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

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

PP 10 – Jožef Stefan Institute (JSI)

Author: PP 10 – JSI

Version: 1.0

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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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 Jožef Stean Institute
- Lessons learned by Jožef Stefan Institute
- Durability and follow-up

Methodology to achieve the output

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

<table>
<tr><td>Step 1:</td><td>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:

<table>
<tr><th>CE design</th><th>CE optimal use</th><th>CE value recovery</th></tr>
<tr><td>LP TPLJ & PP10 JSI
PP4 aws
PP5 ITG
PP9 AURAE</td><td>LP TPLJ & PP10 JSI
PP3 bwcon
PP7 VI
PP8 Grand E-nov PP11
TOWL</td><td>PP2 TUAS Rosenheim
PP6 Biz-Up
PP13 CCIAA Venezia
Rovigo
PP14 UCB</td></tr>
</table>
</td></tr>
</table>

	PP12 Confindustria Bergamo 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 JSI

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

1. Selection/identification of SMEs
2. Thematic workshops/seminars
3. Circular CE capability/potentiality and Digital Maturity Assessment of SMEs
4. Identification of innovation needs and investment plan
5. identification of the funding instrument for SME to apply for funding the pilot action

ACTIVITY 1

1	**Selection/identification of SMEs**	**Start date**	11.2021
		End date	02-03.2022

In January/February 2022 a joint online call for participation of companies with the CAT4.0 pilot training course was published via e-platforms of JSI, TPLJ and affiliated partners (KIC CLIMATE, SRIP Circular economy, SRIP Smart Cities, Chamber of Economy Cluster Smart factories, Cluster of plastics etc).

The call was published jointly by the JSI and Technology Park Ljubljana on e-social platform and web sites of the partners.

42 SMEs registered in total in Slovenia. They were than distributed between the two Circular4.0 project partners (JSI and TPLJ) for individual consultations i.e., experts advisory testing. JSI took majority of the digitally matured companies mostly coming from the manufacturing sector i.e., services in support of manufacturing and construction and waste management sectors. All SME's qualified as SMEs i.e., they met criteria of their annual turnover or number of employees.

15 SMEs were taken over by the JSI experts to be pre-screened by for their business areas and to further determine the type of targeted tools needed with the 1:1 consultations.

6 SMEs from manufacturing, 2 SMEs from construction sector, 1 from ICT, 2 from plastics and 4 from services in manufacturing and 1 from waste management.

The SMEs selected were predominantly mid-sized companies with several employees from 20 to approximately 250 and 5 micro companies from 1-50 employees.
Result *Planned: Reach at least 17 interested SMEs to participate in the pilot action.* 15 SMEs registered for the pilots in domain of JSI 13 SMEs attended joint introductory course10 SMEs got 1:1 consultations & completed CAS and DMA 9 SMEs got action plans/recommendations/investments (so 9 SMEs fully completed the pilots!)

ACTIVITY 2

2	**Thematic workshop/seminar: CAT4.0 introduction for SME's**	**Start date**	9.3.2022
		End date	9.3.2022
A joint online presentation of the CAT4.0 pilot training course was delivered to SMEs registered for the pilot actions. Instructions on the course delivery and content were provided to the participants beforehand. Cat4.0 introduction of pilots was given on the 9.3.2022 at 1 p.m. The presentations were delivered to the SMEs by the contracted experts introducing key concepts of the Circular economy, Digital technologies in support of circular economy, the CAT4.0 learning platform with materials available to SME's the tools to be used with 1:1 consultations and general procedures for implementing the pilot actions. Sub activity: 1. On 11th of March as the follow up of the 9th of March workshop the detailed instructions were handed to the SME's on how to fill up DMA report and how to approach CAS as well as the invitation to use other tools available to SMEs for self-assessment and invitation for the 1:1 meetings with SME's. 2. Experts than individually set an appointment date for 1:1 consultation.		
Results 15 SMEs were present at the introductory meeting from sectors of manufacturing, constructing, services in support of manufacturing, ICT, plastics, waste management.			

ACTIVITY 3

3	**Circular CE capability/potentiality and Digital Maturity Assessment of SMEs CAT4.0 (1:1 expert consultation to SME's)**	**Start date**	10.3.2022
		End date	4.5.2022
As part of the training, external experts conducted an analysis of the circularity of the participating companies using the Circularity Assessment Score (CAS2.0) and DMA (i4MS) and based on at least one personal meeting with each of the participants. At personal meetings they discussed the results of the assessment of the company's circularity/digital maturity and identified circular/digital opportunities to increase the circularity and digital advancement in the organization or. to develop a new product, service, or circular business model where possible with investments into digital technologies. Based on the meetings, some participants also prepared a project plan in the form of Lean Business Model Canvas.		
Results			
All companies obtained a documented report, a picture of DMA and CAS diagrams with the interpretation of the scoring results and DMA/CAS reports/responses summary. 10 CAS 2.0+ digital maturity assessments of SMEs were produced. 3 participating SMEs also prepared a pilot project plan in the form of Lean Business Model Canvas.		

ACTIVITY 4

4	**Identification of innovation needs and investment plan**	**Start date**	11.3.2022
		End date	1.6.2022
Each of the 15 companies was invited to prepare a self-evaluation report and received results of its CE and digital maturity assessment result, a document established in collaboration with the SME (based on the 1:1 meetings) and encompassing at least one specific recommendation covering one or several 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 And with the following characteristics: ▪ Digitally supported (as far as possible) ▪ With a time horizon from 6 months up to 1 year Additionally, the participating companies were invited to self-study CAT2.0 on the online learning platform Talent LMS.		

Ten CAS 2.0 + digital maturity assessments of SMEs were produced fully. Three participating SMEs also prepared a pilot project plan in the form of Lean Business Model Canvas.

ACTIVITY 5

5	**Identification of the funding instrument for SME to apply for funding the pilot action**	**Start date**	9.3.2022
		End date	5.8.2022
During the pilot action implementation, the national calls were announced and later published in August 2022 in support of Green/Circular transition and digitalisation (The instrument was called: Support for start-ups, micro, small and medium-sized companies in the strategic sustainable and circular transformation of business in the years 2022-2025 ERDF funding in Slovenia) published by the Ministry of Economy. This is a specific instrument to support transformation of SMEs to circular economy business. Companies were proactively directed during the 1:1 consultations to seek investment funds for their pilot projects as well as to present their pilots to the venture capital organisations.			
Results 3 companies produced lean canvas investment plan with the aim to participate at the public calls and/or seek other suitable investment funds. 9 companies will consider pursuing investing into pilot projects using public funding instruments in support of circular and digital transformation.			

Lessons learned and recommendations for the follow-up

Some companies which participated at the introductory course on the 9th of March decided not to further commit to the implementation of the pilots due to lack of human resources and/or responsibility level in the organisation.

Recommendation is that top level decision makers and/or company owners need to get involved with the transformative actions of companies.

Timing was another issue as some SME's would need a longer period to prepare business/investment plans and gain needed top management support for that. All the foreseen pilot activities were performed and presented to the SMEs. Pilot actions were closely linked to the national calls for projects in domain of circular economy and digitalisation of SMEs, which is a good incentive for companies to get involved with the transformative actions.

Considering that by the time of the meeting not all the local actions reports were available, the discussion based on the preliminary results available. Those results concern 212 enterprises supported, i.e., about 85% of the final number of enterprises supported reached by the end of June. The validity of the lessons learned was therefore not questioned by the members of the Evaluation Committee.

Following the presentation of the results from the local pilot actions:

- *SMEs supported and sectors,*
- *Evaluation results of the local pilot actions,*
- *Lessons learned and input from the Transnational Working Groups.,*

The lessons learned were discussed with the members of the Evaluation Committee.

Outcome of the discussion:

- *The overall performance of the local pilot actions was acknowledged positively.*
- *In addition to the overall positive feedback to the local pilot actions, suggestions for improvement of the design and implementation of similar actions aiming for improving the combined circular and digital maturity of SMEs through adequate assistance were discussed.*
  The following recommendations were discussed:

  Lessons learned for the design of the pilot actions:
  - *It was generally difficult to involve SMEs with a low maturity level*
    A more differentiated strategy to reach companies according to their maturity level might have helped.
  - *More generally, the overall support offer could be better differentiated according to the maturity level of the businesses.*
  - *The focus on SMEs might have been too strict. Large SMEs which control, or influence value chains could have been involved in order to reach also their SME suppliers.*
  - *The initial KPIs might have been too ambitious in terms of investment leveraging, according to the limited financial and time resources for the pilots.*

  Lessons learned for the implementation of the pilot actions:
  - *Combining digital and circular expertise in the assistance process was not always easy with on expert. Mixed teams would have helped working on both aspects more systematically*
  - *Some local actions started late and were too short to reap all possible fruits. In general, the 1:1 assistance and consulting cycle was too short to reach the best possible results.*
  - *The implementation of a full Plan-Do-Check-Act interaction cycle with companies is recommended.*
  - *More peer learning and interaction among the different regional experts and sharing of experience among trainers could have helped to increase the impact of the pilot actions.*
  - *Giving the possibility to companies to meet might have generated more innovative ideas.*
  - *The online training offer could have been designed in a more flexible way to make it even easier to access for companies.*

  The following key learnings were agreed upon:

  1. *Awareness of Circular Economy is key.*
  2. *Creating a network/community of experts and business support providers promoting the improvement of circular economy by use of digital tools is essential. The community generated in the project is a valuable asset to be maintained.*
  3. *Action plans and recommendations need to be connected closely with funding opportunities for SMEs in order to accelerate the design of innovative activities and investment decisions.*
  4. *The higher the circular maturity, the higher the need for digitalization.*

Durability and follow-up

Pilots will be capitalised within Jožef Stefan Institute by continuous provision of maintenance of the training platform https://circular40.eu/ and training materials for CAT2.0 training course from the https://circular40.talentlms.com/index is to be transferred onto IJS server for further use and potential upgrade in the future.

Digital maturity assessment tools and CAS 2.0 tool will continue to be promoted for use within the cluster SRIP Factories of the future as an integral part of trainings and services provided for the member organisations.

Methodology to assist the SMEs continue to be applied by the member organisations of the SRIP Factories of the future and new tools are to be added such as screening tools for the application of advanced technologies and advanced materials.

The development of the advanced technologies and materials in support of SMEs transition to circular economy will be further supported by IJS researchers such as for example use of robots for e-waste and/or digital twin for advanced manufacturing or new materials such as rare magnets, steel wool and many others currently being researched and newly applied in industry i.e., factories of the future.

Annex

- D.T3.1.1 - AS feasibility plan to foster CE design model with digitalisation processes
- D.T3.2.1 - Local actions to implement CE Design Model approaches with digitalisation processes

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

Deliverable: D.T3.1.1 AS feasibility plan to foster CE design model with digitalisation processes

Author: TPLJ, inputs by PPs (JSI&TPLJ, CONFBG, AWS, ITG, AURAE, RISING SUD)

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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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.T3.1.1 AS feasibility plan to foster CE design model 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.T3.1.1) is focusing on the development of AS feasibility plan to foster CE design model with digitalisation processes. BWCON collected inputs of each project partner from the CE design model (in the case of Slovenia two project partners collaborated – JSI & TPLJ). Each PP from the group of CE design model (JSI & TPLJ, CONFBG, AWS, ITG, AURAE, RISING SUD) 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: JSI & TPLJ, CONFBG, AWS, ITG, AURAE, RISING SUD) are available in the appendix. All PPs in this group provided their input.

Appendix (Inputs by PPs: Local detailed feasibility plans by PPs for the implementation of pilots – Slovenia (JSI & TPLJ, CONFBG, AWS, ITG, AURAE, RISING SUD)

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, JSI TPLJ**
Date of submission:	**2.12.2021 (v3), JSI & TPLJ**

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Overview of the local pilot action - Slovenia (Jožef Stefan Institute, Technology Park Ljubljana)

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

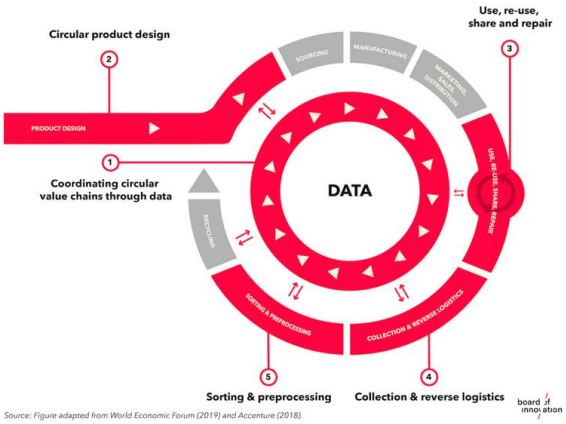
These selected sectors of interest are in accordance with the National Circular Economy Roadmap and other national strategic development plans:

	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.

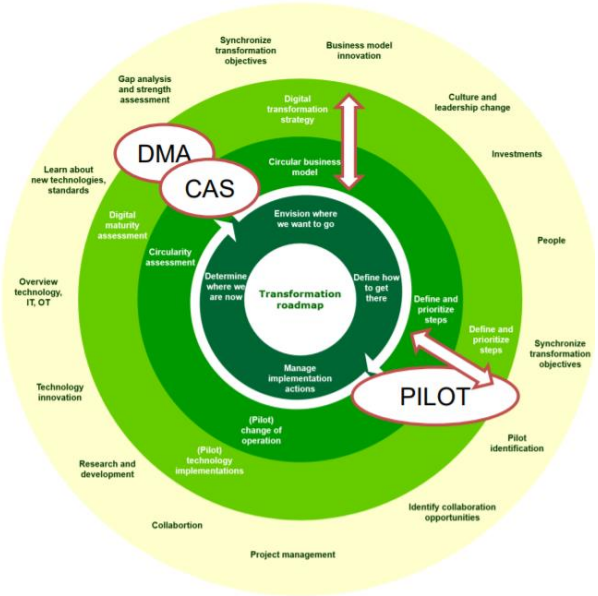
Circular economy approach we plan to undertake for pilots is the circular design model (approach) and optimal use model (approach) as defined in the scope of the Circular 4.0 project. If applicable for Slovenian SMEs also value recovery model (approach) will be used.

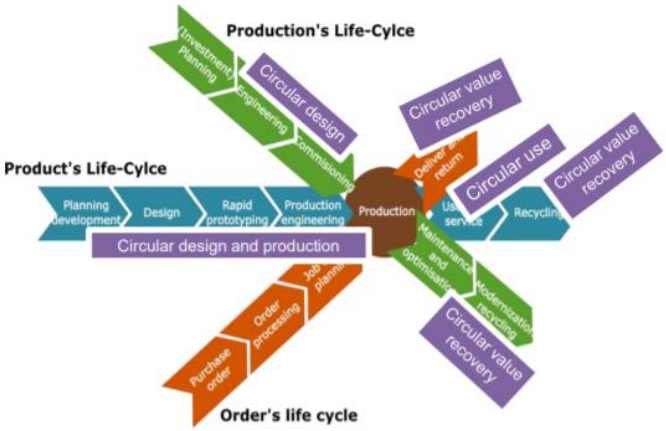
In addition, digital data-based models and systems changes will be adopted where applicable (example in advanced manufacturing) for coordinating business chains transformation and digitalization as enabler of circular transformation will be strongly emphasized along the value chain transformation. CAT4.0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

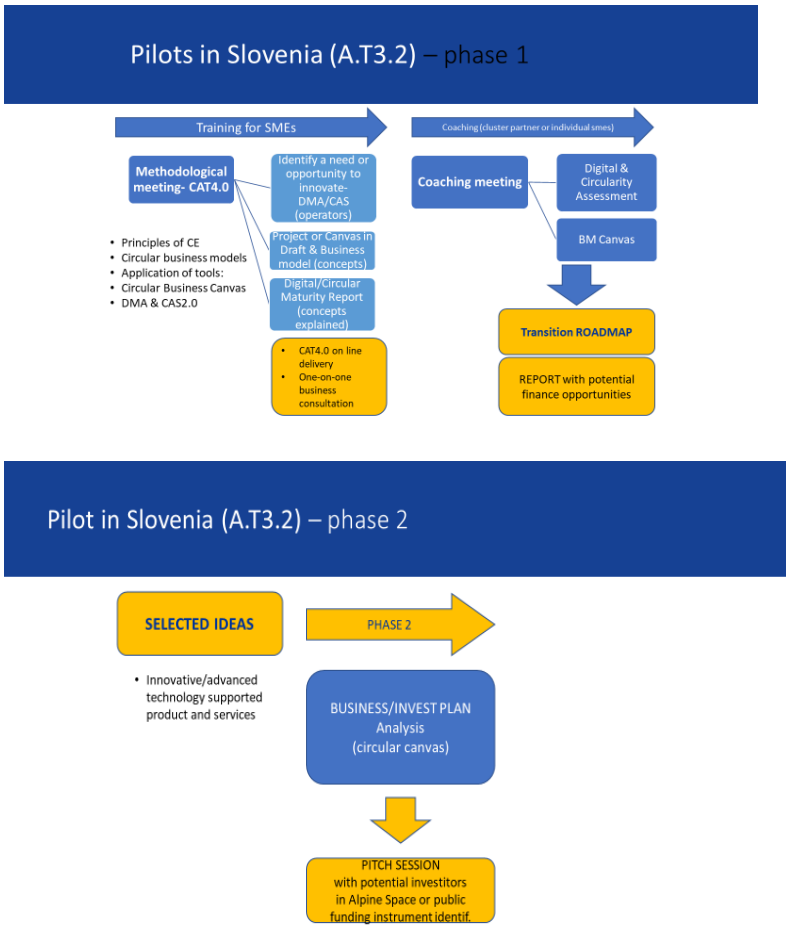
Underlying principles of pilots used in Slovenia are explained in the
Module 1 (Part 2) of the CAT4.0 training course Enabling the potential for circular transformation – tech readiness–digitalization and I4.0 (available over https://circular40.eu/).
The process encompasses systemic changes as well as 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, analyzing 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/centres 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 analysing 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.T2.3.1 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 decidec)

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, CONFBG**
Dissemination level:	**CO = confidential**
Revision:	**DRAFT 02**
Due Date:	
Date of submission:	**Nov 2021**

1. Overview of the local pilot action – Confindustria Bergamo 7
2. Planned activities 11
3. Indicators (KPIs) and monitoring 13

Overview of the local pilot action – Confindustria Bergamo

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:

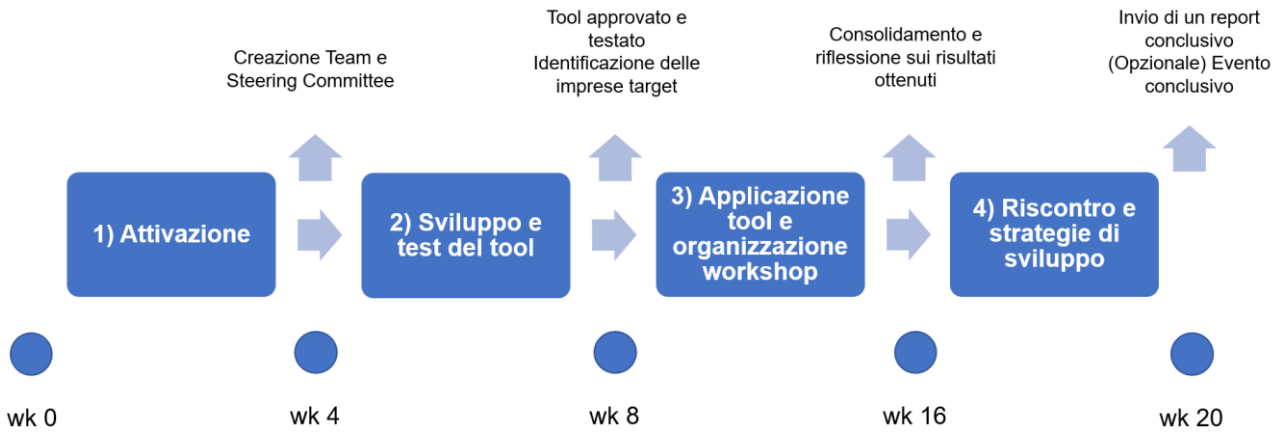
- **Local context and CE approach**
  The local context of the local actions encompasses enterprises from the Bergamo province. The targeted companies are SMEs from the manufacturing sector
  The assessment allows to evaluate the status and the workshops would allow to understand how to improve in three areas:
    - design of new actions and strategies connected to the circular economy
    - optimal use through benchmarking companies and optimizing what enterprises already use
    - value recovery to implement trivial actions such as the reduction and recovery of waste finalized at recovering the value that was previously lost

- **Methodology**

The project described here has the general objective of developing, testing and applying a tool for assessing the maturity of companies in terms of Circular Economy.

In particular, it will be divided into 4 main phases:

- Project activation
- Circular Maturity Assessment Tool Test
- Application of the tool to the mapping of 5-15 virtuous companies associated with Confindustria Bergamo and identification of areas for improvement through workshops to be organized in the company
- Development of a final benchmarking report among the companies analyzed, possibly with a final dissemination event



Main steps:
1. DMA (Confindustria Bergamo)
2. CAS (Bergamo University)
3. Roadmap with corrective actions and suggestions
4. Dedicated consultancy to build the Business Model Canvas of each company profile

Digital maturity tool: Derived from Dreamy 4.0 Politecnico of Milano
Circular assessment tool: Circularity Assessment Score 2.0

- **Expected results**
  Through the parallel assessment of digital and circular maturity, SMEs will be able to auto-assess their readiness with respect to the green and digital transitions, which will be relevant to drive investments in the short term. Thanks to the dedicated workshop, each company will be able to engage in brainstorming and reflections with the involved experts, as well as with other functions inside the company, so to overcome the so-called silos thinking. In addition, the benchmarking report will allow SMEs to achieve a deeper understanding on their current digital and circular state related to other companies in the same area. Finally, the main opportunity for companies is to understand which actions to implement to become more digitalized and exploit circular processes to get a competitive advantage.

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

7. **Selection/identification of SMEs**
   The selection of SMEs is done through the Confindustria Bergamo database of companies. Firstly the companies are filtered in order to visualize only the ones that are qualified as SMEs regarding the number of employees and their annual turnover. Secondly, the selected SMEs are contacted through the Confindustria newsletter to inform them about the Circular 4.0 project and its opportunities. After having an adequate number of responses, the works proceeds in organizing the thematic workshops, the circular and digital maturity assessments in our headquarters or in company according to company preferences.

8. **Thematic workshops/seminars**
   The Local training Actions were organized in two different Front-desk modules:

1. Front-desk module 1 were addressed to the internal resources of Confindustria Bergamo that are involved in the Circular Acceleration Training 4.0 (CAT4.0) and in the Pilot actions, in particular in the implementation of the Digital Maturity Assessment (DMA). The module were scheduled for the 25th June 2021 and consisted in a meeting of three hour in a classroom of Confindustria Bergamo dedicated to the training activities.
2. Front-desk module 2 were addressed to the University of Bergamo that were involved in the Pilot action, and in particular in the implementation of the Circular Assessment Score (CAS) and in the construction of the Circular Business Model Canvas. The module were scheduled for the 29th June 2021 and was implemented through an online Teams meeting of four hours.

   The front-desk modules were supported also by an online course (OCT training course) that was available on the platform TalentLMS. The online course was composed by eight different module of one hour each; the materials and information provided by the Talent platform are fundamental for the correct implementation of services dedicated to the SMEs: the training activities (CAT4.0) and the pilot action (implementation of the assessment tools and the circular business model canvas).

9. **Circular CE capability/potentiality and Digital Maturity Assessment of SMEs**
   Regarding the digital maturity assessment, Politecnico di Milano and Assoconsult have developed an online self-assessment tool Test Industria 4.0, available free of charge on the website: http://preparatialfuturo.confindustria.it/digital-innovation-hub/check-aziendale-online/

   The Industry 4.0 Test provides a first indication of the digital maturity of your company, with the intention of photographing its positioning with respect to the possibilities offered by the Industry 4.0 logic. The level of maturity is measured against four dimensions of analysis (Execution, Monitoring and Control, Technologies and Organization) in the processes that form the value chain of a company.

   On the other hand, the tool used for the circularity assessment is the CAS 2.0, it will be applied by the experts of the University of Bergamo in order to make sure the companies understand the questions and fill them in the most accurate way.

10. **Identification of innovation needs and investment plan**
    The University of Bergamo will then merge the results of the digital maturity test with the circular assessment score in a single report. This report will present to each company

the current state on both maturities and a roadmap on which actions to take in order to develop both their digital and circular maturity.
As discussed during the partner meeting on 02.11.2021, each company supported should receive a document established on the basis of 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

Consequently this activity should describe the process for the draft of those recommendations, like for instance involvement of experts and setup of a roadmap (example for AURA-E).

Each of the above activity can be split into several steps (sub-activities) as relevant for each pilot action. But we recommend keeping it simple.

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

Title	Selection and identification of SMEs	**Start date**	11/2021
		End date	12/2021
Description The selection of SMEs is done through the Confindustria Bergamo database of companies. Firstly the companies are filtered in order to visualize only the ones that are qualified as SMEs regarding the number of employees and their annual turnover. Secondly, the selected SMEs are contacted through the Confindustria newsletter to inform them about the Circular 4.0 project and its opportunities. After having an adequate number of responses, the works proceeds in organizing the thematic workshops, the circular and digital maturity assessments in our headquarters or in company according to company preferences.			
Results			
1	Identification of 15 SMEs		

Title	Thematic workshops	Start date	.YYYY
		End date	MM.YYYY

Description

The Local training Actions were organized in two different Front-desk modules:

1. Front-desk module 1 were addressed to the internal resources of Confindustria Bergamo that are involved in the Circular Acceleration Training 4.0 (CAT4.0) and in the Pilot actions, in particular in the implementation of the Digital Maturity Assessment (DMA). The module were scheduled for the 25th June 2021 and consisted in a meeting of three hour in a classroom of Confindustria Bergamo dedicated to the training activities.

2. Front-desk module 2 were addressed to the University of Bergamo that were involved in the Pilot action, and in particular in the implementation of the Circular Assessment Score (CAS) and in the construction of the Circular Business Model Canvas. The module were scheduled for the 29th June 2021 and was implemented through an online Teams meeting of four hours.

