be specified

Key ERDF actors: Institut Català de Finances and Barcelona Activa

- Spread their ERDF instruments in the challenge events.

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- Include circular economy and the results of the CircE project in their campaigns.
  - Participate in the challenge and work hand by hand with students, companies and other public organisations.

#### **4. Period of implementation**

Organisation and implementation of the challenge: October 2019 to July 2020

Monitoring: 2<sup>nd</sup> half of 2020

#### **5. Estimated costs**

The challenge will cost an estimated €60,000, of which the DTES will assume an estimated €14,000.

#### **6. Sources of financing**

- UPC and Ministry of Territory and Sustainability.
- Other universities.
- Metropolitan Area of Barcelona and other public administrations.
- Companies (sponsorship).

#### **7. Monitoring indicators**

- Number of participant students.
- Number of participant companies. Contribution to the indicator **EO20**: Number of companies impacted by awareness raising actions
- Number of ideas incubated and/or implemented.



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## ACTION 2: Agreement on the transformation towards a circular textile sector (Pilot action)

### 1. Context and relevance to the Interreg project

#### Relevance to the Interreg project

The **textile sector** has been acknowledged as **one of the sectors with the greatest potential to move towards a circular economy model**: first, by the European Commission, which, in its report “Sustainable Products in a Circular Economy – Towards an EU Product Policy Framework Contributing to the Circular Economy” (2019) points to the textile sector’s high environmental impact and considerable potential for circularity, particularly if an holistic approach is guaranteed; second, by the Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018, amending Directive 2008/98/EC on waste, which determines that member states must establish separate waste collection for textiles before 1 January 2025.

This pilot action is a **straight-forward follow-up of the phase 1 outcomes**. It allows PP02 to address the CircE circular economy prioritized opportunities that were identified in conjunction with the textile LSG in Phase 1 of the project. More specifically, this pilot action responds to the implementation of the following identified opportunities: (1) the increase in the collection capacity of post-consumer textiles, (2) the increase in recyclability, recycling and use of recycled fibres, threads and textiles locally, (3) the improvement of energy and water efficiency and quality during the production process and (4) eco-design for durability. The resulting Textile Agreement will therefore have a cross-cutting impact influencing these various challenges and opportunities in the sector.

Moreover, this action derives from the **learning of a good practice of the Dutch partners** (PP04) of the Interreg CircE project: [Agreement on Sustainable Garment and Textile \(2017\)](#). Several meetings have been held with PP04 and its stakeholders (especially with MODINT, the leader of the agreement) in order to better understand their approach and process management.

#### Relevance to the Policy Instrument

Concerning our main policy instrument, the ERDF, the pilot action “Agreement towards a Circular Textile Sector in Catalonia” is aligned with **OP ERDF Catalonia 2014-2020** in the Thematic Objective (TO) 3/ Specific Objective 3(d)1, that includes programs to improve the competitiveness of companies through the efficient use of resources, implementation of green technologies, reduction of environmental impacts and production of more sustainable goods and services.

The Intermediate Body of the ERDF in Catalonia (Ministry of the Vice-presidency and of the Economy and Finance of the Government of Catalonia) considers that the “Agreement towards a Circular Textile Sector in Catalonia” clearly improves the regional policies related to the promotion of circular economy and SME’s support **and strengthens the complementarity between the OP ERDF Catalonia 2014-2020 and the regional policies in this period, as follows:**

- **With regards to the RIS3CAT** strategy, which is the framework of the ERDF, it includes a line of action aimed at identifying European projects in which partners from Catalonia are involved and which can provide relevant evidence and learning for both RIS3CAT and public policy. In the context of this line of action of the RIS3CAT, the Agreement towards a Circular Textile Sector in Catalonia **has been selected as a pilot for monitoring the RIS3CAT** and will thus contribute to its improvement.
- When it comes to **policy changes regarding the current ERDF**, the pilot action

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“Agreement towards a Circular Textile Sector in Catalonia” will improve the **loans Eurocredit** from the Institut Català de Finances (Catalan Finance Institute), which are the instruments currently defined to deploy the Objective 3 (d) 1 of the OP ERDF Catalonia. The improvement will consist on including circular economy criteria in the selection procedure of the loans.

- To guarantee continuous feedback with our main policy instrument **OP ERDF** and **RIS3CAT**, representatives of institutions that are taking part in key RIS3CAT and OP ERDF projects, such as RIS Communities and Territorial Competitiveness Specialization Project (PECT in its acronym in Spanish) related to circular economy, will become members of the technical commission of the Textile Agreement. This will allow a better integration of circular economy in both policy tools.

In addition, concerning the **next ERDF period**, the results of the present pilot action can be replicated to other economic sectors of the RIS3CAT by financing an instrument similar to the present Agreement that facilitates their transition towards circular economy.

Moreover, policy changes **beyond the ERDF** will also occur in the context of: the Circular Economy Roadmap for Catalonia (which will start its drafting next year), the Circular Economy Hotspot (which will take place in Catalonia next year) and the future Catalan Law for Waste Prevention and Management and Efficient Use of Resources.

## 2. Description

The objective of the pilot action is the creation of a Circular Economy Voluntary Agreement in the textile sector to be signed by companies and that represent stakeholders from all the different links of the textile value chain in Catalonia, as well as public administrations (both at regional and local level) and other relevant stakeholders. The goal of the Agreement is that signatories agree to promote the circular economy and to innovate in the sector by means of the integration of circular principles in their organisational strategies, of the adoption of circular measures in their production processes and of encouragement of participation of both suppliers and consumers in the transition towards a circular economy.

The thematic issues that will be included in the Agreement will range from design for durability to improve selective collection, reuse and recycling strategies, clean production and innovation of materials. In this sense, the Agreement will offer an opportunity to create cross-cutting impacts in the Catalan textile sector, given the fact that Catalonia, unlike other European regions, has significant stakeholders in every link of the textile value chain. These include industrial producers, designers, manufacturing and tailoring companies, distribution and retailers (from small to large multinational companies), waste recovery and textile recycling companies.

