Program Priority: SO1.1 - Improve the framework conditions for innovation in the Alpine Space

Work Package: WPT3 Fostering CE processes in Alpine Space with digitalisation processes

Output: O.T3.1 Local actions addressed to SMEs to foster CE with digitalisation processes

PP7 – Veneto Innovazione

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CIRCULAR4.0 is co-financed by the European Regional Development Fund through the Interreg Alpine Space programme

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Purpose of the document

The purpose of this document is to describe the achievement of the output O.T3.1, described as follows in the AF:

"Grouped according to 3 CE approaches and in line with 3 feasibility studies, 15 pilots in 13 areas addressed to SMEs to push CE processes, increase attitude to invest and move toward sustainable growth, waste reduction and optimal use of resources."

The following table shows the distribution of the 13 areas (according to the NUTS 2 region code of the respective partners) and the 15 partners in charge of performing one pilot each.

Areas	**Pilots**
1. SIO2 Zahodna Slovenija	1. LP TPLJ 2. PP10 JSI
2. DE21 Oberbayern	3. PP2 TUAS Rosenheim
3. DE11 Stuttgart	4. PP3 bwcon
4. DE27 Schwaben	5. PP14 UCB
5. AT13, Wien	6. PP4 aws
6. AT32, Salzburg	7. PP5 ITG
7. AT31, Oberösterreich	8. PP6 Biz-Up
8. ITH3, Veneto	9. PP7 VI 10. PP13 CCIAA Venezia Rovigo
9. FR42, Alsace	11. PP8 Grand E-nov
10. FR71, Rhône-Alpes	12. PP9 AURAE
11. FR82 Provence-Alpes-Côte d'Azur	13. PP15 RISINGSUD
12. ITC1, Piemonte	14. PP11 TOWL
13. ITC4, Lombardia	15. PP12 Confindustria Bergamo

The present document encompasses the following elements:

- Overall methodology applied by all partners in the consortium to achieve the implementation of their own local pilot action.
- Description of the local pilot action for the partner PP7 – Veneto Innovazione
- Lessons learned by PP7 – Veneto Innovazione
- Durability and follow-up

Methodology to achieve the output

The methodology used to achieve the output mirrors the activities planned in the AF:

Step 1: **Planning digitalised CE processes in Alpine Space area addressed to SMEs**

Development of feasibility plans to foster digitalised CE processes in SMEs from the Alpine Space, according the 3 approaches: CE design, CE optimal use and CE value recovery.

Each feasibility plan includes plans for local actions defined by the relevant partners, according to the following distribution across the partnership:

CE design	**CE optimal use**	**CE value recovery**
LP TPLJ & PP10 JSI PP4 aws PP5 ITG PP9 AURAE PP12 Confindustria Bergamo	LP TPLJ & PP10 JSI PP3 bwcon PP7 VI PP8 Grand E-nov PP11 TOWL	PP2 TUAS Rosenheim PP6 Biz-Up PP13 CCIAA Venezia Rovigo PP14 UCB

	PP15 RISINGSUD BWCON as a WP T3 leader prepared in a close collaboration with TPLJ a template for the feasibility plans, based on the methodology for the development of feasibility plans provided by TPLJ and confirmed by all PPs in May 2021.
Step 2:	**Experimenting transnational actions to foster CE approaches through digitalisation** Implementation of the local actions by the respective partners as defined in the feasibility plans: maturity assessment check, identification of innovation needs, 1:1 assistance provided to SMEs. UCB provided to all partners a template for the drafting of implementation reports.

PLANNING DIGITALISED CE PROCESSES IN ALPINE SPACE AREA ADDRESSED TO SMES - FEASIBILITY PLANS

The task A.T3.1 Planning digitalised CE processes in Alpine Space area addressed to SMEs was implemented under WP T3 - Fostering CE processes in Alpine Space with digitalisation processes. The main objective of WP T3 was to develop transnational and local actions to monitor the effectiveness of SMEs digitalisation to push them toward CE processes. The role of digitalisation as an 'enabler' for the CE is tested with the support of the CIRCULAR4.0 toolkit developed under T2. The testing method (T3.1) is based on a "cycle" moving from the transnational working groups and their specific approaches, through an Alpine "vision" of the actions to be implemented and developed with the feasibility studies and then their experimenting with local action to come back to the Alpine vision and produce the following CIRCULAR4.0 Action Plan (T4.1). The overall idea is that Circular Economy and digitalisation can benefit SMEs and Alpine well-being economy only if included in a transnational approach that will highlight connections, relationships, knowledge and opportunities for SMEs, Intermediaries, Policymakers, and the society as a whole.

The feasibility plans developed according to the 3 main approaches to CE define concrete paths to be undertaken to achieve the results, the resources and the organization required. Partners selected one priority CE approach looking at their economic and social environment and worked with the target groups "declining" the alpine roadmaps into local needs and expectations. Local Pilot actions consist of actions directly addressed to SMEs to check their maturity for CE processes, the innovation to be introduced in the processes, products and business models, the investment plan required and the way to implement it.

1. AS feasibility plan to foster CE design model with digitalisation processes (D.T3.1.1)

This feasibility plan focuses on how to foster CE design model with digitalisation processes. Each P from the group of CE design model developed its feasibility plan for setting-up local service providers addressed to SMEs to establish services to increase attractiveness by investors and propose new financial schemes by Public Actors, roadmaps to achieve these results. In the case of Slovenia two project partners collaborated – JSI & TPLJ.

The plan defines organization, actions, resources, and equipment needed to set-up Alpine regional centres able to promote digitalised CE activities addressed to SMEs on the design model and eco-innovation in general.

Local detailed plans by PPs for their pilots:

- LP TPLJ & PP10 JSI
- PP4 aws
- PP5 ITG
- PP9 AURAE
- PP12 Confindustria Bergamo
- PP15 RISINGSUD

are available in deliverable D.T3.1.1 in the annexes.

2. AS feasibility plan to foster CE optimal use approach with digitalisation processes (D.T3.1.2)

This feasibility plan focuses on how to foster CE optimal use approach with digitalisation processes. Each PP from the group optimal use model developed its feasibility plan for setting-up local service providers addressed to SMEs to establish services to increase attractiveness by investors and propose new financial schemes by Public Actors, roadmaps to achieve these results. In the case of Slovenia two project partners collaborated – JSI & TPLJ.

The plan defines organization, actions, resources, and equipment needed to set-up Alpine regional centres able to promote digitalised CE activities addressed to SMEs on the design model and eco-innovation in general.

Local detailed plans by PPs for their pilots:

- LP TPLJ & PP10 JSI
- PP3 bwcon
- PP7 VI
- PP8 Grand E-nov
- PP11 TOWL

are available in deliverable D.T3.1.2 in the annexes.

3. AS feasibility plan to foster CE value recovery approach with digitalisation processes (D.T3.1.3)

This feasibility plan focuses on how to foster CE value recovery approach with digitalisation processes. Each PP from the group value recovery model developed its feasibility plan for setting-up local service providers addressed to SMEs to establish services to increase attractiveness by investors and propose new financial schemes by Public Actors, roadmaps to achieve these results. In the case of Veneto Region two project partners from Veneto collaborated – PP7 VI and PP13 CCIAA Venezia Rovigo.

The plan defines organization, actions, resources, and equipment to set-up Alpine regional centres to promote digitalised CE activities addressed to SMEs to develop value recovery processes, services, and products.

Local detailed plans by PPs for their pilots:

- PP2 TUAS Rosenheim
- PP6 Biz-Up
- PP7 VI & PP13 CCIAA Venezia Rovigo
- PP14 UCB

are available in deliverable D.T3.1.3 in the annexes.

EXPERIMENTING TRANSNATIONAL ACTIONS TO FOSTER CE APPROACHES THROUGH DIGITALISATION - IMPLEMENTATION REPORTS FOR THE LOCAL ACTIONS

IN coherence with the feasibility plans, 15 local actions were implemented by the project partners, according to a shared methodology. The following picture shows the common parts of all local actions as well as the flexibility available to the partners for the operational aspects of the implementations:

Common parts of all local actions	Flexibility
Information events **Calls for SMEs (transparent selection)**	Kick-off for selected companies or pre-call events Selection procedure / main criteria = transparency
Circular assessment **Digital maturity assessment** **Access to self-learning materials**	Different tools can be used, as long as they are part of the toolkit. Assessments can be performed online as self-assessment or in interviews.
Identification of innovation needs **1:1 assistance**	Assistance provided either directly by the partners or in combination with external experts (most common case)
Development of recommendations **focus 3 to 6 months** **(on the basis of the above)**	Format of recommendations: business model canvas, transformation roadmap…

Description of the local pilot action implemented by PP7 – Veneto Innovazione

According to the overall methodology defined for the pilot actions, the following activities were implemented by Veneto Innovazione:

1. Promotion of the pilot action
2. Selection/identification of participant SMEs
3. Circular CE capability/potentiality and Digital Maturity Assessment of SMEs
4. Identification of innovation needs and action plan
5. Follow up on innovation needs and action plan

Veneto CIRCULAR4.0 partners – Veneto Innovazione and CCIAA VE-RO, decided to develop their pilot actions separately but in parallel. They presented the pilot actions and developed it in the same period, but managed it independently. Veneto Innovazione, as regional body acting on the whole Veneto territory, took into consideration companies located in the seven territorial province of the Region.

Both pilot actions started with a call for expression of interest that were open to companies with the following characteristics:

- be an SME as defined by EC Recommendation 2003/361;

- have at least one office in Veneto region;

- be willing to involve in the project at least two persons in key positions in the organisational chart (e.g.: owner, partner, managing director, technical director, production manager, research and development manager) for the entire duration of the pilot action.

The selected enterprises would have had participate in a circular transformation assistance programme during which they would be able to identify which actions to take to start/improve their circularity approach for processes and products, and which steps would have been be facilitated by the introduction of digitisation processes in the enterprise.

Each individual enterprise would have obtained an index of its propensity for circularity and digitisation through the use of platforms and services dedicated to circular economy (CAS4.0) and digitisation processes (SELFI).

Experts in processes aimed at enterprise circularity would have supported the single companies both in the assessment and in the identification of a specific action plan through targeted advice.

Veneto Innovazione launched a call addressed to entrepreneurs or managers of SMEs with at least one office in Veneto, with the aim of selecting at least 18 enterprises that will have the opportunity to be supported in the development of proposals and/or development plans for a more circular design model approach trough digitisation, starting from traditional management and production models. Following experiences made in previous Circular 4.0 activities and due to the rather low level of awareness of most SMEs, all CE approaches need to be considered. In fact, separation between circular design, optimal use and value recovery models is not clear to businesses and not always adapted to their practice. It is also not realistic to foresee the outcomes of the 1:1 assessment in terms of circular models. The call was therefore open to all the models foreseen n the Circular 4.0 approach.

As the first step, an open call addressed to SMEs willing to test the set of tools developed or identified within Circular4.0.Launch, in parallel with CCIA VE-RO. The pilot action was aimed primarily at companies in the building and construction sector. However, companies from other sectors interested in the initiative might also apply.

Companies were to be selected on the basis of the “first come, first served” principle.

The call was officially and publicly launched by an online workshop that took place on May the 3rd. The workshop was organised by CCIAA VE-RO in collaboration with Veneto Innovazione. At this event both the supporting external experts of Veneto Innovazione and CCIAA VE-RO attended.

The call was opened since April 5th, 2022 and by June 3rd, 20 SMEs expressed their intention to take part to the pilot and were accepted and included in the following steps. During the assessment phase all companies were directly assisted both in presence and online.

The companies involved in the pilot actions came from the following sectors:

1. Constructions (6)
2. Environmental services (6)
3. Manufacturing (3)
4. Waste management (3)
5. Health (1)
6. Services (other) (1)

Each company received, in addition to the results of its CE and digital maturity assessment result, a document encompassing at least one specific recommendation covering aspects of the transformation of the company towards CE.

Lessons learned and recommendations for the follow-up

The pilot action carried out by Veneto Innovazione in our region involved 20 SMEs from different sectors who responded to the call for expression of interest open online and also disseminated through a specific online meeting organized in collaboration with the CCIA VE-RO.

The technical times related to the procedures necessary for identifying the external company that supported Veneto Innovazione in the implementation, forced to concentrate the activities in a very short period of time. However, this did not prevent from establishing a positive and useful relationship with the companies that have decided to participate in the action.

In particular, this was useful for verifying with them the consistency of the tools used, with the intended objectives. In particular, this led to the following reflections:

- the CAS tool is very useful for providing an overview of the company status and helps both the company to understand at what stage it is, and the consultant to target the interventions and the action plan on the capabilities of the former;

- with regard to the sectors, CAS is very well structured for manufacturing companies while, to achieve the same results in service companies, it requires more accompanying work by the expert who supports the company;

-SELFI4.0, compared to CAS, has a wider scope of use and it is able to give good results without particular difficulties even in the case of service companies;

- in general, the companies involved in the pilot action were not very familiar with the issue and do not know how to act. In some cases, the concept of sustainability through digitalization also needs to be endorsed. The cause of this is probably linked to the fact that the measures for digitization have always been seen by companies as an opportunity for investments in digital technologies but were never included in an organic discourse for the growth of the company's competitiveness;

- on the other hand, companies that are implementing a program for digitization are more sensitive to the possibility of using it also to start, or sustain, the path towards sustainability and therefore the combined use of the two approaches is immediately understood positively.

Durability and follow-up

The activities carried out during Circular 4.0 and, in particular, the ones implemented with the pilot action have been useful to better understand how to deal with one of the most important organisational issue that companies, and mainly SMEs, are facing in this period. The set of tools identified, the experience gained and the lessons learnt will be therefore useful to Veneto Innovazione in order to address this topic also in other activities implemented, such as the supporting services delivered through the Enterprise Europe Network that, for the years to come, will encompass increasingly the topic of sustainability and the support to companies in this respect.

Annexes

- D.T3.1.2 - AS feasibility plan to foster CE optimal use approach with digitalisation processes
- D.T3.2.2 - Local actions to implement CE Optimal Use approaches with digitalisation processes

Interreg Alpine Space
Circular4.0

Program Priority: SO1.1 - Improve the framework conditions for innovation in the Alpine Space

Work Package: WP T3 - Fostering CE processes in Alpine Space with digitalisation processes

Activity: A.T3.1 Planning digitalised CE processes in Alpine Space area addressed to SMEs

Deliverable: D.T3.1.2 AS feasibility plan to foster CE optimal use approach with digitalisation processes

Author: TPLJ

Version: final

Month, YEAR: December 2021

CIRCULAR4.0 is co-financed by the European Regional Development Fund through the Interreg Alpine Space programme

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II. Content: AS feasibility plan to foster CE optimal use approach with digitalisation processes..... **Napaka! Zaznamek ni definiran.**

III. Conclusion..... **Napaka! Zaznamek ni definiran.**

Appendix (Inputs by PPs: Local detailed feasibility plans by PPs for the implementation of pilots – TPLJ/JSI, TOWL, VENINN/CCIAA DL VERO, BWCON, GRAND E-NOV) 4

I. Introduction

The task A.T3.1 Planning digitalised CE processes in Alpine Space area addressed to SMEs is implemented under WP T3 - Fostering CE processes in Alpine Space with digitalisation processes. This deliverable relates particularly to the development of the deliverable D.T3.1.2 AS feasibility plan to foster CE optimal use approach with digitalisation processes.

The main objective of WP T3 is to develop transnational and local actions to monitor the effectiveness of SMEs digitalisation to push them toward CE processes. The role of digitalisation as an 'enabler' for the CE is tested with the support of the CIRCULAR4.0 toolkit developed under T2. The testing method (T3.1) is based on a "cycle" moving from the transnational working groups and their specific approaches, through an Alpine "vision" of the actions to be implemented and developed with the feasibility studies and then their experimenting with local action to come back to the Alpine vision and produce the following CIRCULAR4.0 Action Plan (T4.1). The overall idea is that Circular Economy and digitalisation can benefit SMEs and Alpine well-being economy only if included in a transnational approach that will highlight connections, relationships, knowledge and opportunities for SMEs, Intermediaries, Policymakers, and the society as a whole. The feasibilities studies developed according to the 3 main approaches to CE will define concrete paths to be undertaken to achieve the results, the resources and the organization required (T3.2). Partners selected one priority CE approach looking at their economic and social environment and will work with the target groups "declining" the alpine roadmaps into local needs and expectations. Local Pilot actions (T3.3) will consist of actions directly addressed to SMEs to check their maturity for CE processes, the innovation to be introduced in the processes, products and business models, the investment plan required and the way to implement it. Finally, 280 SMEs will be assisted to implement CE processes and some of them, identified as success cases will be included in one exhibition tour, being CE with a social impact too. Pilots will be evaluated by a Scientific committee that will support the analysis of the performance according to KPIs (T2.5). The outputs will be the ground for the development of the CIRCULAR4.0 Action Plan (T4.1).