The front-desk modules were supported also by an online course (OCT training course) that was available on the platform TalentLMS. The online course was composed by eight different module of one hour each; the materials and information provided by the Talent platform are fundamental for the correct implementation of services dedicated to the SMEs: the training activities (CAT4.0) and the pilot action (implementation of the assessment tools and the circular business model canvas).

Results

1	Front-desk module 1	**Date**	25/6/2021
2	Front-desk module 2	**Date**	29/6/2021
3		**Date**	
n		**Date**	

Title	Digital and circular maturity assessment	Start date	12/2021
		End date	3/2022

Description

Regarding the digital maturity assessment, Politecnico di Milano and Assoconsult have developed an online self-assessment tool Test Industria 4.0, available free of charge on the website: http://preparatialfuturo.confindustria.it/digital-innovation-hub/check-aziendale-online/

The Industry 4.0 Test provides a first indication of the digital maturity of your company, with the intention of photographing its positioning with respect to the possibilities offered by the Industry 4.0 logic. The level of maturity is measured against four dimensions of analysis (Execution, Monitoring and Control, Technologies and Organization) in the processes that form the value chain of a company.

On the other hand, the tool used for the circularity assessment is the CAS 2.0, it will be applied by the experts of the University of Bergamo in order to make sure the companies understand the questions and fill them in the most accurate way.			
Results			
1	Digital and Circular maturity assesments		

Title	Identification of innovation needs and investment plan	**Start date**	3/2022
		End date	4/2022
Description The University of Bergamo will then merge the results of the digital maturity test with the circular assessment score in a single report. This report will present to each company the current state on both maturities and a roadmap on which actions to take in order to develop both their digital and circular maturity. Along with the report, it will also be created a business model canvas that encompasses the findings of both the circular and digital assessments.			
Results			
1	Final report of assessment activities and roadmap	**Dd/mm/yy**	

Indicators (KPIs) and monitoring

The KPIs defined for the four above-mentioned phases are as follows:

1. Selection/identification of SMEs:
   - Number of identified SMEs
2. Thematic workshops/seminars:
   - Number of workshops
   - Average number of participants
3. Circular CE capability/potentiality and Digital Maturity Assessment of SMEs
   - Number of SMEs that were assessed with the Digital Maturity Assessment
   - Number of SMEs that were assessed with the Circular Assessment Score
4. Identification of innovation needs and investment plan:
   - Number of SMEs that participated in the post-assessment workshop
   - Average number of improvement actions/innovation identified per company

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, AWS**
Dissemination level:	**CO = confidential**
Revision:	**DRAFT 02**
Due Date:	**November 2021**
Date of submission:	**December 2021**

1. Overview of the local pilot action - Austria (Austria Wirtschaftsservice) 7
2. Planned activities 11
3. Indicators (KPIs) and monitoring 13

Overview of the local pilot action - Austria (Austria Wirtschaftsservice)

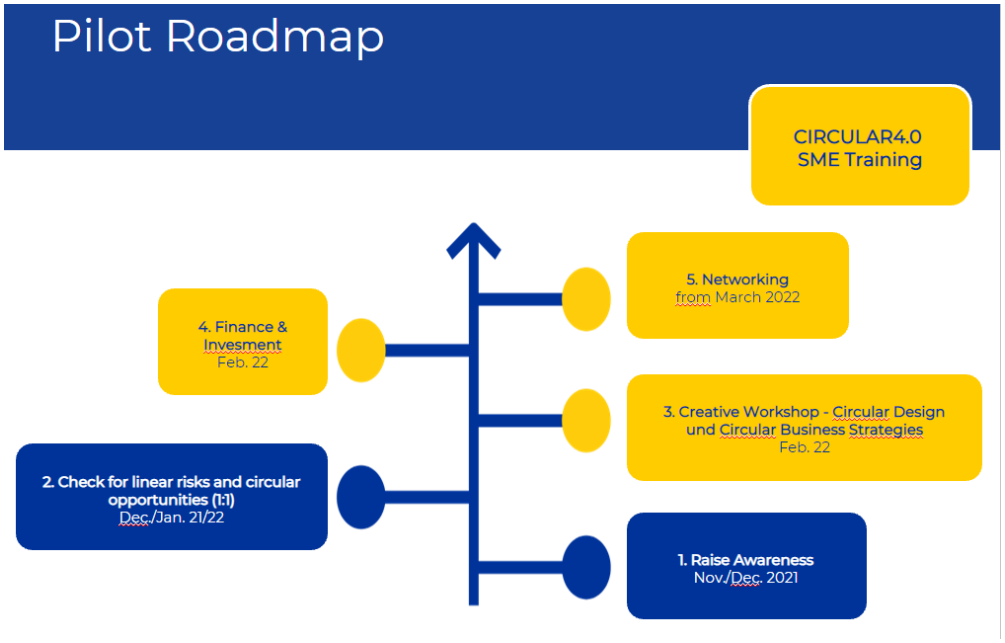
AWS has started to work with experts to plan out the pilot actions, based on what has been developed with the other German speaking partners.

The pilot action is planned out in the following models:

1. Raise awareness for CE supported by digitalization
2. Understanding the business case of CE with digital support
3. Circular business strategies in den specific sectors (sector specific training)
4. Finance & Investment
5. Networking

Not all steps are mandatory – depending on the demands/requirements of the SMEs the different modules will be applied. Just the first module is more or less mandatory because we need it to come into contact with the SMEs and to build the community.

1:1 assistance starts immediately after the first module. Module 2 is implemented in the form of a workshop but just for one company (CEO + additional employees). Module 3, 4 and 5 can be carried out either as individual 1:1 assistance or as group workshops (depending on the demands/requirements of the SMEs



Expected results

We expect to assist 15 companies with their journey to introduce circular economy in their businesses. With the kick-off workshop we hope to educate companies on what circular economy is and what it could mean for their respective businesses. The 1:1 assistance is an opportunity for the companies to dive deeper into their business cases and to find specific ways to introduce circular economy e.g., when producing a product with the help of digitalisation. The creative workshops intend to help companies with the circular design of their products and services and plan their journey beyond the project life.

Planned activities

MODUL 1

Raise Awareness for CE supported by digitalization (community building)

Objective: to raise awareness of the opportunities of the circular economy through information events for specific sectors / several companies (building & construction, wood industry, recycling/water treatment, waste electronic equipment)

Format:

- Networking event/(online) workshop
- 1-2 hours
- An event is planned and carried out for each of the three sectors
- The entire value chain is invited

Topics:

- Presentation of the Circular 4.0 project
- Presentation of EU Circular Economy Action Plan
- Basics of the circular economy and how digitalization can support transformation (with focus on the respective sectors)
- Presentation of two (regional) case studies
- Q&A + discussion
- Forecast: what does Circular4.0 offer the participating companies?

Tools:

- Regional best practice cases

MODUL 2

Understanding the Business Case of CE
Objective: Create awareness / raise awareness of the business case of CE and digital transformation

Format:

- (Online) coaching for one company - 1:1 assistance
- 2-4 hours

Topics:

- Entry point: linear risks and circular opportunities of sectors - as a check
- Knowledge transfer of added value of the circular economy for company
- Opportunities at point of intersection of CE and digital technologies for various circular economy business models

Tools:

- Check for linear risks and circular opportunities (based on the example of the CAS) + digi check (evaluation of contexts)
- Katch-e CE Strategist (https://www.katche.eu)
- MOVECO Qualification tools (http://www.interreg-danube.eu/news-and-events/programme-news-and-events/2577)
- SMEs will receive:
- an evaluation of the check for linear risks and circular opportunities (based on the example of the CAS) and digital maturity check (+ evaluation of contexts)
- Circular business model canvas

MODUL 3

Circular business strategies in specific sectors (sector specific training)
Objective: Know-how transfer & sector-specific workshops (building & construction, wood industry, recycling/water treatment, waste electronic equipment) - creative process

Format:

- Workshop for one sector, several companies
- The entire value chain is invited (if possible, cover the entire value chain of specific sector)
- Creative session

Topics:

- Focus: understanding of possible new circular business models and how digital technologies can support them

Tools:

- Creative tools (CE idea creation game: https://www.katche.eu/knowledge-platform/tools-and-training-materials/katch_e-tools/katch_up-board-game/m) to stimulate the users to generate value ideas from a business challenge, applying circular design and circular business strategies. The tools should act as a guide to get an idea about an innovative product-service or to solve a real business problem and generate opportunities

- Outsourcing to external experts

Title	Selection/identification of SMEs	Start date	12.2021
		End date	03.2022

In December 2021 we have published a press release as well as social media posts in order to find companies to take part in our pilot action. Moreover, we have sent out the information on our company newsletter (reaching hundreds of aws clients) as well as shared the information with our expert in order to circulate the ad.

For any company that has sent us an e-mail stating their interest we have sent a form to fill out asking for the following information:

- Why would you like to take part in the pilot action?

- Have you already taken measures to introduce circular economy in your company and if so, which ones?

- What are your expectations for the pilot action?

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	Selection/identification of SMEs	Date	12.2021 - 03.2022
		Date	
		Date	
		Date	

Title	Modul 1	Start date	01.2022
		End date	01.2022

For modul 1 we plan to organize a kick-off meeting for all interested companies to introduce the principal concepts of circular economy and how to introduce them into their daily work.

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	Modul 1	Date	01.2022

		Date	
		Date	
		Date	

Title	**Modul 2**	**Start date**	02.2022
		End date	02.2022
For modul 2 every company taking part in the pilot to receive the opportunity for a 1:1 session with our experts for about 2-3 hours where they have the opportunity to discuss their individual business cases and undergo digital maturity assessments as well as a circularity assessment.			
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	Modul 2	**Date**	01-02.2022
		Date	
		Date	
		Date	

Title	**Modul 3**	**Start date**	03.2022
		End date	03.2022
Circular business strategies in specific sectors (sector specific training) Objective: Know-how transfer & sector-specific workshops (building & construction, wood industry, recycling/water treatment, waste electronic equipment) - creative process.			
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	Modul 3	**Date**	03.2022
		Date	
		Date	
		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).

One of the KPIs will be a satisfactory survey. As we have asked all companies taking part what their expectations are in the pilots, we will ask them after the pilots if we have met their expectations. We will define the exact KPIs as soon as all companies are identified.

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, ITG**
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 – Salzburg (ITG)

Local context and CE approach

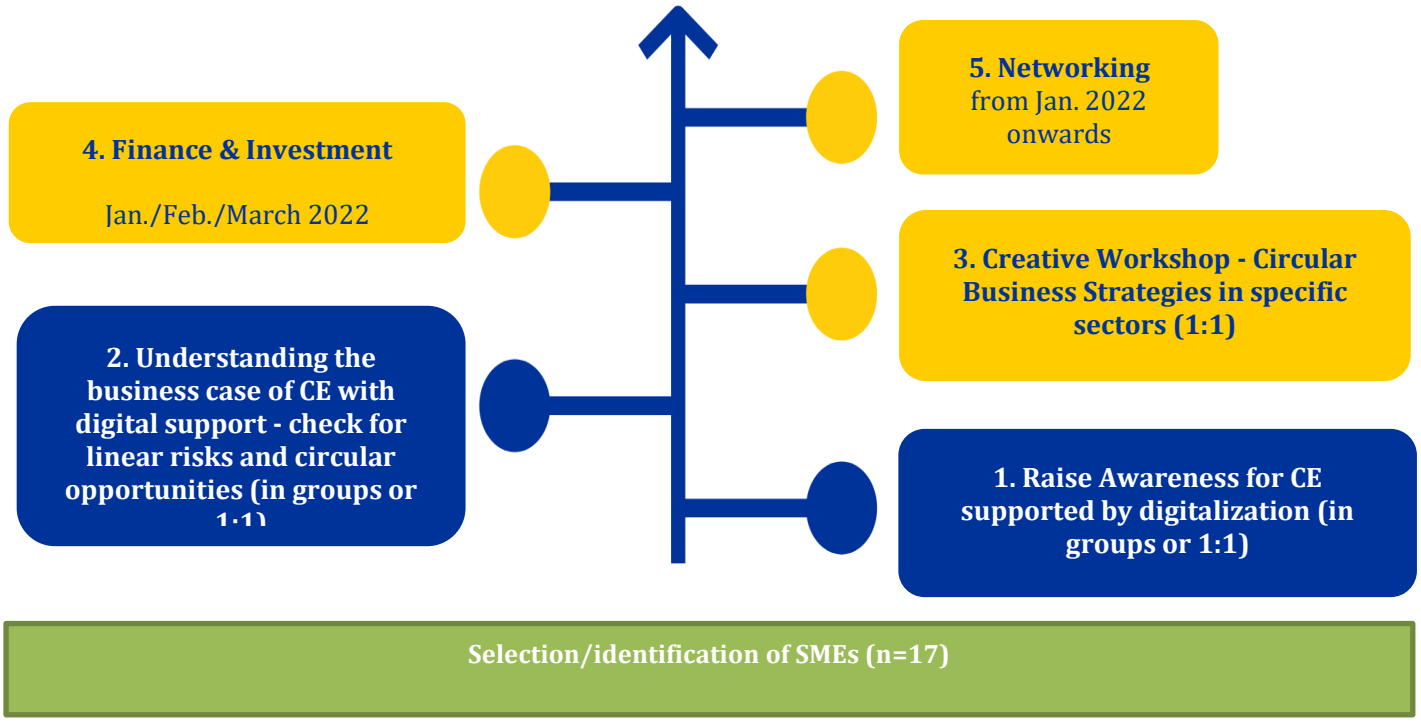
The focus of the ITG work in WP T3 is D.T3.1.1 AS feasibility plan to foster CE design model with digitalisation processes. ITG starts to gather information on possible organization, actions, resources, and equipment needed to set-up Alpine regional centers able to promote digitalised CE activities addressed to SMEs on the design model and eco-innovation in general. Therefore, desk research and an analysis of existing structures (within the region and beyond) and requirements on a regional political, economic, sociological, and technical basis is performed.

Due to the regional economy structure of Salzburg, SMEs from the following sectors are mainly targeted for the local actions:

- building and construction
- wood / timber industry
- plastics industry (not as a sector but as a material with great impact on many sectors)

Methodology

In order to assist SMEs in their circular transformation, ITG developed together with the Austrian and German partners and an external expert five modules to promote and implement digitalised CE activities. Depending on the SME's individual demands/requirements, different modules are applied. This means, that not all modules are mandatory, except from the first one, as it is needed to get in contact with the SMEs and to build up the community. Right after the first module, 1:1 assistance starts by performing workshops for one company (CEO + additional employees) with checks for linear risks and circular opportunities within module 2. Modules 3,4, and 5 can be carried out either as individual 1:1 assistance or as group workshop, depending on the needs and requirements of the SMEs.



Expected results

The aim of A.T3.2 is to foster CE design model with digitalisation processes in at least 17 SMEs mainly in the sectors building and construction, wood / timber industry and plastic industry. Awareness for CE activities will be raised on a very broad level e.g. by tenders on the homepage. These SMEs are coached in CE activities, at first by raising awareness to the importance and the chances of CE, secondly by the check for linear risks and circular opportunities. SMEs benefit from the checks and the detailed results they get after the workshop performed by the external expert. Additionally, SMEs are coached in further CE activities (modules 3-4), which should support them in developing a business strategy and a transformation plan. Networking and exchange with other SMEs are another aim of the pilot action (module 5). SMEs should be motivated and enthusiastic about further working on CE through knowing the chances and advantages of CE and by the help of an expert in the first steps of implementation CE activities.

Within the pilot action, the developed modules should be tested for their applicability and their usefulness. The tools and the generated knowledge on CE should be provided to more SMEs above the project framework. Thus, it is important that CE knowledge is provided on a low level and it should be easily applicable. In the long run, the knowledge collected during pilots should be made available to other SMEs within the region of Salzburg.

Planned activities

11. Selection/identification of SMEs

ITG decided to focus on the following sectors:

- **Building and construction**
  This sector is an especially lively one in most project areas and certainly a sector with a lot of potential to work with during the course of the project. In Austria, more specifically in Salzburg, there are almost 3000 companies within this sector. According to the economic cycle of the construction industry in Salzburg, the following picture emerges: the positive economic development in the construction industry in recent years has continued so far. Despite the Corona crisis, the construction industry in Salzburg can record a high level of workload, which reliably keeps an important part of the regional economy running and secures thousands of jobs. Digitalization and circular economy are currently seen as the greatest challenges but also opportunities in the sector (cf. member survey of the building and construction industry of Salzburg). For these reasons, regional research institutes, such as the Kompetenzzentrum Bauforschung (competence center for research within the sector of building and construction), deal with the building industry in connection with circular economy issues.
  For the Austrian government authorities, the promotion of circular economy and material efficiency is very important. In particular, the preparation for the reuse of components and the ensuring of a high quality of recycled building materials to recycle construction and demolition waste is supported by regulations.
- **Wood / timber industry**
  The wood and timber industry are also very present in Salzburg. The only cluster the region of Salzburg has so far, is the cluster in timber industry. Therefore, this sector has also been chosen for CE activities.
- **Plastics industry** (not as a sector but as a material with great impact on many sectors)

As the aim is to include at least 17 SMEs in the pilot actions, ITG might not only to include SMEs from the three above mentioned sectors but expand the target group also to other sectors like print and life sciences.

ITG publishes the invitation for the participation in the workshops on their homepage and, additionally, invites and contacts SMEs directly to apply for the participation in these workshops. Selected SMEs (First Come – First Served) are chosen to participate in the workshops. Additionally, SMEs in the wood and timber industry will be contacted via the Holzcluster Salzburg.

Title	Selection/identification of SMEs	**Start date**	11.2021
		End date	03.2022

Description

The aim of this activity is to select and identify at least 17 SMEs for participation in local action.

Sub-activities

- Identification of sectors
- Raising awareness among SMEs in sectors – Call for applications
- Selection of SMEs

Results - Sectors, the addressed SMEs are operating in, have been selected - Awareness is raised among SMEs in predefined sectors by publishing information and invitation to participate in local actions on homepage (call for applications); additionally, SMEs are contacted directly by email (direct approach) or via Holzcluster Salzburg - At least 17 SMEs are selected based on first come – first served principle for participation in local action			
1	Identification of sectors	**Date**	Until 10/2021
2	Raising awareness / call for applications	**Date**	Until 03/2022
3	17 SMEs are selected for CE + digital maturity assessments	**Date**	Until 03/2022

12. Thematic workshops/seminars

Together with German-speaking partners and the external expert a module system has been developed to be able to foster CE activities in SMEs. The aim of the development of the modules is to reach SMEs on a low-threshold level to increase motivation, acceptability, and applicability of CE tools within SMEs. ITG developed these modules together with an external expert, whose knowledge, experience, and know-how are outstanding. Dr. Sonja Eser is circular design consultant and supports companies, administrations, and organisations in the development of products, processes, buildings, and areas for regenerative circular economy (https://www.sinnen-wandel.de). She will also be part of the training courses with SMEs until the knowledge building has reached an appropriate level ITG internally.
In summary, all these activities should ensure, that the modules can also be easily implemented from theory into practice to as many SMEs as possible within the region of Salzburg.

The following modules have been developed to be addressed to the SMEs:

- **Modul 1**: Raise Awareness for CE supported by digitalization (community building)
  Objective: to raise awareness of the opportunities of the circular economy through information events for specific sectors / several companies (building & construction, wood industry, recycling/water treatment, waste electronic equipment)
- **Modul 2:** Understanding the Business Case of CE
  Objective: create awareness / raise awareness of the business case of CE and digital transformation
- **Modul 3:** Circular business strategies in specific sectors (sector specific training)
  Objective: know-how transfer & sector-specific workshops (building & construction, wood industry, recycling/water treatment, waste electronic equipment) - creative process
- **Modul 4:** Finance & Investment
  Objective: advice on financing & investment options and imparting knowledge on the implications of circular business models for the financing structure of SMEs
- **Modul 5:** Networking
  Objective: regular exchange between companies (of one value chain or with similar challenges), between investors, between authorities, etc.

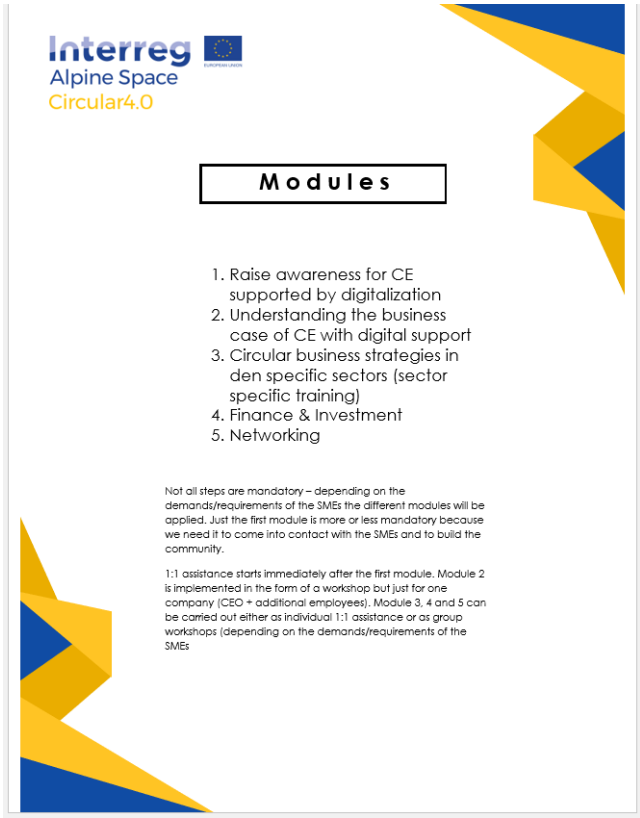
<table>
<tr><td rowspan="2">Title</td><td rowspan="2">Thematic workshops/seminars</td><td>Start date</td><td>11.2021</td></tr>
<tr><td>End date</td><td>03.2022</td></tr>
<tr><td colspan="4">Description

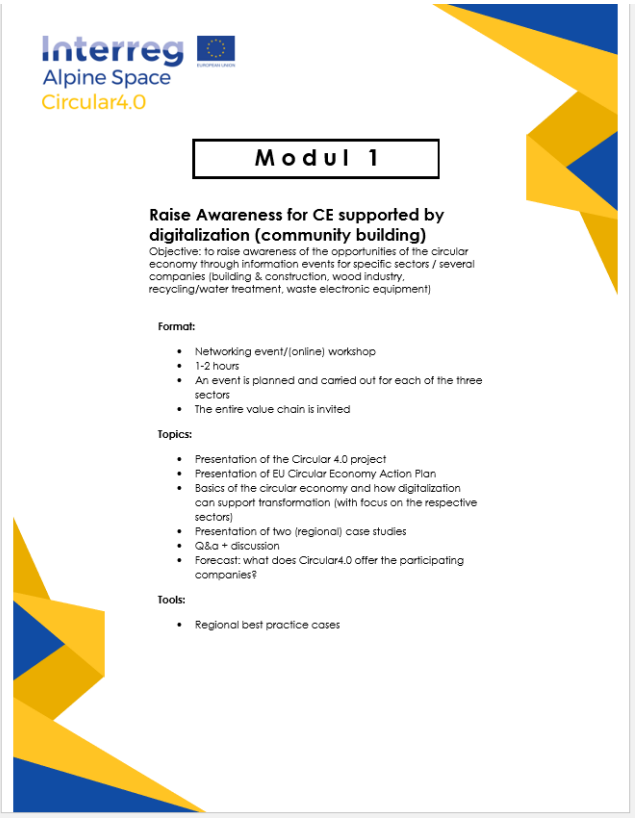
The aim of this activity is to organize local workshops/seminars with at least 17 SMEs where the developed tools (modules) are applied (in groups and/or in 1:1 workshops)

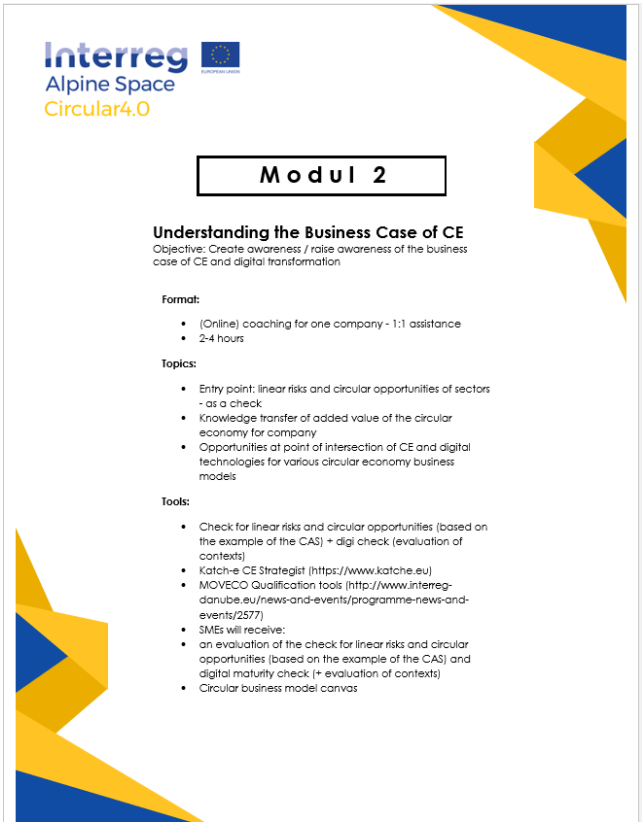
Sub-activities

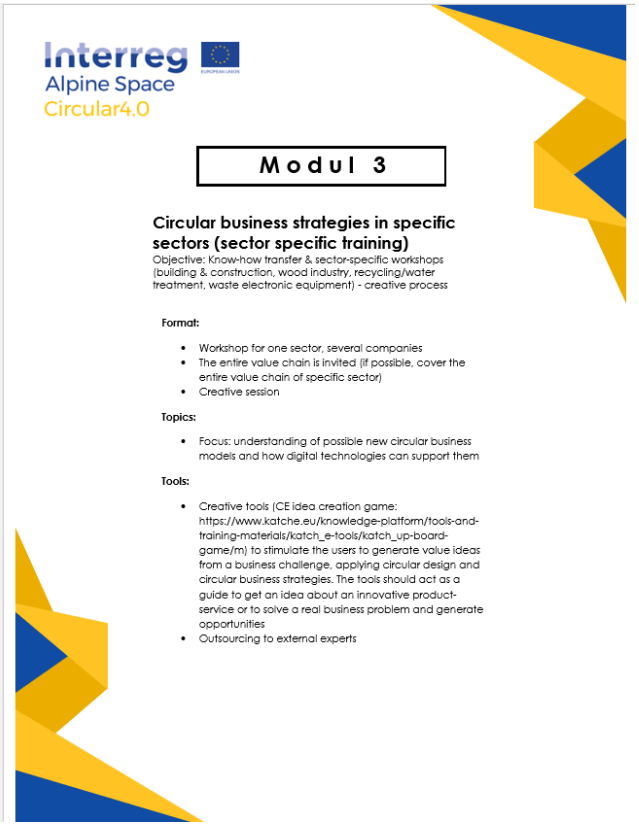
- Organization of workshops with 17 SMEs (in groups and/or in 1:1 workshops)
- Definition of training modules to be applied to 17 SMEs</td></tr>
<tr><td colspan="4">Results

