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# IDEA

## IMPROVED EMPLOYABILITY THROUGH CIRCULAR ECONOMY EDUCATION FOR ADULTS

2021 - 1 - PL01 - KA220 - ADU - 000026797

IDEA GUIDE



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## Project

Improved Employability through circular economy education for Adults – IDEA

### Start date

2022-02-01

### End date

2024-01-31

## Action

KA220 Cooperation partnerships in adult education

## Project result 1 – IDEA Guide

September 2023

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# Introduction

In this world where everything changes fast, it is really important to shift our focus towards more sustainable practices, circular and systemic thinking. The IDEA Guide is created to provide you with tools and methodologies to help Adult Educators and Adult Education Institutions in this transition, enabling them to make a real difference in your work.

IDEA Guide is a practical resource for Adult Educators and Adult Education Institutions created within the Erasmus+ Cooperation Partnership in Adult Education – Improved Employability Through Circular Economy Education for Adults (IDEA). It is focused on tools and methodologies to foster Circular Economy and Plastic Craftwork within their organizations and in their work with the target group and beyond.

The IDEA guide contains a selection of good practices at national and European level that encourage the Circular Economy through arts, crafts and tinkering and other NFE methodologies, as well as a detailed explanation of the identified methodologies and their replicability in activities involving the target group.

A Training Format employing the identified methodologies is included, as a practical resource for direct application of said methods in future trainings or in the daily life of organizations. The Training Format is based on the findings of a transnational research identifying the needs and barriers, and societal exclusion factors of adults at risk of exclusion, and the existing offer in the frame of Circular Economy Education and Plastic Craftwork. The Training Format is a practical tool with easy-to-follow theoretical and practical tools with examples. It's designed for different types of learners and situations. By bringing together these topics, the guide will help adult educators in educating unemployed adults improve their labor market prospects.

Moreover, topics like Plastic Craftwork and Tinkering Methodology encourages learning, engagement and passion for experimenting. By repurposing plastics into valuable creations and embracing tinkering as a tool for skill improvement, learners will be empowered to think out of the box, not only be equipped with skills for improved employability.

The final research report was done with the data obtained through mixed research in the 4 partner countries in the project: Poland, North Macedonia, Bosnia and Herzegovina and Italy. As mentioned above, a Desk Research was performed at collecting and analyzing existing good practices in the field of non-formal adult education on the topics of circular economy, plastic craftwork and tinkering. Apart from good practices, mixed research was also performed (Desk + Field Research) aimed at identifying the educational needs of unemployed adults (45+) and mapping the field stakeholders on a national level.

In the IDEA guide, Adult Educators will discover a set of resources aimed at promoting Circular Economy and Plastic Craftwork for 45+ unemployed adults, allowing them to engage with adult learners in a meaningful and impactful way. In this guide Adult Educators can find interactive workshops and engaging materials, which offer a practical approach to empower both educators and institutions to integrate Circular Economy, Plastic Craftwork and Tinkering into their curriculums and teaching programs. This education is not only beneficial for the environment but also for the personal and professional development of adult learners.

Whether you are an experienced adult educator or new to the field, the IDEA Guide is a needed tool that will support you in expanding your teaching skills and equipping adult educators and institutions who work with adults with the skills and knowledge needed to contribute to a more sustainable society. Together, we can be the change and contribute for a world where circularity and sustainability are the most important

The IDEA Guide isn't just about ideas on paper. Workshops in the Guide can be adapted and fit different situations and different ways of learning. The combination of multidisciplinary contexts like Plastic Craftwork, Circular Economy and Tinkering is also something that is beneficial and

provides more complete education which can bridge the gap between sustainability and employment.

IDEA Guide can be the needed resource to foster Circular Economy, Tinkering and Plastic Craft-work within your organization and with your target groups. Be ready to make a positive impact and educate the unemployed adults.

## 1. Research report

In the months December 2022 and January 2023, a Desk Research was performed at collecting and analyzing existing good practices in the field of non-formal adult education on the topics of circular economy, plastic craftwork and tinkering, for the purposes of the project Improved Employability through circular economy education for Adults – IDEA funded by the Erasmus+ Programme of European Commission under the reference number: 2021-1-PL01-KA220-ADU-000026797. Apart from good practices, mixed research was also performed (Desk + Field Research) aimed at identifying the educational needs of unemployed adults (45+) and mapping the field stakeholders on a national level.