The task A.T3.1 Planning digitalised CE processes in Alpine Space area addressed to SMEs provides the AS users with proposals and plans to increase attitude by SMEs to eco-innovation, to innovate business models and products for re-use & recycling starting from traditional business and production processes. BWCON as a WP T3 leader prepared in a close collaboration with TPLJ a template for A.T3.1 based on the methodology for the development of feasibility plans provided by TPLJ and confirmed by all PPs in May 2021.

This deliverable (D.T3.1.2) is focusing on the development of AS feasibility plan to foster CE optimal use approach with digitalisation processes. BWCON collected inputs of each project partner from the optimal use model (in the case of Slovenia two project partners collaborated –TPLJ & JSI). Each PP from the group optimal use model (TPLJ & JSI, TOWL, VENINN, BWCON, GRAND E-NOV) developed its feasibility plan for setting-up local service providers addressed to SMEs to establish services to increase attractiveness by investors and propose new financial schemes by Public Actors, roadmaps to achieve these results. The plan defines organization, actions, resources, and equipment needed to set-up Alpine regional centres able to promote digitalised CE activities addressed to SMEs on the design model and eco-innovation in general. Local detailed plans by PPs for pilots (Slovenia: TPLJ & JSI, TOWL, VENINN, BWCON, GRAND E-NOV) are available in the appendix.

Appendix (Inputs by PPs: Local detailed feasibility plans by PPs for the implementation of pilots – TPLJ/JSI, TOWL, VENINN, BWCON, GRAND E-NOV)

Project Acronym: Circular 4.0

Project title: **Digital technologies as enabler to foster the transition to the circular economy by the SME in the Alpine Space area**

A.T3.1

Planning digitalised CE processes in Alpine Space area addressed to SMEs

Template for description (plan) of Local pilot actions (for use in D.T3.1.1/2/3)

WP n°: T.3.	Fostering CE processes in Alpine Space with digitalisation processes
Task n°: T.3.1	Planning digitalised CE processes in Alpine Space area addressed to SMEs
Author(s):	Lara Trikha, Luc Schmerber, bwcon Dr. Eva Schichl, UCB
Contributors:	Roberto Sandrini, TPLJ

Type:	**T -Template/R – Report, JSI & TPLJ**
Dissemination level:	**CO = confidential**
Revision:	**DRAFT 02**
Due Date:	**26.11.2021, v1**
Date of submission:	**2.12.2021 (v3)**

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Overview of the local pilot action - Slovenia (TPLJ & JSI)

This is the place where to describe in 2-3 pages the pilot action in its entirety, without entering into deep operational details related to its implementation. It is a summary-like or elevator pitch like approach.

The description should encompass at least the following elements:

- **Local context and CE approach**
  Sectors, geographical area, type of businesses targeted, etc.

In Slovenia pilot actions will address the sectors in accordance with the selected sectors of interest as mapped out in D.T1.4.2. Report on the industrial sectors selected by each area and justification of those selected:
:
Wood processing industry,
Plastics,
Construction,
Manufacturing,
Food

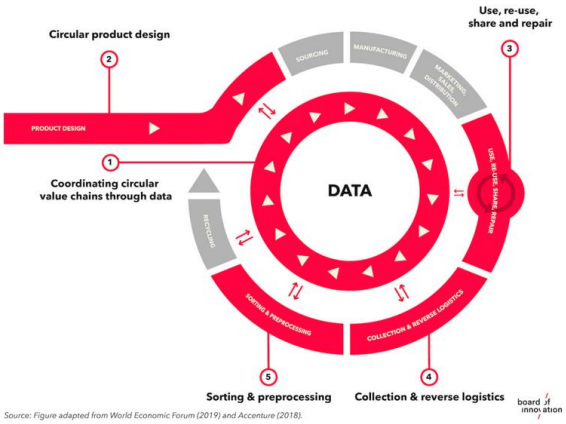
These selected sectors of interest are in accordance with the National Circular Economy Roadmap and other national strategic development plans:

	TPLJ+IJS	RISINGSUD	GRAND E-NOV	AURE	TWL	VINN+CCIAAVE	UCP	TUAS	BIZ-UP	AWS
	SI	R-Sud	Grand Est	Rhone-Al	Piemonte	Veneto	Swabia	Up-Bayern	Ober-Oster	Vienna
Wood processing industry					Forest based value chains			Furniture		
Plastics					Packaging platics					
Construction							Construction and Building			Construc
Manufacturing industry										
Food										
Bioeconomy										
Textile										
Electronics and Electrical engineering										
TOTAL	5	1	3	3	6	1	2	1	1	1

These are also sectors included in Slovenia's regional specialization strategy supported by cluster organizations.

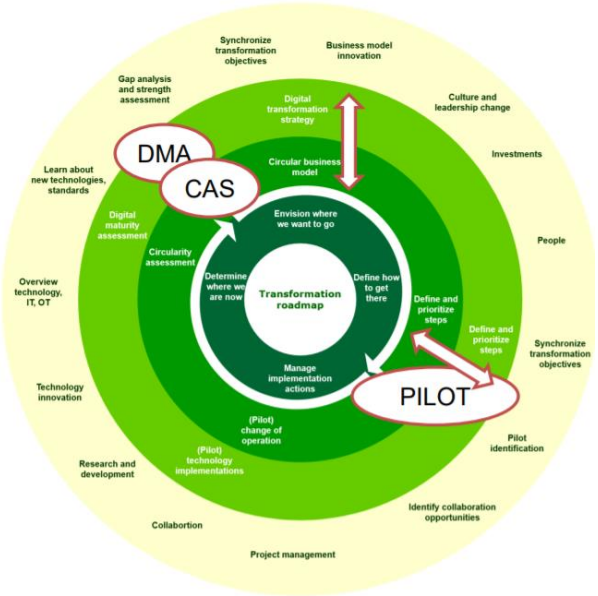
Circular economy approach we plan to undertake for pilots is the circular design model (approach) and optimal use model (approach) as defined in the scope of the Circular 4.0 project. If applicable for Slovenian SMEs also value recovery model (approach) will be used.

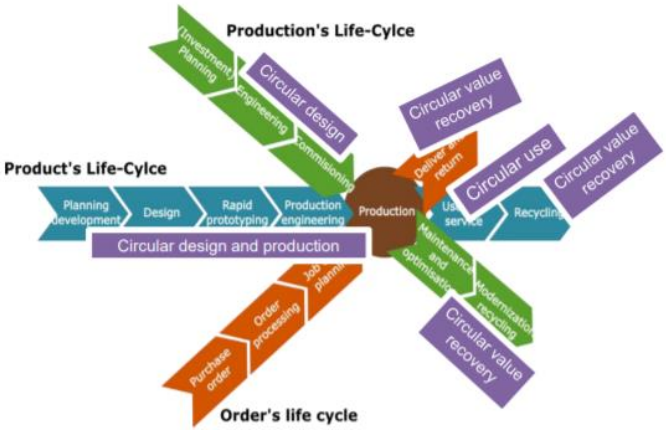
In addition, digital data-based models and systems changes will be adopted where applicable (example in advanced manufacturing) for coordinating business chains transformation and digitalization as enabler of circular transformation will be strongly emphasized along the value chain transformation. CAT4.0 transformation course of the Circular 4.0 project will be used as a base for pilot actions.



Source: https://www.boardofinnovation.com/blog/circular-business-model-examples/

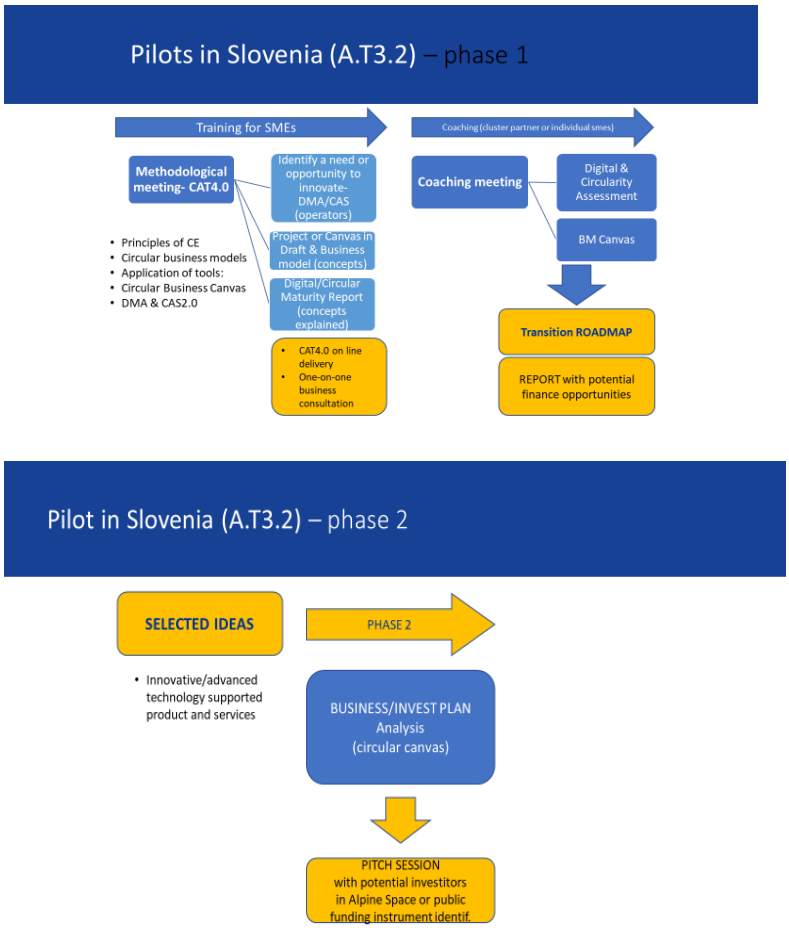
Underlying principles of pilots used in Slovenia are explained in the
Module 1 (Part 2) of the CAT4.0 training course Enabling the potential for circular transformation – tech readiness–digitalization and I4.0 (available over https://circular40.eu/).
The process encompasses systemic changes as well as transformation across the value chain of the product, production, and business functions.





Improving production and process by means of digitalization will be examined such as the concepts of Zero-defect manufacturing through analytics, signal processing, AI, sensoring. Industrial symbiosis & industrial urban symbiosis for improving collaboration utilizing technology and IoT & Industrial cloud platforms for connecting, storing, monitoring, analysing and improving production processes.
(Ref.: www.symbiosis.dk/en; • https://qu4lity-project.eu/wpcontent/uploads/2020/05/PRJ.pdf; https://www.ellenmacarthurfoundation.org/casestudies/effective)

- **Methodology**



AWARNESS RISING FOR SMEs& CHECK FOR LINEAR RISKS & CIRCULAR OPPORTUNITIES will be also included in the CAT4.0 approach.

Tools to be used:

Digital maturity assessment tools:

http://dma.innocape.eu/en/test/registration

Designed for all kinds of companies to assess the digital maturity and to give a foundation for internal discussions on strategic priorities in digitalization opportunities and challenges. It is useful for the assessment of results to initiate dialogue with the regional Digital innovation hub to gain further support in digitalization process within the company:

- Improving processes through digitization and automation
- Experimenting at low costs to reveal efficiency gains, new customer touch points or new products
- Collecting and analysing data to generate insights for strategic decision making
- Establishing relationships with external partners to pool complementary resources

Other tools for SMEs & business or CE model specific tool (to be selected by experts from the tools approved in the scope of the Circular4.0 project and introduced through the training actions in T.2.) including tools assessed in the scope of **D.T2.3.1 Setting up the toolkit to support digitalisation processes to foster the CE in the Alpine space**. Such as:

https://digital-transformation-tool.eu/project/

and some selected tools from a repository of identified tools "fit-for-purpose" (depending on level of maturity of SME, size and SME pilot project needs)

http://e2-owncloud.ijs.si/owncloud/index.php/s/rc17RxI7bd7Kw8d

Companies will be cross-examined also about the application of advanced technologies such as robotics, control technologies (industrial control systems), artificial intelligence, big data use, block-chain, XP, virtual reality or augmented reality use.

Circularity assessment scoring tool:

CAS2.0 tool (developed in the scope of Circular4.0 project):

https://circular40.eu/cas2-0/

- **Expected results**
  This section shall explain the benefit / added value expected for the SMEs.

  SME's will identify the pilot project (business transformation project and/or investment project) they will start the CE transformation journey, get acquainted with the CE principles. They will also elaborate a business plan (business canvas) and/or investment plan (investment project) and present it in front of funders i.e., proactively seek financial instrument for implementing the transformation project.

Planned activities

Planned activities in Slovenia (JSI & TPLJ) are:

1. **Recruit expert assessors for 1:1 consultations & delivery of DMA/CAS**
   TPLJ: Preparation of the open call for experts, selection & contracting phase

   Selected experts prepare CAT4.0 for specific sectors to support 1:1 assessment within the process of DMA/Circular Maturity Assessment, business canvas preparation, investment plan preparation, potentially for pitching)
   Deadline: 10.12.2021 (draft), 15.12.2021 (final)

2. **Selection/identification of SMEs**

   Selecting SMEs to participate in the training program & directly addressing sector specific industrial clusters (clusters for wood, manufacturing, plastics, food) (open call and/or direct call for participation in the CAT4.0 program through sectoral clusters organized through regional specialization or located under the umbrella of Chamber of Economy).

   TPLJ/JSI - expression of interest to be publicly published on TPLJ and JSI web page, & involvement of Operators (Association of plastic industry of Slovenia, Regional development agencies/centers etc.)
   Deadline: 10.12.2021 (draft), 15.12.2021 (final)
   Clear message for SMEs!
   Deliverables: CAS2.0, DMA, Canvas, Fin. Investment plan, possible investors pitching events (Slo & It – venture capital investors)
   Preparation of direct invitations for companies: (approx. to be selected 10), list of companies from business data bases (BIZi/AJPEs, among 500 companies, selection by sectors, by turnover, profit & value added), principle of selection: First come, first selected, Deminimis rule (to be received by FLC)

3. **Thematic workshops/seminars**
   Implementing the CAT4.0 modules addressed to SMEs supported by awareness rising campaign (using project partners communications channels – JSI & TPLJ).

   Thematic workshops per sectors: 15.2.2022 – 15.3.2022

4. **Circular CE capability/potentiality and Digital Maturity Assessment of SMEs**

   Tools mainly used will be:

- **INNOCAPE tool**
  http://dma.innocape.eu/en/test/registration

Designed for all kinds of companies to assess the digital maturity and to give a foundation for internal discussions on strategic priorities in digitalization opportunities and challenges. It is useful for the assessment of results to initiate dialogue with the regional Digital innovation hub to gain further support in digitalization process within the company:

- Improving processes through digitization and automation
- Experimenting at low costs to reveal efficiency gains, new customer touch points or new products
- Collecting and analyzing data to generate insights for strategic decision making
- Establishing relationships with external partners to pool complementary resources

Some other SME/sector specific tool from a repository of identified tools might be deployed as well that is “fit-for-purpose” (depending on level of maturity of SME, size and SME pilot project needs) http://e2-owncloud.ijs.si/owncloud/index.php/s/rc17RxI7bd7Kw8d

Other tools for less digitally advanced SMEs & business or CE model specific tool (to be selected by experts from the tools approved in the scope of the Circular4.0 project and introduced through the training actions in T.2.) including tools assessed in the scope of D.**T.2.3.1 Setting up the toolkit to support digitalization processes to foster the CE in the Alpine space**. Such as: https://digital-transformation-tool.eu/project/

5. **Identification of innovation needs and investment plan**

As discussed during the partner meeting on 02.11.2021, each company supported should receive a document established based on the assessment and in collaboration with the SME (at least one bilateral meeting between the SME and an expert/consultant during the process) and encompassing at least one recommendation covering any of the following aspects of the transformation of the company towards higher circularity (= increase of maturity level)

- Technology adoption
- New or improved process
- New or improved or transformed business model
- New or improved products
- New or improved services
- Digitally supported (as far as possible)
- With a time, horizon from 6 months up to 1 year

Business canvas and a roadmap for the implementation of the SME pilot action covering at least one of the transformation areas listed above will be produced by the experts and a pitching presentation prepared to advance SMEs with their transitioning intentions. Experts will assist SME’s 1:1 on that.