- Modul 1 – Raise awareness is applied to at least 17 SMEs (either in groups or in 1:1 workshops)
- Modul 2 – Understanding the business case of CE is applied to at least 17 SMEs (in groups or 1:1 workshops)
- Modul 3-5 are optionally applied to 17 SMEs</td></tr>
<tr><td>1</td><td>Modul 1 – Raise awareness is applied to at least 17 SMEs (either in groups or in 1:1 workshops)</td><td>Date</td><td>Until 10/2021</td></tr>
<tr><td>2</td><td>Modul 2 – Understanding the business case of CE is applied to at least 17 SMEs (in 1:1) workshops</td><td>Date</td><td>Until 03/2022</td></tr>
</table>


Interreg
Alpine Space
Circular4.0
Modules
1. Raise awareness for CE supported by digitalization
2. Understanding the business case of CE with digital support
3. Circular business strategies in den specific sectors (sector specific training)
4. Finance & Investment
5. Networking
Not all steps are mandatory – depending on the demands/requirements of the SMEs the different modules will be applied. Just the first module is more or less mandatory because we need it to come into contact with the SMEs and to build the community.
1:1 assistance starts immediately after the first module. Module 2 is implemented in the form of a workshop but just for one company (CEO + additional employees). Module 3, 4 and 5 can be carried out either as individual 1:1 assistance or as group workshops (depending on the demands/requirements of the SMEs


Interreg
Alpine Space
Circular4.0
Modul 1
Raise Awareness for CE supported by digitalization (community building)
Objective: to raise awareness of the opportunities of the circular economy through information events for specific sectors / several companies (building & construction, wood industry, recycling/water treatment, waste electronic equipment)
Format:
Networking event/(online) workshop
1-2 hours
An event is planned and carried out for each of the three sectors
The entire value chain is invited
Topics:
Presentation of the Circular 4.0 project
Presentation of EU Circular Economy Action Plan
Basics of the circular economy and how digitalization can support transformation (with focus on the respective sectors)
Presentation of two (regional) case studies
Q&a + discussion
Forecast: what does Circular4.0 offer the participating companies?
Tools:
Regional best practice cases


Interreg
Alpine Space
Circular4.0
Modul 2
Understanding the Business Case of CE
Objective: Create awareness / raise awareness of the business case of CE and digital transformation
Format:
(Online) coaching for one company - 1:1 assistance
2-4 hours
Topics:
Entry point: linear risks and circular opportunities of sectors - as a check
Knowledge transfer of added value of the circular economy for company
Opportunities at point of intersection of CE and digital technologies for various circular economy business models
Tools:
Check for linear risks and circular opportunities (based on the example of the CAS) + digi check (evaluation of contexts)
Katch-e CE Strategist (https://www.katche.eu)
MOVECO Qualification tools (http://www.interreg-danube.eu/news-and-events/programme-news-and-events/2577)
SMEs will receive:
an evaluation of the check for linear risks and circular opportunities (based on the example of the CAS) and digital maturity check (+ evaluation of contexts)
Circular business model canvas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Alpine Space
Circular4.0
Modul 3
Circular business strategies in specific sectors (sector specific training)
Objective: Know-how transfer & sector-specific workshops (building & construction, wood industry, recycling/water treatment, waste electronic equipment) - creative process
Format:
Workshop for one sector, several companies
The entire value chain is invited (if possible, cover the entire value chain of specific sector)
Creative session
Topics:
Focus: understanding of possible new circular business models and how digital technologies can support them
Tools:
Creative tools (CE idea creation game: https://www.katche.eu/knowledge-platform/tools-and-training-materials/katch_e-tools/katch_up-board-game/m) to stimulate the users to generate value ideas from a business challenge, applying circular design and circular business strategies. The tools should act as a guide to get an idea about an innovative product-service or to solve a real business problem and generate opportunities
Outsourcing to external experts

Modul 4

Finance & Investment

Objective: advice on financing & investment options and imparting knowledge on the implications of circular business models for the financing structure of SMEs

Format:

- Handout and possibly reference to external experts (establish contact)
- Consultation
- 1-2 hours (+ self-study)

Topics:

- Specific funding options
- Typical challenges with circular business models, product service systems and pre-financing (e.g. via expert lecture)
- Presentation of the EU taxonomy and its implications for SMEs

Tools:

- Regional guidelines such as the Funding Guide for Environmental Protection and Energy from the Bavarian State Office for Environment: https://www.umweltpakt.bayern.de/werkzeuge/foerderfibel/ (overview of all funding opportunities & financial instruments related to sustainability / circular economy)
- Booklet with collected funding opportunities from Circular4.0 with reference to digitization (compilation from Output D.T2.4.1 & D.T2.4.3)
- MOVECO Toolbox: Financing Instruments - http://www.interreg-danube.eu/news-and-events/programme-news-and-events/2568 (List of Funding Instruments for the circular economy, Interregional match-making tool, Concept for Investor Day, Public-private partnership investment opportunities in the circular economy)
- Individual consultation on request

Interreg
Alpine Space
Circular4.0

Modul 5

Networking

Objective: regular exchange between companies (of one value chain or with similar challenges), between investors, between authorities, etc.

Format:

- (Online) group of regulars
- Guests are invited for certain topics (e.g. topic financing: invite investors)
- Regular events & fixed dates
- 1 hour

Topics:

- General exchange between companies: state of the art, current developments
- Best Practices "Flagship Companies" from T2.2.1
- New guidelines, action plans (invitation of authorities from T2.2.4)
- Financing (e.g. investor brunch as a special format, investors from T2.4.2)

Tools:

- Networking-plattform
- LinkedIn group

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

The following tools are used for the digital maturity and the CE assessment as part of module 2: understanding the business case of CE:

- Regional best practice cases
- Check for linear risks and circular opportunities (based on the example of the CAS) + digi check (evaluation of contexts)
- Katch-e CE strategist tool to help the user identify circular business opportunities and provide ideas and inspiration along the process of defining a circular business model.
- Katch-e CE idea creation game to stimulate the users to generate value ideas from a business challenge, applying circular design and circular business strategies. The tools should act as a guide to get an idea about an innovative product-service or to solve a real business problem and generate opportunities
- Moveco qualification tools – principles of circular economy & business models for the circular economy

<table>
<tr><td>Title</td><td colspan="2">Circular CE capability/potentiality and digital maturity assessment of SMEs</td><td>Start date</td><td>10.2021</td></tr>
<tr><td></td><td colspan="2"></td><td>End date</td><td>03-2021</td></tr>
<tr><td colspan="5">Description

The following tools are used for the digital maturity and the CE assessment:

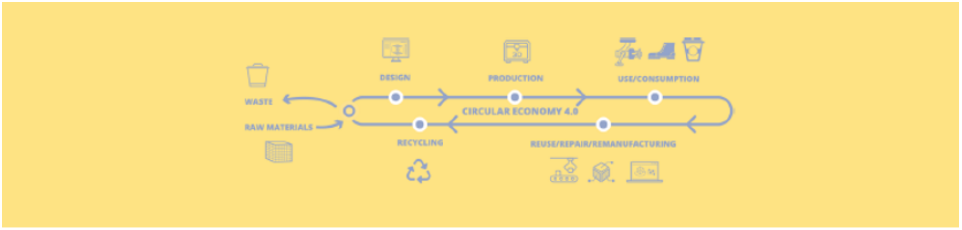
○ Regional best practice cases
○ Check for linear risks and circular opportunities (based on the example of the CAS) + digi check (evaluation of contexts)
○ Katch-e CE strategist tool to help the user identify Circular Business Opportunities and provide ideas and inspiration along the process of defining a Circular Business Model.
○ Katch-e CE idea creation game to stimulate the users to generate value ideas from a business challenge, applying circular design and circular business strategies. The tools should act as a guide to get an idea about an innovative product-service or to solve a real business problem and generate opportunities
○ Moveco qualification tools – principles of circular economy & business models for the circular economy</td></tr>
<tr><td colspan="5">Results
- Circular CE capability/potentiality and digital maturity assessment is applied to at least 17 SMEs with the above defined tools within module 2: Understanding the business case of CE with digital support - check for linear risks and circular opportunities</td></tr>
<tr><td>1</td><td colspan="2">Circular CE capability/potentiality and digital maturity assessment is applied to at least 17 SMEs with the above defined tools</td><td>Date</td><td>Until 03/2022</td></tr>
</table>

14. Identification of innovation needs and investment plan

SMEs participating in the training course will work through modules 1 & 2, as these are the obligatory modules. This means, that within a 1:1 session with the expert Dr. Sonja Eser, SMEs will be checked for linear risks and circular opportunities (based on the example of the CAS) and the digit check (evaluation of contexts). As a result, SMEs will be provided with the evaluation and the results of this check and will additionally get the circular business model canvas. Innovation needs, and – if appropriate – investment plans can be derived from these results. Each SME will receive a document established on the basis of the assessment and in collaboration with the SME (at least one bilateral meeting between the SME and the expert) at least one recommendation covering any of the following aspects of the transformation of the company towards higher circularity (this means an increase of maturity level) will be developed. This recommendation with a time horizon from 6 months up to one year can for example be:

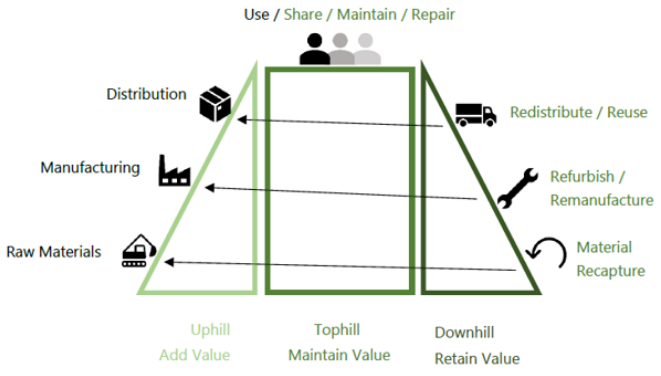
- technology adoption
- new or improved process
- new or improved or transformed business model
- new or improved products
- new or improved services
- digitally supported (as far as possible)

A standardized document for the delivery of the results from the check for linear risks and circular opportunities has been developed, here is an excerpt from the results for the SME (find the whole document in annex 1):



Auswertung

Nützliche Circular Strategies für Ihr Unternehmen:
(identifizierte Lösungsstrategien werden in die Grafik eingetragen, CS1-CS10)



Es wird kurz umrissen, welche Gedanken dazu für das Unternehmen besprochen wurden:

<table>
<tr><td rowspan="2">Title</td><td rowspan="2">Identification of innovation needs and investment plan</td><td>Start date</td><td>11.2021</td></tr>
<tr><td>End date</td><td>03.2022</td></tr>
<tr><td colspan="4">Description

Each SME will receive the results based on the check for linear risks and circular opportunities. At least one recommendation covering any of the following aspects of the transformation of the company towards higher circularity (this means an increase of maturity level) will be developed. This recommendation with a time horizon from 6 months up to one year can for example be:

- 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)</td></tr>
<tr><td colspan="4">Results
- 17 SMEs get the results from the check for linear risks and circular opportunities and can derive at least one recommendation for innovation needs to be implemented</td></tr>
<tr><td>1</td><td>Recommendation for innovation needs to be implemented</td><td>Date</td><td>Until 03/2022</td></tr>
</table>

Indicators (KPIs) and monitoring

To measure the results of the pilot action and the progress made, various key performance indicators (KPIs) have been defined beforehand (D.T2.5.2). These KPIs are part of the company dashboard and derive from the instruments used in module 2.

Additionally, the trainee's level of satisfaction, maturity improvements, and the impact on CE related to the pilot action are part of the monitoring.

To document the trainee's level of satisfaction, the participating SMEs will fill in a short questionnaire before the workshop takes place. This is also important to identify the expectations from and needs of the SMEs beforehand. After the workshop(s) took place, SMEs will fill in another questionnaire to ask for their satisfaction, if their expectations were fulfilled and if an added value was created to the company. Additionally, SMEs are asked, if they are motivated to further push the implementation of CE and if the contents and tools within the workshop were clear, practicable, understandable, and applicable. Participants are asked if all relevant topics have been covered, if the content is applicable to the company environment. Finally, SMEs are asked If they were satisfied with the organisation of the workshop, with the workshop instructor and with the duration of the workshop.

The exact tools for the measurement of maturity and the impact on CE will be defined later depending on the SMEs selected.

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, AUREAE**
Dissemination level:	**CO = confidential**
Revision:	**DRAFT 02**
Due Date:	**26/11/2021**
Date of submission:	**26/11/2021**

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2. Planned activities....11
3. Indicators (KPIs) and monitoring....13

Overview of the local pilot action – AUVERGNE RHONE ALPES ENTREPRISES

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.
  Any other information on the context, as relevant.
  Please mention which is the CE approach originally foreseen for your pilot (among those listed in the project: design, optimal use, value recovery) and add the justification – if relevant - to include one or more CE additional approaches.

  Our agency is missioned by the Auvergne-Rhône-Alpes Region to support companies of the industry and service to industry sectors.
  We have identified 10 000 SME's that have significant size or activity that we follow and support. Among them, 300 have been identified as "High potential" because of the progression of their turnover, their activity, and projects.
  For the pilot action, we finally decided not to focus on a particular sector nor to a particular CE approach but to open it to all the interested companies.
  The first criteria is the motivation of the CEO. We have noticed that companies that engage in the circular economy often do so out of the manager's conviction and it is the best way to get results.

- **Methodology**

  This part shall provide an overview of the methodology that will be used to select and assist SMEs in their circular transformation (common to all pilots).
  Please specify which tools will be used (among those listed in the toolkit – D.T2.3.3) and the justification for their selection.

  We build our pilot actions on different levels:
  - Circular industry path, the core of the pilot action, dedicated to support 25 SMEs with collective training and individual support
  - Intervention in events organized by partners, during which we present our tools and the circular industry path
  - Tools developed during the WP2, that are used to support the 25 SMEs but also other companies interested.
  - Actions to raise awareness on CE internally.

  The main action of our pilot action is the **Circular Industry Path,** aimed at raising awareness of SMEs on CE and helping them to define a roadmap to CE. It is a first step in CE, and this path has to be followed up by complementary support to implement the roadmap.

  GOALS and ADDED VALUE For the SMEs:

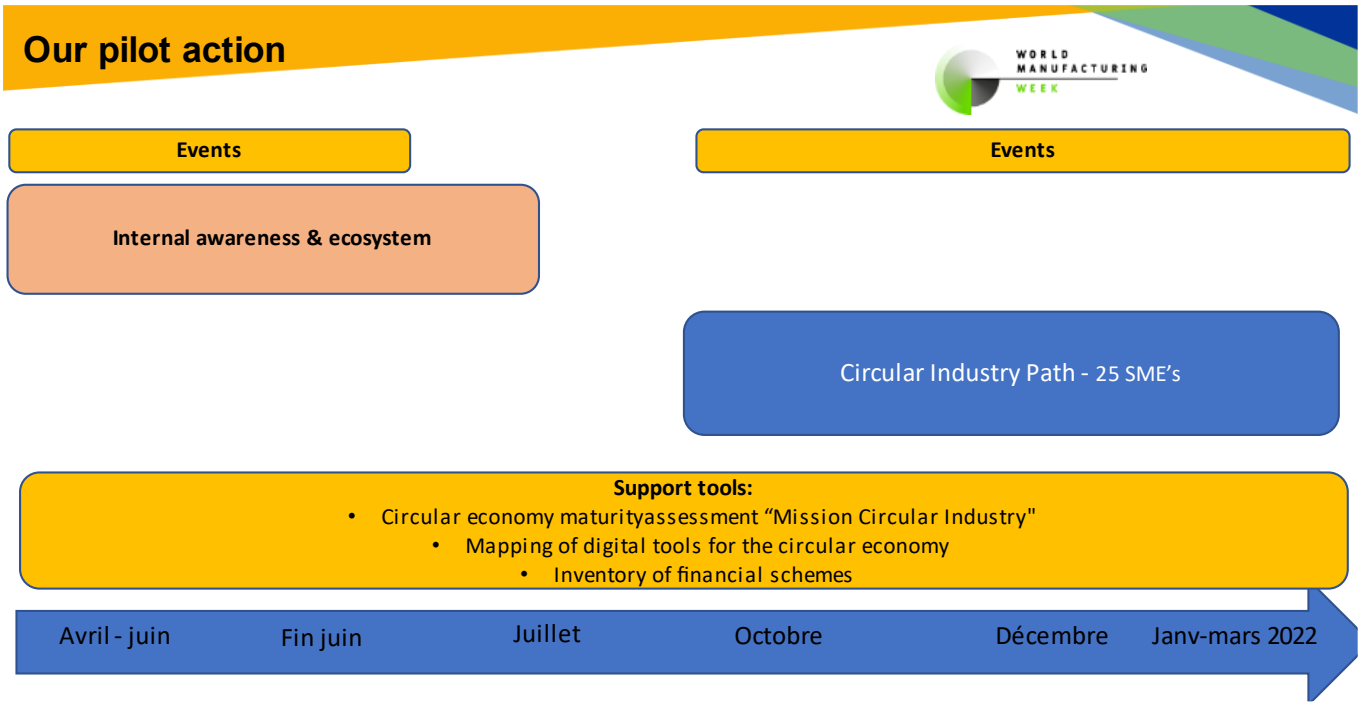
  - Anticipate the challenges of ecological transition
  - Understand what the circular economy is for industrial companies & identify opportunities
  - Imagine how to integrate this concept into their business

- Identify if digital tools make it possible to facilitate its deployment
- Launch a meaningful project within the company
- Define their priorities and build a circular economy roadmap
- Differentiate and gain in competitiveness

The program is composed of these elements:

1. A webinar to introduce CE
2. CE Assessment
3. One-day training workshop
4. One day of individual support for each company by a consultant to define the action plan for the company,
5. Personalised **support by a project manager from AURA Entreprises** to deploy the action plan

⇨ **25 SMEs** engaged in the **pilot action Circular Industry path** that started at the end of August and will end by the end of the year



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

With the program and pilot actions, the strategic objectives for our agency are to:

- Acquire tools to support companies towards the circular economy
- Propose complementary tools compared to already existing tools we already have to support SMEs
- Continue to build internal skills on these 2 priority themes: circular & digital economy

- Affirm our position in the ecosystem on these digital and circular economy topics

The pilot action will be successful if:

- The CEOs of the SMEs are motivated to carry on working on CE
- Companies have defined an action plan towards CE and have initiated at least 1 concrete action or a support program
- The program is followed by studies, investments, R&D programs

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

15. Selection/identification of SMEs

We decided to open widely the circular industry path.
We first sent an e-mail (cf following page) to all our 300 high potential SME's. We thought they could be interested in exploring CE, and that the size and potential of the companies could be relevant. The project managers of the agency also relayed this offer to the companies they were referent for.
The companies had to fill in a formular to explain their motivation and stakes for CE.
One month later, 10 high potential companies had filled the formular.
We than decided to open the program to all the SMEs that are supported by our agency. The e-mail was sent to 10 000 companies and relayed also by the agency project managers.
In 2 days, 15 companies answered and we closed the inscriptions.

16. Thematic workshops/seminars

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

The program is composed of these elements:

1. A w**ebinar to introduce CE:** by our CE expert: 2 sessions programmed: 24/08/21 and 12/10/21
2. **CE Assessment: online on our website** – each SME fills in the assessment before the training
3. **One-day training workshop:** by consultant OPEO to understand how to integrate CE in the business model of the company: 3 sessions programmed: 31/08; 1/09 and 19/10/2021
4. **One day of individual support for each company** by a consultant: to define the action plan for the company – From October 2021 to end of January 2022.
5. **Personalized support by a project manager from AURA Entreprises:** to deploy the action plan The project managers also attend the one-day individual support and can contribute with their knowledge of the economic local actors, public programs or other interesting connections.

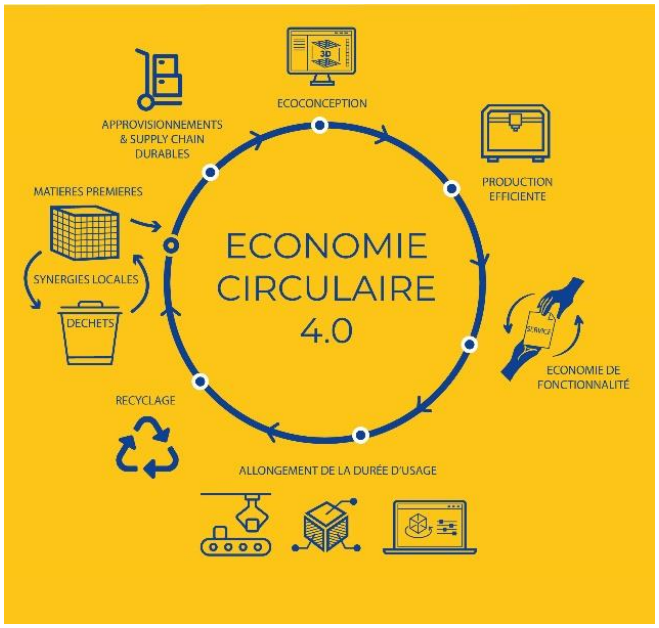
In April 2021, we published a tender to select consultants to:

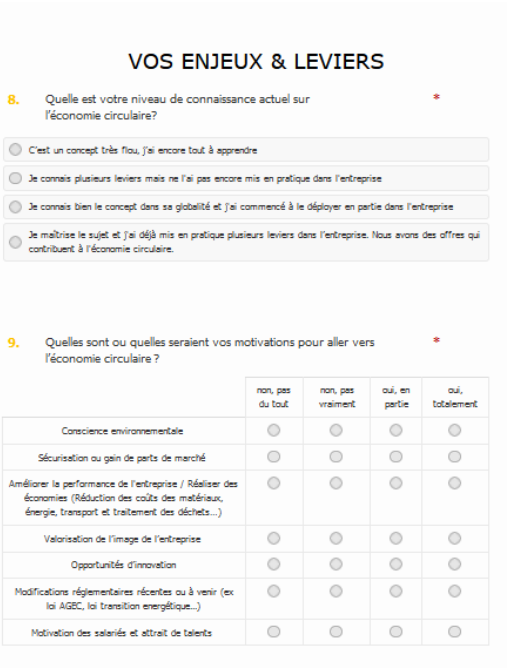
- Lead the 3 trainings. We selected the consulting firm OPEO, that has a strong industry experience and had just published a survey called “Pivoting towards Circular economy” with the French national institute for CE.
- Support the companies. Due to the number of companies to support (25), we selected 5 consulting firms for their experience on CE and the methodology they proposed.

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

This activity regroups the actions delivered to evaluate the CE and digital maturity of the SMEs. In this activity, the tools used should be specified.

We decided to mix CE and digital maturity in a single assessment we called **Mission « Circular Industry »** we developed internally, inspiring by the assessment proposed by IJS and other French tools. Our objective was to propose a simple and pragmatic tool adapted for SMEs.
This tool is available on our website: https://auvergnerhonealpes-entreprises.fr/testez-votre-maturite-sur-leconomie-circulaire
Through around forty questions, the company can assess its level of maturity in each of the circular economy's areas of action and consider whether digital tools can facilitate its deployment.
We developed the assessment on the Eval&Go platform, that can allow us to get easily a synthesis of the results.





VOS ENJEUX & LEVIERS

8. Quelle est votre niveau de connaissance actuel sur l'économie circulaire? *

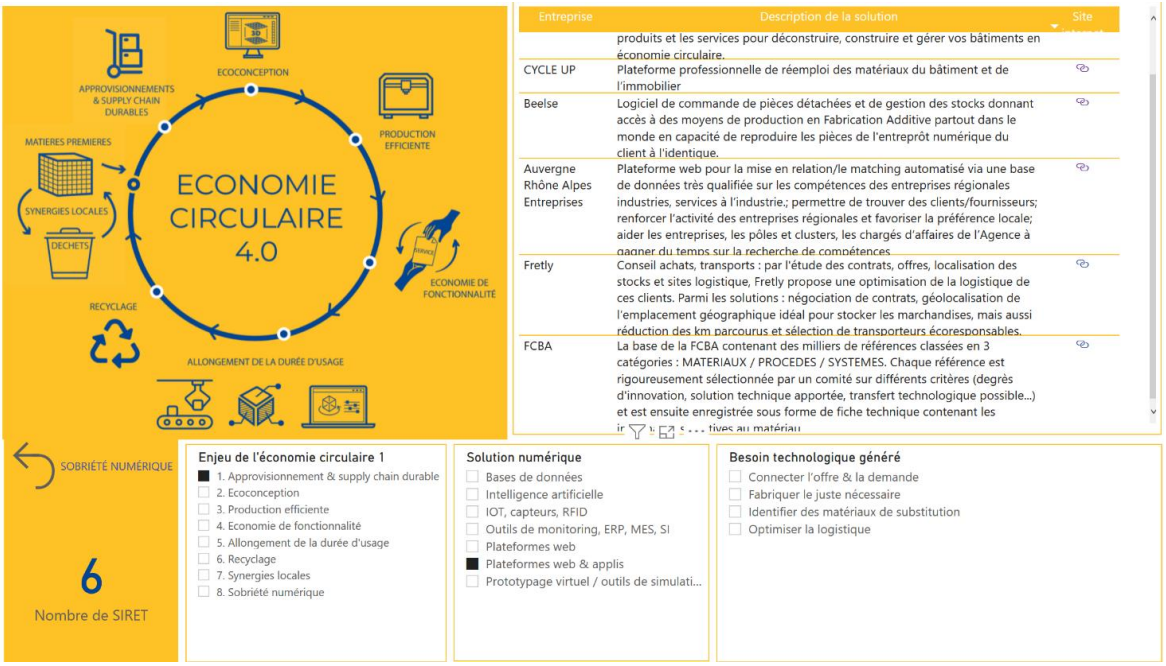
- C'est un concept très flou, j'ai encore tout à apprendre
- Je connais plusieurs leviers mais ne l'ai pas encore mis en pratique dans l'entreprise
- Je connais bien le concept dans sa globalité et j'ai commencé à le déployer en partie dans l'entreprise
- Je maîtrise le sujet et j'ai déjà mis en pratique plusieurs leviers dans l'entreprise. Nous avons des offres qui contribuent à l'économie circulaire.

