

JOINT CIRCULAR ECONOMY STRATEGY

JOINT CIRCULAR ECONOMY STRATEGY:
UDINE

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D.T1.2.8: Joint circular economy strategy: Udine

A.T1.2 Developing a local circular economy strategy

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1. Introduction

The Memorandum of Understanding is an agreement signed by regional stakeholders which identify the joint objectives and the next activities foreseen to boost circular economy initiatives within CITYCIRCLE in Friuli Venezia Giulia. The Regional stakeholders' group has been previously identified with the regional mapping “D.T1.1.3 Regional mapping for CE transition - Udine” and officially established through bilateral and/or plenary meetings as reported in deliverable “D.T1.2.3 Regional Stakeholders' group - Udine”.

The circular economy strategy for Friuli Venezia Giulia was designed adopting an interactive and integrative approach by actively involving the stakeholder's group in a dedicated workshop as described in “D.T1.2.11 CE strategy workshops”; in a second workshop the final draft of this strategy was submitted to the stakeholders in order to obtain their final approval. The workshops were meant to share knowledge and ideas, create synergies among key stakeholders and pursue a bottom-up approach throughout the strategy building process. This is also to ensure commitment and acceptance by relevant stakeholders in view of the long-term sustainability of the strategy. The strategy is ruled by the provisions set forth in the Memorandum of Understanding signed by relevant stakeholders. It represents the framework agreement upon which the local hub will be built and that will be described in the deliverable “D.T1.3.3 Circular economy hubs implemented: Udine”.

The aforementioned Memorandum is attached to this document. The next paragraphs contain information on the strategy and the context in which it is intended to be applied.

2. SUMMARY

The CITYCIRCLE project aims to bring innovation and sustainable economic growth to peripheral regions within the European Union. This is thanks to the implementation of circular economy practices. The partners of this project are 11, coming from different European countries (Austria, Croatia, Germany, Italy, Slovenia and Slovakia). The idea is to combine the efforts of the private sector and the public sector to generate a terrain suitable for the diffusion of circular economy practices. To achieve this it is necessary to involve stakeholders from different areas, in accordance with the principles of the quadruple helix, which plan to create collaborations between Public Authorities, Universities, companies and civil society. The aim of the project is therefore to create the best possible conditions for generating economic growth in the area, resulting from innovation and sustainable development.

3. GENERAL CONTEXT

At European level, the transition from a linear economy to a circular economy is an absolute priority. This depends on the fact that, not only this will be indispensable for achieving the objectives set for the protection of the environment, but it will also result in competitive advantages in economic terms. Consider, for example, the decarbonisation and climate agreements that involve the European Union. This context therefore generates important opportunities for companies and public bodies to be able to invest in new technologies, making their activities more competitive on the one hand and making cities more healthy places on the other.



Taking the 17 goals for sustainable development as a guideline, it is clear that for some of them, the circular economy can facilitate their achievement. In the following table (Schroeder et al., 2019) we see what is the relevance and the possible impact of CE for every single SDG. The numbers in the boxes represent the number of targets related to the corresponding goal that CE could help to achieve in some way. Sometimes we notice an inverse relationship that represents the cases in which reaching the target could be helpful in order to support CE diffusion. For these researches CE framework can permit us to reach different SDGs targets; the total number of targets is 169 and CE seems to help directly for 21 of them and indirectly for other 28. Talking about SDGs: 6, 7, 8, 12 and 15 are the ones for which there exist the strongest link with CE.

	<i>Direct contribution of CE practices to achieve target</i>	<i>Indirect contribution of CE practices to achieve target (e.g., via other SDGs)</i>	<i>Achieving target will contribute toward CE</i>	<i>Weak or no link</i>	<i>Cooperation opportunities for CE promotion</i>
Goal 1	0	4	1	1	1
Goal 2	1	3	3	0	1
Goal 3	1	0	0	11	1
Goal 4	0	0	5	3	2
Goal 5	0	0	2	6	1
Goal 6	4	1	0	0	3
Goal 7	3	1	0	0	1
Goal 8	2	3	4	1	2
Goal 9	2	0	6	0	0
Goal 10	0	1	4	4	1
Goal 11	1	3	3	2	1
Goal 12	3	5	2	0	1
Goal 13	0	1	3	0	1
Goal 14	1	2	3	1	3
Goal 15	3	3	1	1	4
Goal 16	0	1	6	5	0
Goal 17	0	0	9	0	10
Total	21	28	52	35	33