6. **Pitching the pilot in front of finance organizations and/or identification of the funding instrument for SME to apply for funding the pilot action.**

Identifying financial organizations and their instruments in support of CE.
Organizing a “pitching” event with financial institutions and/or

Pitching event (SLO-IT): April 2022 (to be decided)

For the description of each activity (or sub-activity if relevant), we suggest using the following table:

Title		**Start date**	MM.YYYY
		End date	MM.YYYY
Description Describe here the activity			

Add sub-activities if necessary			
Results Note: the results (or deliverables) will need to be documented and reported upon in Activity T3.2 in the report for each local pilot action. They should therefore be formulated in a way that enables monitoring and documentation of the implementation.			
1	Example: 3 online workshops …	**Date**	
2	Example: 1 call for applications	**Date**	
3	Example: 25 CE + digital maturity assessments of SMEs	**Date**	
n		**Date**	

Indicators (KPIs) and monitoring

This section shall describe what are the measurable objectives (qualitative and quantitative indicators) of the pilot action and how the progress will be monitored. The selection/definition of indicators shall refer to deliverable *D.T2.5.1 Evaluation methodology* and *D.T2.4.2 KPIs definition to assess the contribution of digitalisation on CE approaches* (templates available on Teams – see also next page).

A basic indicator for all pilot actions is the number of SMEs targeted (35 in Slovenia - 17 (JSI) within Circular Design Model and 18 (TPLJ) within Optimal Use Model).

Measurable objectives:

Minimally 17 + 18 PPs (JSI & TPLJ) SMEs going through CAT4.0. All together 35.

- Technology adoption
    - 1 new or improved process in SME
    - 1 New or improved or transformed business model identified
    - 1 New or improved products foreseen within 6 months to a year from finalizing CAT4.0
    - 1 New or improved services/business process
    - 1 Digitally supported action identified with at least one advanced digital technology

Project Acronym: Circular 4.0

Project title: **Digital technologies as enabler to foster the transition to the circular economy by the SME in the Alpine Space area**

A.T3.1

Planning digitalised CE processes in Alpine Space area addressed to SMEs

Template for description (plan) of Local pilot actions (for use in D.T3.1.1/2/3)

WP n°: T.3.	Fostering CE processes in Alpine Space with digitalisation processes
Task n°: T.3.1	Planning digitalised CE processes in Alpine Space area addressed to SMEs
Author(s):	Lara Trikha, Luc Schmerber, bwcon Dr. Eva Schichl, UCB
Contributors:	Roberto Sandrini, TPLJ

Type:	**T -Template/R – Report, TOWL**
Dissemination level:	**CO = confidential**
Revision:	**DRAFT 02**
Due Date:	**December 2021**
Date of submission:	**06/12/2021**

1. Overview of the local pilot action – Piedmont (Fondazione Torino Wireless - TOWL) 16
2. Planned activities 19
3. Indicators (KPIs) and monitoring 21

Overview of the local pilot action – Piedmont (Fondazione Torino Wireless - TOWL)

- **Local context and CE approach**
  Local actions will be promoted through the Unioncamere and chamber of commerce channels that arrives potentially to companies on all the regional territory and also through the Cluster of SMEs that are also at regional level.
  The main sectors selected during the previous WP in the project are in order of priority (related with the economic relevance and specializations of the territory plus the circular potential): Manufacturing Industry, Food sector and Textile sector. Specific actions with regional clusters in these areas will be done. We also nominated the Construction sector as another potential sector because is a priority of other partners in the project, without forgetting other priority sectors for the topic in Europe with high environmental impact (WEEE, mobility).

  It is important to notice as a context that companies in Italy (and in Piedmont also) there are a high number of small companies and micro companies that are difficult to involve in activities, because non so structured, or mature enough or with the potential to invest even the time for the pilot in a very difficult moment by the pandemic crisis. Medium companies and medium-big companies are more mature so a limited in time and reduced effort available in our pilot can probably reduce our ability to attract them. So, we need to be flexible, offering a shorter path for less mature companies and more intensive effort for more mature companies. We still cannot predict specific profile of companies that can be interested in our path to the circularity, for sure will be a mix of companies for different sectors and dimensions.

  The C.E. approach originally foreseen focus in our territory for our pilot were Optimal Use and Value recovery as a second priority. But during the discussions with the other partners of the project that share their experiences with SMEs, it was explained that we cannot use only one approach excluding the others because companies in every sector can be different priorities and maturity level, so it is impossible to decide or exclude companies interested on other models. For that reason, we trained ourselves to support all the 3 approaches with our e-learning platform Circular4.0. In our first session with companies, it will be discovered that many of them are interested in “Circular Design Model”. We will verify with companies if this is the model with higher potential for them.

- **Methodology**

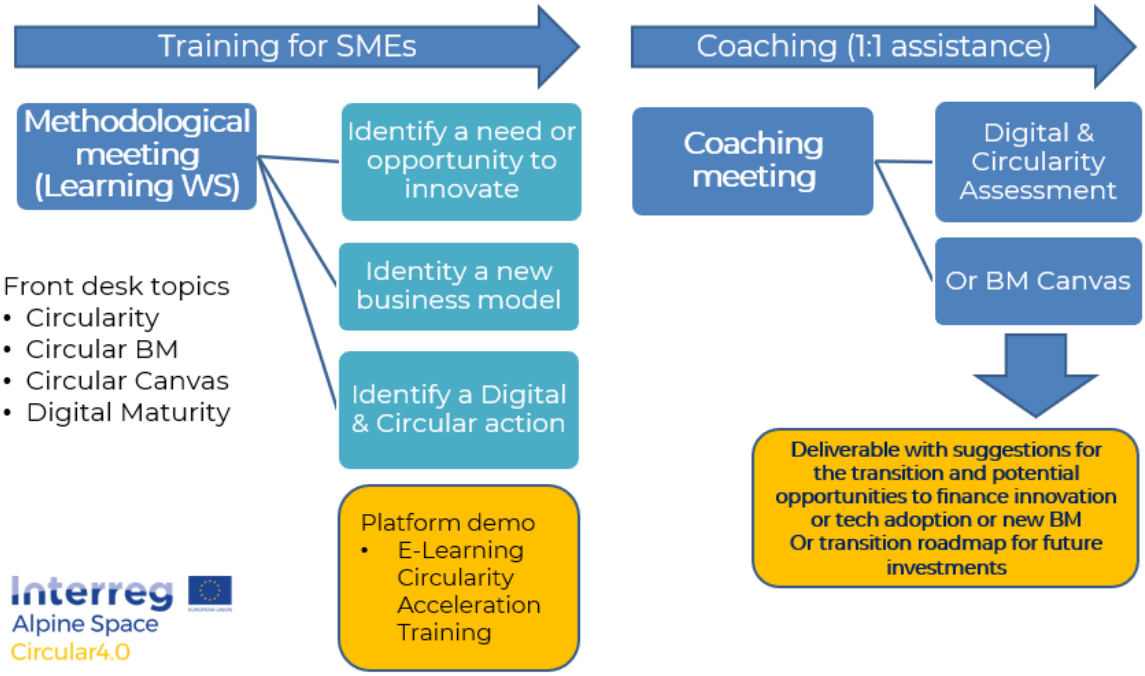
  In this part we will provide an overview of the methodology that will be used to select and assist SMEs in their circular transformation (common to all pilots).
  Involvement phases: with a call for action, we will offer the possibility to all companies in the territory to be supported during the path for the circularity of circular4.0 (pilot). If a higher number of the target number of companies will be presented, we will choose the companies with the higher circular potential evaluated with our CAS2.0 tool. If a lower number of companies participate to the pilot, we will propose again the call-in other period, or using other channels or unpackaging the Pilot separating the training phase (offered as a shorter workshop for SMEs) and then involving them to the 1:1 coaching assistance.

- **Specific tools from the Toolkit Circular4.0**

  We will test and use the original approach of the project, the tool developed by the project (CAS2.0 – Circularity Assessment Score) that is also in Italian and helps to assess SMEs on the potential of the circular model and the commitment. During the Circularity Assessment Score session, the maturity of the circular BM of the PMI can be inferred. Our interpretation of the level of maturity of the companies that we can reach is shown in the following figure:

  For Digital Maturity Assessment we decide to use SELFI4.0 (or the evolved version ZOOM4.0), the tool of the Chamber of Commerce of Italy because it is commonly used, is in Italian and can be done in a shorter time (120 questions).

The Circular4.0 Path:
The path is shown in the following figure:



The path includes:

A training meeting on the opportunities of the circular and digital transition. You will learn the fundamental concepts from an expert operator on the topic: the principles of the Circular Economy, the main generic circular business models, and the useful tools to build such models, as well as the methods and recommendations to implement more circular and sustainable processes, products or services.

A coaching meeting with one or more experts to evaluate the potential of the circular model that the company wishes to implement, and the opportunities related to the double transition. The company will receive the result of the analysis and its Roadmap for double transformation, which consists of a final report with the concrete actions identified, the priorities, the next steps and the financing opportunities for the identified improvement / innovation / technological adoption.

In-depth analysis of the business model: overall analysis of the company's business plan (circular canvas) for the proposals of the most innovative products and services (if available at this level of maturity).

The initiative will be open to any SME that need to identify or has identified a need or an initial idea of raw material reduction, waste recovery, better use of the products or services provided to make their company more sustainable or to improve their efficiency in processes, productive or service and consumption.

- **Expected results**
  This section shall explain the benefit / added value expected for the SMEs.
  Aligned with the minimum requirements indicated during the WPT3 meeting (02-11-2021) we will provide at least one recommendation covering any of the different aspects of the transformation of the company towards higher circularity: technology adoption/innovation, new process, new business model.
  We as a partner belong to the CE Optimal Use approaches with digitalization process (5 partner, 90 SMEs, so 18 SMEs for partner).

Planned activities

In this session, the activities planned for the roll-out of the approach described above shall be detailed. In order to have a significant degree of comparison among the different local pilot actions, we suggest using a set of common activities (= same title or heading, not the same methods). Those activities are the ones listed in the AF

Title	1. Selection/identification of SMEs - workshops	**Start date**	09.2021
		End date	04.2022
Description A local call for action will be promoted through intermediaries and regional Cluster of SMEs. If the call for action is not enough, workshops and individual invitations to 1:1 assessment service will be done.			
Results Note:			
1	1 Call for action published and promoted	**Date**	
2	Number of intermediaries that collaborate promoting the pilot	**Date**	
3	Number of participants interested to the path	**Date**	
n		**Date**	

Title	2.Thematic workshops/seminars	**Start date**	12.2021
		End date	05.2022
Description Single workshop events to motivate companies to start the path. If the number of companies interested on the call for actions and in the first workshop guarantee the target number of companies, the workshop will not be repeated. If the number of companies is higher that the target number, all companies can participate to the workshop and only the ones with the higher circular potential from the CAS assessment will receive the 1:1 support.			
Results			
1	Number of online workshops	**Date**	
2	Number of online participants (SMEs in Piedmont) to the workshops.	**Date**	
3	Number of online participants (others) to the workshops	**Date**	
4	Number of subscriptions in the TalentLMS platform	**Date**	

Title	3.Circular CE capability/potentiality and Digital Maturity Assessment of SMEs	Start date	12.2021
		End date	06.2022

Description

CAS2.0 assessment will be done online individually or in groups of companies of the same sector and/or interested in the same generic circular business model. It can be done in a single session or in multiple session, being flexible with the availability of the SMEs.

DMA (SELFI4.0 or ZOOM4.0) will be done individually.

Results

1	Number of SMEs with CE assessment done and reports	**Date**	
2	Number of companies with DMA report	**Date**	
3	Number of companies with Canvas elaborated	**Date**	
n		**Date**	

Title	4.Identification of innovation needs and investment plan	Start date	12.2021
		End date	07.2022

Description

During the different assessments (DMA or CAS2.0) at least one recommendation covering any of the aspects of the transformation of the company towards higher circularity will be provided through a deliverable document. The document (final deliverable) can include potential finance opportunities if active and identified during the period of the assessment.

Experts will be invited to participate to the sessions but will no leader or organize the activities. They can contribute with suggestions for SMEs and if they belong to intermediary institutions can test the methodology of the project participating to the sessions. Additional sessions can be co-organized with intermediaries to enhance the impact of the project in the territory.

Results

1	Number of final deliverables with suggestions for SMEs (target 18+ SMEs)	**Date**	
n		**Date**	

Indicators (KPIs) and monitoring

This section shall describe what are the measurable objectives (qualitative and quantitative indicators) of the pilot action and how the progress will be monitored. The selection/definition of indicators shall refer to deliverable *D.T2.5.1 Evaluation methodology* and *D.T2.4.2 KPIs definition to assess the contribution of digitalisation on CE approaches* (templates available on Teams – see also next page).

A basic indicator for all pilot actions is the number of SMEs targeted (~20 on average).

The used tools and considering a time horizon from 6 months up to 1 year will not produce a higher circularity (= increase of maturity level).

CAS Tool is a strategic tool and is not designed to measure, rather to assess. So, the increase in maturity and commitment can probably be an opinion of the operator comparing the initial state and the final state of the companies after the support or a comparison between scenarios considered at the beginning and at the end of the assessment. The score of the assessment potential is a general objective not a measure.

During the time of the project, we will not be able to also measure an increase in digital maturity because most of the suggestions for digitalization's will probably not be implemented in 6-1 year, only in a few cases. A change of business model requires long periods. Some improvements suggestions could be implemented faster, but it is not guaranteed, to have a plan for it, so the increase of commitment can be better as a reference for the increase of maturity in the short time we have to interact with companies.

So, our metrics will be:

Digital Technology Readiness level assessment (initial level and plan for the SMEs)

CE Commitment level assessment (from CAS2.0)

Satisfaction level on tools and trainings provided

Maturity improvement that can be described as qualitative concepts (not a level, it can be measure in 2-5 years after the assessment, out of the scope of the project)

See also the KPI table on the last page of this report.

Project Acronym: Circular 4.0

Project title: **Digital technologies as enabler to foster the transition to the circular economy bythe SME in the Alpine Space area**

A.T3.1

Planning digitalised CE processes in Alpine Space area addressed to SMEs

Template for description (plan) of Local pilot actions (for use in D.T3.1.1/2/3)

WP n°: T.3.	Fostering CE processes in Alpine Space with digitalisation processes
Task n°: T.3.1	Planning digitalised CE processes in Alpine Space area addressed to SMEs
Author(s):	Valeria Bazzan, Ivan Boesso
Contributors:	Francesca Maccatrozzo

Type:	**T -Template/ R- Report, CCIAA DL VERO & Veneto Innovazione**
Dissemination level:	**CO = confidential**
Revision:	**DRAFT 02**
Due Date/Submission:	**December 2021**

1. **Overview of the local pilot action - Veneto (CCIAA VE RO and VENETO INNOVAZIONE)** **3**
2. **Planned activities** **5**
3. **Indicators (KPIs) and monitoring** **8**

1. Overview of the local pilot action – Veneto Region (CCIAA VE RO andVENETO INNOVAZIONE)

The local pilot action in Veneto will be carried out in coordination and collaboration between Chamber of Commerce of Venice Rovigo and Veneto Innovazione.

The industrial sectors involved will mainly be constructions and buildings, which are very important in the area, have a very strong environmental impact but at the same time are usually not very involved or advanced in terms of circularity and/or digitalization.