9. Quelles sont ou quelles seraient vos motivations pour aller vers l'économie circulaire ? *

	non, pas du tout	non, pas vraiment	oui, en partie	oui, totalement
Conscience environnementale				
Sécurisation ou gain de parts de marché				
Améliorer la performance de l'entreprise / Réaliser des économies (Réduction des coûts des matériaux, énergie, transport et traitement des déchets...)				
Valorisation de l'image de l'entreprise				
Opportunités d'innovation				
Modifications réglementaires récentes ou à venir (ex loi AGEC, loi transition energétique...)				
Motivation des salariés et attrait de talents				

For the digital part of the program, we also developed a **mapping of regional digital solutions** for the circular economy. We identified 100 solutions that meet the challenges of the circular economy, most of them are regional but we also added national solutions for very specific needs.

The solutions are presented on the PowerBI Platform.



18. 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 on the basis of 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*

Consequently, this activity should describe the process for the draft of those recommendations, like for instance involvement of experts and setup of a roadmap (example for AURA-E).

Each of the above activity can be split into several steps (sub-activities) as relevant for each pilot action. But we recommend keeping it simple.

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

Title	Name of activity	**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**	

Each company that follows the Circular Industry path has to sign a participation contract to commit to follow the support. This document also aims to promote the European funding of the program.

At the end of each individual one-day support, the deliverable of the consultant is:

- a roadmap to CE
- an action plan for the next 3-6 months

The Agency project managers contribute also by:

- identifying if complementary support is needed: other relevant public schemes or financing schemes.
- identifying if digital tools could be relevant to deploy the action plan, with the help of the mapping of the 100 solutions.

We prepared a specific document for these purposes that we enclosed in Annex (“Bilan & feuille de route”).

At the end of the pilot action, we will be able to measure the number of companies:

- that followed the Circular Industry path
- that filled the “mission Circular industry” assessment and their CE maturity
- that launched new CE projects.

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).

⇨ We will use the tool proposed below by the program at the end of the pilot action to measure the results.

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**		**……..**		**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***	***Describe the inputs needed***	***Describe what has been done***	***Describe the inputs needed***	***Describe what has been done***	***Describe the inputs needed***	***Describe what has been done***		***Describe the Improvement***		***Describe the Improvement***	

ANNEX - CIRULAR INDUSTRY PATH

Auvergne Rhône-Alpes Entreprises | Interreg Alpine Space Circular4.0

Innovation

Participez à un parcours de formation-action gratuit pour intégrer les enjeux de demain dans votre business model, grâce à l'économie circulaire.

✓ **85%* DES INDUSTRIELS CONSIDÈRENT L'ÉCONOMIE CIRCULAIRE COMME UNE OPPORTUNITÉ !**

ET VOUS ?

Transitions écologique et numérique sont deux enjeux majeurs pour les entreprises.

Une gestion efficace de vos ressources peut vous permettre de tendre vers une industrie flexible, performante et responsable. A cet effet, l'économie circulaire et les outils digitaux sont de précieux leviers pour repenser vos procédés, produits et services.

Dans le cadre du programme européen Circular 4.0, Auvergne-Rhône-Alpes Entreprises vous propose un parcours de formation-action inédit pour engager votre entreprise vers l'économie circulaire.

*source : étude Inec – Opeo « Pivoter vers l'industrie circulaire », avril 2021 sondage mené auprès de 63 acteurs industriels

La Région

POUR QUI ?

- **20 Entreprises industrielles** situées sur le territoire de l'ex région Rhône-Alpes, souhaitant identifier les opportunités offertes par l'économie circulaire et désirant s'engager dans cette démarche
- **Dirigeants ou membres de comités de direction**

POURQUOI PARTICIPER AU DISPOSITIF ?

- Anticiper les enjeux de la transition écologique
- Comprendre ce qu'est l'économie circulaire pour les entreprises industrielles & identifier les opportunités
- Imaginer comment intégrer ce concept dans son entreprise
- Identifier si des outils digitaux permettent de faciliter son déploiement
- Lancer un projet porteur de sens au sein de votre entreprise
- Définir vos priorités et construire une feuille de route économie circulaire
- Vous différencier, gagner en compétitivité

CONTENU

- **Un webinaire** d'introduction à l'économie circulaire
  > 2 sessions : 24 août - 14 octobre
- **Un diagnostic** « Mission Industrie circulaire » pour tester votre maturité sur le sujet
- **Un atelier de formation d'une journée** autour de mises en situation et cas pratiques pour identifier les opportunités offertes par l'économie circulaire & les clés pour l'intégrer au modèle de l'entreprise
  L'atelier sera animé par le cabinet OPEO et se basera sur de nombreux exemples tirés de l'étude « Pivoter vers l'industrie circulaire », menée auprès de 63 industriels.
  > 3 sessions : 31/08 : Le Bourget du lac - 01/09 : Lyon - 19/10 : Lyon
- **Une journée d'accompagnement individualisé** par un consultant expert pour définir votre feuille de route économie circulaire.
  > A partir de septembre

A l'issue du programme, l'Agence vous propose un accompagnement personnalisé pour la mise en oeuvre de la feuille de route établie (mise en relation partenaires, prescription de dispositifs d'accompagnement et financiers, recherche d'outils digitaux pertinents pour faciliter le déploiement de l'économie circulaire).
> A partir de septembre

DATE LIMITE D'INSCRIPTION : 20 JUILLET 2021

POUR EN SAVOIR PLUS :

Isabelle CLOUET
iclouet@arae.fr - 06 70 90 59 92

Formulaire de candidature :
https://cutt.ly/HbbdAnH
Nombre de places disponibles : 20

ENTREPRISE :

ACTIVITE :

CONTACT (Nom & fonction) :

Date du bilan :

NOTRE FEUILLE DE ROUTE ECONOMIE CIRCULAIRE (*format libre selon méthodologie consultant)*

Plan d'actions pour les 3 à 6 prochains mois :

Besoins d'accompagnement complémentaire :

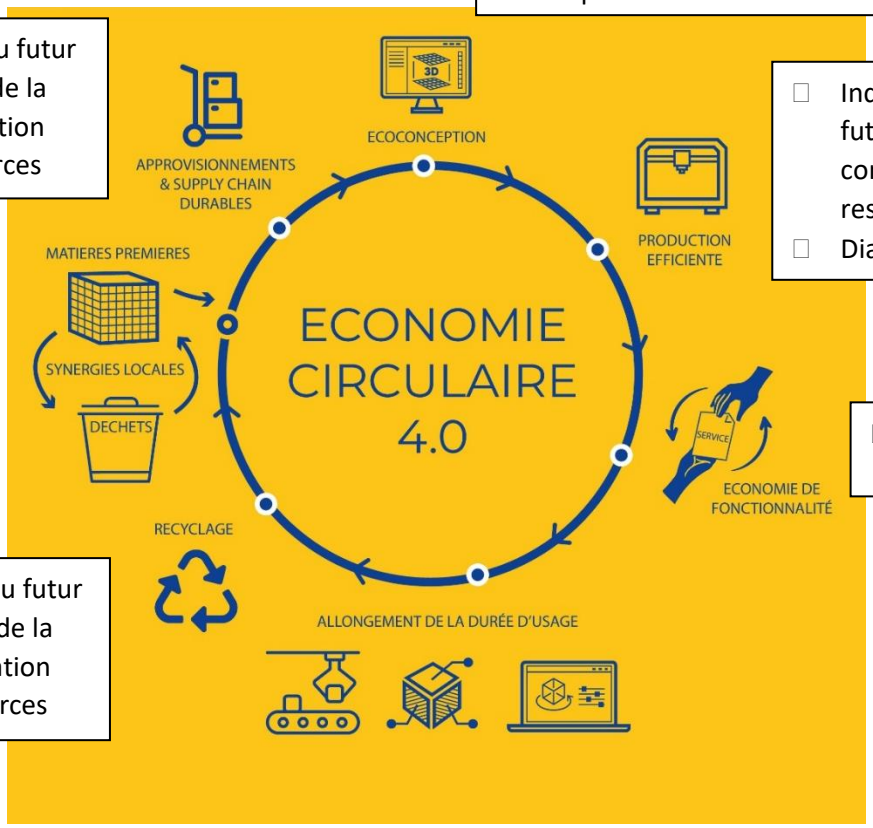
Pour mener à bien sa feuille de route, quels sont les besoins d'accompagnement complémentaires de l'entreprise ?

A-t-elle besoin de compléter l'accompagnement par l'un des programmes suivants ?

☐ Dispositif PRIME – Pôle Ecoconception

☐ Industrie du futur / Maîtrise de la consommation des ressources

☐ Industrie du futur/Maîtrise de la consommation des ressources
☐ Diag Ecoflux - BPI



☐ Programme RELIEF - Ciridd

☐ Industrie du futur / Maîtrise de la consommation des ressources

Plus d'informations sur les programmes :

- ☐ Industrie du futur / Maîtrise de la consommation des ressources : file:///C:/Users/ICLOUE~1.AGE/AppData/Local/Temp/INDUSTRIE_DU_FUTUR_AMELIORATION_PROCEDES_PRODUIRE.pdf
- ☐ Dispositif PRIME – Pôle Ecoconception : https://www.eco-conception.fr/static/PRIME-ecoconception-AURA.html
- ☐ Programme RELIEF – CIRIDD : https://www.ciridd.org/appui-a-l-innovation-et-animation-territoriale#relief
- ☐ Diagnostic EcoFlux BPI: https://diagecoflux.bpifrance.fr/

QUESTIONNAIRE DE SATISFACTION:

CONTACT (Nom & fonction) :

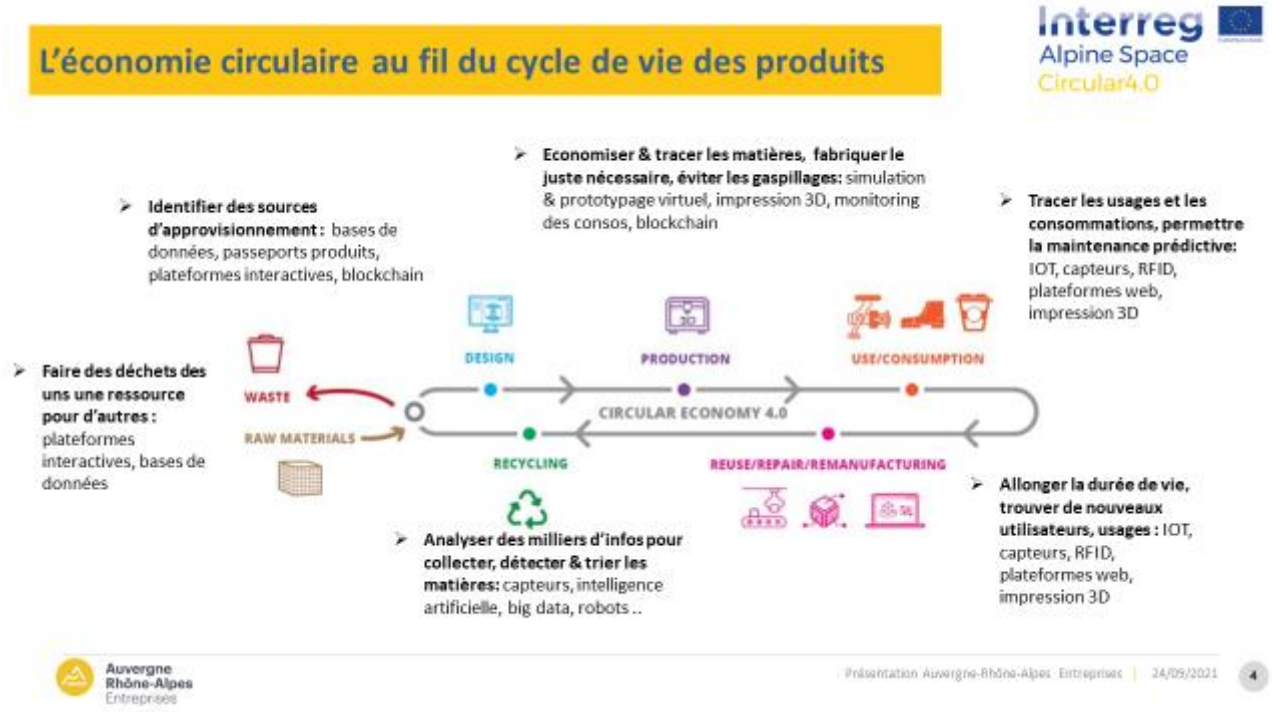
	- -	-	+	++
Comment évaluez-vous le contenu de la formation ?				
Connaissance du sujet et pédagogie de l'intervenant				
Comment évaluez-vous le contenu de la journée d'accompagnement individuel?				
Connaissance du sujet et pédagogie de l'intervenant				
Que pensez-vous du degré de transfert dans votre entreprise ?				
Ce parcours vous a t'il fourni des outils pratiques et méthodologiques pour avancer vers l'économie circulaire?				
Comment évaluez-vous l'organisation du parcours ? (durée, logistique…)				
Ce parcours a t'il répondu à vos attentes ?				

Commentaires :

Suggestions d'améliorations :

1. **Outils numériques pour l'économie circulaire?**

Au regard de la feuille de route et des projets de l'entreprise, y a-t-il des outils numériques qui pourraient faciliter le déploiement de l'économie circulaire ?



2. Bilan des actions réalisées par l’entreprise suite au parcours Industrie circulaire

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, Rising SUD**
Dissemination level:	**CO = confidential**
Revision:	**DRAFT 02**
Due Date:	
Date of submission:	

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Overview of the local pilot action - Région SUD Provence-Alpes-Côte d'Azur (RisingSUD)

- **Local context and CE approach**

As risingSUD was a member of the Ecodesign transnational working group, this approach was kept while selecting the companies and coaching them. The aim was to look at the earliest stage of the lifecycle of products and services offered by the companies. However, some sectors were added to the initial list of sectors targeted. Initially, risingSUD targeted the food and water sector. If some companies belonged to that sectors other were added, consistent with 3 of the 8 key strategic sectors of Région SUD Provence-Alpes-Côte d'Azur: Natural living (including food and water), Blue economy and Industry.

- **Methodology**

The program is composed by two different parts:

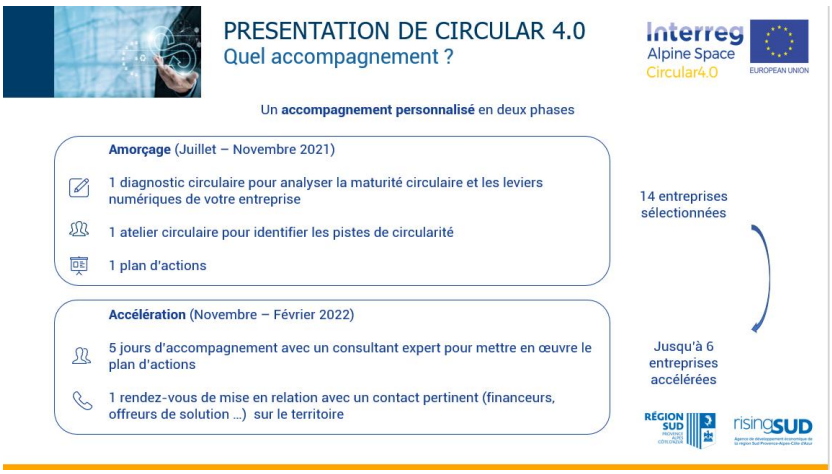
1- Initiation (11th June- 19th of November)

5 collective online workshops are organised covering module 0,1 and 3 of the CAT, with a slight adaptation with an adapted auto diagnosis. It is open to all companies with no selection process. The workshop was organised in close cooperation with OPEO and Institut national de l'économie circulaire, two organisations that are experts in circular economy. The goal was twofold: assess the maturity of the companies in the region, and inform them about the potentialities of circular economy, and Circular4.0 project.

Several on site one-to-one workshops covering module 2, 4, 5 with a restitution workshop to validate with the company the transformation plan covering modules 6, 7. These workshops meetings are either animated by risingSUD and its partner the Chamber of Commerce of Provence-Alpes-Côte d'Azur. Companies apply with an Expression of interest. The applications of the companies are validated by a selection committee composed by members of Région SUD Provence-Alpes-Côte d'Azur and risingSUD.

2- Acceleration (19th of November- 28th of February)

Selected companies selected among the companies of the first phase benefit from a one-to-one support by an expert selected through a dedicated tenure to implement one prioritary action of the action plan. The companies benefit from 5 days of consulting services.



- **Expected results**

After the "Initiation phase" phase, companies should:

- Understand, rethink and accelerate their transition toward circular economy thanks to the online workshop
- Have a diagnostic report on their circular and digital maturity
- Have a complete transformation plan and know what actions to undertake on their own, require further assistance to be implemented.

After the "Acceleration" phase, companies should have worked with a consultant on one prioritary action of the action plan and get at least one contact with an investor or solution provider.

Planned activities

19. Selection/identification of SMEs

Title	Identification / identification of SMEs	**Start date**	06.2021
		End date	10.2021
Description risingSUD launches a series of collective online workshops between June and October 2021, in order to inform companies about the potentialities of circular economy, and Circular4.0 project. During this period of time, the selection committee meets several time to select the companies that will benefit from the one-to-one coaching service. This committee is composed by member of risingSUD and members of Région SUD Provence-Alpes-Côte d'Azur.			
Results 4 online workshops 14 companies to be selected			
1	Online workshop #1	**Date**	06.2021
2	Online workshop #2	**Date**	06.2021
3	Launch of the call for applications	**Date**	06.2021
4	Online workshop #3	**Date**	07.2021
5	Selection committee #1	**Date**	07.2021
6	Selection committee #2	**Date**	10.2021
6	Online workshop #4	**Date**	09.2021
7	Selection committee #3	**Date**	09.2021
9	Selection committee #4	**Date**	10.2021

L'ACCOMPAGNEMENT CIRCULAR 4.0
Comment candidater ?

Interreg Alpine Space Circular4.0 EUROPEAN UNION

1 Répondre à l'appel à manifestation d'intérêt : https://sphinxdeclic.com/d/s/n0910m

2 L'équipe CIRCULAR 4.0 vous rappelle pour vérifier les conditions d'éligibilité et demander les éléments complémentaires du dossier de candidature

3 Compléter le diagnostic circulaire

4 Le comité de sélection CIRCULAR 4.0 valide les candidatures au fil de l'eau

Jusqu'au 30 septembre

20. Thematic workshops/seminars

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

Title	Collective workshop for the selected SMEs	**Start date**	10.2021
		End date	11.2021
Description For the selected companies that did not attend the online workshop, a specific session is organised. The goal is the same that the previous online workshop: inform companies about the potentialities of circular economy.			
Results 1 online workshop			
1	Online workshop #5	**Date**	10.2021

Title	One-to-one workshops and transformation plans	**Start date**	10.2021
		End date	11.2021
Description			

For the selected companies, one-to-one workshops are organised to coach individually the companies toward more circular business models. These workshops are adapted according to the level of maturity of the project as described in the CAT: either a workshop of identification of the sources of circularity in their organisation and business model or an assessment of the potential of the transformation project.			
Results 14 one-to-one workshops to identify with the company the sources of circularity / assess the potentiality of the potential transformation project 14 transformation plans with one priority action			
1	Launch of the one-to-one workshops and transformation plans	**Date**	09.2021
2	End of the one-to-one workshops and transformation plans	**Date**	11.2021

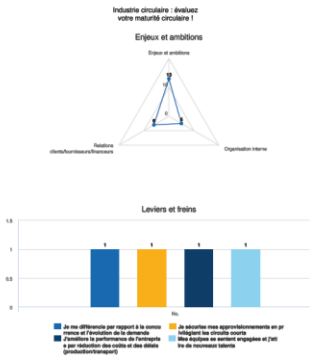
Title	Final selection of SMEs the implementation of the priority action of the transformation plan	**Start date**	11.2021
		End date	11.2021
Description The selection committees meet one last time to select the companies that will benefit from the one-to-one assistance to implement their transformation plan. To be selected for this second phase, companies must fill a letter of intent describing the priority action to put in place and committing to full investment to the program.			
Results 6 companies to be selected			
1	Selection committee #1	**Date**	11.2021

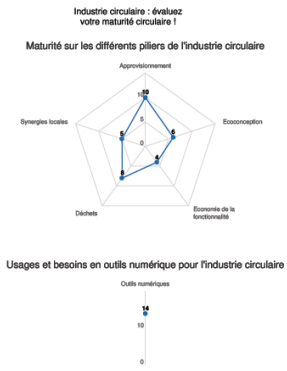
Title	Implementation of the priority action of the transformation plans	**Start date**	11.2021
		End date	03.2022
Description The final selection of companies benefits from 5 days of assistance by an expert to implement the priority action identified in the action plan. The experts are selected by risingSUD after a tenure, based on their quality of their proposal, their competence in the field as well as the price.			
Results 6 priority actions of the action plan implemented			
1	Launch of the tenure for experts to assist companies	**Date**	11.2021

2	Selection of the experts	**Date**	12.2021
3	Launch of the One-to-one assistance for the implementation of the transformation plans	**Date**	12.2021
4	End of the one-to-one assistance for the implementation of the transformation plans	**Date**	03.2022

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

To assess the Circular and the digital maturity, risingSUD uses a diagnosis derived from the tool built from the project. It was built in close cooperation with the French partners of the project to adapt to the specificities of the three regions (language, size of companies etc.). This diagnosis indicates:
- the leverage to be used in order to remove the breaks to initiative or accelerate the transition towards circular economy
- some initial lines of enquiry for the sources of circularity in their business model and organisation
- the application potential of digital tools to facilitate the implementation of circular economy actions
risingSUD uses the online tool "eval&go" to enhance the accessibility of the diagnosis and get a clean report.
Companies can fill the questionnaire either with the help of risingSUD during the collective online workshop or a one-to-one workshop, or by themselves. In any case, a link to access the questionnaire is provided to them to access the online questionnaire.
Each company assessed with this diagnosis receives a detailed report with some elements of analysis.





22. Identification of innovation needs and investment plan

As described before after the "Initiation phase" phase, companies should receive a complete transformation plan (from 6 to 12 months) mentioning which actions to undertake on their own, and which actions require further assistance to be implemented. This transformation plan is the result of the one-to-one workshop with the company, and may encompass either new or improved process, products, services or business model. It may be digitally supported if necessary and may require the adoption of a new technology.
This transformation plan is given to the company in the form of a PowerPoint presentation or a word document.

After the "Acceleration" phase, companies should have worked with a consultant on one priority action of the action plan and get at least one contact with an investor or solution provider.

Indicators (KPIs) and monitoring

RisingSUD will use the data retrieved by diagnosis tool at the beginning to measure an initial level of maturity on the circular and digital aspects and compare it with the results with selected questions from the same diagnosis tool at the end of the pilot action. It will be associated with questions analysing the progress regarding the main challenges identified, as well as the future actions of the action plan to be implemented. Finally, general question will be added to improve the support scheme, and possible ways of improvements.

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.T3.2.1 Local actions to implement CE Design Model approaches with digitalisation processes

Reporting on local pilot actions – Jozef Stefan Institute (JSI)

Author: Bojana Omersel-Weeks, PP10 – Jozef Stefan Institute (JSI)

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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8. Annex 1

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1. Introduction

The purpose of the pilot actions in Slovenia in the scope of the Circular 4.0 project was to train a total of **35 SMEs** with the aim of discovering the potential for the introduction of circular and digital transformation, changes in business models and easier integration into global value chains.

Upon the joint open invitation with the lead partner (Technology park Ljubljana) to companies to participate at the pilot training, with the assistance of many operators i.e. organizations assisting companies (Industrial clusters at Chamber of Economy, 3 Strategic research and Innovation Partnerships from S5- SRIP Factories of the Future, SRIP Circular Economy, SRIP Smart Cities, SRIP Agriculture and Food, Cluster of toolmakers, KIC Climate) **28 SME's have registered initially to undergo the training.**

SMEs were coming from sectors identified in previous actions in the Circuar4.0 project D.T.1.4.2. Report on the industrial sectors selected by each area. For Slovenia this means sectors of manufacturing, food and agriculture, wood processing, construction as also defined in the Slovenia's roadmap to circular economy.

The training was held in the light of the European Green Agreement with the aim of creating a starting point for a circular strategy, achieving greater added value, productivity, increasing positive impacts on the environment, people and communities and with the additional goal of offering starting points for companies for recovery and resilience and other appropriate financial instruments.

With the help of selected experts on circular and digital transformation, SMEs assessed their level of circular and digital maturity, identify needs for innovation and technologies for circular transformation, develop new circular and digital business models, prepare a plan for the transition to a circular economy and a financial investment plan. obtaining financing from banks or to present the circular transformation model and investment needs to potential public or private investors. In the training process, each company, in addition to the customized group training, will also receive 1: 1 advice from a selected expert.