The Agreement will generate the creation of a common vision and a shared agenda within the textile sector that will facilitate the establishment of real commitments that generate action towards circularity. Besides, it will favour the creation of collaborative initiatives (private-private and public-private) and in-house transformations.

The deployment of the Circular Economy Agreement in the textile sector in Catalonia will be, in fact, a two-layer Agreement. This is to say, that the Agreement will have a first layer that will include a selected group of companies, as well as other type of stakeholders, that already have a strong commitment towards circularity. It is expected that this first layer of the agreement incorporates around 10 stakeholders:

Then, as the collaborative work gets consolidated and draft objectives are defined with this first group, a cascade effect is expected to encourage a vast number of SMEs from different links of the value chain, as well as other type of stakeholders, to join the Agreement. This

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group will constitute the second layer of the Agreement. It is expected that the second layer includes around 40 new stakeholders. Overall, the aim is for the Agreement to be signed by at least 50 stakeholders from all links of the textile value chain, and there is a pledge to gradually increase this number.

So as to achieve a Circular Economy Agreement in the textile sector, a number of activities are envisaged until June 2021 to ensure a broad support of the sector and its real transformation towards circular economy:

1. Establishing the **core group of stakeholders** and organising the first meetings in order to define the initial draft objectives of the Agreement.
2. Setting up and coordinating a **Technical Commission**: identifying members, establishing tasks, setting meetings, defining contents to be discussed, etc.
3. **Mapping** the most relevant companies from the Catalan textile value chain and their main resource and waste flows so as to identify the optimal companies from different links of the value chain to be candidates to join the group of 40 stakeholders that will become the second layer of the agreement.
4. Designing and developing a **Plan for engaging second layer stakeholders** through participatory means.
5. Designing a set of **communicative tools** so as to persuade stakeholders to join the second layer of the agreement (to be used during the development of Activity 4).
6. Defining a **Plan to develop a shared agenda** and to explore possible financial options.
7. Elaborating the **contents of the Agreement**: commitments, final objectives, actions, responsibilities, monitoring and evaluation framework.
8. Organising a **signatories' event** that, apart from including the official signing of the event, will serve as dissemination of the Agreement.
9. **Evaluating** the implementation of the Agreement.

### 3. Stakeholders involved

Selecting main beneficiaries of the pilot action implies going beyond the CircE textile LSG and consider the whole textile ecosystem:

- Business companies from the whole value chain:
- Employer's associations and different types of business associations from the whole textile value chain.
- Third sector organisations which have an important role in the collection, reuse and preparing for reuse of textiles in Catalonia.
- Public administrations:
  - Department of Territory and Sustainability: General Directorate of Environmental Policies and the Natural Environment (leader) , Catalan Waste Agency (co-leader), General Directorate for Environmental Quality and Climate Change
  - Other relevant actors of the Catalan Government such as the Department of Business and Knowledge (Catalan Agency for Business Competitiveness, ACCIÓ), the Department of the Vice-Presidency, Economy and Finance (including the Catalan Statistical Institute, IDESCAT).
  - Local authorities.
- Research and technological centres:
  - Centro INTEXTER (Universitat Politècnica de Catalunya), Eurecat, Leitat.

### 4. Period of implementation

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July 2019 – June 2021.

#### **5. Estimated costs**

The creation of the Agreement will entail an estimated initial cost of €70,638.88.

#### **6. Sources of financing**

- European Regional Development Fund (Interreg Europe).
- Ministry of Territory and Sustainability.

#### **7. Monitoring indicators**

On the one hand, the measurement of the following process indicators is foreseen:

- Characterization of the core group (number, dimension and type of stakeholders of the first-layer group).
- Characterization of the second-layer members (number, dimension and type of stakeholders of the second-layer group).
- Analysis of the lessons learnt from the process (means for engaging stakeholders, involving “new” stakeholders, etc.).

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## **ACTION 3: Identification of tools regarding circular economy and food waste prevention, and support for their implementation: Guidelines and workshop for different beverage subsectors**

### **1. Context and relevance to the Interreg project**

#### Relevance to the Interreg project

Firstly, and taking into account the logical framework underlying the CircE project, which includes:

- gathering **good practices** with regards to circular economy in specific sectors selected by each PP,
- identifying circular economy **opportunities** for selected sectors,
- pointing out **barriers** to their development,
- **prioritizing** opportunities,
- defining **actions** that can boost prioritized opportunities and overcome barriers (which is the aim of this Action Plan);

it is worth emphasizing that this action **contributes directly to the opportunity identified as priority in phase 1 of the CircE project “Preventing food waste along the value chain”**, and to other two opportunities prioritized: a) Increase the reuse of glass packaging and b) Use of recycled packaging materials<sup>2</sup>.

Indeed, of the actions proposed to the LSG at the workshop held on 15 May this year, **this was the second most voted action by stakeholders** during the prioritisation rating exercise undertaken at that workshop.

Secondly, this action **is in line with one of the typologies of opportunities discussed during Phase 1** among project partners. In fact, as a result of the aforementioned logical framework, different types of opportunities were discussed among PPs during project meetings and the drafting of guidelines was one of them. In this sense, PP07 (Sofia) also identifies as an opportunity (which can later be developed into an action) the elaboration of guidelines, in their case, for the building sector: “preparation of guidelines containing sequence actions taken in case of destruction of buildings and the subsequent treatment of generated waste” (PP07-S5-006). This action is thus a clear result of the cross-regional and cross-sectorial analysis.

Thirdly, **the guidelines will follow the value chain framework developed by the CircE project during Phase 1** that has allowed approaching circular economy in a systemic way.

Besides, this action responds to the commitment acquired by PP02 within the Action Plan of the Interreg Europe Ecowaste4food project, which envisaged that the Action Plan of the CircE project should include a measure to prevent food waste.