Additional sectors, such as textile, nautical, manufacturing and tourism will also be taken into consideration since they are often strictly connected with our main targeted sector and are very relevant to the local economy.

The selection and involvement of enterprises will be carried out together by the two partners, while the following activities will respectively focus mainly on the following approaches (as foreseen in the ApplicationForm):

1) Value recovery for CCIAA VE RO (D.T3.2.3)
2) Optimal Use for Veneto Innovazione (D.T3.2.2)

Assistance to the SMEs shall be opened to include both approaches, and even Circular design models, ifnecessary.

- Methodology

The combined effort of the two partners will hopefully be particularly effective with regard to the selectionand engagement of the SMEs and the content/professional competence required.

CCIAA VE RO and Veneto Innovazione will jointly organize the promotional activities and the workshops topresent the pilot actions path to local entrepreneurs and promote opportunities offered on the matters ofcircularity ad digitalization at local and at national level.

The local workshops will particularly focus on awareness and financial instruments offered to the SMEs toimplement digitalization and transition to circularity.

The workshop will take place online within the first week of February and will consist in:

- Aperitivo for circularity

Originally planned as a presence event, a happening with SMEs involved in circularity processes and/orinterested in starting and promoting more eco sustainable productions and approaches. Also, intermediaries involved in circularity will be targeted, in order to promote the exchange of ideas and spread knowledge, mainly among SMEs on the opportunities offered by CE approach (along with digitalization).

SMEs will be invited to apply for the public call that Chamber of Commerce and Veneto Innovazione willlaunch in January and intermediaries will be invited to give their support to disseminate the potential opportunity of the call among their stakeholders.

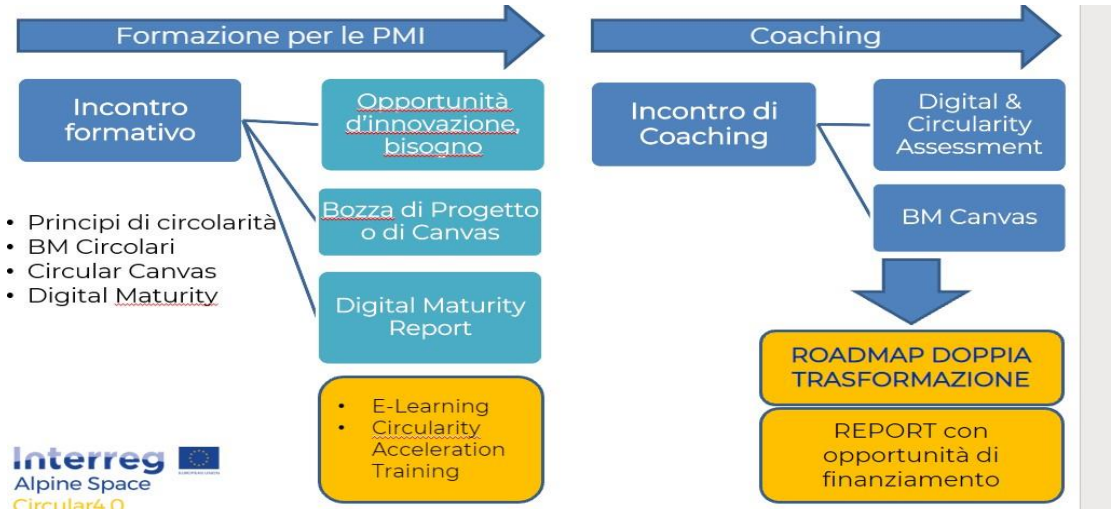
The call will give the opportunity to a maximum of 50 SMEs (selected according to the order of subscriptionto the call) to join the pilot action and be assisted by experts.

The experts, in strict coordination respectively with Chamber of Commerce and Veneto Innovazione, will carry out a digitalization assessment using Selfi 4.0 tool and a circularity capability by using CAS2.0 Tool ofthe selected SMEs. Both tools are included in the CIRCULAR4.0 Toolkit

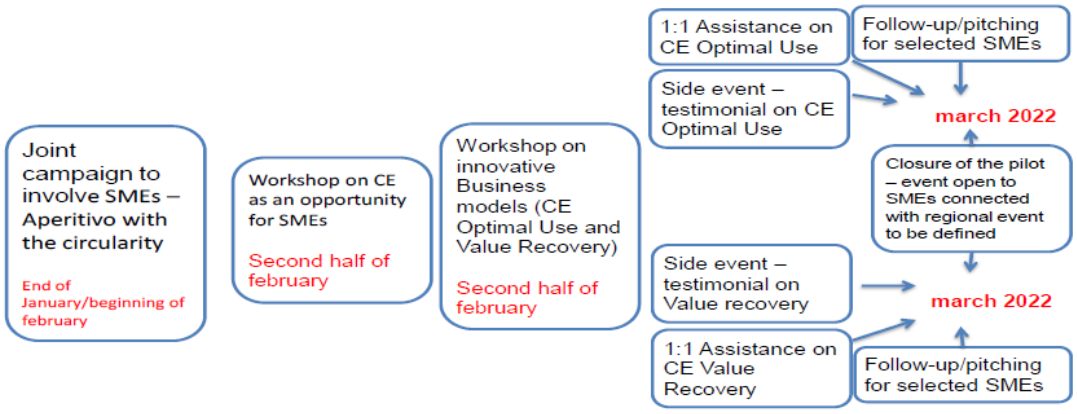
According to the combined results of the assessments carried out a customized plan of action will be elaborated and proposed to the SMEs. In this plan experts will suggest instruments and changes that couldbe adopted to improve the circularity and digitalization of the SMEs, also with regard of financial opportunities available to sustain the necessary activities.

The original plan of action was as follows:

First phase foresaw an informative meeting with SMEs, followed by personalized coaching, digital and circularity assessment, the drawing of a roadmap to improve on circular processes and digitalization, and finally some practical suggestions enlightening the financial sources to use to achieve the goals indicated inthe roadmap.



The expected Plan for January/March 2022



- **Expected results**

  According to the Application form:
  a) 1 local event "Aperitivo" to launch the Call
  b) 2 local workshops/awareness action will be addressed to SMEs
  c) 40 SMEs (Minimum 23+15 SMEs) 1:1 assisted:
     - Digital maturity assessment
     - CE capability
     - "Customized plan"

2. Planned activities

1. Selection/identification of SMEs

Targeting of enterprises, which will mainly be constructions and buildings and additional sectors, such astextile, nautical, manufacturing and tourism to be involved in the promotional events.

Invitation to Workshops will be carried out by email, websites, social media channels and the cooperationof intermediaries. (End of January/beginning of February).

A public call will be launched for SMEs to apply to the assisted procedure of assessment and elaboration ofa roadmap to improve circularity and digitalization.

2. Thematic workshops/seminars

Aperitivo with SMEs and two thematic workshops will take place online to promote the participation to thecall and to involve SMEs and intermediaries in the activities (end of January/beginning of February).

3. Circular CE capability/potentiality and Digital Maturity Assessment of SMEs

SMEs applying for the assisted procedure will be guided by experts through digitalization andcircularity capability assessment using respectively SELFI 4.0 and CAS 2.0.

4. Identification of innovation needs and investment plan

After the assessment SMEs representatives will receive from the experts a proposal of roadmap toimprove their skills and solve potential weaknesses. Also, information on potential financial instruments to fulfil the actions required will be offered (march).

For the description of each activity (or sub-activity if relevant), we suggest using the following table:

Title	**Identification of the SMEs and preparatory activities**	**Start date**	12.2021
		End date	01.2022
Description Veneto Innovazione and CCIAA VERO both will launch a public tender to hire experts to support the pilot implementation. The procurement procedure will last several weeks and will be completed hopefully by January 2022 In the meantime, the following preparatory activities will be carried out: a) Scouting and analysis of the entrepreneurial environment b) Analysis of the tools (SELFI4.0 and CAS2.0) to be adopted and their adaptation for the local use c) Organization and launch of the communication campaign **Add sub-activities if necessary** **No sub-activities are planned**			
Results			
		Date	

Title	**Involvement of the SMEs**	**Start date**	12.2021
		End date	03.2022
Description Veneto Innovazione and CCIAA VERO organize a communication campaign to invite SMEs to participate to the Pilot. An open call will be published on their website. This way, the SMEs will be selected, and the state-aids rules will be respected. **Add sub-activities if necessary,no sub-activities are planned**			
Results:			
1	List of SMEs interested in participating in the CCIAAVERO pilot	**Date**	31/03/2022
2	List of SMES interested in participating to the VENINN pilot	**Date**	31/03/2022

Title	Kick-off pilots event	Start date	01.2022
		End date	02.2022

Description
Veneto Innovazione and CCIAA VERO will organize one event to start the pilot action. Minimum 30 SMEs will participate.

Add sub-activities if necessary

No sub-activities are planned			
Results:			
1	One online kick-off event in form of aperitif jointly organized	**Date**	15/02/2022

Title	Raising knowledge by SMEs for CE-innovation oriented processes	Start date	02.2022
		End date	02.2022

Description
Veneto Innovazione and CCIAA VERO will organize 2 online thematic seminars addressed to SMEs on the following topics:

a) Thematic seminar on CE as an opportunity for SMEs
b) Thematic seminar on CE business models connected with CE Value Recovery and CE optimal use.

Add sub-activities if necessary
Sub-act1: thematic seminar on Value recovery organized by CCIAAVERO
Sub-act2: thematic seminar on Optimal use organized by VENINN

Results:			
1	One kick-off event in form of aperitif jointly organized	**Date**	15/02/2022

Title	Assisting SMEs for sustainability transaction plans	Start date	02.2022
		End date	03.2022

Description
Veneto Innovazione and CCIAA VERO, with the support of external experts, will organize 1:1 assistance to SMEs consisting with the following steps:

a) Digital maturity level assessment with SELFIE tool
b) CE capability assessment with CAS2.0 tool

Elaboration of a report as result from the 1:1 assistance provided

Add sub-activities if necessary
Sub-act1: 1:1 assistance provided by CCIAAVERO for (estimated) 23 SMEs
Sub-act2: 1:1 assistance provided by VENINN for (estimated) 15 SMEs

Results:			
1	38 (estimated) digital maturity checks implemented	**Date**	31/03/2022
2	38 (estimated) CE capability assessment checks implemented		31/03/2022
3	38 (estimated) report as results from the 1:1 assistance provided		31/03/2022

Indicators (KPIs) and monitoring

The objective of the pilot action is to assist at least 40 SMEs in the assessment and elaboration of the roadmap.

Project Acronym: Circular 4.0

Project title: **Digital technologies as enabler to foster the transition to the circular economy by the SME in the Alpine Space area**

A.T3.1

Planning digitalised CE processes in Alpine Space area addressed to SMEs

Template for description (plan) of Local pilot actions (for use in D.T3.1.1/2/3)

WP n°: T.3.	Fostering CE processes in Alpine Space with digitalisation processes
Task n°: T.3.1	Planning digitalised CE processes in Alpine Space area addressed to SMEs
Author(s):	Lara Trikha, Luc Schmerber, bwcon Dr. Eva Schichl, UCB
Contributors:	Roberto Sandrini, TPLJ

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Dissemination level:	**CO = confidential**
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1. Overview of the local pilot action - Baden-Württemberg (BWCON) 10
2. Planned activities 10
3. Indicators (KPIs) and monitoring 12

Overview of the local pilot action – Baden-Württemberg (BWCON)

Local context and CE approach

The pilot addresses proprietarily on manufacturing SMEs in Baden-Wurttemberg focussing on the optimal use or resources (Germany). However, all other companies are invited to express their interest as, according to the experience made in previous project activities, the separation between circular design, optimal use and value recovery models is not clear to businesses and not always adapted to their practice. It is also not realistic to foresee the outcomes of the 1:1 assessment in terms of circular models. Due to the estimated rather low level of awareness of most SMEs, all CE approaches need to be considered.

Planned activities

According to the overall methodology defined for the pilot actions, the following activities are planned for the local pilot action in Baden-Wurttemberg, piloted by BWCON.

<table>
<tr><td rowspan="2">1</td><td rowspan="2">Selection/identification of SMEs</td><td>Start date</td><td>10.2021</td></tr>
<tr><td>End date</td><td>11.2021</td></tr>
<tr><td colspan="4">The selection and identification of companies (in priority SMEs) to take part in the pilot in Bade-Wurttemberg shall place by means of an open call published by BWCON through its website and its newsletter. Partners in BWCON’s network (business development organisations, digital hubs) were activated through personal contacts to extend the reach of the call.

Companies headquartered or with a branch in Baden-Wurttemberg are selected on the basis of the “first come, first served” principle.</td></tr>
<tr><td colspan="4">Result

Reach at least 16 interested SMEs to participate in the pilot action.</td></tr>
<tr><td>1</td><td>Collecting at least 16 interested SMEs to participate in the pilot action and make appointments to perform the initial assessment in online or onsite meetings.</td><td>Date</td><td>11.2021</td></tr>
</table>

<table>
<tr><td rowspan="2">2</td><td rowspan="2">Circular CE capability/potentiality and Digital Maturity Assessment of SMEs</td><td>Start date</td><td>11.2021</td></tr>
<tr><td>End date</td><td>12.2021</td></tr>
<tr><td colspan="4">Each selected company will go through a CE maturity assessment using the CAS questionnaire (also accessible online in German).

The assessment provides the basis for the 1:1 assistance and will be performed by students at the University of Applied Sciences Pforzheim, under the supervision of Prof. Dr Bernhard Kölmel. The assessments will be performed in the framework of a 1:1 online or onsite meeting with a representative of each company.</td></tr>
</table>

The results will be documented in a common template for all businesses.			
Result Documented CE and digital maturity assessments			
1	Documented CE maturity and digital maturity assessments according to a generic template for at least 16 eligible SMEs	**Date**	31.12.2021

3	**Identification of innovation needs and investment plan**	**Start date**	12.2021
		End date	01.2022
Each company supported will receive, in addition to the results of its CE and digital maturity assessment result, a document established in collaboration with the SME (on the basis of the 1:1 meeting) and encompassing at least one specific recommendation covering any of the following aspects of the transformation of the company towards higher circularity (= increase of maturity level) - Technology adoption - New or improved process - New or improved or transformed business model - New or improved products - New or improved services - Digitally supported (as far as possible) - With a time horizon from 6 months up to 1 year Additionally, the participating companies are invited to self-study CAT2.0 on the online learning platform Talent LMS.			
Result Companies assessed receive an individual evaluation with at least one individual recommendation.			
1	At least 16 evaluation reports with innovation needs and investment plans handed out	**Date**	31.01.2022

4	**Follow up on innovation needs and investment plan**	**Start date**	03.2022
		End date	04.2022
Each supported company will be asked to answer a follow-up questionnaire about 3 months after the initial meeting and the delivery of the results of the assessments and specific recommendations. The aim of the follow-up will be to measure satisfaction with the support delivered and identify improvements in CE maturity as a result of the pilot action.			

Result Companies assessed receive an individual evaluation with at least one individual recommendation.			
1	At least 16 evaluation reports with innovation needs and investment plans handed out	**Date**	31.01.2022

Indicators (KPIs) and monitoring

Progress of KPIs will be monitored during the 1:1 assistance as well as after individual company's pilot actions by a standardized questionnaire, asking for their self-assessed increase in Commitment level to CE implementation, Digital technologies awareness, Specific pilot project identified and their overall level of satisfaction with pilot activities.