The present deliverable displays for the local pilot action in *Slovenia* the:

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

2. Local pilot actions in Slovenia (Jozef Stefan Institute) - Overview

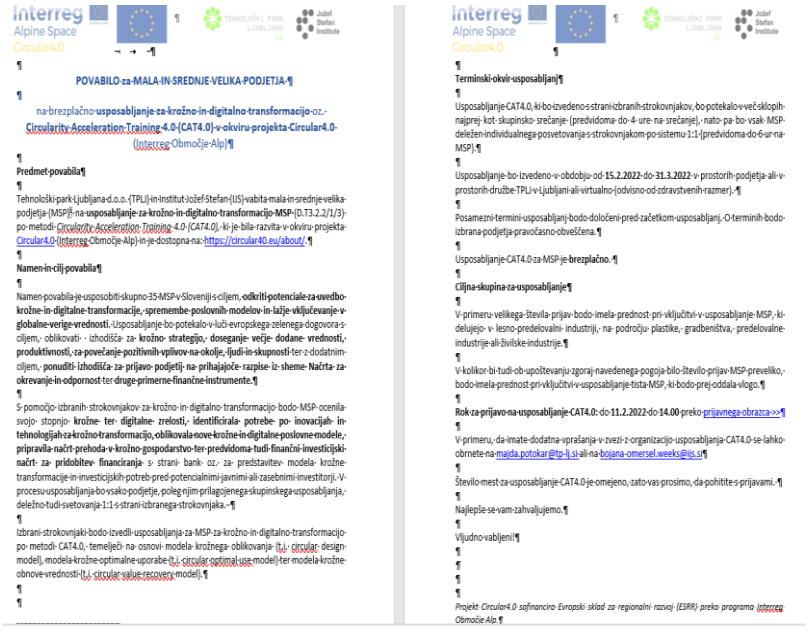
Implementation of the pilot actions followed the plan as described in the report A.T.3.1.- Overview of the pilot actions.

1. **Recruitment of expert assessors for 1:1 consultations & delivery of DMA/CAS**
   Open call for experts was initiated by JSI and Contracted were experts performing digital maturity assessment, circularity assessment and preparation of a business canvas and providing 1:1 traning for companies based on predefined templates and Cat4.0 methodolgy presented to the experts beforehand, using all the materials available on the Circular4.0 learning platform Talents LMS.

2. Selection/identification of SMEs

Selecting SME's to participate in the training programme was made by directly addressing sector specific industrial clusters (clusters for wood, manufacturing, plastics, food). An open call and 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 was posted and widely communicated through the communication channels of Jožef Stefan Institute and member organisations of the SRIP Factories of the Future. Information was communicated via Chamber of Economy i.e. (Association of Chemical Industries of Slovenia , Association of Factories of the future), SRIP Factories of the Future, SRIP Smart Cities, SRIP Circular Economy, SRIP Agriculture and food and other clusters (Slovenian Toolmaking Cluster, Competence Center for advanced control technologies) and KIC Climate Slovenia as well as through some of member organisations of the mentioned clusters (business incubators, accelerators, technology parks).

A rational was well justified to companies to join the pilot actions such as companies need to address changes of EU legislation (plastics, waste directives), new financial instruments (domestic and EU tenders, bank loans for green / digital transformation, Recovery and resillience programme, Bauhaus programme, national development banks), requirements of global supply chains and global markets for more environmentally friendly products / services, new business models (servitisation), expensive raw materials and energy sources, trends after digitalization / digital transformation - transition from i.2.0 to i.4.0 or advanced production.
The aims and objectives of the pilot tranings were given in the invitation as well.



POVABILO za MALA IN SREDNJE VELIKA PODJETJA

na brezplačno usposabljanje za krožno in digitalno transformacijo oz. Circularity Acceleration Training 4.0 (CAT4.0) v okviru projekta Circular4.0 (Interreg Območje Alp)

Predmet povabila

Tehnološki park Ljubljana d.o.o. (TPLJ) in Institut Jožef Stefan (IJS) vabita mala in srednje velika podjetja (MSP) k sodelovanju na usposabljanje za krožno in digitalno transformacijo MSP (D.T3.2.2/1/3) po metodi Circularity Acceleration Training 4.0 (CAT4.0), ki je bila razvita v okviru projekta Circular4.0 (Interreg Območje Alp) in je dostopna na: https://circular4.eu/about/.

Namen in cilj povabila

Namen povabila je usposobiti skupno 35 MSP v Sloveniji s ciljem, odkriti potenciale za uvedbo krožne in digitalne transformacije, spremembe poslovnih modelov in lažje vključevanje v globalne verige vrednosti. Usposabljanje bo potekalo v luči evropskega zelenega dogovora s ciljem, oblikovati izhodišča za krožno strategijo, doseganje večje dodane vrednosti, produktivnosti, za povečanje pozitivnih vplivov na okolje, ljudi in skupnosti ter z dodatnim ciljem, ponuditi izhodišča za prijavo podjetij na prihajajoče razpise iz sheme Načrta za okrevanje in odpornost ter druge primerne finančne instrumente.

S pomočjo izbranih strokovnjakov za krožno in digitalno transformacijo bodo MSP ocenila svojo stopnjo krožne ter digitalne zrelosti, identificirala potrebe po inovacijah in tehnologijah za krožno transformacijo, oblikovala nove krožne in digitalne poslovne modele, pripravila načrt prehoda v krožno gospodarstvo ter predvidoma tudi finančni investicijski načrt za pridobitev financiranja s strani bank oz. za predstavitev modela krožne transformacije in investicijskih potreb pred potencialnimi javnimi ali zasebnimi investitorji. V proces usposabljanja bo vsako podjetje, poleg njim prilagojenega skupinskega usposabljanja, deležno tudi svetovanja 1:1 s strani izbranega strokovnjaka.

Izbrani strokovnjaki bodo izvedli usposabljanja za MSP za krožno in digitalno transformacijo po metodi CAT4.0, temelječi na osnovi modela krožnega oblikovanja (t.j. circular design model), modela krožne optimalne uporabe (t.j. circular optimal use model) ter modela krožne obnove vrednosti (t.j. circular value recovery model).

Terminski okvir usposabljanj

Usposabljanje CAT4.0, ki bo izvedeno s strani izbranih strokovnjakov, bo potekalo v več sklopih najprej kot skupinsko srečanje (predvidoma do 4 ure na srečanje), nato pa bo vsak MSP deležen individualnega posvetovanja s strokovnjakom po sistemu 1:1 (predvidoma do 6 ur na MSP).

Usposabljanje bo izvedeno v obdobju od 15.2.2022 do 31.3.2022 v prostorih podjetja ali v prostorih družbe TPLJ v Ljubljani ali virtualno (odvisno od zdravstvenih razmer).

Posamezni termini usposabljanj bodo določeni pred začetkom usposabljanj. O terminih bodo izbrana podjetja pravočasno obveščena.

Usposabljanje CAT4.0 za MSP je brezplačno.

Ciljna skupina za usposabljanje

V primeru velikega števila prijav bodo imela prednost pri vključitvi v usposabljanje MSP, ki delujejo v lesno predelovalni industriji, na področju plastike, gradbeništva, predelovalne industrije ali živilske industrije.

V kolikor bi tudi ob upoštevanju zgoraj navedenega pogoja bilo število prijav MSP preveliko, bodo imela prednost pri vključitvi v usposabljanje tista MSP, ki bodo prej oddala vlogo.

Rok za prijavo na usposabljanje CAT4.0: do 11.2.2022 do 14.00 preko prijavnega obrazca >>

V primeru, da imate dodatna vprašanja v zvezi z organizacijo usposabljanja CAT4.0 se lahko obrnete na majda.potokar@tp-lj.si ali na bojana.omersel.weeks@ijs.si

Število mest za usposabljanje CAT4.0 je omejeno, zato vas prosimo, da pohitite s prijavami.

Najlepše se vam zahvaljujemo.

Vljudno vabljeni!

Projekt Circular4.0 sofinancira Evropski sklad za regionalni razvoj (ESRR) preko programa Interreg Območje Alp.

3. Thematic workshops/seminars
Implementing the CAT2.0 modules addressed to SMEs supported by awareness rising campaign (using project partners communications channels) started. Registered companies were invited to the joint meeting of all registered participants

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

Tools mainly used:

- I4ready: https://i4ready.co.uk/
- 6Ps (1 case as maturity level of SME was high)
- CAS2.0

5. Identification of innovation needs and investment plan

   Each company supported should receive a document established on the basis of 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 was produced by the experts assisting SME's 1:1 on that.

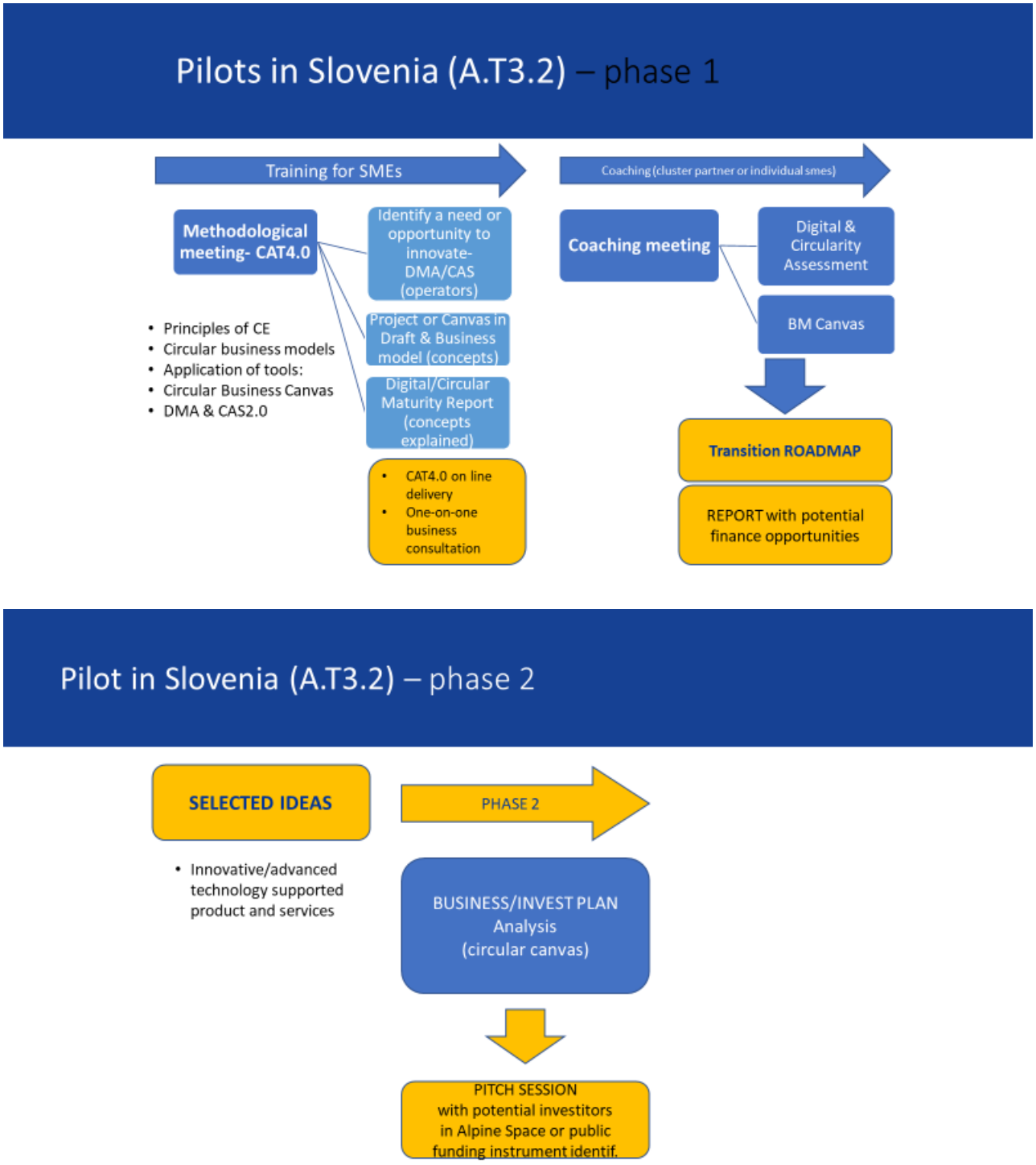
6. Pitching the pilot infront of finance organisations and/or identification of the funding instrument for SME to apply for funding the pilot action.

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

This chapter shall provide an overview of the initially planned local pilot actions as described in activity A.T3.1 (short version of chapter 1 from your filled A.T3.1 template - Overview of the local pilot action).

This is only to replace the reader in the context and make the present deliverables independent from others for the reader.

An overview of the process of implementing the pilot actions in Slovenia is shown below:



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

An open invitation was issued by the project partners Jožef Stefan Institute, Technology Park Ljubljana and their affiliated partners I.e. operators (Chamber of Economy, various industrial clusters, incubators, Climate KIC) as described under Activity 1- Call for application below.

4. Implementation report

Call for participating with the pilot action CAT4.0

Title	Call for participating with the pilot action CAT4.0	**Start date**	9.3.2022
		End date	9.3.2022

Description

Describe here the activity **as it was implemented:**

- What has been done
  A joint on line call for participation of companies with the CAT4.0 pilot training course was published via e-platforms of JSI, TP Lj and affiliated partners (KIC CLIMATE, SRIP Circular economy, SRIP Smart Cities, Chamber of Economy Cluster Smart factories, Cluster of plastics

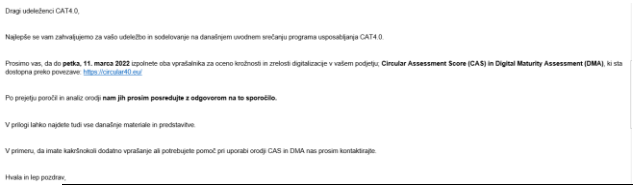
- When: February 2022

- By Whom

The call was published jointly by the JSI and Technology Park Ljubljana on e-social platform and
web sites of the partners.

- How many SMEs were involved/did benefit?
  42 SMEs registered **in total.** They were than distributed between the two Circular4.0 project partners for individual consultations i.e. experts advisory testing. JSI took majority of the digitally matured companies mostly coming from the manufacturing sector i.e. services in support of manufacturing and construction and waste management sectors. All SME's qualified as SMEs i.e. they met criteria of their annual turnover or number of employees.

The following 15 SME's were taken over by the JSI experts to be pre-screened by the experts for their business areas and to further determine the type of targeted tools needed with the 1:1 consultations.



Dragi udeleženci CAT4.0,

Najlepše se vam zahvaljujemo za vašo udeležbo in sodelovanje na današnjem uvodnem srečanju programa usposabljanja CAT4.0.

Prosimo vas, da do **petka, 11. marca 2022** izpolnete oba vprašalnika za oceno krožnosti in zrelosti digitalizacije v vašem podjetju, **Circular Assessment Score (CAS) in Digital Maturity Assessment (DMA)**, ki sta dostopna preko povezave: https://circular4.0.eu/

Po prejetju poročil in analiz orodji **nam jih prosim posredujte z odgovorom na to sporočilo.**

V prilogi lahko najdete tudi vse današnje materiale in predstavitve.

V primeru, da imate kakršnokoli dodatno vprašanje ali potrebujete pomoč pri uporabi orodji CAS in DMA nas prosim kontaktirajte.

Hvala in lep pozdrav.

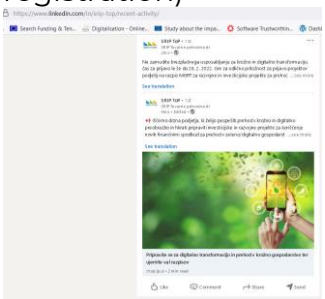
No.	Company name	Sector	No. of employees	Turnover
1	Škrlj d.o.o.	Advanced Manufacturing	51-250	< 50 MEUR
2	Kronoterm doo	Manufacturing	51-250	< 50 MEUR
3	Exoterm-it d.o.o.	Manufacturing/Methalurgy	41-50	< 50 MEUR
4	Fonaterm d.o.o.	Construction	1-10	< 50 MEUR
5	Ekstera d.o.o.	Manufacturing	11-20	< 50 MEUR
6	BASS d.o.o., Celje	Construction	21-30	< 50 MEUR
7	BASS d.o.o., Celje	ICT	21-30	< 50 MEUR
8	Podkrižnik d.o.o.	Plastics	51-250	< 50 MEUR
9	Barjans d.o.o., Pod Hruševco 20, 1360 Vrhnika	Services	51-250	< 50 MEUR
10	WEILER ABRASIVES D.O.O	Manufacturing	51-250	< 50 MEUR
11	SMM d.o.o.	Manufacturing	51-250	< 50 MEUR
12	ELVEZ	Plastics	51-250	< 50 MEUR
13	Numip d. o. o.	Services in manufacturing	51-250	< 50 MEUR
14	INEA d.o.o.	Services in manufacturing	51-250	< 50 MEUR
15	Interseroh d.o.o.	Waste management	11.-20	< 50 MEUR

Results

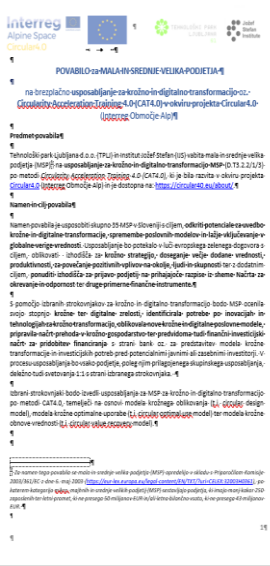
Please list below the results achieved, including the items available for documentation of the results (those items shall be put in the annexes to the deliverable).

1	Registration of SMEs to the pilot training course *Cat4.0 pilot action on 9th of March 2021* Documentation • Registered companies	**Date** **9.3.2022**	
2	call for applications • Copy of publication (website, newsletter, direct e-mail invitation to all SRIP ToP members, registration) • https://ctop.ijs.si/wp-content/uploads/2022/06/SRIPToP_novicnik_26.1.2022.pdf	**Date:** **26.1.2022**	

	Organizacija	Področje delovanja (o:	Število zaposlenih (oz
2	Giro car share d.o.o	Turizem	1-10
3	TT Okroglica d.d.	kaširanje tekstila	51-250
4	Zero waste pallets	Plastika	1-10
5	Greenium	Svetovanje iz trajnostne	1-10
6	Škrlj d.o.o.	Napredne tehnologije za	51-250
7	Anteja ECG d.o.o.	Infrastruktura za povezo	11-20
8	Jure Počkaj - Pevec	Organizacija dogodkov	1-10
9	Avitel	IKT	1-10
10	ripitz inovacije d.o.o.	razvoj pametnih hiš in no	1-10
11	Beti d.d.	Predelovalna industrija	51-250
12	Interseroh	Plastika	11-20
13	odvetniška pisarna CMS	poslovno svetovanje, oc	11-20
14	Kronoterm doo	Ogrevalna tehnika; Klima	51-250
15	Giro car share d.o.o.	Mobilnost	1-10
16	Spela Jereb s.p.	Stiki z javnostjo	1-10
17	Turistično društvo Natur	turizem, NVO	1-10
18	Zavod Trust so.p.	KKS, tekstilna industrija	1-10
19	Exoterm-it d.o.o.	metalurgija	41-50
20	Evegreen d.o.o.	Bioplastika	1-10
21	Fonaterm d.o.o.	Gradbeništvo	1-10
22	Ekstera d.o.o.	Predelovalna industrija	11-20
23	OREL CELJE d.o.o.	Oblikovanje in predelava	1-10
24	OREL CELJE d.o.o.	Oblikovanje in prodaja ak	1-10
25	BASS d.o.o., Celje	Gradbeništvo	21-30
26	BASS d.o.o., Celje	Informacijska tehnologij	21-30
27	clera.one	Plastika	1-10
28	Intra lighting d.o.o.	Predelovalna industrija	51-250
29	CORe d.o.o.	Izobrajevanje in usposab	1-10
30	Sc gim Simion Barnutiu :	Gradbeništvo	41-50
31	Podkrijnik d.o.o.	Plastika	51-250
32	Barjans d.o.o., Pod Hruš	Prodaja izdelkov za čisto	51-250
33	D.O.O	Predelovalna industrija	51-250
34	INTERSEROH d.o.o.	Ravnanje z odpadnimi pr	11-20
35	Interseroh d.o.o.	Ravnanje z odpadnimi pr	11-20
36	SMM d.o.o.	proizvodnja strojev	51-250
37	ELVEZ	Plastika	51-250
38	Wilsonic Design	trženje	1.-10
39	Nektar Natura d.o.o.	živilska industrija	51-250
40	Numip d. o. o.	Inženiring, montaja, vzdrje	51-250
41	INEA d.o.o.	avtomatizacija, informati	51-250
42	Interseroh d.o.o.	odpadki, okoljsko sveto	11.-20



https://ctop.ijs.si/dogodek/pripravite-se-za-digitalno-transformacijo-in-prehod-v-krozno-gospodarstvo-ter-ujemite-val-razpisov/?no_cache=1643117026



POVABILO-za-MALA-IN-SREDNJE-VELIKA-PODJETJA¶

na brezplačno-usposabljanje-za-krožno-in-digitalno-transformacijo-cz.-Circularity Acceleration Training 4.0-(CAT4.0)-v-okviru-projekta-Circular4.0-(interreg Območje Alp)¶

Predmet-povabila¶

Tehnološki park Ljubljana d.o.o. (TPLJ) in institut Jožef Stefan (IJS) vabita mala in srednje velika podjetja (MSP)¶ na **usposabljanje-za-krožno-in-digitalno-transformacijo-MSP-**(D.T3.2.2/1/3): po metodi Circularity Acceleration Training 4.0 (CAT4.0), ki je bila razvita v okviru projekta Circular4.0 (interreg Območje Alp) in je dostopna na: https://circular40.eu/about/.¶

Namen-in-cilj-povabila¶

Namen povabila je usposobiti skupno 35 MSP v Sloveniji s ciljem, **odkriti-potenciale-za-uvedbo-krožne-in-digitalne-transformacije, -spremembe-poslovnih-modelov-in-lažje-vključevanje-v-globalne-verige-vrednosti**. Usposabljanje bo potekalo v luči evropskega zelenega dogovora s ciljem, oblikovati- izhodišča za- **krožno- strategijo, - doseganje- večje- dodane- vrednosti, - produktivnosti, za-povečanje-pozitivnih-vplivov-na-okolje, -ljudi-in-skupnosti** tar-z dodatnim-ciljem, **ponuditi- izhodišča- za-prijavo- podjetij- na-prihajajoče- razpise- in- sheme- Načrta- za-okrevanje-in-odpornost** ter **druge-primerne-finančne-instrumente.¶**

S pomočjo izbranih strokovnjakov za krožno in digitalno transformacijo bodo MSP- ocenila svojo stopnjo **krožne- ter- digitalne- zrelosti; identificirala- potreba- po- inovacijah- in-tehnoloških-in-krožno-transformacija, -oblikovalcem-new-krožne-in-digitalne-poslovne-modela, - pripravila-načrt-prehoda-v-krožno-gospodarstvo-ter-predvidoma-tudi-finančni-investicijski-načrt- za- pridobitev- financiranja** s strani bank oz. za predstavitev- modela- krožne-transformacije-in-investicijskih-potreb-pred-potencialnimi-javnimi-ali-zasebnimi-investitorji. V procesu-usposabljanja-bo-vsako-podjetje, poleg njim prilagojenega-skupinskega-usposabljanja, deležno-tudi-svetovanja-1:1-s-strani-izbranega-strokovnjaka. ¶

Izbrani-strokovnjaki-bodo-izvedli-usposabljanja-za-MSP-za-krožno-in-digitalno-transformacijo-po- metodi- CAT4.0, temelječi- na- osnovi- modela- krožnega- oblikovanja- (i.i. circular- design-model), modela-krožne-optimalne-uporabe (i.i. circular- optimal-use model) ter modela-krožne-obnove-vrednosti (i.i. circular- value- recovery model). ¶

¶

¶

[1] Za-namen-tega-povabila-se-mala-in-srednje-velika-podjetja-(MSP)-opredeljio-v-skladu-s-Priporočilom-Komisije-2003/361/ES-z-dne-6.-maj-2003-(https://eur-lex.europa.eu/legal-content/SL/TXT/?uri=CELEX:32003H0361), po-katerem-kategorijo-malih-in-srednje-velikih-podjetij-(MSP)-sestavljajo-podjetja, ki-imajo-manj-kakor-250-zaposlenih-ter-letni-promet, ki-ne-presega-50-milijonov-EUR-in/ali-letno-bilančno-vsoto, ki-ne-presega-43-milijonov-EUR. ¶

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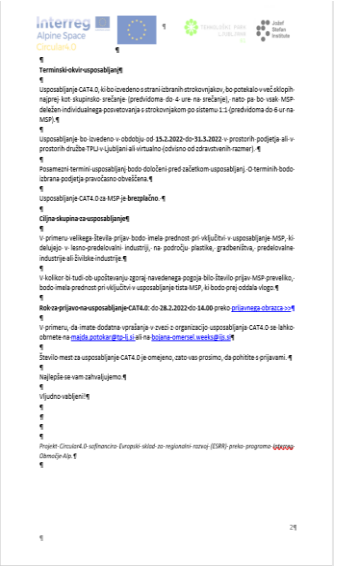

Terminski-okvir-usposabljanj¶

¶

Usposabljanje CAT4.0, ki bo izvedeno s strani izbranih strokovnjakov, bo potekalo v več sklopih najprej kot skupinsko srečanje (predvidoma- do- 4- ure- na- srečanje), nato pa- bo- vsak- MSP- deležen individualnega posvetovanja s strokovnjakom po sistemu 1:1 (predvidoma do 6 ur na MSP).¶

¶

Usposabljanje- bo- izvedeno v- obdobju- od- **15.2.2022**-do-**31.3.2022** v- prostorih- podjetja- ali- v- prostorih družbe TPLJ v Ljubljani ali virtualno (odvisno od zdravstvenih- razmer). ¶

¶

Posamezni-termini-usposabljanj-bodo-določeni-pred-začetkom-usposabljanj.-O-terminih-bodo-izbrana-podjetja-pravočasno-obveščena.¶

¶

Usposabljanje-CAT4.0-za-MSP-je-**brezplačno.** ¶

¶

Ciljna-skupina-za-usposabljanje¶

¶

V-primeru- velikega- števila- prijav- bodo- imela- prednost- pri- vključitvi- v- usposabljanje-MSP, ki-delujejo- v- lesno-predelovalni- industriji, na- področju- plastike, gradbeništva, predelovalne-industrije-ali-živilske-industrije.¶

¶

V-kolikor-bi-tudi-ob-upoštevanju-zgoraj- navedenega- pogoja- bilo- število- prijav- MSP- preveliko, bodo-imela-prednost-pri-vključitvi-v-usposabljanje tista-MSP, ki bodo-prej oddala vlogo.¶

¶

Rok-za-prijavo-na-usposabljanje-CAT4.0: do-**28.2.2022**-do-**14.00** preko prijavnega-obrazca->>¶

¶

V primeru, da imate-dodatna-vprašanja v zvezi-z organizacijo-usposabljanja CAT4.0 se lahko-obrnete-na-maida.potokar@tp-lj.si ali-na bojana-omerzel.weeks@ijs.si¶

¶

Število-mest-za-usposabljanje CAT4.0 je omejeno, zato-vas prosimo, da pohitite s prijavami. ¶

¶

Najlepše-se-vam-zahvaljujemo.¶

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Vljudno-vabljeni:¶

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Projekt- Circular4.0- sofinancira- Evropski- sklad- za- regionalni- razvoj- (ESRR)- preko- programa- Interreg- Območje- Alp. ¶

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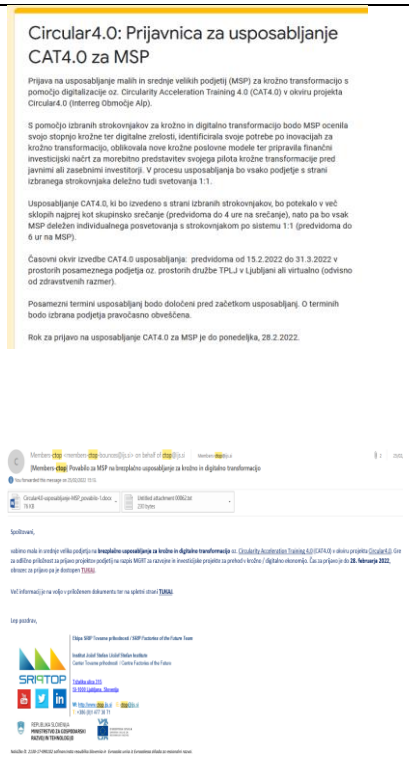


Circular4.0: Prijavnica za usposabljanje CAT4.0 za MSP

Prijava na usposabljanje malih in srednje velikih podjetij (MSP) za krožno transformacijo s pomočjo digitalizacije oz. Circularity Acceleration Training 4.0 (CAT4.0) v okviru projekta Circular4.0 (Interreg Območje Alp).