With this in mind, CITYCIRCLE aims to disseminate tools such as industrial symbiosis in order to provide examples of good sustainable development practices that will then have to be repeated by other companies and other organizations. A problem in this regard may be the fact that, especially dealing with peripheral territories, interested parties may find difficulties and barriers on several fronts (Kirchherr et al., 2018):

- A) **Cultural:** hesitant company culture, limited willingness to collaborate in the value chain, lacking consumer awareness and interest, etc.
- B) **Regulatory:** limited circular procurement, obstructing laws and regulations, lacking global consensus, etc.
- C) **Technological:** lacking ability to deliver high quality remanufactured products, limited circular designs, too few large-scale demonstration projects, etc.
- D) **Market:** low virgin material prices, lacking standardization, high upfront investment costs, etc.



To cope with these problems, CITYCIRCLE provides for the implementation of facilitator offices (HUBs) capable of following companies and organizations of various types along the transition path.

4. KEY OBJECTIVES OF THE PROJECT

In order to create, as mentioned, a favourable environment for sustainable development, the CITYCIRCLE project will focus on the following objectives:

- 1) **Implementation of pilot projects that will serve as an example for future initiatives:** This will happen thanks to the collaboration with the stakeholders and the identification of specific and promising projects.
- 2) **Promotion of the initiative and the concept of circular economy:** through events, web advertising campaigns, etc.
- 3) **Creation of a circular economy HUB in each of the regions identified by the project:** It will represent a facilitator office able to offer services to users and stakeholders in the transition to the circular economy.

5. THE STRATEGY FOR FRIULI VENEZIA GIULIA

In this paragraph you will find indications regarding the specific characteristics of the territory in question, the plan for achieving the project objectives contextualized in the region and other information always related to the specific context.

5.1. STAKEHOLDERS DEFINITION

A&T2000: is a company that deals with the integrated management of the municipal waste cycle with a strong focus on issues related to environmental sustainability.

Agenzia per l'Energia del Friuli Venezia Giulia: non-profit PEB active in promoting the intelligent use of energy in Friuli Venezia Giulia. APE FVG is part of the "Intelligent Energy for Europe" network supported by the European Commission. Partner of the Citycircle project.

Animaimpresa: social promotion association whose mission is to promote the culture of corporate social responsibility (CSR) and strategic sustainability by raising awareness of the business world and society, the dissemination of tools to implement and report on it, the development of marketing activities and the integration of profit-no profit relationships.

Cafc S.p.A.: consortium that manages the Integrated Water Service in most of the optimal central area of Friuli (120 Municipalities out of 134).

CDA di Cattelan s.r.l.: company with a core business centered in the vending sector, i.e. the automatic food and drink vending machines. The company has distinguished itself in the conception of a system for revaluing coffee waste.



Cluster Agroalimentare FVG scarl: agency that has the aim of realizing, promoting the coordination and development of the agro-food and bioeconomic sector in FVG, in line with the strategy of the Autonomous Region of Friuli Venezia Giulia.

Cluster Comet: by delegation of the Friuli Venezia Giulia Region, it coordinates the initiatives aimed at the development of the regional metalworking industry for the sectors relating to mechanics, thermo-electromechanics, components, plastics, machinery and metal production.

Cluster Legno Arredo Casa FVG: consortium that works for the development of the reference sector by offering services and projects in favor of businesses and institutions.

Municipality of Pordenone: municipality of Friuli Venezia Giulia with a population of 51.543 inhabitants (2019).

Municipality of Udine: municipality of Friuli Venezia Giulia with a population of 99.206 inhabitants (2019). Partner of the Citycircle project

Federconsumatori FVG: regional section of Federconsumatori, which is a non-profit association whose primary objective is the protection of consumers and users.

Net S.p.A .: is an entirely publicly owned company, which deals with the entire chain of urban and similar waste management for about 90 municipalities in the province of Udine.

Autonomous Region of Friuli Venezia Giulia: region with special statute with a population of 1,215,220 inhabitants (2019).

University of Udine: the main areas of competence of the University of Udine are higher education, research, technology transfer, interaction with the territory and internationalization. The engineering department and the economics and statistics department were particularly involved in the project.

These stakeholders have been identified on the basis of their experience and their skills in the circular economy, environmental sustainability and some industrial sectors considered fundamental for the objectives of this project. In addition to this, this working group was built on the basis of the principle of the quadruple helix, that is, involving representatives from: public bodies, private entities, universities and civil society.