KPI	**number of SMEs assisted**	**Identification of circular opportunities**	**Commitment level to CE implementation**	**Level of satisfaction**
Goal	At least 16	100% of assisted companies identified a potential circular opportunity for their business	On average Increase in level of commitment, ideally in connection with a digital solution	Level of satisfaction of at least 8 (out of 10)
Evaluation method	1:1 assistance received	Documented results of assessment and recommendations	questionnaire	questionnaire

Project Acronym: Circular 4.0

Project title: **Digital technologies as enabler to foster the transition to the circular economy by the SME in the Alpine Space area**

A.T3.1

Planning digitalised CE processes in the Alpine Space area addressed to SMEs

Template for description (plan) of Local pilot actions (for use in D.T3.1.1/2/3)

WP n°: T.3.	Fostering CE processes in Alpine Space with digitalisation processes
Task n°: T.3.1	Planning digitalised CE processes in Alpine Space area addressed to SMEs
Author(s):	Lara Trikha, Luc Schmerber, bwcon Dr. Eva Schichl, UCB
Contributors:	Roberto Sandrini, TPLJ

Type:	**T -Template/ R- Report, Grand E nov**
Dissemination level:	**CO = confidential**
Revision:	**DRAFT 02**
Due Date:	**November 2021**
Date of submission:	**December 2021**

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Overview of the local pilot action – Grand Est Region (Grand E Nov)

Industry is living through a pivotal moment in its history with digital and ecological transformations that will profoundly change the way we produce. In this context, more and more industries have begun their transition. Well upstream of recycling, their approach consists of pivoting towards 6 circular economic models, from the sustainability of resources to the extension of the use of products and their regeneration. The benefits are numerous and meet economic, environmental and social objectives.

Digital tools and practices can facilitate and accelerate the transition to more sustainable production and organisation models and longer product life cycles.

They can be applied in various economic sectors. However, the relevance and maturity of the available digital technologies, the possible synergies and their environmental impact remain little known and underused.

The CIRCULAR 4.0 programme, based on tools and methodologies observed on the scale of the Alpine region, aims to facilitate this transition for industrial SMEs, to define, strengthen or implement their Industry of the Future and Circular approach.

The support in Grand Est region includes 4 collective workshops and 3 days of individual support by an expert financed by the INTERREG Alpine Arc programme.

- **Local context and CE approach**

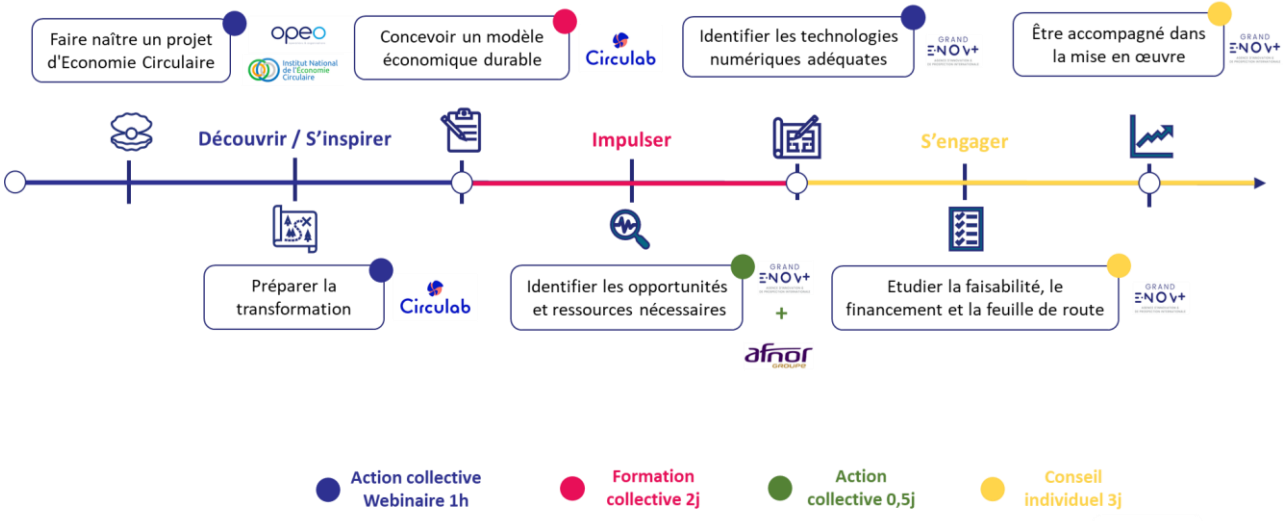
The regional innovation agency Grand E Nov has launched a call for expressions of interest (AMI) in order to experiment and support digital innovation for the Circular Industry. To complete the regional service offer, we focused on the pillars of the circular economy related to optimal use and value recovery.

Targets:
Manager/executive of an industrial SME or serve the industry in the Grand Est
Reaching the limits of their business model and see the Circular Economy as an opportunity
Want to stand out from the competition as an Industry of the Future and Circular
Having an industrial and circular project that requires digital technology
Want to build, validate their business model and roadmap
Companies from the textile, bioeconomy, plastics, wood and manufacturing sectors that have been prioritised and targeted by the regional strategies.

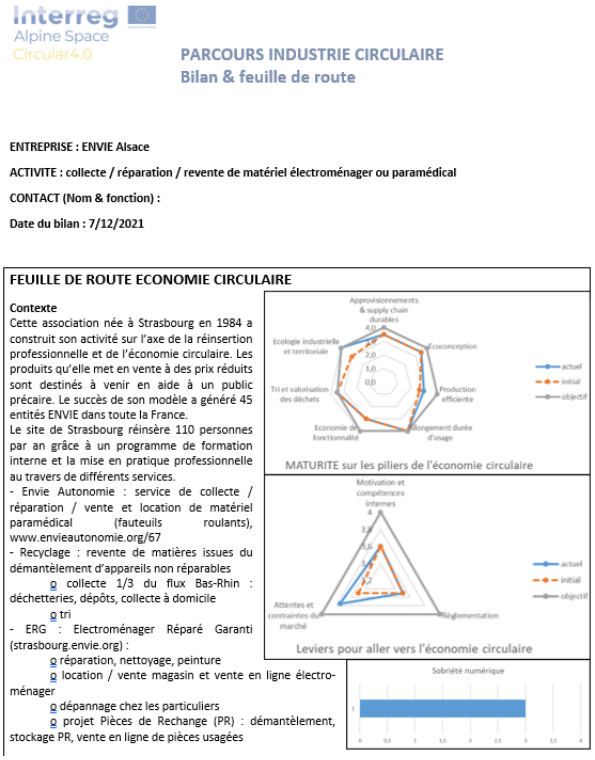
- **Methodology**

The Circular 4.0 programme consists of collective workshops, 2 days of training and 3 days of individual coaching by an expert financed by the INTERREG Alpine Arc programme. Applicant companies can be supported from September 2021 to March 2022. Registration has been opened publicly to allow any company to benefit from the programme. A communication campaign on various social networks and during various physical or digital events sought to reach the maximum number of companies.

To apply, SMEs have to complete the form by following this link:
https://forms.office.com/Pages/ResponsePage.aspx?id=5UQqvyTdf0WEAFuarHI2qvQwtN1zlotNm-wWYQaTIHxUOVlNRlcySFdVOTlOUlZPSEtNSVU0SEFNMS4u
For further information, they can contact b.lallemand@grandenov.plus
Deadline for support indicated: March 2022 inclusive



Tools used



Interreg Alpine Space Circular4.0

PARCOURS INDUSTRIE CIRCULAIRE
Bilan & feuille de route

ENTREPRISE : ENVIE Alsace

ACTIVITE : collecte / réparation / revente de matériel électroménager ou paramédical

CONTACT (Nom & fonction) :

Date du bilan : 7/12/2021

FEUILLE DE ROUTE ECONOMIE CIRCULAIRE

Contexte

Cette association née à Strasbourg en 1984 a construit son activité sur l'axe de la réinsertion professionnelle et de l'économie circulaire. Les produits qu'elle met en vente à des prix réduits sont destinés à venir en aide à un public précaire. Le succès de son modèle a généré 45 entités ENVIE dans toute la France.
Le site de Strasbourg réinsère 110 personnes par an grâce à un programme de formation interne et la mise en pratique professionnelle au travers de différents services.

- Envie Autonomie : service de collecte / réparation / vente et location de matériel paramédical (fauteuils roulants), www.envieautonomie.org/67
- Recyclage : revente de matières issues du démantèlement d'appareils non réparables
  - collecte 1/3 du flux Bas-Rhin : déchetteries, dépôts, collecte à domicile
  - tri
- ERG : Electroménager Réparé Garanti (strasbourg.envie.org) :
  - réparation, nettoyage, peinture
  - location / vente magasin et vente en ligne électro-ménager
  - dépannage chez les particuliers
  - projet Pièces de Rechange (PR) : démantèlement, stockage PR, vente en ligne de pièces usagées

Figure 1: Circular and digital maturity assessment derived from DMA tool

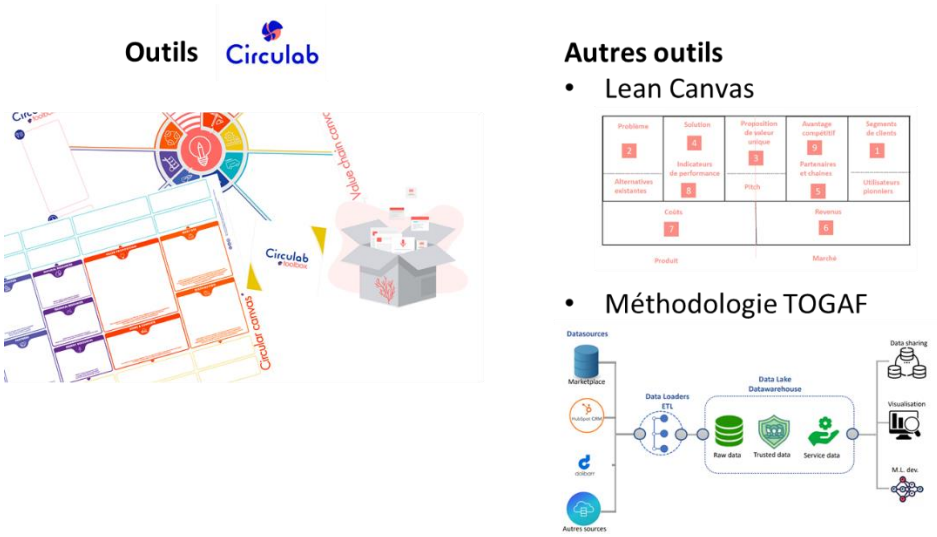


Figure 2: Circulab toolbox and specific tools used to support digital transitions

Modalities of the support programme

Depending on SME's maturity, we adapted the objectives of the support:

Figure 3: The 3 stages of maturity encountered

Stage 1 support

- Discover the principles of the circular economy; Webinars and discussions will help you understand the challenges and opportunities of the circular economy in your sector.
- Prepare your transformation; A collective workshop will allow you to discover a transformation process and its tools.
- Design a new sustainable business model: During a 2-day training session, reassess your company's needs, ambition, value proposition, products and services.

Stage 2 and 3 support

- Leveraging digital technologies to activate circular strategies: Various webinars will help you discover new possibilities and how to implement them.
- Establishing a digital roadmap and implementing it: 4 days of individual advice to study the feasibility, viability and financing of your digital innovation project and then facilitate the development of the solution.

- **Expected results**

Depending on their maturity and the support provided, companies will have benefited from:

- Discovering the key concepts of the circular economy and handling a methodology.
- Discovering the cases of companies that have implemented it and designing a first draft for the case of their company.
- Diagnosis of the business model hypothesis, identification of appropriate solutions and digital experts
- Construction of a roadmap to implement the solution and achieve the desired objectives.
- Implementation of the digital solution and evaluation of the effectiveness.

Planned activities

7. Selection/identification of SMEs

To identify companies to support through the Circular 4.0 programme, we have implemented different approaches:

- Getting companies interested in their own transition through awareness-raising workshops showing them examples from their own or other sectors, by presenting methods for building an ambition and roadmap
- Recruiting companies through other local intermediaries capable of detecting targets for the programme and having synergistic missions with our own.
- Directly approaching companies previously referenced according to their sector of activity and indices obtained by various media.

8. Thematic workshops/seminars

This activity regroups the CAT2.0 or other training modules selected by the partners and addressed to SMEs.

Various thematic sessions were organised dealing with circular industry equipped with digital technology or with exemplary circular transformations observed in specific sectors.

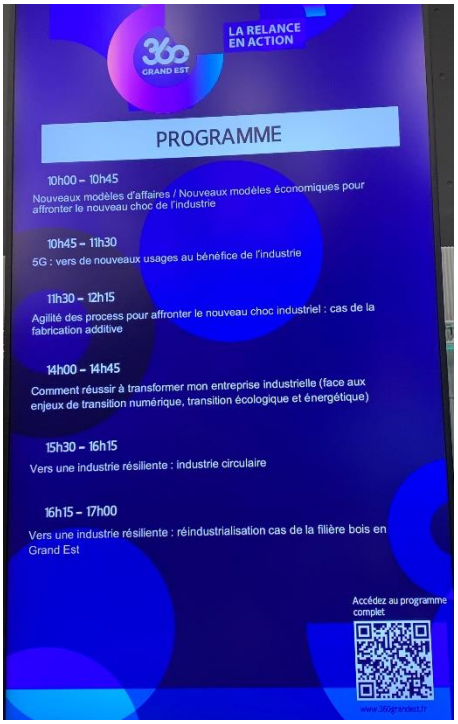


Figure 4: Track Circular 4.0 (7th of Dec 2021)

Visits to transfer centres were also organised to show the field of possibilities.

Textile Alsace
PÔLE DE COMPÉTENCES

Interreg
Alpine Space
Circular4.0

GRAND E-NOV+
AGENCE D'INNOVATION & DE PROSPECTION INTERNATIONALE

Mulhouse, le 6 octobre 2021

Le Pôle Textile Alsace en collaboration avec l'Agence d'Innovation et de Prospection Internationale Grand E-Nov+ est heureux de vous inviter à participer à une nouvelle rencontre du ***Club Innovation Textile Alsace – CITA*** pour 2021.

Le Pôle Textile Alsace veut poursuivre les échanges inter–entreprises et ainsi faciliter les synergies potentielles au sein des membres du Pôle Textile Alsace. Une des réponses est la poursuite de ce Club qui se retrouve 4 fois par an, chez un partenaire du réseau. Il sera accueilli pour cette nouvelle édition de l'année 2021 par l'Institut Carnot MICA et l'IS2M (Institut de Science des Matériaux de Mulhouse).

Réservez dans vos agendas la matinée du mercredi 8 décembre 2021 ! Nous serons accueillis par ***Lionel LIMOUSY, Directeur de l'Institut Carnot MICA*** pour démarrer le programme suivant :

UNE OFFRE MULTI-SECTEURS

POUR VOS PROJETS D'INNOVATION, RECHERCHE ET DÉVELOPPEMENT

AUTOMOBILE, SPATIAL ET AÉRONAUTIQUE
Allégement, durabilité, performance, confort, environnements extrêmes

MODE ET LUXE
Ennoblissement, anti-contrefaçon, personnalisation, matériaux intelligents et connectés, micro et nano-fabrication

ÉNERGIE
Production, stockage, récuperation, chaleur fatale, biomasse, Power to X, énergie verte

ENVIRONNEMENT
Éco-conception, développement durable, chimie verte, matériaux biosourcés, valorisation ressources, dépollution

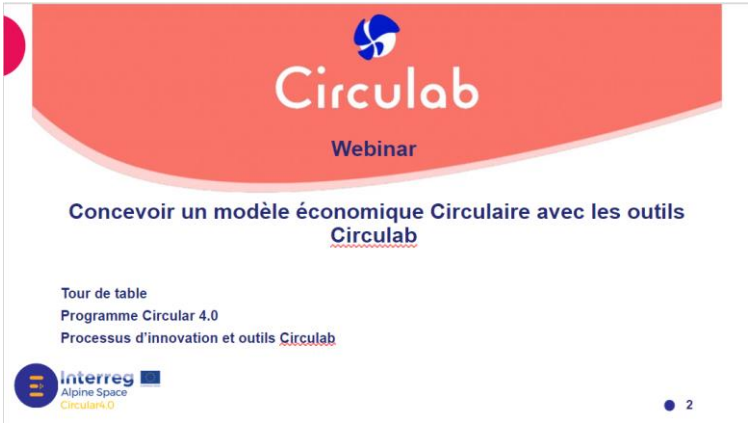
SPORT ET BIEN-ÊTRE
Allégement, performance, aérodynamisme, durabilité, capteurs, matériaux actifs, textiles

INDUSTRIE DU FUTUR
Réalité virtuelle, fabrication additive, instrumentation, contrôle non-destructif en ligne

BÂTIMENT ÉCONOME ET DURABLE
Matériaux intelligents, qualité de l'air, optique, performance énergétique

SANTÉ ET COSMÉTIQUE
Anti-bactérien, traitement de surfaces, théranostique, DMI, relargage contrôlé, biocompatibilité, performance, durabilité

Finally, the presentation of circular transition management methods was carried out.