Additionally, this action also provides continuity and depth to the circular economy guides produced by ACCIÓ:

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<sup>2</sup> Furthermore, and since this action tackles the whole value chain, it helps in the development of the other opportunities identified for the beverage sector: Increase the implementation of smart packaging solutions, Minimising material use for beverage packaging and distribution, Increase water savings and water efficiency during production, Scaling the creation of new valuable industry products from by-products and Use of biobased and/or compostable materials for plastic packaging where beneficial.

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- Collection of Circular Economy Guides: Agro-food sector
  - Collection of Circular Economy Guides: Packaging systems

And it complements the guide on food waste prevention elaborated by the Ministry of Agriculture, Livestock, Fisheries and Food (DARP) with more specific tools and information for different beverage subsectors.

Lastly, it is worth pointing out that, given the nature of the action, both the guidelines and the workshop methodology are highly replicable.

#### Relevance to the Policy Instrument

As far as its contribution to the Policy Instrument is concerned, **the action is fully in line with specific objective (SO) 3. d) 1 of the ERDF Operational Programme for Catalonia 2014-2020**, as it helps to increase business competitiveness through greater efficiency in the use of resources, the implementation of smart, clean technologies, a reduction in negative environmental and health impacts, and the production of more sustainable goods and services that generate value, wealth and jobs.

Likewise, as in the case of Action 1, the measure in question helps to reorient our main policy instrument towards raising awareness and building the capacities of all stakeholders in the beverage sector value chain.

Although circular economy is a priority at European level, evidence shows that the number of circular economy projects that are being co-financed is very low. One of the reasons underlying this low co-financing is limited awareness of the concept of circular economy itself among potential beneficiaries. This is to say, beneficiaries of calls do not have enough knowledge of the circular economy so as to prepare projects to present to those calls.

This action will include the identification of the key elements to define the concept of circular economy so as to enhance the capacity of potential beneficiaries, not only from the beverage sector, to elaborate projects regarding circular economy to present to calls. Since the clarification of the concept of circular economy will impact on all applicants to calls co-financed by ERDF (such as Euro-credit loans), according to our Intermediate Body of ERDF this action will improve the OP not only having an impact on SO 3 d) 1 but also having a cross-cutting impact in the whole OP.

## **2. Description**

The action is intended to raise awareness and to promote the adoption of circular initiatives in economic sectors and the beverage sector in particular, by disseminating circular economy tools and best practices among companies from different subsectors of the beverage value chain: the beer sector, the wine and cava sector, the bottled water sector, the soft drinks sector, the juice sector and distribution as a major cross-sector stakeholder. It will do so through the production of guidelines and by running a workshop to encourage the application of circular economy tools, with special emphasis on preventing food waste.

It will first produce **guidelines addressed to different subsectors in the beverage sector**. These guidelines will have the following content:

- Key elements to define the concept of circular economy addressed to all sectors.
- Information on the context and impact of the beverage sector and of its specific subsectors, including analysis of forces of change and of challenges, and deeper exploration of the barriers detected in phase 1 of the CircE project (and very particularly those concerning regulations).
- Checklist of cross-cutting circular economy tools applicable to each different beverage subsector.

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- Best practices of each different beverage subsector, based on the best practices identified during the exchange of experiences in phase 1 of the CircE project.
  - The role of distribution and of the public administration
  - References to existing European guidelines
  - Conclusions for each subsector and overall conclusions, which include identification, among other things, of common challenges and shared (as well as replicable and/or transferable) tools to address them.

The creation of these guidelines will involve collaboration among the major stakeholders of the different subsectors, and thus strengthen the LSG of the CircE project (which will be engaged in the identification of challenges and tools), as well as complement and intensify detection of the best practices and barriers pointed out in phase 1 of the CircE project.

Lastly, the guidelines will be distributed and presented at a public event. This general dissemination will also be complemented with a **practical workshop** for companies from different beverage subsectors that will entail working on the circular economy tools identified by the guidelines in order to transfer the knowledge, concepts and tools that help them to implement and consolidate the application of the circular economy in the sector. This workshop will be carried out taking into account participatory methodologies.

The potential projects arising from the implementation of the tools identified in the guidelines may be entered for the Catalonia Ecodesign Award and may be published, if relevant, in the Catalonia Ecodesign Catalogue.

### **3. Stakeholders involved**

Ministry of Territory and Sustainability (with the collaboration of ACCIÓ)

- Promotion and coordination
- Distribution and dissemination of the guidelines

Ministry of Agriculture, Livestock, Fisheries and Food (DARP)

- Coordination with the guidelines on food waste prevention

Companies and business associations from different subsectors

- Participation in producing the guidelines (best practices, challenges, etc.)
- Recipients of the guidelines and the workshop

Sector clusters, Ecovidrio and/or Ecoembes

- Dissemination among their members for participation in producing the guidelines and the workshop
- Possible sponsors
- Support in distributing and disseminating the guidelines

Technology centres (Eurecat, Leitat)

- Participation in producing the guidelines (best practices, challenges, etc.)

Intermediate Body of ERDF in Catalonia

- Support to the elaboration of the key elements to define the concept of CE and dissemination.

### **4. Period of implementation**

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2<sup>nd</sup> half of 2019, 1<sup>st</sup> and 2<sup>nd</sup> half of 2020, 1<sup>st</sup> half 2021

## **5. Estimated costs**

Outsourced contracts:

- €10.000 for the production of the Guidelines
- €3,000 for the design and performance of the Workshop

## **6. Sources of financing**

Ministry of Territory and Sustainability

## **7. Monitoring indicators**

- Number of participants at the presentation event and at the workshop
- Number of online downloads of the guidelines



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## **ACTION 4: Analysis of RDI needs to increase the percentage of recycled plastic in new packaging and to seek new packaging materials**

### **1. Context and relevance to the Interreg project**

#### Relevance to the Interreg project

With the adoption of the new European directive on plastic waste, the replacement of plastic with other materials and the increase in the use of recycled plastic in the packaging of beverages represent now some of the major and most imminent challenges for the beverage sector (and particularly for packagers).