5.2. SPECIFIC OPPORTUNITIES RELATED TO THE TERRITORY

The Friuli Venezia Giulia Region has implemented the indications that have come from both European and national level regarding circular economy and sustainable development. From a regulatory point of view, regional law 34 of 2017 offers the basis for the process of reducing the production of waste and its impact on the environment and the health of citizens. Regional law 3 of 2015 (RilancimpresaFVG - Reform of industrial policies) instead supports the development of the production system also following the principles of sustainability. A particularly significant initiative was the creation of the interdirectional working group called "Economia Circolare" (created by decree of the Direttore Generale of 1 October 2019, no. 485 / DGEN), with which it will ideally be possible to generate significant synergy. Another important element is represented by the Working Group on Bioeconomy which represents a further initiative attributable to the principles of the circular economy and, more generally, of sustainable development. Also in this case it is necessary to take into consideration the possibility of generating a synergy capable of promoting the achievement of the objectives set. The new Smart Specialization Strategy (S3) is currently being developed within the framework of the new European programming and the ERDF 2021-2027 funds. Finally, it is important to highlight the



commitment for the preparation of a Regional Strategy for Sustainable Development (provided for by article 34 of Decreto Legislativo 152/06).

An activity of cultural promotion of issues related to environmental sustainability and beyond is already underway. Among the project stakeholders there is Animaimpresa, which focuses on the dissemination of the concepts of corporate social responsibility (CSR), and boasts a network of virtuous companies within which it will be possible to identify best practices to be used as examples for future initiatives. This will certainly facilitate the adoption of specific innovative circular economy practices. It is important to also underline that there are currently many initiatives that can be traced back to the principles of the circular economy, but which have not yet been publicized with this in mind.

The same geographical position of the region guarantees it a certain ease of exchange with neighboring countries and beyond; this could certainly favor the marketing of any by-products or the creation of cross-border collaborations such as industrial symbiosis. Furthermore, the limited size of the Region can facilitate the coordination and management of the various production chains.

In the region there is a public research system, specifically attributable above all to the Universities of Trieste and Udine, already active and attentive in the study of these issues.

Another strength lies within the working group of this project; in fact there are subjects with a strong knowledge and experience of some key sectors of our economy (sectors that are part of the regional smart specialization strategy). Specifically, the Cluster Agroalimentare FVG scarl for agribusiness, Comet S.c.r.l. for the metalworking industry and the Cluster Legno Arredo Casa for the home system supply chain.

5.3. SPECIFIC CHALLENGES RELATED TO THE TERRITORY

It was pointed out by many stakeholders that the current national legislation on waste creates an obstacle for all those initiatives that have the objective of enhancing the waste material deriving from the production processes. In particular, the problem is related to the fact that companies currently have to bear the burden of proof pursuant to art.184bis of Decreto Legislativo 152/06. From the point of view of the transition to a circular economy, this undoubtedly represents a barrier. The review of the aforementioned legislation, although not easy to implement, is taking place through the implementation of the package of directives of the European Commission on the circular economy. This could significantly favor the development of new circular economy initiatives in the area.

Most of the companies are micro and small businesses, which may have difficulty finding the resources to make the investments necessary for a transition towards a more sustainable and circular production system. To this must be added the resistance to change of many companies that do not intend to change their way of doing, also due to previous investments to be amortized.

There is also a market barrier, found in the low prices of virgin raw materials, which often make the use of circular materials economically disadvantageous, such as the by-products generated by the waste material deriving from production. It would be ideal to somehow encourage the adoption of more circular, or at least more sustainable, materials.

Currently there is no single point of reference for those who want to activate new initiatives related to the principles of sustainability, including those specific to the circular economy. This translates into a fragmentation of skills and a lack of coordination of the same. It is therefore difficult to identify in a simple way the professionals, or organizations, capable of providing technical and regulatory support on different



issues. Within this strategy, an attempt is made to respond to this obstacle by conceptualizing a HUB for the circular economy.

5.4. CONTEXTUALIZATION OF THE PROJECT OBJECTIVES

After analyzing the opportunities and barriers related to the territory, it is necessary to contextualize the project objectives to the local reality and the current situation linked to the COVID 19 epidemic.

In order to better understand the regional context, the strengths and weaknesses highlighted above are summarized in the following graph.