9. Circular CE capability/potentiality and Digital Maturity Assessment of SMEs

At the start of each support, a digital maturity audit was carried out. The self-assessments were always confirmed by an initial interview with the company so as not to miss out on elements that could later have an impact on the action plan developed with the company. The diagnostic tool is derived from the DMA tool built for the 4.0 programme. It has been translated into French and modified to take into account certain national specificities.

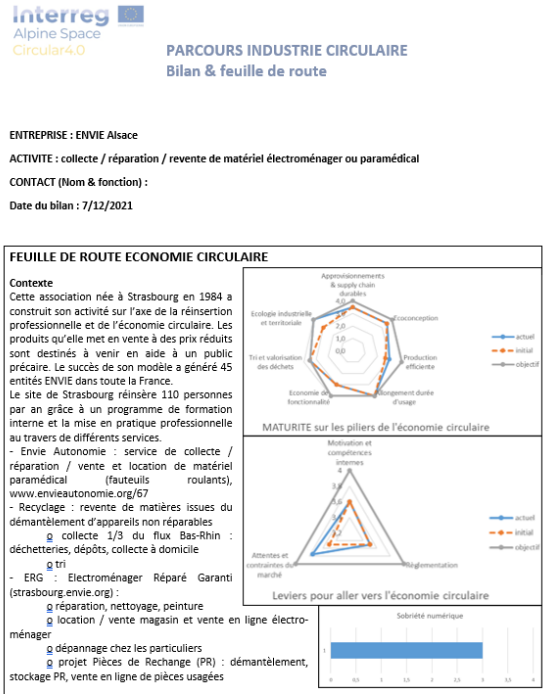
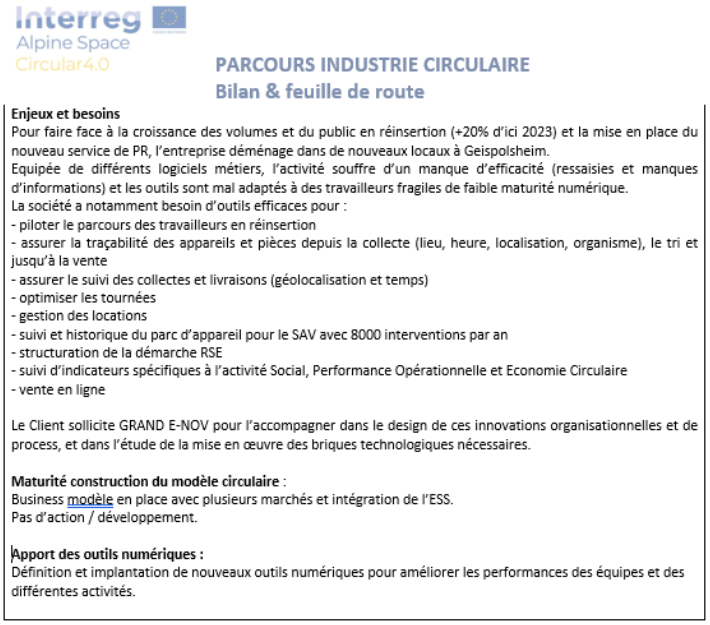


Figure 5: Example of assessment

The tool was also used to set maturation targets and allow for follow-up at the end of the programme. Thus three curves are presented in the reports submitted to the company.

The audit ends with the formalisation of the issues and needs identified and thus prepares the construction of an action plan.



PARCOURS INDUSTRIE CIRCULAIRE
Bilan & feuille de route

Enjeux et besoins
Pour faire face à la croissance des volumes et du public en réinsertion (+20% d'ici 2023) et la mise en place du nouveau service de PR, l'entreprise déménage dans de nouveaux locaux à Geispolsheim.
Equipée de différents logiciels métiers, l'activité souffre d'un manque d'efficacité (ressaisies et manques d'informations) et les outils sont mal adaptés à des travailleurs fragiles de faible maturité numérique.
La société a notamment besoin d'outils efficaces pour :
- piloter le parcours des travailleurs en réinsertion
- assurer la traçabilité des appareils et pièces depuis la collecte (lieu, heure, localisation, organisme), le tri et jusqu'à la vente
- assurer le suivi des collectes et livraisons (géolocalisation et temps)
- optimiser les tournées
- gestion des locations
- suivi et historique du parc d'appareil pour le SAV avec 8000 interventions par an
- structuration de la démarche RSE
- suivi d'indicateurs spécifiques à l'activité Social, Performance Opérationnelle et Economie Circulaire
- vente en ligne

Le Client sollicite GRAND E-NOV pour l'accompagner dans le design de ces innovations organisationnelles et de process, et dans l'étude de la mise en œuvre des briques technologiques nécessaires.

Maturité construction du modèle circulaire :
Business modèle en place avec plusieurs marchés et intégration de l'ESS.
Pas d'action / développement.

Apport des outils numériques :
Définition et implantation de nouveaux outils numériques pour améliorer les performances des équipes et des différentes activités.

Figure 6: Example of an audit conclusions

10. Identification of innovation needs and investment plan

Title	Support to new / improved or transformed business model and technology adoption	**Start date**	04.2021
		End date	03.2022

Description

Supported by the Interreg Circular 4.0 project, Grand E-nov support manufacturers in their transformation towards the Circular Economy by considering innovative business models and relying on digital technologies. In this sense, the regional agency is organising several round tables to

- Bring out new circular and digital transition projects.
- Discover inspiring initiatives to facilitate Technology adoption

Add sub-activities if necessary

Support emergence of new business models

The raw materials extracted from our soils are running out and some of them will no longer be available within 10 years. Faced with this major challenge, the Circular Economy proposes other ways of designing products, reducing and recovering waste to make new raw materials while reducing the carbon impact. Digital technologies play a central role in the design of products, the optimisation of processes and the construction of collaborative supply chains. Grand E nov organised some workshops to help SME's discover new business models and methodologies to develop those.

Support technology adoption

Extending the life span of products, pooling the use of products, aggregating pools of recycled materials, adjusting production to demand, optimising logistics circuits or eco-design using dedicated software: some levers that reduce the impact on the environment. Digital tools and practices facilitate and accelerate the transition to more sustainable production and organisation models. Grand E Nov organised some workshop to help SMEs discover those new technologies.			
Results			
1	3 online / physical workshops	**Date**	2021-2022
2	30 participating SME's	**Date**	2021-2022

Title	Training to generate new / improved or transformed business model	**Start date**	MM.YYYY
		End date	MM.YYYY

Description

Training cession organised for specific target group:

- Manager/executive of an industrial SME or supplier to the industry in the Grand Est
- SME that reaches the limits of your business model and consider the Circular Economy as an opportunity
- SME that wants to stand out from the competition as a Circular Industry
- SME that has a circular economy project that needs to be formalised with experts
- SME that wants to build, validate its business model and roadmap

Sub-activities

Through 2 days of support provided by the Circular 4.0 programme, we propose to start from their problems, to inspire them with the best initiatives to generate new hypotheses of circular business models models.

1 day to use the Circulab tools with the presence of an expert to come up with a first hypothesis of a circular economic model and a set of points to check with potential partners to make this model real.

Personal work on the part of the companies for one month to validate or resolve the questions

Meeting of the companies through two thematic half-days to develop the roadmap and implement the economic model (necessary resources, financing tools, etc.)

Results			
1	6 New circular business models generated / validated	**Date**	Jan 2022
2	2 days of collective support	**Date**	Jan 2022

Title	Digital assessment and Roadmap	Start date	Mar 2021
		End date	Mar 2022

Description

Industrial SME's who wish to be accompanied to :

At the strategic level
- Enlighten the Director on the possibilities of digital technologies.
- Challenge the business issues that arise in all transparency/benevolence in order to formalise the product/process/service/marketing innovation axes according to a dynamic framework that will make it possible to drive/prioritise the opportunities that will be proposed.

At the operational level

- Prioritise/sequence innovation projects, in the medium/short/long term, on the basis of a strategy/innovation axes and according to the company's capacities (skills, equipment, software, IP, etc.).

- Co-construct a business transformation roadmap to make innovative use of the data/assets held and create new economic value by responding to new analytical needs and new uses. This includes technical, HR and overall business organisation aspects.

- Structure the innovation projects selected in the short term as well as the internal innovation process (innovation process where the roles of the different stakeholders are clearly defined).

Objectives:
- Establish an inventory of the company's digital and circular maturity.
- Identify the areas of uncertainty, the hypotheses to be verified, the key points to be consolidated.
- Help you structure your project in terms of activities, distribution of roles, planning of resources, deadlines, identification of risks.

Precision concerning the one-to-one support: Formalisation of your digital and circular innovation strategy

- Assistance in formalising and compiling the elements of analysis of the external environment, the value chain, competitive positioning, evolution of needs and user/customer paths and definition of opportunities

- Framing of the company's digital ambition: Clarification of the technological possibilities and processes capable of responding to these opportunities through interviews with various experts in the candidate technologies, the targeted sectors or with experience close to the targeted services

- Identification of the resulting challenges and strategic objectives

Results

1	15 CE+digital maturity assessments of SMEs (Feedback from individual interviews)	Date	Mar 2021

2	15 Synthesis of digital innovation strategy	**Date**	Mar 2022

Indicators (KPIs) and monitoring

This section shall describe what are the measurable objectives (qualitative and quantitative indicators) of the pilot action and how the progress will be monitored. The selection/definition of indicators shall refer to deliverable *D.T2.5.1 Evaluation methodology* and *D.T2.4.2 KPIs definition to assess the contribution of digitalisation on CE approaches* (templates available on Teams – see also next page).

A basic indicator for all pilot actions is the number of SMEs targeted (~20 on average).

Company dashboard																
Full project partner dashboard																
	CE Strategy/Business model		*Commitment level Investments*		*Digital technologies awareness*		*Commitment level Investments*		*Other relevant item linked to the pilot action considered*		*Trainee level of satisfaction*	*Maturity improvement*		*Impact on CE related to the pilot action*	
Goals	**CE Readiness level assessment**		**Trainee motivation toward CE implementation**		**Digital Technology Readiness level assessment**		**Financial effort foreseen during the pilot action**		**CE Commitment level assessment**		**Satisfaction level on tools and trainings provided**	**Project maturity phase to be reached ***		**Circular metrics to be improved ***	
Phase	**Initial State**	**Outputs**	**Initial State**	**Outputs**	**Initial State**	**Outputs**	**Initial State**	**Outputs**	**Initial State**	**Outputs**	**Quality of trainers and tool, relevance, applicability …**	**Initial level**	**Level reached**	**Initial measure**	**Results achieved ****
Means indicator *															
Comments **	***Describe the inputs needed***	***Describe what has been done***	***Describe the inputs needed***	***Describe what has been done***	***SELFIE ZOOM Maturity level***	***Describe what SME plan to do***	***Describe the inputs needed***	***Describe what has been done***	***CAS 2.0 comittment level***	***Describe what SME plan to do***		***Describe the Improvement***		***Describe the Improvement***	

Interreg
Alpine Space
Circular4.0

Program Priority: SO1.1 - Improve the framework conditions for innovation in the Alpine Space

Work Package: WPT3 Fostering CE processes in Alpine Space with digitalisation processes

Activity: A.T3.2 Experimenting transnational actions to foster CE approaches through digitalisation

Deliverable: D.T3.2.2 Local actions to implement CE Optimal Use approaches with digitalisation processes

Reporting on local pilot actions – Veneto Innovazione

Author: Ivan Boesso – PP7 – Veneto Innovazione

Version: FINAL

Month, YEAR: June, 2022

CIRCULAR4.0 is co-financed by the European Regional Development Fund through the Interreg Alpine Space programme

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Lessons learnt 14

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Overview of companies assisted 15

1. Introduction

Veneto CIRCULAR4.0 partners – Veneto Innovazione and CCIAA VE-RO, decided to develop their pilot actions separately but in parallel.

They presented the pilot actions and developed it in the same period, but managed it independently. Veneto Innovazione, as regional body acting on the whole Veneto territory, took into consideration companies located in the seven territorial province of the Region.

Both pilot actions started with a call for expression of interest that were open to companies with the following characteristics:
- be an SME as defined by EC Recommendation 2003/361
- have at least one office in Veneto region
- be willing to involve in the project at least two persons in key positions in the organisational chart (e.g.: owner, partner, managing director, technical director, production manager, research and development manager) for the entire duration of the pilot action.

The selected enterprises would have had participate in a circular transformation assistance programme during which they would be able to identify which actions to take to start/improve their circularity approach for processes and products, and which steps would have been be facilitated by the introduction of digitisation processes in the enterprise.
Each individual enterprise would have obtained an index of its propensity for circularity and digitisation through the use of platforms and services dedicated to circular economy (CAS4.0) and digitisation processes (SELFI).

Experts in processes aimed at enterprise circularity supported the single companies both in the assessment and in the identification of a specific action plan through targeted advice.

The phases of the pilot actions were:

1. Identification and selection of participant SMEs

2. Analysis of circular capacity and potential and assessment of the SME's digital maturity

3. Expert assistance to the enterprise aiming to improve the enterprise's approach to circularity via the adoption of an action plan.

The present deliverable displays, for the part of the local pilot action carried out in the Veneto Region by Veneto Innovazione S.p.A., the:

- activities delivered,
- results achieved,
- lessons learned to foster CE approaches through digitalization.

2. Local pilot actions in Veneto (Veneto Innovazione) - Overview

Veneto Innovazione launched a call addressed to entrepreneurs or managers of SMEs with at least one office in Veneto, with the aim of selecting at least 18 enterprises that will have the opportunity to be supported in the development of proposals and/or development plans for a more circular design model approach trough digitisation, starting from traditional management and production models. Following experiences made in previous Circular 4.0 activities and due to the rather low level of awareness of most SMEs, all CE approaches need to be considered. In fact, separation between circular design, optimal use and value recovery models is not clear to businesses and not always adapted to their practice. It is also not realistic to foresee the outcomes of the 1:1 assessment in terms of circular models. The call was therefore open to all the models foreseen n the Circular 4.0 approach.

According to the overall methodology defined for the pilot actions, the following activities were planned.

1	Selection/identification of SMEs	Start date	04.2022
		End date	06.2022
Launch, in parallel with CCIA VE-RO, of an open call addressed to SMEs willing to test the set of tools to foster the contribution of Industry4.0 for the transition of SMEs to the circular economy developed or identified within Circular4.0. The pilot action was aimed primarily at companies in the building and construction sector. However, companies from other sectors interested in the initiative might also apply. Companies were to be selected on the basis of the “first come, first served” principle.			
Results At least 18 SMEs answering the call expressing their intention to take part to the pilot.			

2	Circular CE capability/potentiality and Digital Maturity Assessment of SMEs	Start date	04.2022
		End date	06.2022
Participating companies will make their circular assessment using the CAS tool, while the digital assessment will be performed through the SELFI tool, the Italian Chamber of Commerce digital assessment platform. In the implementation of the pilot action, Veneto Innovazione will be supported by an external company selected on the basis of a specific experience on the topic of circular economy and support to SMEs. The experts will prepare a report for every company participating in the pilot action and an action plan to be presented and discussed with each of them.			
Result Documented CE and digital maturity assessments.			
1	Documented CE maturity and digital maturity assessments for at least 18 eligible SMEs.	Date	06.06.2022

3	Identification of innovation needs and investment plan	Start date	04.2022
		End date	06.2022

Each company supported will receive, in addition to the results of its CE and digital maturity assessment result, a document established in collaboration with the SME (on the basis of the 1:1 meeting) and encompassing at least one specific recommendation covering any of the following aspects of the transformation of the company towards higher circularity in order to increase their maturity level:

- Technology adoption
- New or improved process
- New or improved or transformed business model
- New or improved products
- New or improved services
- Digitally supported (as far as possible)

Additionally, the participating companies will be invited to self-study CAT2.0 training paths available on the online learning platform Talent LMS.

Result
Companies assessed received an individual evaluation with at least one individual recommendation.