Firstly, taking into account the logical framework underlying the CircE project, that includes:

- gathering **good practices** with regards to CE in specific sectors selected by each PP,
- identifying CE **opportunities** for selected sectors,
- pointing out **barriers** to their development,
- **prioritizing** opportunities,
- defining **actions** that can boost prioritized opportunities and overcome barriers (which is the aim of this Action Plan),

it is worth pointing out that this action **fulfils the priority opportunity identified in phase 1 of the CircE project regarding “Use of recycled packaging materials”**. Indeed, of the actions proposed to deploy this opportunity, **this was the action most voted for by members of the LSG** during the prioritisation rating exercise undertaken at the workshop held on 15 May this year, both with regard to technical and economic feasibility and its relevance for boosting the circular economy in the sector.

Secondly, this action **is in line with some of the opportunities discussed among project partners during Phase 1**. Indeed, as a result of the aforementioned logical framework, different opportunities were discussed among project partners during project meetings and exchanged also through the CircE tool. In the same thematic line as this action, this is the case of: PP01-S5\_022 “Increase the percentage of recycled plastics into new products”, PP01-S5-023 “Increase the production of sustainable and biodegradable plastics”, PP05-S5-056 “Work with SMEs and innovators to create alternatives to plastics, e.g. bioplastics”. In the context of the same typology of action, but different thematic area, it is the case of PP05-S5-010 “Research constraints on refit, re-use and demolition activities”.

Additionally, it is hoped that the action’s results may help to: a) influence the new European Horizon 2020 programme, b) encourage the creation of RDI partnerships (PPPs) in these areas.

Given that the challenges regarding the new European directive on plastic waste will, to a larger or lesser extent, impact (depending on their starting situation) all European regions, the potential for transferring the results of this action is high.

#### Relevance to the Policy Instrument

Similarly to the previous actions, this action is aligned with specific objective (SO) 3. d) 1 of the ERDF Operational Programme for Catalonia 2014-2020.

Beyond this alignment, the analysis of RDI needs proposed by this action will include a chapter on how to improve the criteria of existing subsidies regarding circular economy (Nuclis d’Innovació and RIS Communities) so that they enhance their contribution to the transition towards the circular economy. Since Nuclis d’Innovació and RIS Communities-type subsidies are co-financed with ERDF funds, this action will clearly contribute to improve the OP.

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Furthermore, RIS Communities will be invited to participate in the analysis of RDI needs; and both RIS Communities and PECTs will be invited to the public presentation of the results of the analysis so that they can integrate them.

## **2. Description**

The action embraces a whole series of sub-actions:

- a) Diagnosing priority RDI needs regarding the increase in the proportion of recycled materials in new packaging and in the search for new packaging materials in the different beverage subsectors. The process of diagnosis will entail the participation of relevant stakeholders.
- b) Describing how to improve the criteria of existing subsidies regarding circular economy (Nuclis d'Innovació and RIS Communities).
- c) Organising a public presentation of the results inviting RIS Communities and PECTs.
- d) Integrating the results of the diagnosis in public presentations of existing lines of subsidy such as Nuclis d'Innovació, Innotec and RIS Communities, in order to encourage the creation of relevant research, demonstration and innovation projects.

Depending on the results of the diagnosis, the potential projects for implementing the needs detected may be entered for the Catalonia Ecodesign Award and may be published, if relevant, in the Catalonia Ecodesign Catalogue.

## **3. Agents involved**

Ministry of Territory and Sustainability

- Promotion and coordination
- Identification of associated lines of subsidy

Promoters of lines of subsidy (ACCIÓ)

- Integrating the results of the diagnosis in public presentations of existing lines of subsidy
- Improving the criteria of existing subsidies according to the results of the analysis

Technology and research centres (EURECAT, LEITAT, universities, etc.)

- Support in diagnosing needs

Sector clusters, companies and associations

- Support in diagnosing needs

RIS Communities and PECTs

- Participating in the analysis of RDI needs (RIS Communities).
- Participating to the public presentation of the results of the analysis

## **4. Period of implementation**

2nd half of 2019, 1st and 2nd half of 2020, 1st half of 2021

## **5. Estimated costs**

Outsourced contracts:

- €10,000 for producing the analysis

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## **6. Sources of financing**

Ministry of Territory and Sustainability

## **7. Monitoring indicators**

- Number of RDI needs detected
- Number of public presentations featuring integration of the results of diagnosis
- Number of RDI projects presented in Nuclis d'Innovació, Innotec and RIS Communities regarding the increase of the percentage of recycled plastic in new packaging and new packaging materials

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## **ACTION 5: Integration of the circular economy in the new ERDF Operational Programme for Catalonia 2021-2027: Creation of a working group at the Ministry of Territory and Sustainability (DTES)**

### **1. Context and relevance to the Interreg project and the policy instrument**

This action is directly related to the policy instrument to which the CircE Interreg project in Catalonia is addressed: the ERDF. Integration of the circular economy in the ERDF programmes may encourage the implementation of actions and best practices in the CircE project's two priority economic sectors –the textile sector and the beverage sector– and be a boost towards the circular economy at different levels.

As mentioned previously, thematic objective 3/specific objective 3 (d) 1 of the ERDF Operational Programme for Catalonia 2014-2020 currently contains: programmes for improving the competitiveness of business through the efficient use of resources, the implementation of green technologies, the reduction of environmental impacts and the production of more sustainable goods and services.

Nevertheless, current ERDF financing for Catalonia does not envisage the funding of either public-private partnership type actions (PPPs), or instruments of support for companies regarding circularity, which are crucial in facilitating the implementation of circular economy at business level and making the circular economy a reality in the region's production fabric. Similarly, sessions with the project's LSGs revealed a need to create funds to support circularity, particularly for SMEs and PPPs, and ERDF funds have considerable potential in this regard.