Minimum of 20 unemployed adults and 20 stakeholders on aforementioned topics from Poland, Bosnia and Herzegovina, North Macedonia and Italy were asked to fill the Online Form answering the survey and at least 3 good practices in the field of adult non-formal educational programs in the relevant fields into a uniform template were gathered through online research.

The Online Questionnaire Forms for unemployed adults (45+) and stakeholders in the field of circular economy, plastic craftwork and tinkering are part of the Project Result 1 of the Erasmus+ Project Improved Employability Through Circular Economy Education for adults. of the results of these online forms from the 4 partner countries are put into Final Report as part of the PR 1 and a Training Format was developed, merged into IDEA Guide.

The goal of the online forms is identifying the educational needs (in terms of skills and struggles to be overcome) of unemployed adults (45+) combined with the identification of the existing offer of good practices regarding abovementioned topics and mapping the stakeholders in each partner country.



## 1.1. Unemployed adults (45+) – questionnaire form – Bosnia and Herzegovina

The questionnaire for unemployed adults includes questions on their needs, barriers for not attending training and educational opportunities, profile and awareness of the topics of circular economy, plastic craftwork, tinkering and how they can be helpful in their pursuit of job.

### Needs

First, the needs for the unemployed adults in Bosnia and Herzegovina were analyzed. According to the survey's answers 70% of the people who answered, attended an educational program, course, training or workshop in the last 5 years. Most of them attended 6 to 10 trainings (60%), some of the unemployed adults 1 to 5 trainings (30%), while 10% of them didn't attend any training, course, workshop or educational program.

Most of the unemployed adults attended on the job training (6 of 20 respondents), followed by courses for obtaining formal qualification (10 of 20 respondents), workshops and seminars (6 of 20 respondents), non-formal learning opportunities (10 of 20 respondents), open or distance education (12 of 20 respondents), other courses or private lessons (5 of 20 respondents).

Biggest percentage of those who attended a training were participating at job related training (PR, HR, Administration) (40% of respondents), language courses (30% of respondents), IT related (20% of respondents)

Regarding the barriers that prevent adults from taking part in trainings and educational programs, most of the respondents (13 of 20) consider lack of finances to pay for the courses as the main reason for not attending such educational opportunities, followed by lack of time due to work (15 of 20 respondents), lack of time due to family responsibilities (11 of 20 respondents), the training prerequisites (6 of 20 respondents), while 2 of 20 listed trainings aren't offered at the place that suit them as a reason for not attending.

### Profile

Regarding the education, most of the respondents listed bachelor's degree (55% as the highest degree of education obtained, followed by primary education diploma (30%), and master's degree or above (15%). More of the unemployed adults who answered the surveys were women (65%), compared to men (35%).

Regarding the place of living, most of the respondents live in urban setting (60%), suburban setting (35%) and rural area (5%). People who answered they live in a city, according to size of the city most of them

live in large city with more than 500 000 inhabitants (10%), compared to medium city with 100 000 to 500 000 inhabitants (55%) and small city with less than 100 000 inhabitants (35%).

### Skills

Regarding activities and words connected to them, the unemployed adults are most familiar with team building (18 of 20 respondents), followed by ice breaking (13 of 20 respondents), plastic craftwork (8 of 20 respondents), circular economy (8 of 20 respondents) and codesign (5 of 20 respondents).

Skills which the unemployed adults are most interested in improving are connecting with the others more easily (8 of 20 respondents), working with others (10 of 20 respondents), plastic craftwork (7 of 20 respondents).

More of the unemployed are not informed what is **Circular Economy** (55%), compared to those

who know (45%), while most of the people who do not know, think that it is important to be informed about circular economy (60%).

Regarding the topic **connecting with others unemployed** adults are:

- interested in on average 4 on a scale from 1 to 5.
- likely that this will improving their labor market prospects is graded with an average of 3,7.

Regarding **theoretical session of circular economy**, the unemployed adults are:

- interested in the topic on average 3,35 on a scale from 1 to 5
- think that it is likely that it will improve their labor market prospect with an average of 3,35.

**Simulation exercise of a Circular Economy** business is a topic that:

- interest them on average 3,3 out of 5
- they think it is likely that it will improve their labor market prospect with an average of 3,2.