1	At least 18 evaluation reports with innovation needs handed out	Date	06.06.2022

3. Identification and involvement of the SMEs for the Pilot Action

Veneto Innovazione launched a tender to identify the external expert to support in the implementation of the pilot action and Veneto Green Cluster was the company selected having a previous experience in developing innovation paths for companies in the sectors of Waste Recycling and Renewable Energy.

The call was officially and publicly launched by an online workshop that took place on May the 3rd. The workshop was organised by CCIAA VE-RO in collaboration with Veneto Innovazione. At this event both the supporting external experts of Veneto Innovazione and CCIAA VE-RO attended.

Interreg
Alpine Space
Circular4.0

CIRCULAR4.0:
UNO STRUMENTO PER AIUTARE LE PMI NELLA TRANSIZIONE VERSO L'ECONOMIA CIRCOLARE

Lancio Azione Pilota CIRCULAR 4.0

martedì 3 maggio ore 16.00 - Evento gratuito

CIRCULAR4.0 è un progetto **finanziato nell'ambito del programma Alpine Space** che mira a contribuire alla transizione del sistema economico locale verso **l'economia circolare** sfruttando le potenzialità della **digitalizzazione** e delle **nuove tecnologie**.

L'evento andrà ad illustrare il percorso gratuito offerto alle imprese che aderiranno, per verificare la loro maturità circolare e digitale ed ottenere un piano per il miglioramento del proprio posizionamento e la strada più consona alle loro esigenze.

ISCRIZIONI

L'evento si terrà in formato webinar. Per ricevere il link per partecipare, effettua l'iscrizione compilando il modulo seguente:

Modulo di iscrizione

Maggiori informazioni ai link:

https://www.dl.camcom.it/ (sezione bandi)

https://www.venetoinnovazione.it/?q=AzionePilotaCircular4_0

CAMERA DI COMMERCIO VENEZIA ROVIGO

Veneto innovazione

4. Implementation report

Veneto Innovazione launched a call addressed to entrepreneurs or managers of SMEs with at least one office in Veneto, with the aim of selecting at least 18 enterprises that will have the opportunity to be supported in the development of proposals and/or development plans for a more circular design model approach trough digitisation, starting from traditional management and production models. Following experiences made in previous Circular 4.0 activities and due to the rather low level of awareness of most SMEs, all CE approaches were considered. In fact, separation between circular design, optimal use and value recovery models is not clear to businesses and not always adapted to their practice. It is also not realistic to foresee the outcomes of the 1:1 assessment in terms of circular models. The call was therefore open to all the models foreseen n the Circular 4.0 approach.

According to the overall methodology defined for the pilot actions, the following activities were planned and, due to the late start of the implementation phase, no further activities were carried out:

1. Selection/identification of SMEs
2. Circular CE capability/potentiality and Digital Maturity Assessment of SMEs
3. Identification of innovation needs and sharing of the action plan with the participating SMEs

1	Selection/identification of SMEs	Start date	04.2022
		End date	06.2022

On April the 5th, 2022 Veneto Innovazione launched, in parallel with CCIA VE-RO, an open call addressed to SMEs willing to test the set of tools to foster the contribution of Industry4.0 for the transition of SMEs to the circular economy developed or identified within Circular4.0.
The pilot action was aimed primarily at companies in the building and construction sector. However, companies from other sectors interested in the initiative might also apply.
Companies were selected on the basis of the "first come, first served" principle.

Results
By June the 3rd 20 SMEs expressed their intention to take part to the pilot and, they were accepted and included in the following steps. During the assessment phase all companies were directly assisted both in presence and online.

2	Circular CE capability/potentiality and Digital Maturity Assessment of SMEs	Start date	04.2022
		End date	06.2022

Participating companies made their circular assessment using the CAS tool, while the digital assessment was performed through the SELFI tool, the Italian Chambers of Commerce digital assessment platform.

In the implementation of the pilot action, Veneto Innovazione was supported by an external company selected on the basis of their specific experience: it started the SMEs supporting phase as soon as the expression of interests were received and continued it until the set goal was reached.
The experts prepared a report for every company that participated in the pilot action and an action plan that was presented and discussed with each of them.

The companies involved in the pilot actions came from the following sectors:

1. Constructions (6)
2. Environmental services (6)
3. Manufacturing (3)
4. Waste management (3)
5. Health (1)
6. Services (other) (1)

Result Documented CE and digital maturity assessments.			
1	Documented CE maturity and digital maturity assessments for 20 SMEs	**Date**	06.06.2022

3	**Identification of innovation needs and investment plan**	**Start date**	12.2021
		End date	01.2022
Each company supported received, in addition to the results of its CE and digital maturity assessment result, a document established in collaboration with the SME (on the basis of the 1:1 meeting) and encompassing at least one specific recommendation covering any of the following aspects of the transformation of the company towards higher circularity in order to increase their maturity level: - Technology adoption - New or improved process - New or improved or transformed business model - New or improved products - New or improved services - Digitally supported (as far as possible) Additionally, the participating companies were invited to self-study CAT2.0 training paths available on the online learning platform Talent LMS.			
Result Companies assessed received an individual evaluation with at least one individual recommendation.			
1	20 evaluation reports with innovation needs handed out	**Date**	06.06.2022

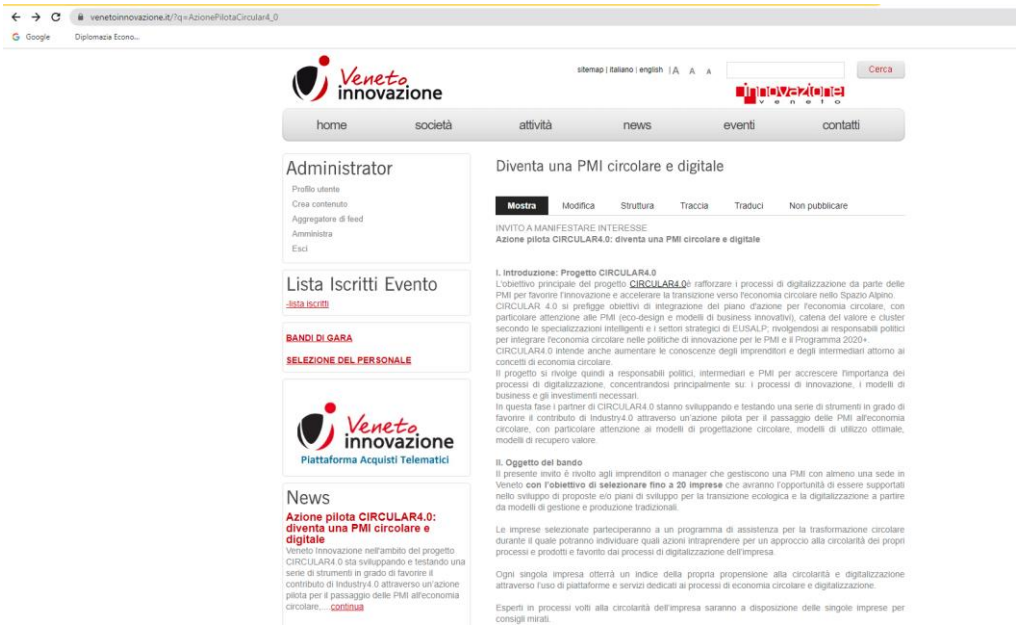
5. Deviations from the pilot action plan (D.T3.1)

As briefly stated above, the only deviation from what was planned refers to the opening of the targeted SMEs to different sectors and not only constructions and building and avoiding the separation between circular design, optimal use and value recovery models because they are not clear to businesses. Moreover, the pilot action regarded 20 SMEs instead of the foreseen 18.

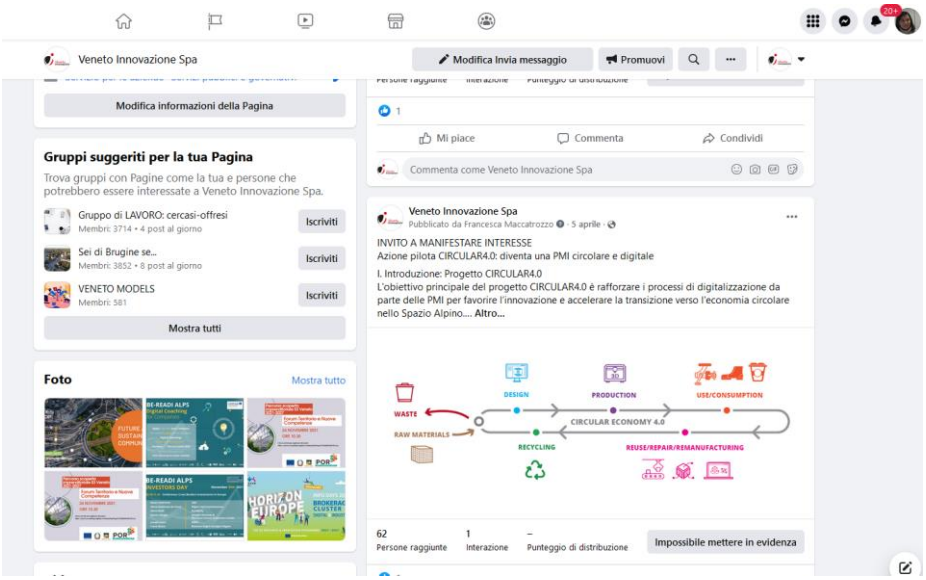
6. Communication activities implemented to support the pilot action

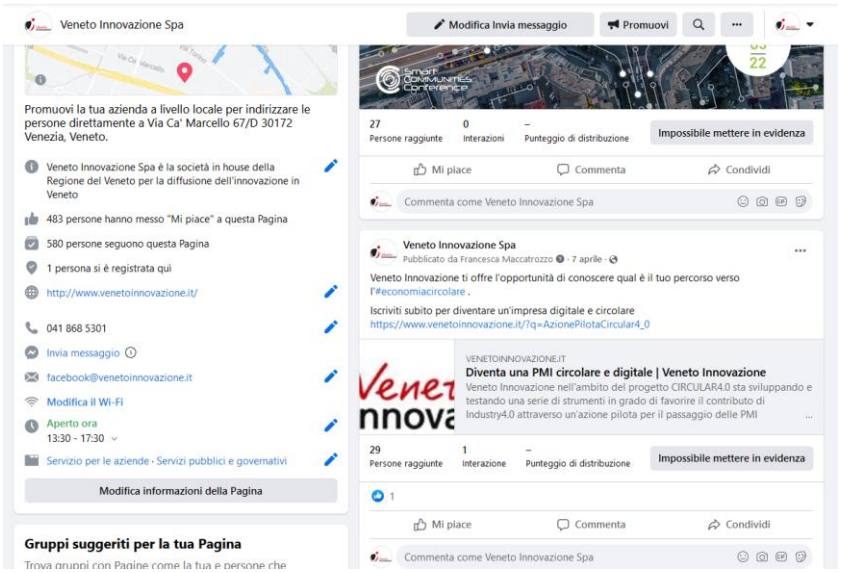
Veneto Innovazione promoted the call for the selection of companies on its website and using its social networks as showed below.

Call on Veneto Innovazione website:



Posts on Veneto Innovazione Facebook profile




Veneto Innovazione Spa
Modifica Invia messaggio
Promuovi
Promuovi la tua azienda a livello locale per indirizzare le persone direttamente a Via Ca' Marcello 67/D 30172 Venezia, Veneto.
Veneto Innovazione Spa è la società in house della Regione del Veneto per la diffusione dell'innovazione in Veneto
483 persone hanno messo "Mi piace" a questa Pagina
580 persone seguono questa Pagina
1 persona si è registrata qui
http://www.venetoinnovazione.it/
041 868 5301
Invia messaggio
facebook@venetoinnovazione.it
Modifica il Wi-Fi
Aperto ora
13:30 - 17:30
Servizio per le aziende · Servizi pubblici e governativi
Modifica informazioni della Pagina
Gruppi suggeriti per la tua Pagina
Trova gruppi con Pagine come la tua e persone che
27
Persone raggiunte
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Interazioni
Punteggio di distribuzione
Impossibile mettere in evidenza
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Veneto Innovazione nell'ambito del progetto CIRCULAR4.0 sta sviluppando e testando una serie di strumenti in grado di favorire il contributo di Industry4.0 attraverso un'azione pilota per il passaggio delle PMI
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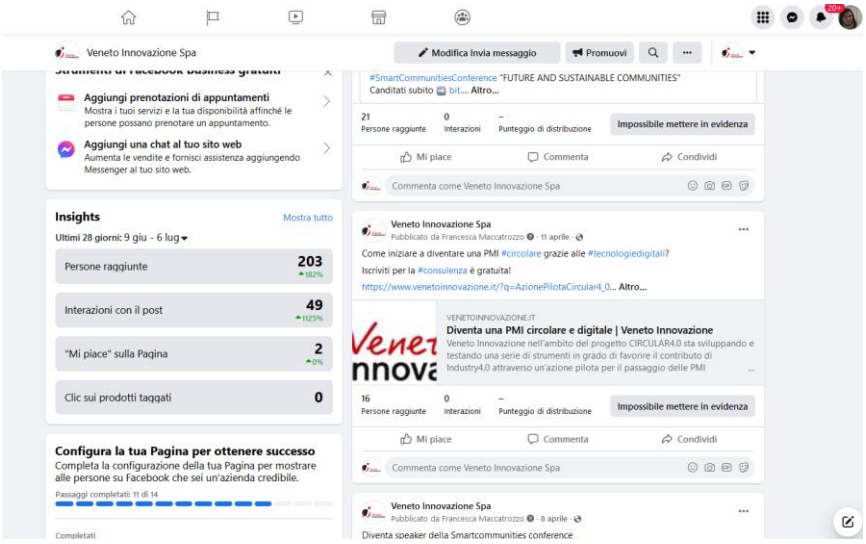
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Modifica Invia messaggio
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Aggiungi prenotazioni di appuntamenti
Mostra i tuoi servizi e la tua disponibilità affinché le persone possano prenotare un appuntamento.
Aggiungi una chat al tuo sito web
Aumenta le vendite e fornisci assistenza aggiungendo Messenger al tuo sito web.
Insights
Mostra tutto
Ultimi 28 giorni: 9 giu - 6 lug
Persone raggiunte
203
Interazioni con il post
49
"Mi piace" sulla Pagina
2
Clic sui prodotti taggati
0
Configura la tua Pagina per ottenere successo
Completa la configurazione della tua Pagina per mostrare alle persone su Facebook che sei un'azienda credibile.
Passaggi completati: 11 di 14
Completati
#SmartCommunitiesConference "FUTURE AND SUSTAINABLE COMMUNITIES"
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16
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Commenta come Veneto Innovazione Spa
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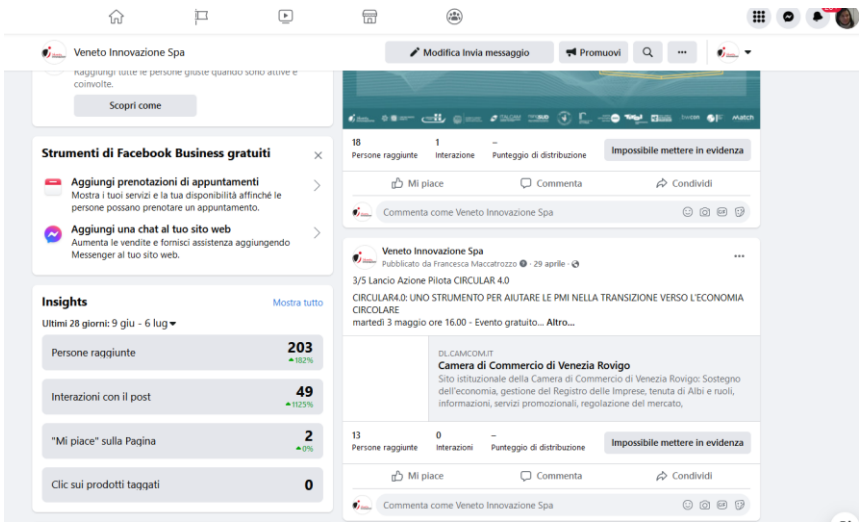
Diventa speaker della Smartcommunities conference