PP02, as well as taking part in the Interreg CircE project, also belongs to the Interreg BID-REX project consortium, which is also technically coordinated by the Secretariat for Environment and Sustainability. This action would therefore complement the actions known as Fund 1 and Fund 2 –contemplated in the Action Plan of the Interreg BID-REX project– that propose the creation of a working group led by the Ministry of Territory and Sustainability (DTES) with a view to (1) incorporating new criteria in ERDF funds to increase the financing of projects related to natural heritage, and to (2) intensify the involvement of the Ministry of Territory and Sustainability in defining and executing projects associated with natural heritage financed with ERDF funds. This action would therefore improve intra- and interdepartmental governance while establishing the objectives and instruments of the new ERDF programme.

### **Description**

The action is intended to integrate the circular economy in the new ERDF Operational Programme (OP) for Catalonia 2021-2027, both through the incorporation of new core circular economy-associated themes and through the introduction of circular economy criteria in other thematic areas subject to financing, whenever such integration is necessary. The action therefore seeks to expand the range of instruments and measures associated with the circular economy that are financeable by the new ERDF OP, and thus help to generate true cross-cutting impact in circularity and fit circular economy projects into a host of economic sectors and territorial areas in Catalonia.

This action would involve the creation of a **working group of policy officers from the Ministry of Territory and Sustainability (DTES)** with a view to incorporating environmental and sustainability goals into the new OP. These include the focal areas of the two Interreg projects: the circular economy and the conservation of biodiversity.

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Specifically, the following measures are specifically envisaged:

- Detection of major stakeholders of the DTES to work on the new OP.
- Coordination of major stakeholders and creation of the DTES working group.
- Participation in meetings to define the new OP in order to:
  - Evaluate the incorporation of theme core areas associated with the circular economy in the new OP.
  - Evaluate the integration of suitable circular economy criteria for the other thematic core areas of the new OP.
  - Review the criteria for selection projects to be financed by the ERDF so that they incorporate aspects more specifically associated with the circular economy.
  - Establish a system to monitor the use of funds for circular economy projects

Although this action is focused on the new OP, the other actions in this Action Plan are in fact in line with the current OP and will influence the mobilisation of funds pledged on the Application Form.

## **2. Agents involved**

Ministry of the Vice-presidency of the Economy and Finance

- Drafting of the ERDF OP for Catalonia 2021-2027

Ministry of Territory and Sustainability of the Government of Catalonia

- Detection of DTES major stakeholders to work on the new OP.
- Coordination of major stakeholders and creation of the DTES working group.
- Participation in meetings to define the new OP in order to meet the objectives mentioned in the section "Description"

## **3. Period of implementation**

2nd half of 2019, 1st and 2nd half of 2020, 1st half of 2021

## **4. Estimated costs**

Internal costs of Administration personnel

## **5. Sources of financing**

Ministry of Territory and Sustainability

## **6. Monitoring indicators**

- Number of intradepartmental meetings associated with the ERDF
- Number of interdepartmental meetings associated with the ERDF
- Number of thematic core areas integrated or number of core areas with circular economy criteria

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#### 4. SUMMARY AND SCHEDULE FOR THE IMPLEMENTATION OF THE ACTIONS

Below there appears a summary of the actions proposed in the 2019-2021 Action Plan and its scheduling in the period the Plan is effective.

<b>Actions</b>	<b>2S 2019</b>	<b>1S 2020</b>	<b>2S 2020</b>	<b>1S 2021</b>
1. Awareness-raising and capacity-building	<b>X</b>	<b>X</b>	<b>X</b>	
2. Agreement on the transformation towards a circular textile sector	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
3. Identification of tools regarding circular economy and food waste prevention, and support for implementation: Guidelines and workshop for different beverage subsectors	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
4. Analysis of RDI needs to increase the percentage of recycled plastic in new packaging and to seek new packaging materials	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
5. Integration of the circular economy in the new ERDF Operational Programme for Catalonia 2021-2027: Creation of a working group at the Ministry of Territory and sustainability (DTES)	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>

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## Annex I

Below there is a list of other proposals for actions that were studied as part of the project and discussed at meetings with the LSGs, even though they were eventually not included in the final Action Plan because of technical feasibility (e.g. time scale), of economic (lack of financing) barriers or of a lack of high relevance for the sector.

It is however possible that work may take place on some of these actions on a parallel basis to the Action Plan in order to implement them at a future date or in another context.

### Textile sector

1. Joint action with Regiotex to promote RDI in recycled and recyclable textile materials
2. Establishment of a digital platform for the exchange of textile waste
3. Integration of circular textile design in higher education
4. Creation of textile collection points in the distribution channel
5. Collaboration for the reuse and preparation for reuse of textiles at Bon Pastor
6. Study of incentives for rental, repair and resale of used clothing business models
7. Network of upcycling companies and stores

### Beverage sector

1. Expansion of existing food waste platforms
2. Sectoral agreement for the standardisation of criteria in wine and/or other packaging systems
3. Encouraging the visibility of the beverage sector within the agro-food sector in RIS3CAT
4. Ideas contest for the design of new packaging to improve the preservation of beverages
5. Subsidies or award for upcycling against food waste
6. Encouraging upcycling of by-products in the beverage sector