S pomočjo izbranih strokovnjakov za krožno in digitalno transformacijo bodo MSP ocenila svojo stopnjo krožne ter digitalne zrelosti, identificirala svoje potrebe po inovacijah za krožno transformacijo, oblikovala nove krožne poslovne modele ter pripravila finančni investicijski načrt za morebitno predstavitev svojega pilota krožne transformacije pred javnimi ali zasebnimi investitorji. V procesu usposabljanja bo vsako podjetje s strani izbranega strokovnjaka deležno tudi svetovanja 1:1.

Usposabljanje CAT4.0, ki bo izvedeno s strani izbranih strokovnjakov, bo potekalo v več sklopih najprej kot skupinsko srečanje (predvidoma do 4 ure na srečanje), nato pa bo vsak MSP deležen individualnega posvetovanja s strokovnjakom po sistemu 1:1 (predvidoma do 6 ur na MSP).

Časovni okvir izvedbe CAT4.0 usposabljanja: predvidoma od 15.2.2022 do 31.3.2022 v prostorih posameznega podjetja oz. prostorih družbe TPLJ v Ljubljani ali virtualno (odvisno od zdravstvenih razmer).

Posamezni termini usposabljanj bodo določeni pred začetkom usposabljanj. O terminih bodo izbrana podjetja pravočasno obveščena.

Rok za prijavo na usposabljanje CAT4.0 za MSP je do ponedeljka, 28.2.2022.

[Members clog] Povabilo za MSP na brezplačno usposabljanje za krožno in digitalno transformacijo

Spoštovani,

vabimo mala in srednje velika podjetja na **brezplačno usposabljanja za krožno in digitalno transformacijo** oz. Circularity Acceleration Training 4.0 (CAT4.0) v okviru projekta Circular4.0. Gre za edinstveno priložnost za prijavo projektno podjetij na razpis MGRT za razvojne in investicijske projekte za prehod v krožno / digitalno ekonomijo. Čas za prijavo je do **28. februarja 2022**, obrnete za prijavo pa je dostopen TUKAJ.

Več informacij je na voljo v priloženem dokumentu ter na spletni strani TUKAJ.

Lep pozdrav,

Deviations – corrective measures (as occurring) Please describe and explain below the deviations compare to the initial plan: - Delays - Significant changes in the activities (activities cancelled, new ones) - Explain corrective measures taken (if any)
Time for registration of companies was extended and communication activities were reinforced (more IJS partners and members stepped in to promote the pilots across the territory and across various sectors i.e. information was publicised with the SRIP Circular Economy, SRIP Smart Cities, KIC Climate and Chamber of Economy business clusters and some incubators/accelerators) to gain higher interest of SME's with the programme implementation.

CAT4.0 introduction for SME's

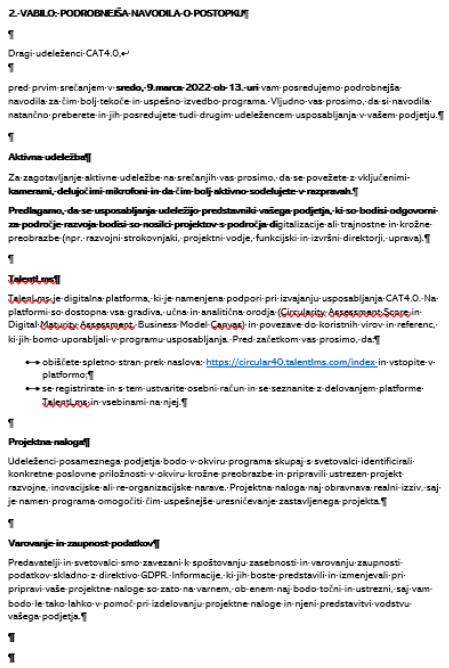
Title	CAT4.0 introduction for SME's	Start date	9.3.2022
		End date	9.3.2022

Description

Describe here the activity **as it was implemented:**

- What has been done

A joint on line presentation of the CAT4.0 pilot training course was delivered to SME's registered for the pilot actions. Instructions on the course delivery and content were provided to the participants beforehand.



2.-VABILO: PODROBNEJŠA NAVODILA O POSTOPKU

Dragi udeleženci CAT4.0,

pred prvim srečanjem v **sredo, 9. marca 2022 ob 13. uri** vam posredujemo podrobnejša navodila za čim bolj tekoče in uspešno izvedbo programa. Vljudno vas prosimo, da si navodila natančno preberete in jih posredujete tudi drugim udeležencem usposabljanja v vašem podjetju.

Aktivna udeležba

Za zagotavljanje aktivne udeležbe na srečanjih vas prosimo, da se povežete z vključenimi kamerami, delujočimi mikrofoni in da čim bolj aktivno sodelujete v razpravah.

Predlagamo, da se usposabljanja udeležijo predstavniki vašega podjetja, ki so bodisi odgovorni za področje razvoja bodisi so nosilci projektov s področja digitalizacije ali trajnostne in krožne preobrazbe (npr. razvojni strokovnjaki, projektni vodje, funkcijski in izvršni direktorji, uprava).

Talent.ms

Talent.ms je digitalna platforma, ki je namenjena podpori pri izvajanju usposabljanja CAT4.0. Na platformi so dostopna vsa gradiva, učna in analitična orodja (Circularity Assessment Score in Digital Maturity Assessment, Business Model Canvas) in povezave do koristnih virov in referenc, ki jih bomo uporabljali v programu usposabljanja. Pred začetkom vas prosimo, da:

- obiščete spletno stran prek naslova: https://circular40.talentlms.com/index in vstopite v platformo;
- se registrirate in s tem ustvarite osebni račun in se seznanite z delovanjem platforme Talent.ms in vsebinami na njej.

Projektna naloga

Udeleženci posameznega podjetja bodo v okviru programa skupaj s svetovalci identificirali konkretne poslovne priložnosti v okviru krožne preobrazbe in pripravili ustrezen projekt razvojne, inovacijske ali re-organizacijske narave. Projektna naloga naj obravnava realni izziv, saj je namen programa omogočiti čim uspešnejše uresničevanje zastavljenega projekta.

Varovanje in zaupnost podatkov

Predavatelji in svetovalci smo zavezani k spoštovanju zasebnosti in varovanju zaupnosti podatkov skladno z direktivo GDPR. Informacije, ki jih boste predstavili in izmenjevali pri pripravi vaše projektne naloge so zato na varnem, ob enem naj bodo točni in ustrezni, saj vam bodo le tako lahko v pomoč pri izdelovanju projektne naloge in njeni predstavitvi vodstvu vašega podjetja.

- When:

  Cat4.0 introduction of pilots was given on the 9.3.2022 at 1 p.m.

- By Whom

  The presentations were delivered to the SMEs by the contracted experts introducing key concepts of the Circular economy, Digital technologies in support of circular economy, the Cat 4.0 learning platform with materials available to SME's the tools to be used with 1:1 consultations and general procedures for implementing the pilot actions.
- How many SMEs were involved/did benefit?
  15 SMEs were present at the introductory meeting from sectors of manufacturing, constructing, services in support of manufacturing, ICT, plastics, Waste management.

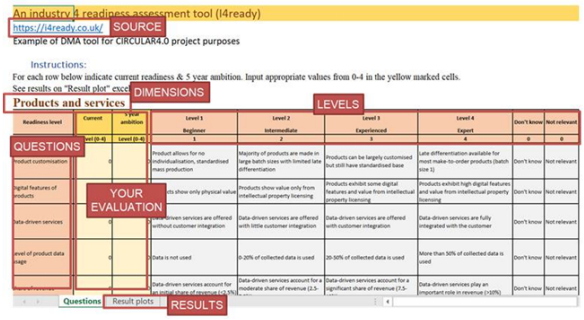
Subactivity:

1. On 11th of March as the follow up of the 9th of March workshop the detailed instructions were handed to the SME's on how to fill up DMA report and how to approach CAS as well as the invitation to use other tools available to SME's for selfassessment and invitation for the 1:1 meetings with SME's.
2. Experts than individually set an appointment dates for 1:1 consultation.

Click here to download pictures. To help protect your privacy, Outlook prevented automatic download of some pictures in this message.

I4ready_DMA_ImePodjetja.xlsx
56 KB

Spoštovani,
po dogovoru vam pošiljamo excel datoteko za izvedbo samoocene digitalne zrelosti vašega podjetja. La ta bo referenčna za naše nadalnje postopke. V aplikaciji Izpolnjujete samo stolpca **Current** in **5 Year Ambition** z ocenami od 0–
(opise teh ocen imate v stopcih levo od omenjenih dveh). V primeru, da na določeno vprašanje in ambicijo ne morete določiti stopnje oz. vprašanje za vas ni relevantno, vpišite vrednost 0.
Izpolnjeno datoteko, ki ji dodajte ime vašega podjetja (npr. I4Ready_DMA_ImePodjetje.xlxx), nam pošljite na poštne naslove ekspertov in vodje projekta.



Vabimo vas tudi, da si na povezavi DMA Tools – Circular40.eu ogledate ostala DMA orodja in jih preiskusite.

Lep pozdrav!

Dragi udeleženci CAT4.0,

Najlepše se vam zahvaljujemo za vašo udeležbo in sodelovanje na današnjem uvodnem srečanju programa usposabljanja CAT4.0.

Prosimo vas, da do **petka, 11. marca 2022** izpolnete oba vprašalnika za oceno krožnosti in zrelosti digitalizacije v vašem podjetju: **Circular Assessment Score (CAS) in Digital Maturity Assessment (DMA)**, ki sta dostopna preko povezave: https://circular40.eu/

Po prejetju poročil in analiz orodji **nam jih prosim posredujte z odgovorom na to sporočilo.**

V prilogi lahko najdete tudi vse današnje materiale in predstavitve.

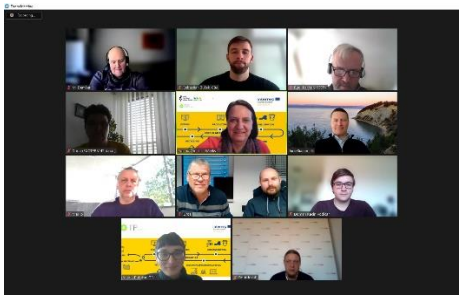
V primeru, da imate kakršnokoli dodatno vprašanje ali potrebujete pomoč pri uporabi orodji CAS in DMA nas prosim kontaktirajte.

Hvala in lep pozdrav,

Results

Please list below the results achieved, including the items available for documentation of the results (those items shall be put in the annexes to the deliverable).

1	Example: 1 online introductory workshop: *Cat4.0 pilot action on 9th of March 2021* Documentation • Agenda **AGENDA – 9. marec 2022** 13.00 Uvodni pozdrav – Bojana Omersel-Weeks 13.05 Predstavitev predavateljev in svetovalcev in programa usposabljanja CAT 4.0 13.20 Predstavitev udeležencev 13.30 Uvod v krožno ekonomijo in krožne poslovne modele – Jurij Giacomelli, Circular Business Academy 14.00 Q&A 14.10 Uvod v digitalno transformacijo – Rudi Panjtar, KCSTV 14.40 Q&A in premor 15.00 Učna orodja in potek individualnega svetovanja 16.00 Konec programa Interreg Alpine Space Circular4.0 kcstv CIRCULAR BUSINESS ACADEMY	**Date**	9.3.2022

	• Participant list/screen shot **Ime** **Priimek** **E-pošta** **Organizacija** Marko Likon marko.likon@telemach.net Škrlj d.o.o. Robi Jakob robi.jakob@kronoterm.com Kronoterm doo DARJA šTER darja.ster@exoterm.si Exoterm-it d.o.o. Jure Naglič jure.naglic@ekstera.si Ekstera d.o.o. Matjaž Centrih prodaja@bass.si BASS d.o.o., Celje Matija Hriberšek matija.hribersek@podkriznik.si Podkrižnik d.o.o. Gregor Živec gregor.zivec@barjans.si Barjans d.o.o. KATJA KLANČNIK Kacin KKLANCNIK@WEILERABRASIVES.COM WEILER ABRASIVES Domen Vodičar Domen.KacinVodicar@inea.si INEA d.o.o. Tomaž Ulčar Tomaz.Ulcar@elvez.si ELVEZ Sara Pavlovic sara.pavlovic@numip.si Numip d. o. o. Natalija Debelak natalija.debelak@bass.si Uroš Kozel komerciala@ekstera.si Ekstera d.o.o. • Picture 		
	•	Date	
3			
n		Date	

Deviations – corrective measures (as occurring)

Please describe and explain below the deviations compare to the initial plan:

- Delays
- Significant changes in the activities (activities cancelled, new ones)
- Explain corrective measures taken (if any)

Some companies which participated at the introductory course on the 9th of March

CAT4.0 1:1 expert consultation to SME's

<table>
<tr><td>Title</td><td colspan="2">CAT4.0 1:1 expert consultation to SME's</td><td>Start date</td><td>10.3.2022</td></tr>
<tr><td colspan="3"></td><td>End date</td><td>4.5.2022</td></tr>
<tr><td colspan="3">Documentation:

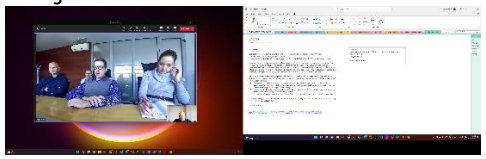
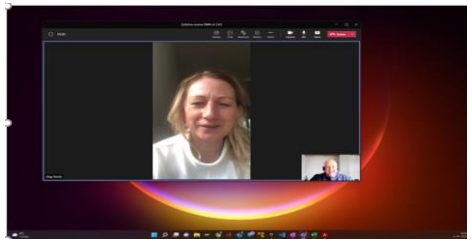
• List of SMEs having performed an assessment
• Overview of the results
As part of the training, external experts conducted an analysis of the circularity of the participating companies using the Circularity Assessment Score (CAS2.0)and DMA (i4MS) and based on at least one personal meeting with each of the participants. At personal meetings they discussed the results of the assessment of the company's circularity/digital maturity and identified circular/digital opportunities to increase the circularity and digital advancment in the organization or. to develop a new product, service or circular business model where possible with investments into digital technologies. Based on the meetings, some participants also prepared a project plan in the form of Lean Business Model Canvas.</td><td colspan="2">Date

22.3.-26.4.2022</td></tr>
<tr><td colspan="5">Results

Please list below the results achieved, including the items available for documentation of the results (those items shall be put in the annexes to the deliverable).</td></tr>
<tr><td>1</td><td colspan="2">Example: One on one consultations with companies. Individual reports available as annexes to this report.

All companies obtained a documented report, a picture of DMA and CAS diagrams/scoring results and DMA/CAS reports/responses summary. 3 of SME's produced business canvass as well.

Documentation provided for each of the participating companies consists of:</td><td>Date</td><td>22.3.-26.4.2022</td></tr>
</table>

	A.T3.2. Template attachment - Individual company report_final ... Barjans_DMA_04.04.2022 CAS2.0_report_Barjans I4ready_DMA_Barjans d.o.o. Lean Canvas_Barjans_Zelena smer (1) ResponseSummary (1) • Participant list/screen shot Barjans  SMM 		
2	10 CAS+digital maturity assessments of SMEs were produced	**Date**	

Documentation:

- Overview of the results

As part of the training, external experts conducted an analysis of the circularity of the participating companies using the Circularity Assessment Score (CAS2.0)and DMA (i4MS) and based on at least one personal meeting with each of the participants. At personal meetings they discussed the results of the assessment of the company's circularity/digital maturity and identified circular/digital opportunities to increase the circularity and digital advancment in the organization or. to develop a new product, service or circular business model where possible with investments into digital technologies. Based on the meetings, 3 participating SME's also prepared a pilot project plan in the form of Lean Business Model Canvas.

- List of SMEs having performed an assessment

N°	Company name	Company Address / Region	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)*
1	BASS d.o.o.	Celje, Slovenia	IT	www.bass.si	Yes	11.03.2022	CAS2.0	Not performed, company did not respond to communication	i4Ready	01.04.2022	NO	
2	WEILER ABRASIVES d.o.o.	Maribor, Slovenia	Manufacturing	https://www.weilerabrasives.com/emea/	Yes	14.03.2022	CAS2.0	Yes	i4Ready	22.03.2022 28.03.2022 11.04.2022	11.4.2022	

3	Exoterm n d.o.o.	Kranj, Slovenia	Metallurgy	https://www.exoterm.si/	Yes	14.03.2022	CAS2.0	Yes	i4Ready	23.03.2022 07.04.2022	11.4.2022				
4	ELVEZ d.o.o.	Višnja Gora, Slovenia	Manufacturing-plastics	https://elvez.si/sl/	Yes	14.03.2022	CAS2.0	Yes	i4Ready	05.04.2022 15.04.2022	15.4.2022	Lean Canvas			
5	Kronoterm d.o.o.	Gomilsko, Slovenia	Smart heating solutions	https://kronoterm.com/	Yes	14.03.2022	CAS2.0	Yes	i4Ready	11.04.2022 20.04.2022	20.4.2022				
6	Numip d.o.o.	Ljubljana, Slovenia	Manufacturing	https://www.numip.si/sl/	Yes	10.03.2022	CAS2.0	Yes	i4Ready	11.04.2022	20.4.2022				
7	Podkrižnik d.o.o.	Ljubno ob Savinji, Slovenija	Manufacturing-plastics	https://podkriznik.si/	Yes	14.03.2022	CAS2.0	Yes	i4Ready	04.04.2022 04.05.2022	In progress				
8	Barjans d.o.o.	Vrhnika, Slovenia	Cleaning and hygiene products	https://www.barjans.si/	Yes	15.03.2022	CAS2.0	Yes	i4Ready	08.04.2022	30.4.2022	Lean canvas			
9	INEA d.o.o.	Ljubljana, Slovenia	IT	https://www.inea.si	Yes	15.03.2022	CAS2.0	Yes	i4Ready	05.04.2022 26.04.2022	26.4.2022				

	10	Ekstera d.o.o.	Prevalje, Slovenia	Manufacturing	https://www.ekstera.si/sl/	Yes	11.03.2022	CAS2.0	Yes	i4Ready	21.04.2022	21.4.2022			
n															Date

Deviations – corrective measures (as occurring)

Please describe and explain below the deviations compare to the initial plan:

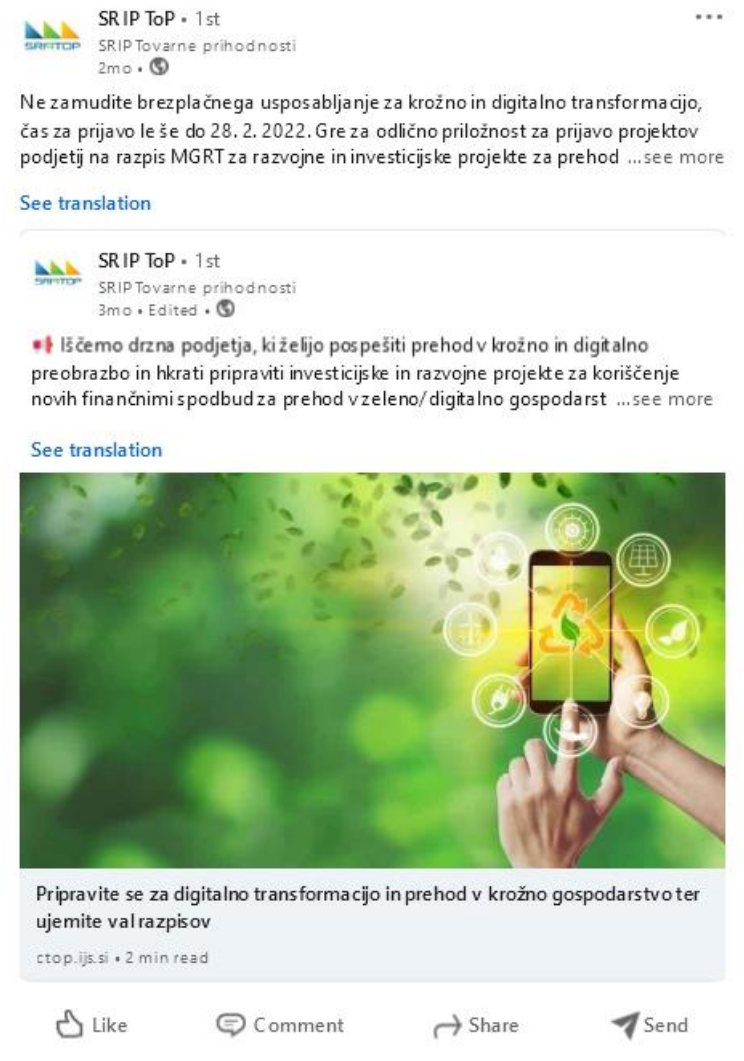
- Delays
- Significant changes in the activities (activities cancelled, new ones)
- Explain corrective measures taken (if any)

Some companies which participated at the introductory course on the 9th of March decided not to further commit to the implementation of the pilots due to lack of human resources and/or responsibility level in the organisation. Retention of SMEs. From 15 registered SME's for pilots, 13 SME's attended initial meeting, 10 SME's were assisted 1:1 and with 9 Action/investment plan was proposed. A broad call was issued to open pilot actions to various sectors and industries (not only selecte in T.1.) as the concept of the circular economy is a new one and narrowing down the focus to only selected sectors would limit even more the interest and participation of SME's in the pilot actions. As JSI predominantly had expertise in assessing certain sectors the Slovenian partners JSI and Technology Park Ljubljana distributed pilot assistance according to the technical expertise available i.e. JSI assisted more to the manufacturing, construction, metallurgy/mateirals and ICT industries predominantly.

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

Apart from the retention rate of SME's i.e. number of companies that followed throughout the pilot action from beginning to the end there were no other notifiable deviations from implementing the pilots. Timing was another issue as some SME's would need a longer period to prepare business/investment plans and gain needed top management support for that. All the foreseen pilot activities were performed and presented to the SME's. Pilot actions were closely linked to the national calls for projects in domain of circular economy and digitalisation of SME's.

6. Communication activities implemented to support the pilot action



Reply Reply All Forward

Members-ctop <members-ctop-bounces@ijs.si> on behalf of ctop@ijs.si Members-ctop@ijs.si 2 25/02

[Members-ctop] Povabilo za MSP na brezplačno usposabljanje za krožno in digitalno transformacijo

You forwarded this message on 25/02/2022 15:13.

Circular4.0-usposabljanje-MSP_povabilo-1.docx 76 KB

Untitled attachment 00062.txt 230 bytes

Spoštovani,

vabimo mala in srednje velika podjetja na **brezplačno usposabljanje za krožno in digitalno transformacijo** oz. Circularity Acceleration Training 4.0 (CAT4.0) v okviru projekta Circular4.0. Gre za odlično priložnost za prijavo projektov podjetij na razpis MGRT za razvojne in investicijske projekte za prehod v krožno / digitalno ekonomijo. Čas za prijavo je do **28. februarja 2022**, obrazec za prijavo pa je dostopen **TUKAJ**.

Več informacij je na voljo v priloženem dokumentu ter na spletni strani **TUKAJ**.