Veneto Innovazione Spa
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Promuovi
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Strumenti di Facebook Business gratuiti
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13
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Punteggio di distribuzione
Impossibile mettere in evidenza
Mi piace
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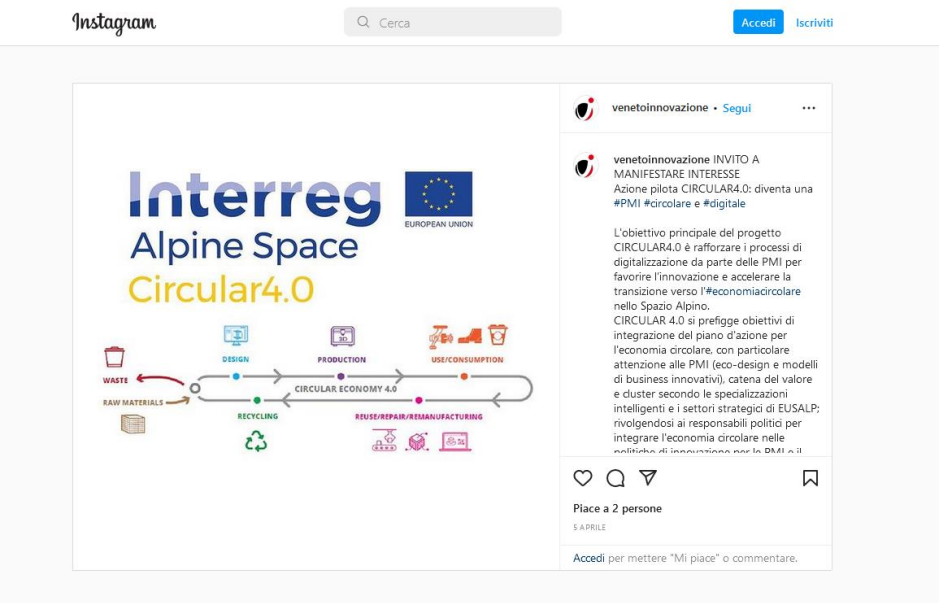
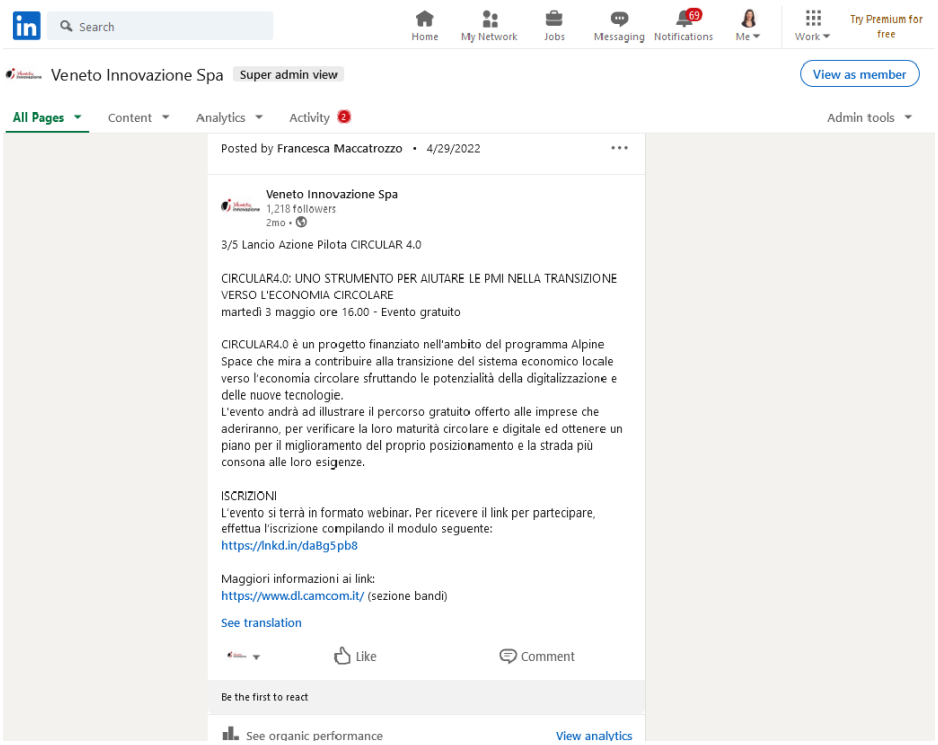
Condividi
Commenta come Veneto Innovazione Spa

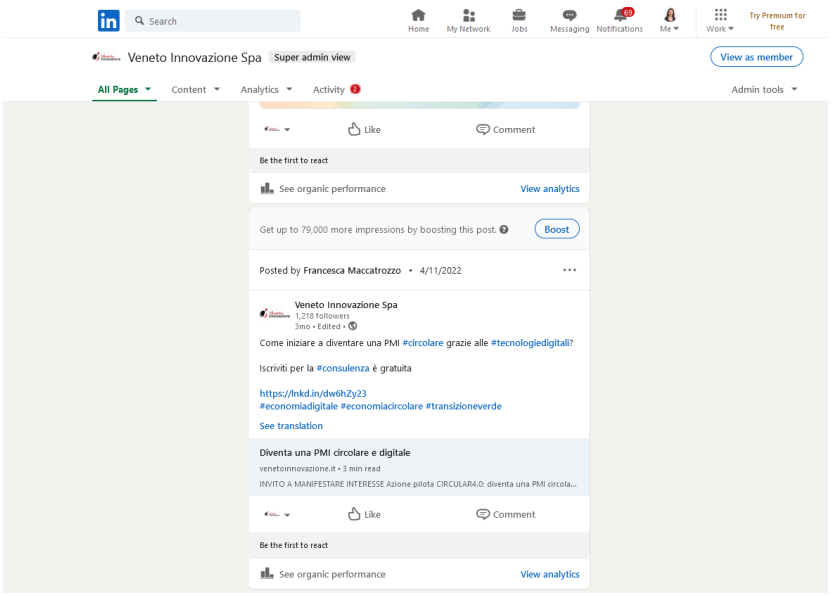
Post on Veneto Innovazione Instagram profile



Posts on Veneto Innovazione Twitter profile

Posts on Veneto Innovazione Linkedin profile

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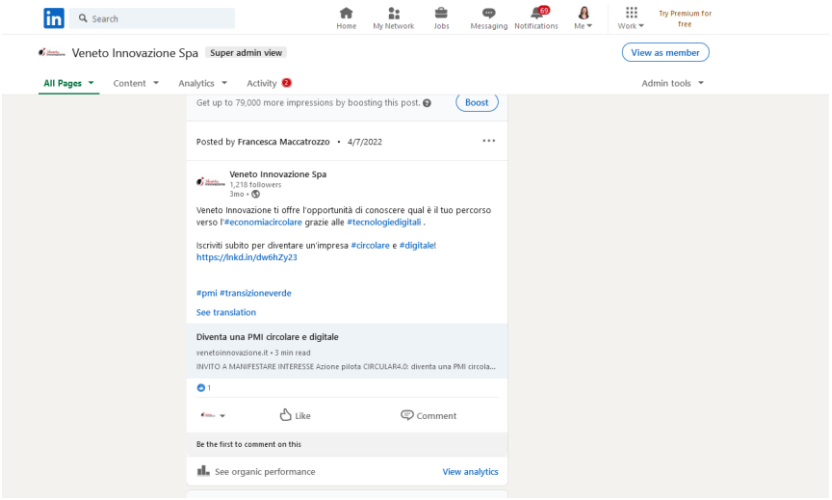
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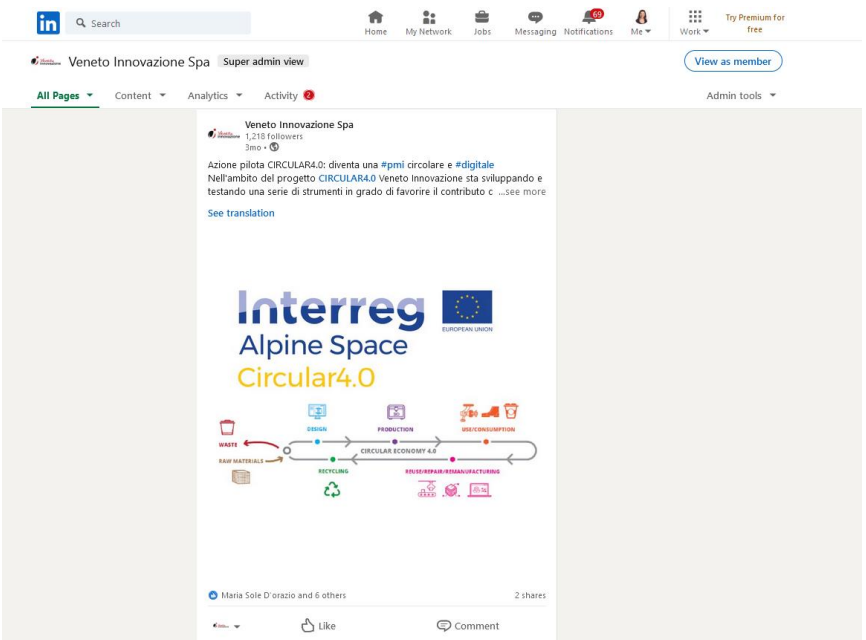
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Alpine Space
Circular4.0
EUROPEAN UNION
DESIGN
PRODUCTION
USE/CONSUMPTION
WASTE
RAW MATERIALS
CIRCULAR ECONOMY 4.0
RECYCLING
REUSE/REPAIR/REMANUFACTURING
Maria Sole D'orazio and 6 others
2 shares
Like
Comment

7. Summary of the achievements - lessons learnt

Achievements

The following achievements can be reported:

KPI	number of SMEs assisted	Identification of circular opportunities
Goal	*At least 18*	*100% of assisted companies identified a potential circular opportunity for their business*
Achievement	20	All 20 companies received concrete recommendations based on the assessments and shared during the 1:1 meetings with companies.

Lessons learnt

The part of the pilot action carried out by Veneto Innovazione in our region involved 20 SMEs from different sectors who responded to the call for expression of interest open online and also disseminated through a specific online meeting organized in collaboration with the CCIA VE-RO.

The technical times related to the procedures necessary for identifying the external company that supported Veneto Innovazione in the implementation, forced to concentrate the activities in a very short period of time. However, this did not prevent from establishing a positive and useful relationship with the companies that have decided to participate in the Action.

In particular, this was useful for verifying with them the consistency of the tools used with the intended objectives. In particular, this led to the following reflections:

- the CAS tool is very useful for providing an overview of the company status and helps both the company to understand at what stage it is, and the consultant to target the interventions and the action plan on the capabilities of the former;

- with regard to the sectors, CAS is very well structured for production companies, to achieve the same results in service companies, it requires more accompanying work by the expert who supports the company;
-SELFI4.0, compared to CAS, has a wider scope of use and is able to give good results without particular difficulties even in the case of service companies;

- in general, the companies involved in the pilot action were not very familiar with the issue and do not know how to act. In some cases, the concept of sustainability through digitalization also needs to be endorsed. The cause of this is probably linked to the fact that the measures for digitization have always been seen by companies as an opportunity for investments in digital technologies but were never included in an organic discourse for the growth of the company's competitiveness;

- on the other hand, companies that are implementing a program for digitization are more sensitive to the possibility of using it also to start the path towards sustainability and therefore the combined use of the two approaches is immediately understood positively.

8. Annexes

Overview of companies assisted

N°	Company name	Company headquarters	Sector of reference	Website	SME	CE maturity assessment	CE maturity assessment tool	Digital maturity assessment	DM assessment tool	1:1 meeting	Action Plan	*Follow up (optional)*	*Activity 1 (optional)*	*Activity 2 (optional)*	*Activity... (optional)*
VI 01	BENEDETTI & CO BIOSOLUTIONS SRL	Venezia	Health		Yes	20/05/2022	CAS4.0	20/05/2022	SELFI4.0	23/05/2022	23/05/2022				
VI 02	BOZZA SRL	Padova	Wood/ Constructions	//www.bozzalegnami.it/	Yes	18.05.2022	CAS4.0	18.05.2022	SELFI4.0	26/05/2022	26/05/2022				
VI 03	Consorzio C.A.T.A.	Belluno	Environmental services	https://www.catasicurezza.it/	Yes	19/05/2022	CAS4.0	19/05/2022	SELFI4.0	26/05/2022	30/05/2022				
VI 04	CENTRO CONSORZI	Belluno	Training services	https://www.centroconsorzi.it	Yes	25/05/2022	CAS4.0	Autonomously before the Pilot Action	SELFI4.0	27/05/2022	27/05/2022				
VI 05	COOPERATIVA FONDERIA DANTE	Verona	Foundry	https://www.cfdcasting.it/	Yes	11/05/2022	CAS4.0	11/05/2022	SELFI4.0	18/05/2022	18/05/2022				
VI 06	CHIMICAMBIENTE SRL	Padova	Environmental and materials analysis	https://www.chimicambiente.net/	Yes	27/05/2022	CAS4.0	18/05/2022	SELFI4.0	30/05/2022	30/05/2022				
VI 07	CONSORZIO MARMISTI DELLA	Verona	Environmental services		Yes	06/06/2022	CAS4.0	06/06/2022	SELFI4.0	06/06/2022	06/06/2022				

	VALPANTENA														
VI08	COOP.SERVICES SOC.COOP.	Padova	Training services on Environment, Energy	https://www.coopservices.it/	Yes	23/05/2022	CAS4.0	Autonomously before the Pilot Action	SELFI4.0	26/05/2022	26/05/2022				
VI09	ECOREX SRL	Padova	Waste management	http://www.ecorex.it	Yes	11/05/2022	CAS4.0	Autonomously before the Pilot Action	SELFI4.0	17/05/2022	147/05/2022				
VI10	ELITE AMBIENTE SRL	Vicenza	Waste management	https://www.eliteambiente.it	Yes	09/05/2022	CAS4.0	09/05/2022	SELFI4.0	25/05/2022	30/05/2022		On 29/05/2022 the CAS4.0 was revised		
VI11	EURO VENETA SRL	Verona	Waste management	http://www.euroveneta.it/	Yes	13/05/2022	CAS4.0	13/05/2022	SELFI4.0	18/05/2022	18/05/2022				
VI12	FERRARI BK S.R.L.	Verona	Constructions	https://www.ferraribk.it/	Yes	26/05/2022	CAS4.0	26/05/2022	SELFI4.0	31/05/2022	31/05/2022				
VI13	INDUSTRIE COTTO POSSAGNO S.P.A.	Treviso	Constructions	https://www.cottopossagno.com/	Yes	26/05/2022	CAS4.0	26/05/2022	SELFI4.0	31/05/2022	31/05/2022				
VI14	LEGNO SMART SRL	Padova	Wood/ Constructions	https://www.legnosmart.it/	Yes	16/05/2022	CAS4.0	14/05/2022	SELFI4.0	24/05/2022	24/05/2022				
VI15	MAP COSTRUZIONI S.R.L.	Padova	Constructions		Yes	26/05/2022	CAS4.0	26/05/2022	SELFI4.0	30/05/2022	30/05/2022				
VI16	METALCO S.R.L.	Treviso	Street furniture	https://www.metalco.it/	Yes	18/05/2022	CAS4.0	18/05/2022	SELFI4.0	31/05/2022	31/05/2022				
VI17	STUDIO GALLIAN SAS	Rovigo	Environmental, Energy and sustainabi	https://www.studiogallian.it/	Yes	09/05/2022	CAS4.0	09/05/2022	SELFI4.0	25/05/2022	25/05/2022				

			lity services												
VI18	TEV GROUP S.R.L.	Venezia	Environmental services	https://www.tevgroup.it/	Yes	10/05/2022	CAS4.0	10/05/2022	SELFI4.0	16/05/2022	16/05/2022				
VI19	FONDERIA ZARDO S.P.A	Vicenza	Foundry	https://www.fonderiazardo.it/	Yes	23/05/2022	CAS4.0	23/05/2022	SELFI4.0	27/05/2022	27/05/2022				
VI20	ZEROCENTO S.R.L.	Padova	Constructions	https://zerocento.eu/	Yes	24/05/2022	CAS4.0	24/05/2022	SELFI4.0	01/06/2022	01/06/2022				