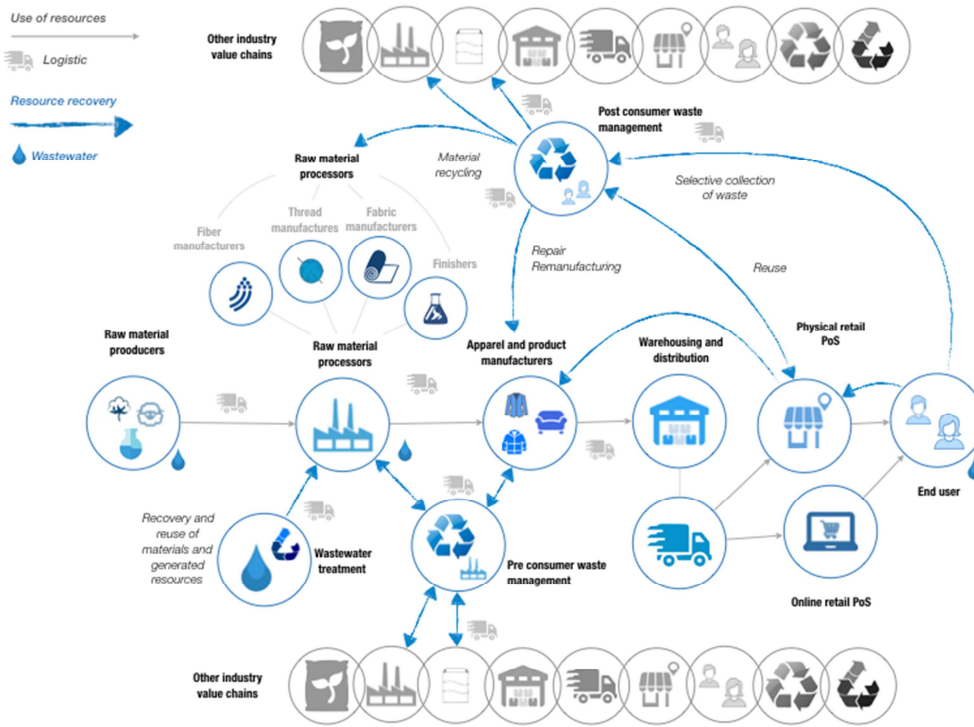
### Cross-cutting actions

1. Creation of a specific module for sectors at the Circular Economy Hotspot 2020 or other events
2. Creation of a new working group and/or integration of new content on the 2 sectors as part of the Circular Economy Observatory
3. Integration of circular economy criteria in public procurement of textile (e.g. uniforms) and beverage products
4. Integration of circular criteria in other public administration subsidies