Lep pozdrav,

Ekipa SRIP Tovarne prihodnosti / *SRIP Factories of the Future Team*

Institut Jožef Stefan /*Jožef Stefan Institute*
Center Tovarne prihodnosti / Centre Factories of the Future

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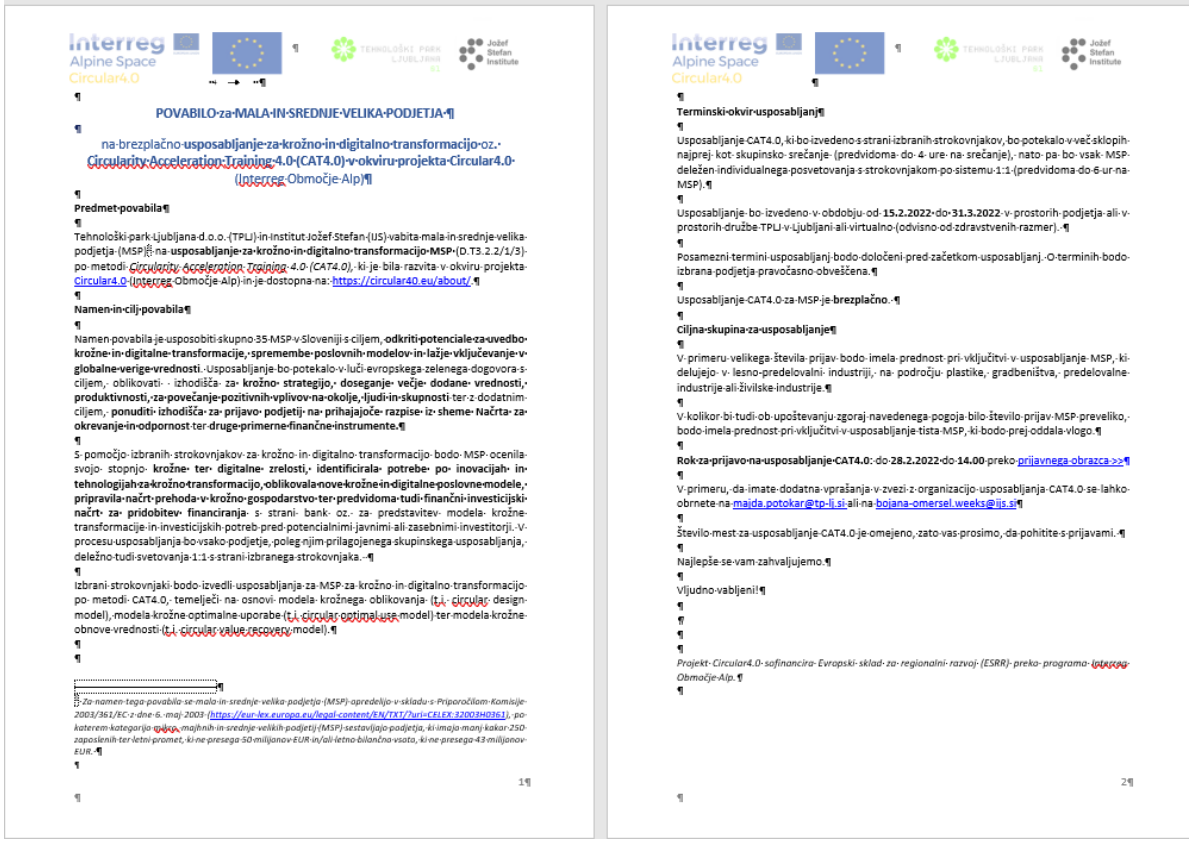
T: +386 (0)1 477 30 71

REPUBLIKA SLOVENIJA
MINISTRSTVO ZA GOSPODARSKI RAZVOJ IN TEHNOLOGIJO

EVROPSKA UNIJA

Naložba št. 2130-17-090102 sofinancirata republika Slovenija in Evropska unija iz Evropskega sklada za regionalni razvoj.

Connected



Interreg Alpine Space Circular4.0 ¶

TEHNOLOŠKI PARK LJUBLJANA d.d. Jožef Stefan Institute

¶

POVABILO·za·MALA·IN·SREDNJE·VELIKA·PODJETJA·¶

¶

na·brezplačno·**usposabljanje·za·krožno·in·digitalno·transformacijo**·oz.·Circularity·Acceleration·Training·4.0·(CAT4.0)·v·okviru·projekta·Circular4.0·(Interreg·Območje·Alp)¶

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Predmet·povabila¶

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Tehnološki·park·Ljubljana·d.o.o.·(TPLJ)·in·Institut·Jožef·Stefan·(IJS)·vabita·mala·in·srednje·velika·podjetja·(MSP)·na·**usposabljanje·za·krožno·in·digitalno·transformacijo·MSP**·(D.T3.2.2/1/3)·po·metodi·*Circularity Acceleration Training 4.0 (CAT4.0)*, ki je bila razvita v okviru projekta Circular4.0 (Interreg Območje Alp) in je dostopna na: https://circular40.eu/about/.¶

¶

Namen·in·cilj·povabila¶

¶

Namen·povabila·je·usposobiti·skupno·35·MSP·v·Sloveniji·s·ciljem,·**odkriti·potenciale·za·uvedbo·krožne·in·digitalne·transformacije,·spremembe·poslovnih·modelov·in·lažje·vključevanje·v·globalne·verige·vrednosti**.·Usposabljanje·bo·potekalo·v·luči·evropskega·zelenega·dogovora·s·ciljem,· oblikovati· · izhodišča· za· **krožno· strategijo,· doseganje· večje· dodane· vrednosti,· produktivnosti,·za·povečanje·pozitivnih·vplivov·na·okolje,·ljudi·in·skupnosti** ter·z·dodatnim·ciljem,· **ponuditi· izhodišča· za· prijavo· podjetij· na· prihajajoče· razpise· iz· sheme· Načrta· za· okrevanje·in·odpornost**·ter·**druge·primerne·finančne·instrumente.¶**

¶

S· pomočjo· izbranih· strokovnjakov· za· krožno· in· digitalno· transformacijo· bodo· MSP· ocenila· svojo· stopnjo· **krožne· ter· digitalne· zrelosti,· identificirala· potrebe· po· inovacijah· in· tehnologijah·za·krožno·transformacijo,·oblikovala·nove·krožne·in·digitalne·poslovne·modele,· pripravila·načrt·prehoda·v·krožno·gospodarstvo·ter·predvidoma·tudi·finančni·investicijski· načrt· za· pridobitev· financiranja**· s· strani· bank· oz.· za· predstavitev· modela· krožne· transformacije·in·investicijskih·potreb·pred·potencialnimi·javnimi·ali·zasebnimi·investitorji.·V· procesu·usposabljanja·bo·vsako·podjetje,·poleg·njim·prilagojenega·skupinskega·usposabljanja,· deležno·tudi·svetovanja·1:1·s·strani·izbranega·strokovnjaka.·¶

¶

Izbrani·strokovnjaki·bodo·izvedli·usposabljanja·za·MSP·za·krožno·in·digitalno·transformacijo·po· metodi· CAT4.0,· temelječi· na· osnovi· modela· krožnega· oblikovanja· (t.i.· circular· design· model),·modela·krožne·optimalne·uporabe·(t.i.·circular optimal use model)·ter·modela·krožne· obnove·vrednosti·(t.i.·circular value recovery model).¶

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¶

[1]·Za·namen·tega·povabila·se·mala·in·srednje·velika·podjetja·(MSP)·opredelijo·v·skladu·s·Priporočilom·Komisije· 2003/361/EC·z·dne·6.·maj·2003·(https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32003H0361),·po· katerem·kategorija· mikro,·majhnih·in·srednje·velikih·podjetij·(MSP)·sestavljajo·podjetja,·ki·imajo·manj·kakor·250· zaposlenih·ter·letni·promet,·ki·ne·presega·50·milijanov·EUR·in/ali·letno·bilančno·vsota,·ki·ne·presega·43·miljanov· EUR.·¶

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Interreg Alpine Space Circular4.0 ¶

TEHNOLOŠKI PARK LJUBLJANA d.d. Jožef Stefan Institute

¶

Terminski·okvir·usposabljanj¶

¶

Usposabljanje·CAT4.0,·ki·bo·izvedeno·s·strani·izbranih·strokovnjakov,·bo·potekalo·v·več·sklopih·najprej· kot· skupinsko· srečanje· (predvidoma· do· 4· ure· na· srečanje),· nato· pa· bo· vsak· MSP· deležen·individualnega·posvetovanja·s·strokovnjakom·po·sistemu·1:1·(predvidoma·do·6·ur·na·MSP).¶

¶

Usposabljanje· bo· izvedeno· v· obdobju· od· **15.2.2022**·do·**31.3.2022**· v· prostorih· podjetja· ali· v· prostorih·družbe·TPLJ·v·Ljubljani·ali·virtualno·(odvisno·od·zdravstvenih·razmer).·¶

¶

Posamezni·termini·usposabljanj·bodo·določeni·pred·začetkom·usposabljanj.·O·terminih·bodo· izbrana·podjetja·pravočasno·obveščena.¶

¶

Usposabljanje·CAT4.0·za·MSP·je·**brezplačno**.·¶

¶

Ciljna·skupina·za·usposabljanje¶

¶

V· primeru· velikega· števila· prijav· bodo· imela· prednost· pri· vključitvi· v· usposabljanje· MSP,· ki· delujejo· v· lesno-predelovalni· industriji,· na· področju· plastike,· gradbeništva,· predelovalne· industrije·ali·živilske·industrije.¶

¶

V·kolikor·bi·tudi·ob·upoštevanju·zgoraj·navedenega·pogoja·bilo·število·prijav·MSP·preveliko,· bodo·imela·prednost·pri·vključitvi·v·usposabljanje·tista·MSP,·ki·bodo·prej·oddala·vlogo.¶

¶

Rok·za·prijavo·na·usposabljanje·CAT4.0: do·**28.2.2022**·do·**14.00**·preko·prijavnega·obrazca·>>¶

¶

V·primeru,·da·imate·dodatna·vprašanja·v·zvezi·z·organizacijo·usposabljanja·CAT4.0·se·lahko· obrnete·na·majda.potokar@tp-lj.si·ali·na·bojana-omersel.weeks@ijs.si¶

¶

Število·mest·za·usposabljanje·CAT4.0·je·omejeno,·zato·vas·prosimo,·da·pohitite·s·prijavami.·¶

¶

Najlepše·se·vam·zahvaljujemo.¶

¶

Vljudno·vabljeni!¶

¶

¶

¶

¶

Projekt·Circular4.0·sofinancira·Evropski·sklad·za·regionalni·razvoj·(ESRR)·preko·programa·Interreg· Območje·Alp.·¶

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SRIP KROŽNO GOSPODARSTVO

SRIP - Krožno gospodarstvo | Clani | Novice | Dogodki | Koncepti | Pravni okvirji

Iskanje

Zadnje objave

- MEDNARODNA KONFERENCA ENERGETSKA UČINKOVITOST MALIH IN SREDNJE VELIKIH PODJETIJ ZA ZELENO PRIHODNOST
- SLOBRAZ – Uspešen vstop na hrvaški trg
- Ugotovitve in predlogi pravnega okvira krožnega javnega naročanja – izziv in priložnost
- Kako bodo trajnostni projekcijski postali standard?
- Modro gospodarstvo Slovenije

Ste pripravljeni na krožno in digitalno transformacijo?

Vabimo mala in srednje velika podjetja na brezplačno usposabljanje za krožno in digitalno transformacijo oz. Circularity Acceleration Training 4.0 (CAT4.0) v okviru projekta Circular4.0, ki bo potekalo od 15.2.2022 do 31.3.2022.

Namen in cilj povabila

Namen povabila je usposobiti skupno 35 MSP v Sloveniji s ciljem, **odkriti potenciale za uvedbo krožne in digitalne transformacije, spremembe poslovnih modelov in lažje vključevanje v globalne verige vrednosti**. Usposabljanje bo potekalo v luči evropskega zelenega dogovora s ciljem, oblikovati izhodišča za **krožno strategijo, doseganje večje dodane vrednosti, produktivnosti, za povečanje pozitivnih vplivov na okolje, ljudi in skupnosti** ter z dodatnim ciljem, **poveziti izhodišča za prijavo podjetij na prihajajoče razpise iz sheme Načrta za okrevanje in odpornost** ter **druge primerne finančne instrumente.**

S pomočjo izbranih strokovnjakov za krožno in digitalno transformacijo bodo MSP ocenila svojo stopnjo **krožne ter digitalne zrelosti, identificirala potrebe po inovacijah in tehnologijah za krožno transformacijo, oblikovala nove krožne in digitalne poslovne modele, pripravila načrt prehoda v krožno gospodarstvo ter predvidoma tudi finančni investicijski načrt za pridobitev financiranja** s strani bank oz. za predstavitev modela krožne transformacije in investicijskih potreb pred potencialnimi javnimi ali zasebnimi investitorji. V procesu usposabljanja bo vsako podjetje, poleg njim prilagojenega skupinskega usposabljanja, deležno tudi svetovanja 1:1 s strani izbranega strokovnjaka.

Izbrani strokovnjaki bodo izvedli usposabljanja za MSP za krožno in digitalno transformacijo po metodi CAT 4.0, temelječi na osnovi modela krožnega oblikovanja (t.i. circular design model), modela krožne optimalne uporabe (t.i. circular optimal use model) ter modela krožne obnove vrednosti (t.i. circular value recovery model).

Terminski okvir usposabljanja

Usposabljanje CAT 4.0, ki bo izvedeno s strani izbranih strokovnjakov, bo potekalo v več sklopih najprej kot skupinsko srečanje (predvidoma do 4 ure na srečanje), nato pa bo vsak MSP deležen individualnega posvetovanja s strokovnjakom po sistemu 1:1 (predvidoma do 6 ur na MSP).

Usposabljanje bo izvedeno predvidoma v obdobju od **15.2.2022** do **31.3.2022** v prostorih podjetja ali v prostorih družbe TPLJ v Ljubljani ali virtualno (odvisno od zdravstvenih razmer).

Posamezni termini usposabljanj bodo določeni pred začetkom usposabljanj. O terminih bodo izbrana podjetja pravočasno obveščena.

Usposabljanje CAT 4.0 za MSP je **brezplačno**.

Ciljna skupina za usposabljanje

Ciljna skupina so MSP. V primeru velikega števila prijav bodo imela prednost pri vključitvi v usposabljanje MSP, ki delujejo v krožno-predelovalni industriji, na področju plastike, gradbeništva, predelovalne industrije ali živilske industrije.

V kolikor bi tudi ob upoštevanju zgoraj navedenega pogoja bilo število prijav MSP previsoko, bodo imela prednost pri vključitvi v usposabljanje tista MSP, ki bodo prej oddala vlogo.

Rok za prijavo na usposabljanje CAT 4.0: do petka 11.2.2022 preko prijavnega obrazca.

V primeru, da imate dodatna vprašanja v zvezi z organizacijo usposabljanja CAT 4.0 se lahko obrnete na mojca.potokar@tpl.si ali na bojana.cvenar@mediaSRP.si.

Število mest za usposabljanje CAT 4.0 je omejeno, zato vas prosimo, da pohitite s prijavami.

Interreg Alpine Space Circular4.0

7. Summary of the achievements - lessons learnt

Achievements

Milestone(s) achievement analysis:
Quantitative (KPIs): 10 SME's were trained through the pilot actions, 10 CAS/DMA reports were produced and 3 lean canvasses. 13 individuals were present during the initial workshop on the 9th of March 2022.

Lessons learnt

More efforts and incentives through operators needs to be given to SME's for higher interest in participation.

It is useful to link the traning actions to the financial instruments (i.e. governmental grants, calls for proposals or banking instruments).

Higher managerial/decision making levels are to be involved from the beginning to the end to obtain needed commitments for circular transition.

Awarness raising campaigns on circular economy issues need to be stimulated to move to a higher general understanding of the differences between the linear and circular economy.

8. Annex

Annex 1: CAT4.0 meeting with SMEs

Description

Activity **as it was implemented:**

- What has been done
  A joint on line call for participation of companies with the CAT4.0 pilot training course was published via e-platforms of JSI, TP Lj and affiliated partners (KIC CLIMATE, SRIP Circular economy, SRIP Smart Cities, Chamber of Economy Cluster Smart factories, Association of Chemical Industries, Business Incubator Postojna)

- When: February-March 2022

- By Whom

  The call was published jointly by the JSI and Technology Park Ljubljana on e-social platforms and
  web sites of the partners stated above.

- How many SMEs were involved/did benefit?
  42 SMEs registered <u>in total</u> and than distributed between the two Circular4.0 project partners for individual consultations i.e. experts advisory testing.
  JSI took majority of the digitally matured companies mostly coming from the manufacturing sector i.e. services in support of manufacturing and construction and waste management sectors. All SME's qualified as SMEs i.e. they met criteria of their annual turnover or number of employees. 15 SME's were taken over by the JSI experts to be pre-screened by the experts for their business areas and to further determine the type of targeted tools needed with the 1:1 consultations.
- Registered companies received a direct e-mail invitation to join the CAT4.0 meeting on the 9th of March 2022 to explain the pilots process to the SMEs.

From: Majda Potokar <majda.potokar@tp-lj.si>
Sent: Wednesday, 2 March 2022 17:27
Cc: Juri <jurij@giacomellimedia.com>; sebastian.zuzek@giacomellimedia.com; Bojana Omersel Weeks <Bojana.omersel-weeks@ijs.si>; Aleš Pevc <ales.pevc@tp-lj.si>
Subject: Circular4.0: usposabljanje CAT4.0

Spoštovani,

najlepše se vam zahvaljujemo za vašo prijavo na usposabljanje Circularity Acceleration Training 4.0 (CAT 4.0), ki ga izvajamo v okviru projekta Circular4.0 (Interreg Območje Alp).

Sporočamo vam, da ste bili izbrani v program usposabljanja CAT4.0.

Usposabljanje CAT4.0 bo izvajal strokovnjak za krožno transformacijo podjetij g. Jurij Giacomelli (v cc) ter svetovalci Kompetenčnega centra za sodobne tehnologije vodenja (KCSTV).

Uvodno skupinsko srečanje se prične v **sredo, 9.3.2022 od 13.00 do 16.00 (online).**

Vljudno vas prosimo, da si rezervirate termin in ga potrdite g. Juriju Giacomelliju na njegov mail jurij@giacomellimedia.com (in v cc sebastian.zuzek@giacomellimedia.com).

Vse nadaljnje informacije o usposabljanju CAT4.0 (program, online povezava itd.) vam bo pred usposabljanjem posredoval g. Jurij Giacomelli (oz. njegov sodelavec g. Sebastjan Žužek).

Želimo vam uspešno usposabljanje in se veselimo srečanja z vami.

Lep pozdrav.

Majda Potokar, MSc
Project manager

TEHNOLOŠKI PARK LJUBLJANA 25 LET

T: +386 (0)1 620 34 90
e-mail: majda.potokar@tp-lj.si

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No.	Company name	Sector	No. of employees	Turnover
1	Škrlj d.o.o.	Advanced Manufacturing	51-250	< 50 MEUR
2	Kronoterm doo	Manufacturing	51-250	< 50 MEUR
3	Exoterm-it d.o.o.	Manufacturing/Methalurgy	41-50	< 50 MEUR
4	Fonaterm d.o.o.	Construction	1-10	< 50 MEUR
5	Ekstera d.o.o.	Manufacturing	11-20	< 50 MEUR
6	BASS d.o.o., Celje	Construction	21-30	< 50 MEUR
7	BASS d.o.o., Celje	ICT	21-30	< 50 MEUR
8	Podkrižnik d.o.o.	Plastics	51-250	< 50 MEUR
9	Barjans d.o.o., Pod Hruševco 20, 1360 Vrhnika	Services	51-250	< 50 MEUR
10	WEILER ABRASIVES D.O.O	Manufacturing	51-250	< 50 MEUR
11	SMM d.o.o.	Manufacturing	51-250	< 50 MEUR
12	ELVEZ	Plastics	51-250	< 50 MEUR
13	Numip d. o. o.	Services in manufacturing	51-250	< 50 MEUR
14	INEA d.o.o.	Services in manufacturing	51-250	< 50 MEUR
15	Interseroh d.o.o.	Waste management	11.-20	< 50 MEUR

SAVE THE DATE CAT4.0

Dragi udeleženci programa usposabljanja Circular Acceleration Training 4.0 (CAT4.0),

Vljudno vas vabimo na uvodno srečanje, ki bo potekalo online preko videokonferenčnega programa Zoom v **sredo, 9. marca 2022 ob 13.uri.**

Uvodno srečanje bo namenjeno predstavitvi programa usposabljanja CAT4.0 in seznanitvi s predavatelji in svetovalci. Na tem srečanju bomo obravnavali tudi prve module programa usposabljanja in spoznali učna orodja, ki jih bomo uporabljali v nadaljevanju.

V naslednjih dneh boste po elektronski pošti prejeli tudi natančnejša navodila za pripravo in sodelovanje v programu.

Povezava za Zoom Meeting:

https://us06web.zoom.us/j/83492012966

V pričakovanju snidenja vas lepo pozdravljamo,

Rudi Panjtar, Matjaž Demšar, KCSTV

Jurij Giacomelli, Sebatian Žužek, Gm

Presentations from the CAT4.0 meeting

Meeting agenda:

Introduction

Presentation of advisors

Introduction into circular economy and circular business models (CAT2.0- Modules 0-3)

Introduction to digital transformation as a pathway to circular economy

Introduction of Circular4.0 tools

Introduction to the CAT4.0 & presentation of the Circular 4.0 to the participants

Usposabljanje Circularity Acceleration Training (CAT4.0) za MSP, D.T3.2.2/1/3
DESIGN
PRODUCTION
USE/CONSUMPTION
WASTE
RAW MATERIALS
CIRCULAR ECONOMY 4.0
RECYCLING
REUSE/REPAIR/REMANUFACTURING
Marec 2022
IJS– Uvodni pozdrav
Interreg
Alpine Space
Circular4.0
Usposabljanje CAT4.0 in CIRCULAR4.0 projekt
S CIRCULAR4.0 projektom krepimo procese digitalizacije in pospešujemo prehod MSP v krožno gospodarstvo v alpski regiji.
Krožno gospodarstvo
Digitalna transformacija
Industrija 4.0
S povezavo obeh področij, tako v raziskavah kot v praksi ob razvoju in uporabi novih tehnologij, spodbujamo trajnostno transformacijo iz linearnega delovanja podjetij v krožno.
Namen usposabljanja CAT4.0
Hitra identifikacija pilotov krožne in digitalne transformacije s strani MSP za implementacijo v roku 6 - 12 mesecev s pomočjo orodij krožne in digitalne transformacije na področju:
- Prilagoditve tehnologije
- Novega ali izboljšanega ali transformiranega poslovnega modela
- Novih ali izboljšanih procesov
- Novih ali izboljšanih storitev
- Digitalne transformacije (kot je to le mogoče)
Priprava na financiranje pilotov s strani javnih ali zasebnih investitorjev.
Priprava na razpise krožne in digitalne transformacije npr. preko Načrta za okrevanje in odpornost in drugih razpisov financiranja.

Koristi CAT4.0 za podjetje: pridobitev brezplačnega 1:1 svetovanja s strani strokovnjaka za krožno/digitalno transformacijo (cca 10 ur/podjetje)
V primeru začetne krožne/digitalne zrelosti podjetja:
Pomoč pri pripravi osnovnega načrta za krožno in digitalno transformacijo/finančnega investicijskega načrta s priporočili s strani strokovnjaka/svetovalca
V primeru že bolj napredne krožne/digitalne zrelosti podjetja
Pomoč pri pripravi poslovnega canvasa/finančnega investicijskega načrta s priporočili s strani strokovnjaka/svetovalca
Interreg
Alpine Space
Circular4.0
Okvirni program usposabljanja CAT4.0
https://circular40.eu/
Ocena krožne zrelosti
Orodje: Circular Assessment Score CAS 2.0 (percepcijski vprašalnik)
Ocena digitalne zrelosti
Izbor orodja za oceno digitalne zrelosti
Identifikacija potreb po krožni in digitalin transformaciji
Začetna stopnja zrelosti
Napredna stopnja zrelosti
Pitching pred javnimi ali zasebnimi vlagatelji
Priprave na razpise
Interreg
Alpine Space
Circular4.0
Promocija uspešnih primerov pilotov krožne in digitalne transformacije
Brošura uspešnih primerov
Razstava uspešnih primerov - plakat
Circular4.0 socialni mediji, spletna stran
Slovenija, Avstrija, Nemčija, Italija, Francija
Regionalni informativni dan
Finalna Circular4.0 konferenca v septembru 2022
Slovenija- Ljubljana
Interreg
Alpine Space
Circular4.0

Introduction of the circular economy concepts and CAT4.0 with the key learning objectives

Identification of SME needs and investment plan for circular/digital transformation

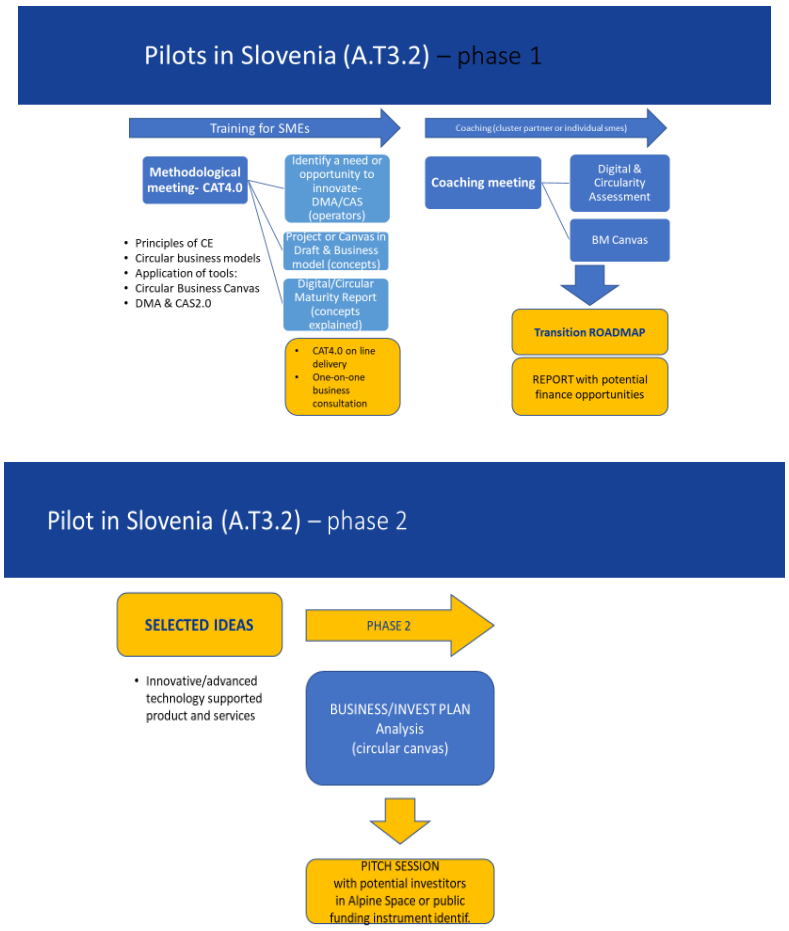
Each company supported was acquainted that it will receive a document established on the basis of the assessment and in collaboration with the SME (at least one bilateral meeting between the SME and an expert/consultant during the process) and encompassing at least one recommendation covering any of the following aspects of the transformation of the company towards higher circularity (= increase of maturity level) by:

- 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. Experts will assist SME's 1:1 on that.