OPPORTUNITIES	CHALLENGES
The Regional Institutions have implemented European and national guidelines and are acting proactively to encourage the dissemination of the principles of circularity and sustainable development.	National legislation on waste unsuitable to favor the transformation of production waste into by-products of economic value.
Cultural promotion activities on these same issues already started in favor of companies and citizens.	Local companies that, due to their characteristics, may find it difficult to access credit channels.
Optimal geographical position to facilitate the exchange and marketing of by-products and circular materials.	The low price of raw materials can make the marketing of by-products not very convenient.
Public research system attentive to these issues.	Lack of a point of reference that can support companies and citizens in this transition.
Presence within the working group of individuals with strong experience in key sectors.	

The main objectives are the following:

1. Creation of a facilitator office (a HUB) for the circular economy that can support companies and citizens in the transition.
2. Implementation of pilot projects that serve as examples for future initiatives.
3. Promotion of the concept of circular economy between companies and citizens, giving particular emphasis to possible business opportunities.

In order to achieve these objectives, it will certainly be necessary to involve the actors who want to participate concretely in the development of this strategy. In addition to this, existing best practices and future virtuous projects will have to be publicized; this will ensure the presence of examples from which to take inspiration for the creation of new initiatives. To do this, it will be necessary to promote the advantages and benefits deriving from a transition towards a more sustainable and circular system, also facilitating the replicability of the most promising projects. One of the tools for this type of activity can be represented by the HUB for the circular economy. This facilitator office, as will be said and deepened later, will have the



task of promoting the transition thanks to the offer of services to companies (but not only) and to the dissemination of relevant information in the field of circular economy and environmental sustainability.

Currently a major contribution to the mapping and analysis of best practices is provided by the aforementioned Interdirectional Working Group for the circular economy. It is therefore crucial to create a synergy between these two activities, rather than carrying them out separately. Following what has just been said and on the basis of what is highlighted in the section on barriers in the area, it is essential to underline the importance of coordination between the actors involved, avoiding as much as possible the creation of parallel and disconnected initiatives. To do this, the HUB for the circular economy will have to contain the specific professional skills able to give concrete support to all those subjects (companies, citizens, public administrations, etc.) who may have the interest of starting new circular economy projects or initiatives. Within the section of this document dedicated to the HUB for the circular economy, a possible proposal will be offered to avoid the fragmentation of the aforementioned initiatives.

It will be particularly important to be able to transfer the skills to manage this change from an operational point of view to companies. To do this we will have to give them the tools necessary to review the entire industrial process in order to rethink the product in terms of reuse and product-as-a-service. More generally, the concept of extended producer responsibility should be spread.

Another relevant point is represented by the identification and analysis of existing marketplaces to understand their potential and collaboration possibilities. These marketplaces will be useful in increasing the market for circular raw materials, such as by-products (both incoming and outgoing). The assessment to be made, however, must also take into consideration the possible negative externalities deriving from the trade of those materials.

The current post-emergency situation covid19, however objectively it may complicate the operations relating to the communication of the activities of this working group, does not seem to be able to slow down or damage the desired transition process. Indeed, this shock can in some way favor the understanding of the critical issues connected to the current economic-productive system by offering a possible push towards the concepts of circular economy and sustainable development.

5.5. SCHEDULED ACTIVITIES

First of all, the members of the Citycircle working group will have the task of making known the existence of this initiative through the communication channels of their competence. Making businesses and citizens aware of this project and the actions of this working group will be necessary in order to promote greater involvement in future activities. One hypothesis is represented by the possibility of using the websites of the project stakeholders as a showcase in which to publish news and updates regarding the developments of the Citycircle project.

Following what has been said previously regarding the importance of avoiding the fragmentation of similar initiatives, it will be useful to map the promotion and implementation of the circular economy in the region. In this way it will be possible to create a synergy able to guarantee better results than what could be achieved through many small separate initiatives.



Another important point is related to the collection of best practices and case studies in the area. For this purpose, as mentioned, particular importance may be attached to the activity of the Interdirectional Working Group for the circular economy. This working group, which also includes some stakeholders of the Citycircle project (APE FVG, Cluster Legno Arredo Casa, Friuli Venezia Giulia Region and University of Udine) has already undertaken an activity of collection and analysis of the best practices present in the region. It will therefore be necessary to create a synergy between these two initiatives thus promoting the search for new case studies to be analyzed, supported and presented as examples for future pilot projects.