# Annex II Results of the analysis of opportunities and barriers for each sector

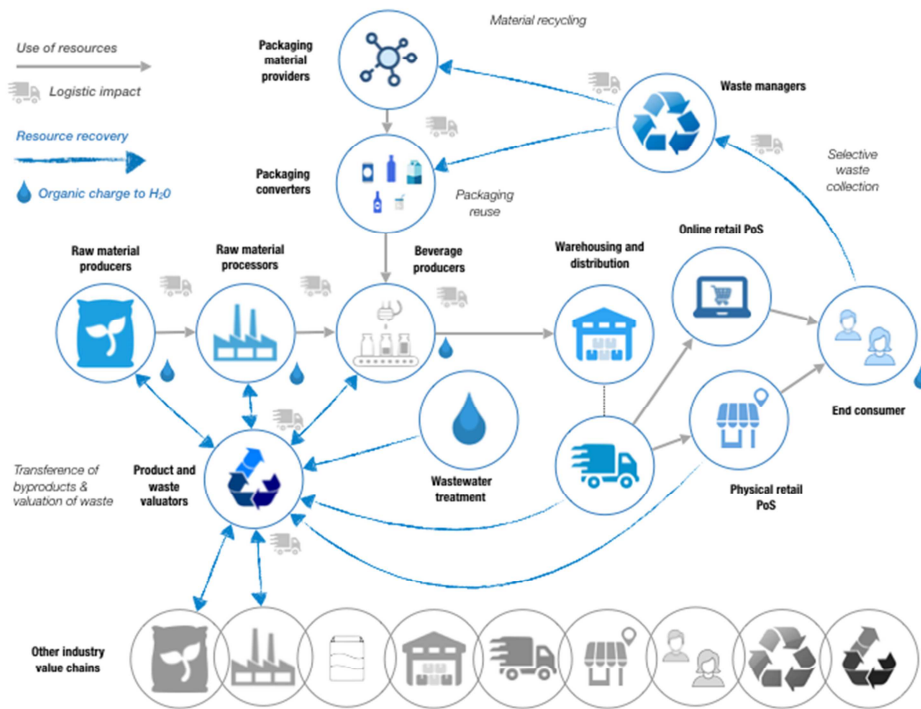
## Value chain analysis

### Textile sector

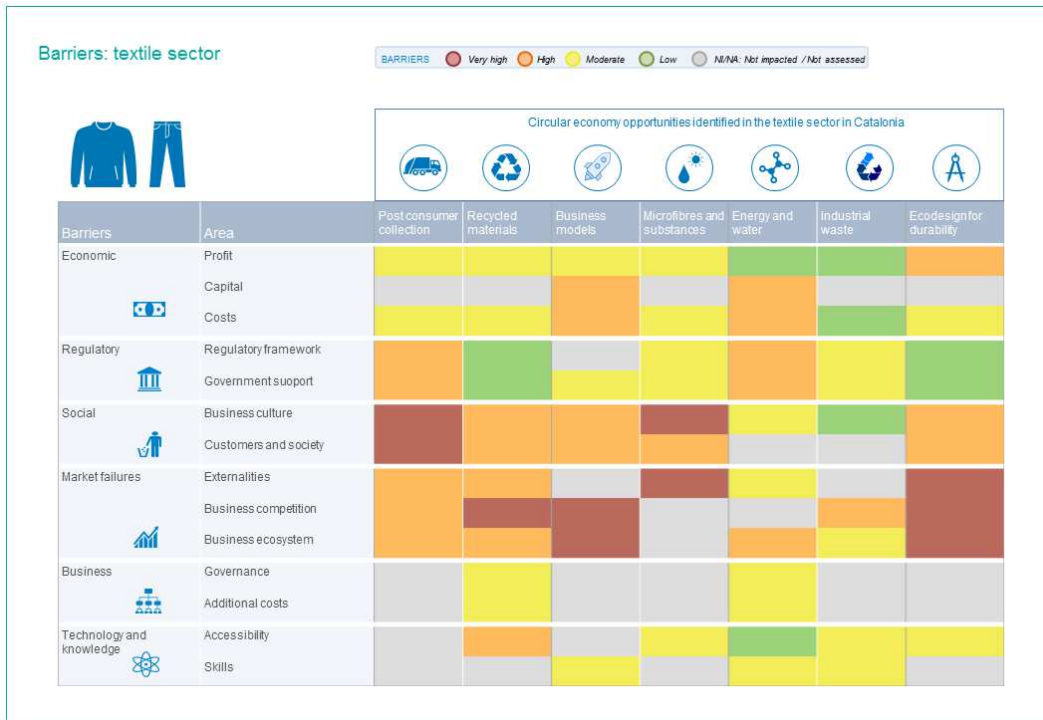




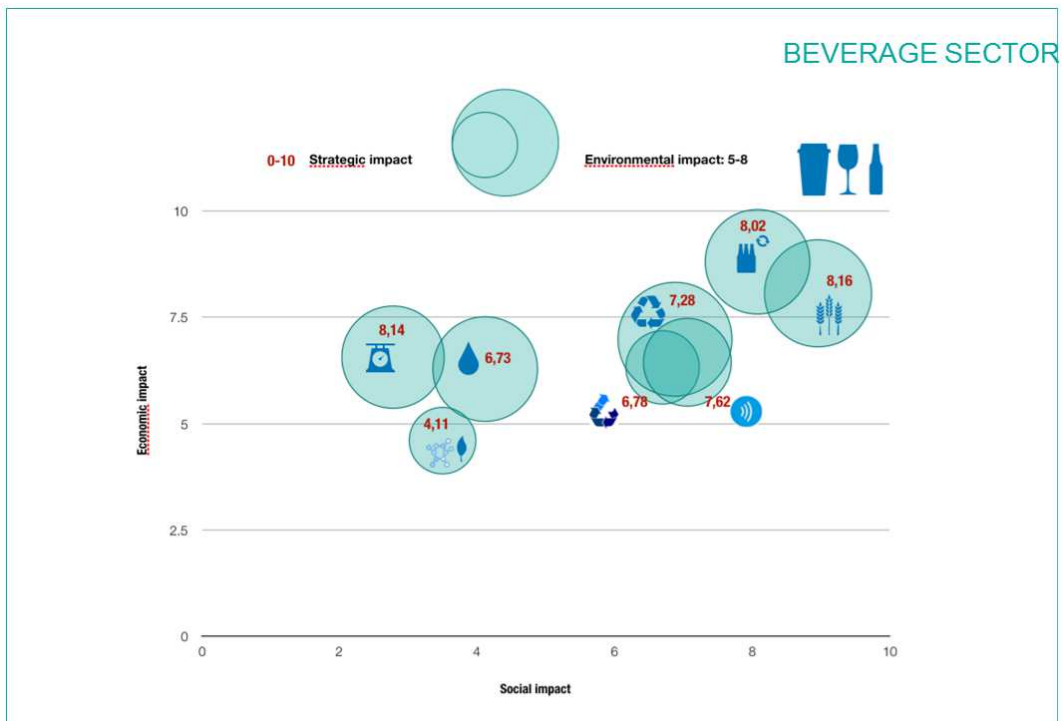
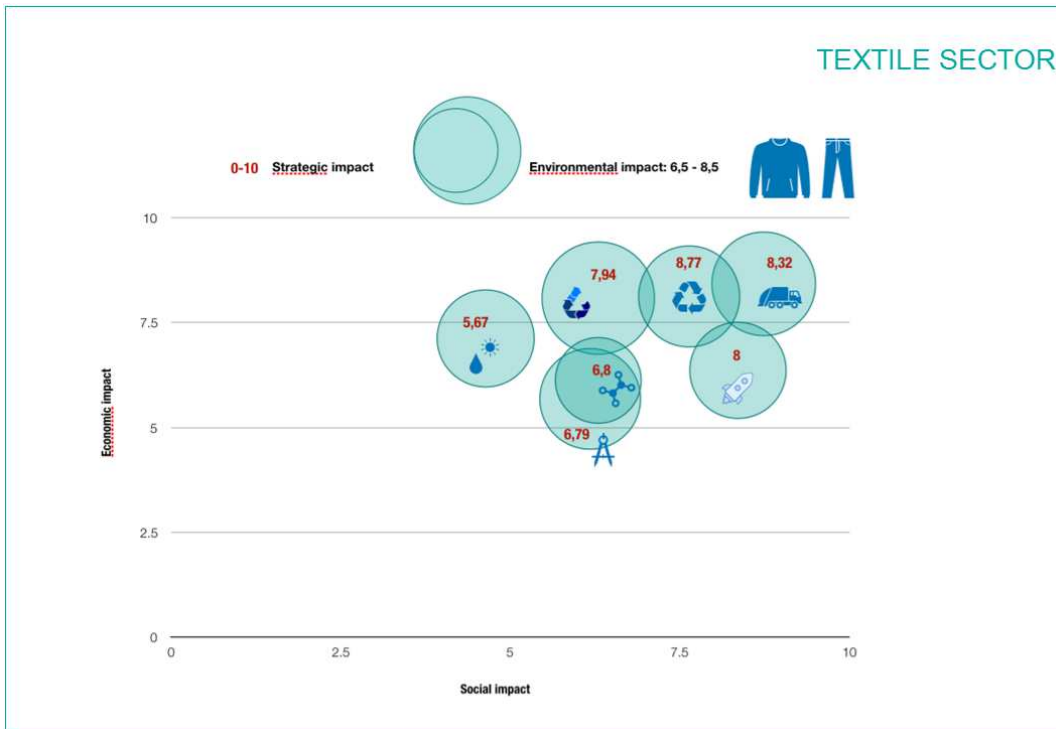
## Beverage sector