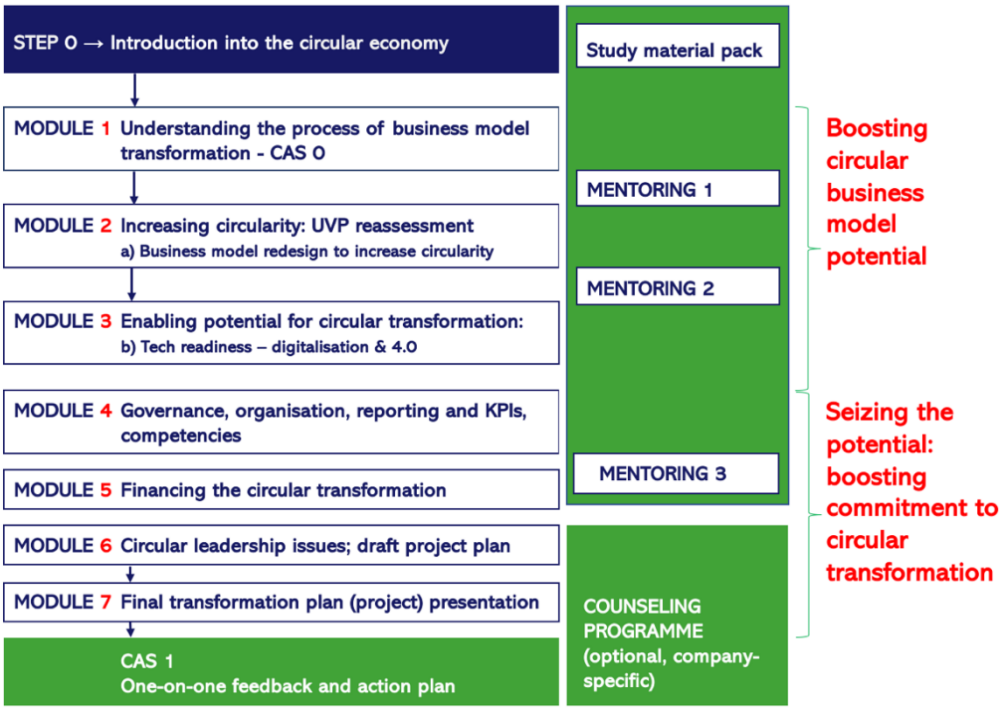
Training process was presented in accordance with the Slovenian methodology for pilots developed in the scope of the A.T.3.1.

- Methodology



Cat4.0 Course content was explained- Modules 1-3 and 6-7 (skipping 4 and 5 to be used during 1:1 consultation with SMEs to adopt specific company needs)

Picture 1: CAT4.0 course modules


STEP 0 → Introduction into the circular economy
MODULE 1 Understanding the process of business model transformation - CAS 0
MODULE 2 Increasing circularity: UVP reassessment
a) Business model redesign to increase circularity
MODULE 3 Enabling potential for circular transformation:
b) Tech readiness – digitalisation & 4.0
MODULE 4 Governance, organisation, reporting and KPIs, competencies
MODULE 5 Financing the circular transformation
MODULE 6 Circular leadership issues; draft project plan
MODULE 7 Final transformation plan (project) presentation
CAS 1
One-on-one feedback and action plan
Study material pack
MENTORING 1
MENTORING 2
MENTORING 3
COUNSELING PROGRAMME (optional, company-specific)
Boosting circular business model potential
Seizing the potential: boosting commitment to circular transformation

MODULE 0: Introduction to the circular economy

Topic / learning objectives:

- Introducing the concept of the circular economy, circularity

Defining a concept of the industry value chain and the “Value Hill”
Understanding circular business models (circular product design, optimal use, value recovery), their importance for the circular transformation and their risk profiles

- Introducing the roots of the circular economy and their current embedding in the legislative framework
- Understanding the meaning of business model redesign for a company and for the whole value chain
- Elaborating on opportunities, challenges and risks of a circular business model transformation

Redefining a competitive advantage in the context of circular transition

MODULE 1 - CAS 0: Understanding the process of business model transformation

Topic / learning objectives:

- Overview of the circular transformation journey
- The CAS2.0 tool (what it is and how to apply it in a company setting)

https://circular40.eu/cas-dma-tools/

Central Concepts:

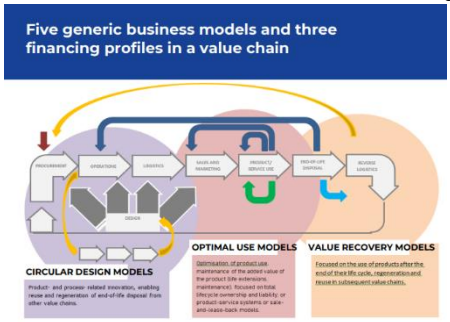
1. The 10-step circular transformation journey
2. The Circularity Assessment Score (CAS2.0)

MODULE 2: Increasing circularity: Unique Value Proposition (UVP) reassessment

a) Business model redesign to increase circularity

Use of the adapted business model canvas was explained, in which we exposed the issues of circularity, simultaneously reassessing the UVP against all three dimensions of sustainability.

- The understanding of the **value chain** in the context of circularity
- The understanding of the **typology of circular business models** (circular design, circular use and recovery)

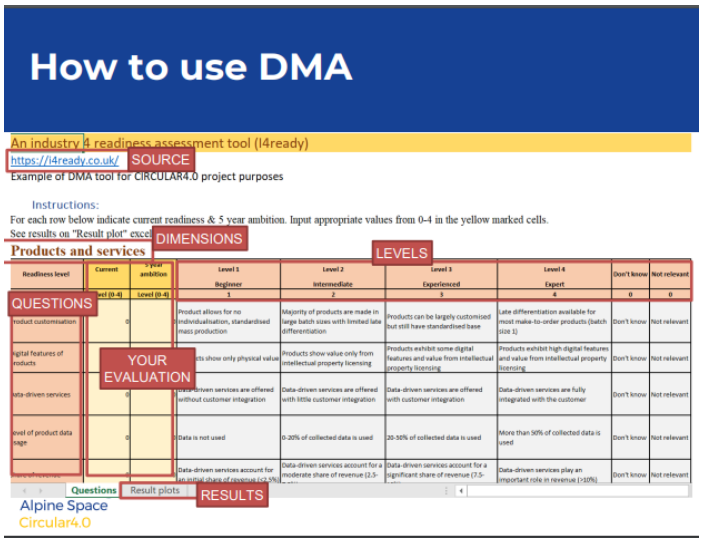


MODULE 3: Enabling the potential for circular transformation

b) Tech readiness – digitalisation & 4.0

Topics / learning objectives:

- Digital Maturity Assessment tools to be used (DMA)

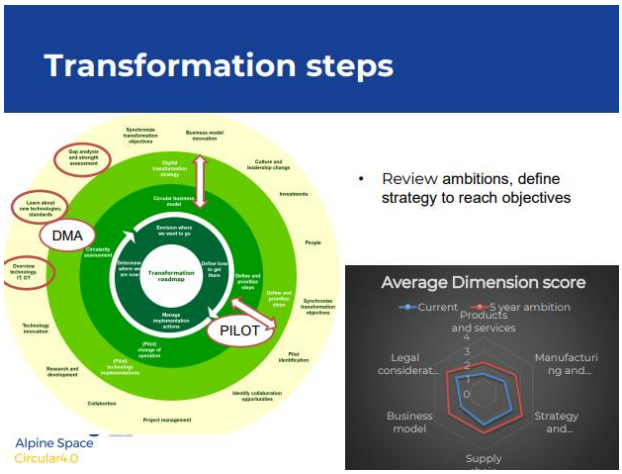


https://circular40.eu/cas-dma-tools/

MODULE 6: Circular leadership issues - integrating the pilot - draft project plan

Topics / learning objectives:

- Scaling the pilot
- Advanced circular transformation
- Leadership challenges
- Structure of the project plan

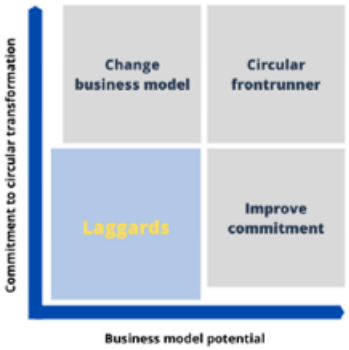


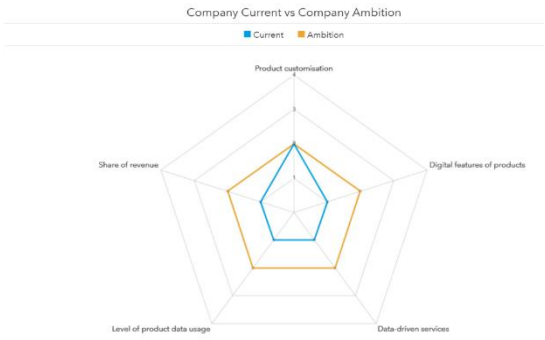
MODULE 7: Final transformation plan (project) presentation

Topics / learning objectives:

- Presentation Business Canvas
- CAS 2.0/DMA report
- One-on-one feedback and SME action plan

CAS Matrix:





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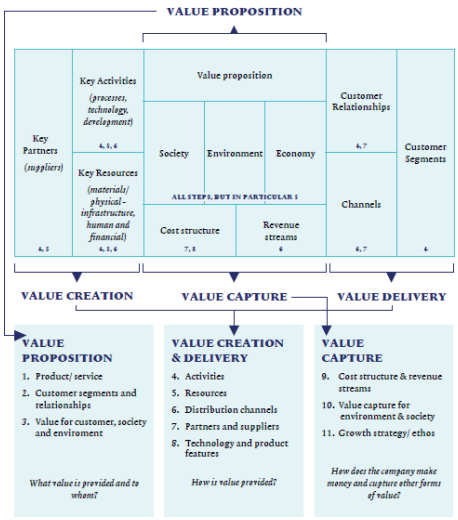
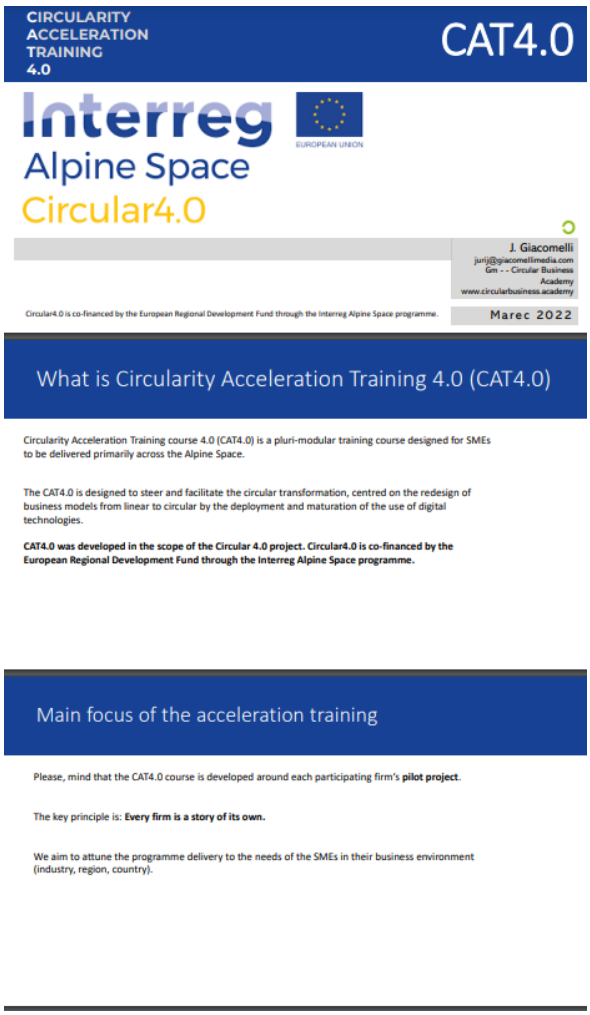


Adapted business canvas:

Source: Bocken and Short, 2016; adapted from Richardson, 2008; Osterwader and Pigneur, 2005; Bocken et al, 2014; Short et al., 2014

Selected slides from a meeting presentation



Circular opportunities, circular business model transformations

In this process we are looking for opportunities..!

Circular opportunities for SMEs across the Alpine Space should lead their transformation processes instead of being viewed as a forced way-outs to reach some of the environment- or society-related Sustainable Development Goals (SDGs) at the expense of business viability of engaged firms or even economic criteria at large.

Please, mind: The adoption of circular principles is not "only" about resource efficiency.

Where do circular opportunities come from?

Circular opportunities for SMEs arise from complex changes in the business environment and in our societies at large: increasing scarcity of primary material and energy resources, their pricing volatility, climate-related risk mitigation, societal issues, such as aging population, global migrations, mitigation of social inequality of different kinds, lifetime learning, consumer power, redesign of regulatory framework away from "take-make-dispose logic and related linear circular models.

The Circular Triangle

The Circular Triangle depicting the three dimensions of the circular transition: Circular economy (systemic, policy-making and regulatory view), Circular transformation representing corporate challenges, and Circular Culture requiring a new platform of social values.

Course organisation

Language of the course: Slovenian, English.

Course delivery is organised in a hybrid mode, using On-line platform (**Talent LMS**) and Zoom for live sessions. The latter ones may be carried out also in a classroom, should the circumstances allow.

Participants of this CAT4.0 Course
- representatives of SMEs (actual beneficiaries)

Navigation through the course
Reference review and completion of the course Modules

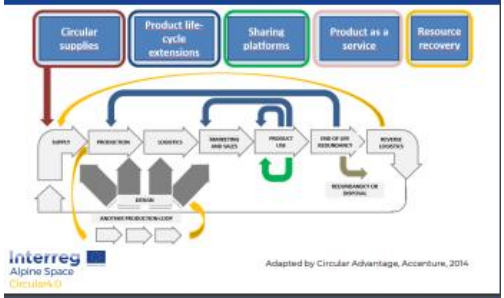
MODULE 1

Understanding the process of business model transformation CAS 0 and DMA 0

Interreg Alpine Space Circular4.0

Juri Giacomelli
Circular Business Academy

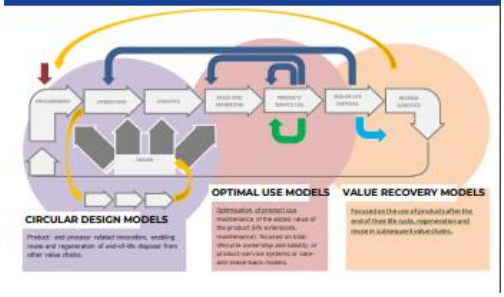
Five generic circular business models in the value chain

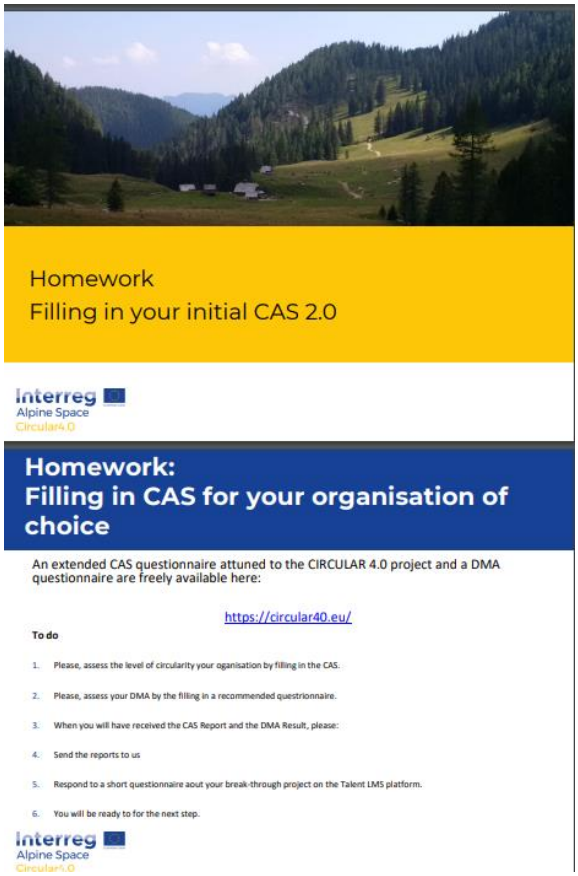


Interreg Alpine Space Circular4.0

Adapted by Circular Advantage, Accenture, 2014

Five generic business models and three financing profiles in a value chain

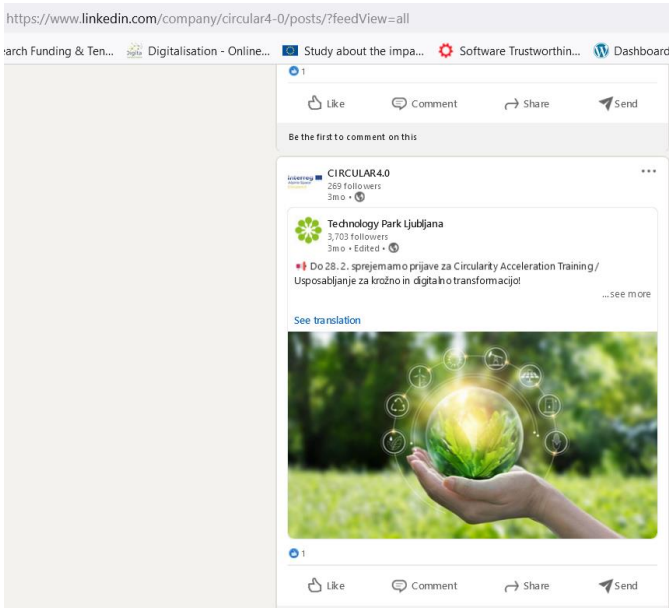


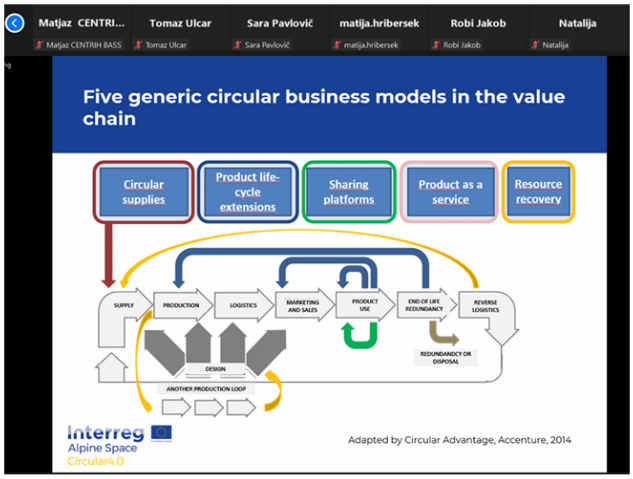


Presentation of the SME advisors/experts

Communication

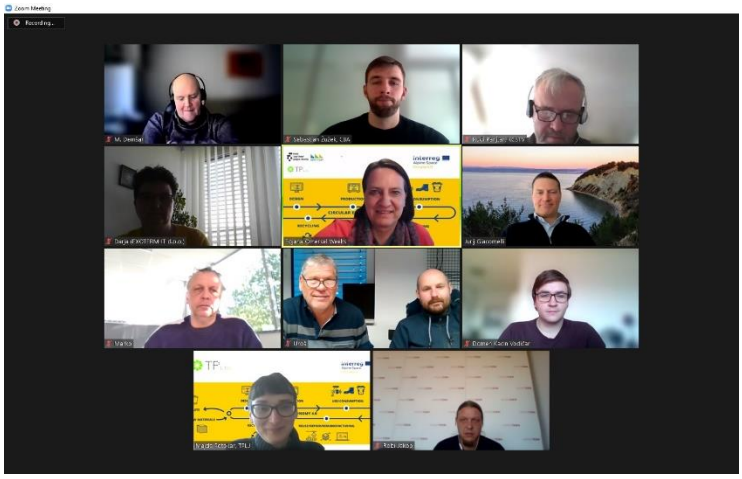
Registration of SME's to the pilot training programme as well as the introduction meeting of the Cat4.0 on the 9th of March 2022 were communicated via the Circular4.0 linkedin, via project partners social media and web site (JSI and TP LJ) as well as through operators such as Chamber of Economy, Business Incubators, SRIP Circular Economy, EIT Climate KIC).



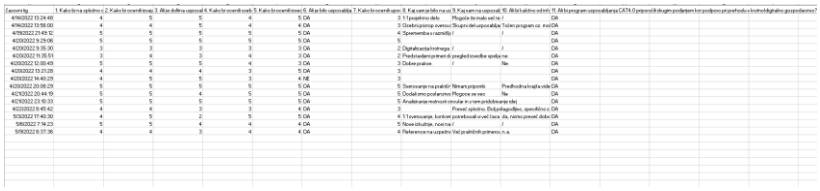


Presence list

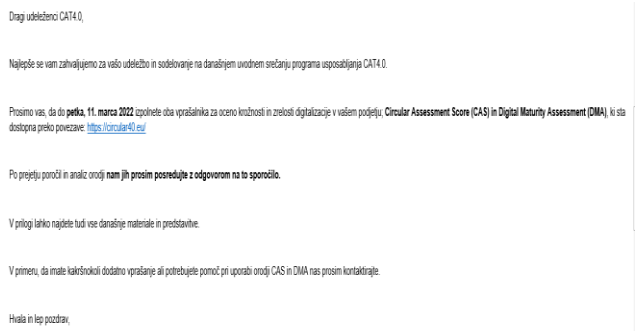
Prisotnost	Ime	Priimek	E-pošta	Organizacija
DA	Marko	Likon	marko.likon@telemach.net	Škrlj d.o.o.
DA	Robi	Jakob	robi.jakob@kronoterm.com	Kronoterm doo
DA	DARJA	šTER	darja.ster@exoterm.si	Exoterm-it d.o.o.
DA	Jure	Naglič	jure.naglic@ekstera.si	Ekstera d.o.o.
DA	Matjaž	Centrih	prodaja@bass.si	BASS d.o.o., Celje
DA	Matija	Hriberšek	matija.hribersek@podkrizn	Podkrižnik d.o.o.
DA	Gregor	Živec	gregor.zivec@barjans.si	Barjans d.o.o.
DA	KATJA	KLANČNIK	KKLANCNIK@WEILERAE	WEILER ABRASIVES
DA	Domen	Kacin Vodičar	Domen.KacinVodicar@ine	INEA d.o.o.
DA	Tomaž	Ulčar	Tomaz.Ulcar@elvez.si	ELVEZ
DA	Sara	Pavlovic	sara.pavlovic@numip.si	Numip d. o. o.
DA	Natalija	Debelak	natalija.debelak@bass.si	
DA	Uroš	Kozel	komerciala@ekstera.si	Ekstera d.o.o.



Programme satisfaction survey



Follow up invitation for 1:1 meetings with SME's and invitation to use CAS and DMA tools presented on the 9th of March during the joint meeting.



Dragi udeleženci CAT4.0,

Najlepše se vam zahvaljujemo za vašo udeležbo in sodelovanje na današnjem uvodnem srečanju programa usposabljanja CAT4.0.

Prosimo vas, da do **petka, 11. marca 2022** izpolnite oba vprašalnika za oceno krožnosti in zrelosti digitalizacije v vašem podjetju, **Circular Assessment Score (CAS) in Digital Maturity Assessment (DMA)**, ki sta dostopna preko povezave: https://circular40.eu/

Po prejetju poročil in analiz orodji **nam jih prosim posredujte z odgovorom na to sporočilo.**

V prilogi lahko najdete tudi vse današnje materiale in predstavitve.

V primeru, da imate kakršnokoli dodatno vprašanje ali potrebujete pomoč pri uporabi orodji CAS in DMA nas prosim kontaktirajte.

Hvala in lep pozdrav,

Annex 2: Overview of companies assisted

N°	Company name	Company Address/ Region	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)*
1	BASS d.o.o.	Celje, Slovenia	IT	www.bass.si	Yes	11.03.2022	CAS2.0	Not performed, company did not respond to communication	i4Ready	01.04.2022	NO			
2	WEILER ABRASIVES d.o.o.	Maribor, Slovenia	Manufacturing	https://www.weilerabrasives.com/emea/	Yes	14.03.2022	CAS2.0	Yes	i4Ready	22.03.2022 28.03.2022 11.04.2022	11.4.2022			
3	Exoterm d.o.o.	Kranj, Slovenia	Metallurgy	https://www.exoterm.si/	Yes	14.03.2022	CAS2.0	Yes	i4Ready	23.03.2022 07.04.2022	11.4.2022			
4	ELVEZ d.o.o.	Višnja Gora, Slovenia	Manufacturing- plastics	https://elvez.si/sl/	Yes	14.03.2022	CAS2.0	Yes	i4Ready	05.04.2022 15.04.2022	15.4.2022	Lean Canvas		
5	Kronoterm d.o.o.	Gomilsko, Slovenia	Smart heating solutions	https://kronoterm.com/	Yes	14.03.2022	CAS2.0	Yes	i4Ready	11.04.2022 20.04.2022	20.4.2022			
6	Numip d.o.o.	Ljubljana, Slovenia	Manufacturing	https://www.numip.si/sl/	Yes	10.03.2022	CAS2.0	Yes	i4Ready	11.04.2022	20.4.2022			

7	Podkrižnik d.o.o.	Ljubno ob Savinji, Slovenija	Manufacturing- plastics	https://podkriznik.si/	Yes	14.03.2022	CAS2.0	Yes	i4Ready	04.04.2022 04.05.2022	In progress			
8	Barjans d.o.o.	Vrhnika, Slovenia	Cleaning and hygiene products	https://www.barjans.si/	Yes	15.03.2022	CAS2.0	Yes	i4Ready	08.04.2022	30.4.2022	Lean canvas		
9	INEA d.o.o.	Ljubljana, Slovenia	IT	https://www.inea.si	Yes	15.03.2022	CAS2.0	Yes	i4Ready	05.04.2022 26.04.2022	26.4.2022			
10	Ekstera d.o.o.	Prevalje, Slovenia	Manufacturing	https://www.ekstera.si/sl/	Yes	11.03.2022	CAS2.0	Yes	i4Ready	21.04.2022	21.4.2022			