Thanks to the identification of these best practices, it will be easier to promote circular economy concepts. In fact, through these examples it will be possible to highlight the advantages and benefits (also from an economic point of view) deriving from the implementation of the circular economy principles. This will clearly be vital for the achievement of the project objectives, but also for the success of the activities of this working group at regional level.

The importance of identifying case studies also derives from the need to create communication tools capable of transferring knowledge to new stakeholders to embark on a path towards a more circular and sustainable system. To do this, it will therefore be necessary to try to model existing best practices, highlighting the strengths and weaknesses of each one, in order to offer the best possible support for future initiatives, but also for those already underway. It is worth underlining in this regard the fact that within the Citycircle project a feasibility analysis has been included for a possible pilot project of industrial symbiosis between two NET S.p.A. service plants and Cafc S.p.A. . This type of activity can be seen as an example of the services that a future HUB for the circular economy could offer to companies.

Finally, taking advantage also of the relaxation of the restrictions adopted to contain the epidemic, the organization of physical events will be particularly useful to encourage the participation and commitment of both the stakeholders of this working group and all those who you will want to reach out and get involved. For this purpose we can imagine different types of events, each with a different goal; below is a non-exhaustive list of examples:

- Working group discussion tables within which to identify and organize the steps necessary to carry out the objectives set. Within these tables, thanks to the synergy with the interdirectional working group for circular economies, it will also be possible to analyze the best practices in the region in order to involve those responsible for these initiatives within this transition process.
- Events to present the project and the activities of this working group. These events may be focused on a specific audience (think for example of the different production sectors) or be designed for a wider audience.
- Training events to increase the awareness of the local actors towards the principles of the circular economy and sustainable development.
- Events designed to involve the world of young people, and in particular the university world. An example in this sense could be represented by hackathons.

5.6. THE HUB FOR THE CIRCULAR ECONOMY IN FRIULI VENEZIA GIULIA

As highlighted in this document, one of the objectives is to conceptualize and then create a HUB for the circular economy. This facilitator office will play a key role in the medium to long term in achieving the objectives set within this strategy. In fact, it should centralize the competences and the coordination of the promotion and implementation activities of the principles of circular economy and ideally, more generally, also of sustainable development. In fact, as previously mentioned, the creation of synergies



and the reduction of the fragmentation of similar initiatives in the region will be essential. Furthermore, this HUB, while taking shape within the design perimeter of Citycircle, must be autonomous and economically sustainable even beyond the time horizon provided for by the aforementioned project.

APE FVG has submitted a request to join the ATS DIH Udine - Data analytics & Artificial intelligence, one of the nodes that make up the IP4FVG (Industry Platform 4 Friuli Venezia Giulia) platform. IP4FVG is in fact a regional HUB for digital innovation (Digital Innovation HUB). In addition to bringing specific skills within this consortium in the field of energy, circular economy and sustainable development (always in the energy field), what the Friuli Venezia Giulia Energy Agency intends to do is to act as a point of connection between this Digital Innovation HUB and the regional territory, always with regard to the aforementioned themes. Through CITYCIRCLE and the working group created within the project, it is possible to hypothesize the formation of a network and an ad hoc virtual platform focused on concretely supporting companies and citizens in a circular transition. While not directly dependent on IP4FVG, this could be seen as an added value for the Digital Innovation HUB, with which a strong collaboration could be formed in favor of the regional social-economic environment.

The HUB for the circular economy envisaged within the Citycircle project will therefore develop independently of the IP4FVG Digital Innovation HUB, but ideally, once it has materialized, a strategically relevant synergistic relationship can arise between these two realities.

The first step is therefore to identify among the members of the territorial working group those subjects particularly interested in participating in a collaboration that has as its ultimate goal that of creating a network of competence centers for the circular economy coordinated through a virtual platform.

In the following paragraphs we try to propose a possible conceptualization of this HUB for the circular economy. Given the complexity of the initiative and the rapid evolution of regional and national scenarios in terms of innovation and sustainable development, the following proposal is considered to be modifiable in the future.

5.6.1. LEGAL FORM

One possibility is the creation of an association in which the stakeholders identified and involved in this process can participate as members. This type of legal form is proposed as it can guarantee significant advantages in terms of organizational and creation simplicity.

As anticipated, this hub, although born within the Citycircle design perimeter, must be autonomous and economically sustainable even beyond the time horizon provided for by the aforementioned project. It is useful to already propose a possible hypothesis in this regard. Following the association hypothesis, the main income, if we opt for the creation of an association would be:

1. Membership fees.
2. Remuneration of the services offered.
3. Participation in national and international projects (Interreg Program, LIFE Program, etc.).
4. National-regional contributions (motivated by the usefulness of the service offered to the territory).