## Barriers identified for each opportunity



## Prioritization of opportunities



## Summary of opportunities and prioritization

Opportunities – Textile sector	Strategic impact	Economic impact	Social impact	Environmental impact	Score
Increase the capacity of post-consumer textile collection	8,32	8,42	8,74	7,78	8,237
Increase the recyclability, recycling and the use of recycled fibres, threads and fabrics	8,77	8,08	6,3	8,43	8,059
Explore new ways of upcycling pre consumer textile waste for industrial uses	7,94	8,12	7,64	7,59	7,809
Scale up the creation of new business models	8	6,36	8,36	7,23	7,450
Ecodesign for durability	6,79	5,68	6,18	7,56	6,698
Intensify the search of alternatives to prevent the effects of microfibre release and other substances of concern during the product lifecycle	6,8	6,12	6,3	6,45	6,445
Increase savings and water and energy efficiency used during the production process	5,67	7,12	4,64	7,29	6,344
Opportunities – Beverage sector	Strategic impact	Economic impact	Social impact	Environmental impact	Score
Preventing foodwaste along the value chain	8,16	8,06	8,96	7,91	8,204
Increase the reuse of glass packaging	8,02	8,8	8,08	7,73	8,107
Use of recycled packaging materials	7,28	6,98	6,88	8,41	7,525
Increase the implementation of smart packaging solutions	7,62	6,44	7,06	6,50	6,889
Minimising material use for beverage distribution	8,14	6,56	2,78	7,56	6,635
Increase water savings and water efficiency during production	6,73	6,28	4,12	7,74	6,500
Scaling the creation of new valuable industry products from by-products	6,78	6,32	6,7	5,45	6,223
Use of biobased and/or compostable materials for plastic packaging where beneficial	4,11	4,6	3,5	4,95	4,391

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## Annex III Members of the Textile Local Stakeholder Group

### Public administrations:

- ACCIÓ
- Department of the Vice-Presidency, Economy and Finance
- Catalan Waste Agency (ARC)

### Third sector organisations:

- Formació i Treball – Cooperativa Roba Amiga
- Fundació Humana
- Solidança

### Universities and Technological centres:

- Inexter (UPC)
- Eurecat
- Leitat
- Fitex

### Textile sector organisations

- AEI tèxtils
- MODACC
- Moda Sostenible

### SMEs:

- Hilaturas Arnau
- Hidrocolor
- Iaios
- Back to Eco
- Indústries Valls (Punto Blanco)
- Triturats La Canya, S.A
- Organic Cotton Colours
- Hilosa
- ANTEX
- Masies Maquinaria

### Big corporations:

- Mango
- Inditex

### Employer's associations :

- Texfor
- CECOT
- PIMEC

### Other type of SHs :

- FAD
- Centre de Documentació i Museu Tèxtil de Terrassa
- Association of recovery companies

## Annex IV

**Table 1**

Nº according Pilot Action Budget	Concept	Man-hour Director	Hourly rate	Man-hour Technical Officer	Hourly rate	Total costs
Nº 1	Identification of SMEs belonging to the textile value chain taking into consideration the CNAEs and the information provided by sector organisations	10	150	60	75	6000,00
	Analysis of material and waste flows taking into consideration Declarations of Industrial Waste and field work (interviews, visits, etc.) with sector companies	15	150	80	75	8250,00
Nº 2	Defining and developing the means and tools to engage second-layer stakeholders	6	150	40	75	3900,00
	Facilitating group meetings and define draft objectives	10	150	60	75	6000,00
Nº 3	Plan to develop a shared agenda	20	150	80	75	9000,00
	Elaborating the conceptual document of the agreement	10	150	50	75	5250,00
Nº 4	Organization of signatories' event (catering)					500,00
Nº 5	Design of a campaign to engage consumers	20	150	130	80	13400,00
	Total Cost					52300,00

**Table 2**

Semester	Activity	Man-hour Director	Hourly rate	Man-hour Technical Officer	Hourly rate	Total Cost
Semester 1	Preparing 1 public tendering (mapping textile value chain)	5	23	20	14,5	405,00
	Coordination, support, final revision and approval of the mapping of the textile value chain	20	23	50	14,5	1185,00
	Selecting members for the Technical Commission and establishing functions + Starting Technical Secretariat	10	23	15	14,5	447,50
Semester 2	Preparing 2 public tenderings (Plan for engaging 2nd layer SHs + Plan to develop a shared agenda)	10	23	40	14,5	810,00
	Coordination, support, final revision and approval of the Plan for engaging 2nd layer SHs + Plan to develop a shared agenda	15	23	50	14,5	1070,00
	Technical Secretariat of the Technical Commission	25	23	50	14,5	1300,00
	Implementing the Plan for engaging 2nd layer SHs	15	23	70	14,5	1360,00
Semester 3	Preparing 1 public tendering (Campaign for consumers)	5	23	30	14,5	550,00
	Coordination, support, final revision and approval of the Conceptual document of the agreement + Campaign for consumers	15	23	50	14,5	1070,00
	Technical Secretariat of the Technical Commission	30	23	50	14,5	1415,00
	Organisation signatories' event	30	23	60	14,5	1560,00
	Evaluation of the implementation of the agreement and first steps to replicate the methodology	10	23	100	14,5	1680,00
Semester 4	Technical Secretariat of the Technical Commission	40	23	60	14,5	1790,00
	Total cost					14642,50

**Date:**

**Name of the organisation(s):**

**Signature:** \_\_\_\_\_

**Stamp of the organisation (if available):** \_\_\_\_\_

## Regional Action Plan letter of support

### Project Information

<b>Project acronym</b>	CircE
<b>Project title</b>	European Regions Toward Circular Economy
<b>Name of project partner</b>	Department of Territory and Sustainability. Government of Catalonia

We hereby state:

- that we were informed about the preparation of the Regional Action Plan as part of the above-mentioned project,
- that the topic tackled by this Regional Action Plan is in line with the Catalonia ERDF Operational Programme,
- that we acknowledge the participation of the above-mentioned partner(s) in the Regional Action Plan,
- that we will engage with the stakeholder group and welcome opportunities for exchanging experiences with other institutions in Europe,
- that we will consider possibilities for implementation of the action plan through our policy instrument.

<b>Name of signatory</b>	Teresa MEDINA PLANS
<b>Position of signatory</b>	Deputy General Director of Economic Programming
<b>Date</b>	29 <sup>th</sup> January 2020

**Signature and institution stamp**

  
 Generalitat de Catalunya  
Departament d'Economia i Finances  
Direcció General de Promoció Econòmica