Of particular importance for this association, especially for participation in national and international projects, is obtaining the legal personality. Only in this way it will be possible to present and participate in projects as a single entity. Again with regard to participation in projects of various kinds, it will be



necessary to have within the hub competent professional figures for the preparation of funding applications and project management.

5.6.2. ORGANIZATIONAL STRUCTURE

With regard to the organizational structure, the idea is to directly involve the stakeholders within the activities of the hub. Each member will therefore have a role based on its specific skills. It will be very important to identify the most suitable person to assume the coordination role. Ideally, in a first phase this role could be assumed by the local partners of the Citycircle project, specifically: the Municipality of Udine and the Agenzia per l'Energia del Friuli Venezia Giulia. In the long term, however, coordination could be entrusted to the Autonomous Region of Friuli Venezia Giulia, with a view to managing territorial competences in favor of companies, citizens and institutions.

Finally, part-time employment of part of the staff of the organizations participating in the initiative could be envisaged. In this way, it will be possible to limit personnel costs while maintaining a very high level of skills and experience available.

5.6.3. VIRTUAL HUB

As for the form that this hub can take, the idea proposed in this strategy is that of a virtual platform capable of guaranteeing users access to all information deemed relevant in order to offer them the necessary support.

For example, this platform must contain:

- Essential information relating to the activities carried out.
- The main contacts.
- News about virtuous initiatives related to the circular economy and sustainable development.
- The presentation of regional case studies.
- Reports relating to the achievement of the objectives set within this strategy.
- Ads useful in order to encourage match-making.

Through the web platform, users would be directed to the most suitable organization to offer the requested support (eg: APE FVG would be the reference office for energy support). The objective is therefore to provide users, in addition to various general information in the field of circular economy and sustainability, also the possibility of receiving targeted support at real centers of competence, represented by bodies specialized in a specific subject (just like APE FVG). By doing so, while keeping intact the specificity of the individual offices involved, they could in fact be coordinated thus avoiding the fragmentation of territorial competences.

5.6.4. THE OFFERING OF SERVICES

Finally, the services that this hub will have to offer are the following:

- **Creating awareness and sharing knowledge:** To stimulate citizens and businesses to become more circular and sustainable, the Hub should share knowledge on the advantages deriving from the adoption of strategies and practices relating to the circular economy and sustainable development. To do this, the case studies or the stories of the entrepreneurs already committed



in this sense may be particularly useful. These contributions can be collected within the web platform and can be advertised through face-to-face events. It will also be useful to publish the latest news in the circular economy (European communications, scientific publications, etc.).

- **Match-making:** Analyzing other examples of hubs in Europe, it is clear that one of the main tasks of this type of organization is the matchmaking. The hub will therefore have to act as a link between the various subjects, private and otherwise, with an interest in creating possible symbiosis. A useful tool in this sense could be the web platform itself, which should contain a section dedicated to collecting any collaboration opportunities (for example, think of a company that wants to sell its by-product: it could publish on the web platform the technical characteristics of its material in order to search for possible buyers).
- **Support to companies:** this support must be aimed at following companies through a process of transition or efficiency improvement of their production. This support can also be translated into a concrete help in preparation of pilot projects or access to funding channels. The possibility of using external experts must certainly be taken into consideration. In fact, in the event that within the hub there were not the necessary skills to solve any problems, the staff must be able to direct users to those subjects or entities that can offer that type of support.
- **Support for citizens:** it will also be essential to promote a direct connection with citizenship. For example, all those initiatives related to the reuse or refurbished products market will have to be supported.
- **Connection between companies and the world of research and development:** as previously highlighted, a fundamental role will be attributed to the university world. It will therefore be essential to create a bridge between the business world and the academic world (an example already reported is that of hackathons).

5.6.5. IMPLEMENTATION

Once the stakeholders interested in taking part in the development of the HUB for the circular economy have been identified, the goal will be to find the best way to give substance to the initiative. In this sense, an opportunity is represented by the growing European push for sustainable innovation which could then materialize in the presentation of an ad hoc project aimed specifically at the establishment of this facilitator office in our area.

1. Annex

- Memorandum of Understanding signed by the stakeholders (English version)
- Memorandum of Understanding signed by the stakeholders (National language version)