The unemployed adults who answered the surveys the topic of **Good Practices on Circular Economy Businesses**:

- are interested to learn more about on average 3,4 of 5 and
- think it will improve their labor market prospect with an average of 3,4.

**Theoretical session on Plastic Craftwork** is a topic in which our target group:

- is interested in learning more on average 2,75 of 5
- think it will improve their labor market prospects with an average of 2,6.

**How to manage plastic craftwork – risks and guidelines** is a topic in which our target group:

- is interested in learning more on average 2,75 of 5
- think it will improve their labor market prospects with an average of 2,6.

**Tinkering on plastic craftwork is a session** in which the unemployed adults are:

- are interested in the session on average 2,65 of 5 and think it will improve their labor market prospects with an average of 2,5 of 5.

For the session **Theoretical and practical session on Co-design** the unemployed adults:

- are interested in with an average of 3,25 of 5
- think it will improve their labor market prospects with an average of 3,1 of 5.

High percentage of unemployed adults (%) are not informed about examples of trainings in the field of Circular Economy and skills related teamwork for the unemployed.

## 1.2. Stakeholders - questionnaire form – Bosnia and Herzegovina

The questionnaire for stakeholders was done with the purpose to map the relevant stakeholders in the fields of non-formal adult education on the topics of circular economy, plastic craftwork and tinkering.

### Needs

Most of the stakeholders have examples of their trainings in their own companies/institutions (35%) and know examples of circular economy related trainings, like composting (0%), installers of photovoltaic panels (0%), while smaller percentage of the stakeholders don't know any examples (100%).

Regarding the efficiency of delivery of the courses for the unemployed, most of stakeholders think that practical trainings with applicable skills will be more efficient (90%), some of them answered that with physical presence (20%), some of them answered hybrid type, physical + online (50%), some of them think online is the most efficient way of delivering those courses (30%).

According to stakeholders, lack of time due to work (19 of 20 stakeholders) is the biggest barrier that prevent adults to attend trainings), followed by lack of time due to family responsibilities (12 of 20 stakeholders), lack of financing to pay for the courses (11 of 20 stakeholders answered, trainings are not offered at the place it suits them (8 of 20 stakeholders), training prerequisites (6 of 20 stakeholders).

### Skills

The stakeholders who answered the survey listed communication skills as the most important skills that the unemployed adults should possess or acquire in order to be employed (80%), computer skills (20%), depends on the needs of the company (10%).

They are already familiar with Circular Economy (5 of 20 stakeholders), Team building (19 of 20 stakeholders), ice breaking (16 of 20 stakeholders), plastic craftwork (8 of 20 stakeholders), co-design (6 of 20 stakeholders).

**Ice breaking and Team Building** are topics that the stakeholders consider:

- interesting for the unemployed adults with an average grade 4,25 out of 5.
- relevant for the unemployed adults with an average grade 4,4 out of 5.
- likely to help someone in improving the labor market prospects with an average 4,35 out of 5.

**Theoretical Session on Circular Economy** is a topic that the stakeholders consider:

- interesting for the unemployed adults with an average grade 4,15 out of 5.
- relevant for the unemployed adults with an average grade 4,1 out of 5.
- likely to help someone in improving the labor market prospects with an average 4,1 out of 5.

**Simulation exercise of a Circular Economy business** is a topic that the stakeholders consider:

- interesting for the unemployed adults with an average grade 4,6 out of 5.
- relevant for the unemployed adults with an average grade 4,3 out of 5.
- likely to help someone in improving the labor market prospects with an average 4,15 out of 5.

**Good practices on circular economy businesses** is a topic that the stakeholders consider:

- interesting for the unemployed adults with an average grade 4,7 out of 5.
- relevant for the unemployed adults with an average grade 3,9 out of 5.
- likely to help someone in improving the labor market prospects with an average 4,2 out of 5.

**Theoretical session on Plastic Craftwork** is a topic that the stakeholders consider:

- interesting for the unemployed adults with an average grade 3,75 out of 5.
- relevant for the unemployed adults with an average grade 3,8 out of 5.
- likely to help someone in improving the labor market prospects with an average 3,8 out of 5.

**How to manage Plastic Craftwork in practice – risks and guidelines** is a topic that the stakeholders consider:

- interesting for the unemployed adults with an average grade 3,85 out of 5.
- relevant for the unemployed adults with an average grade 4,05 out of 5.
- likely to help someone in improving the labor market prospects with an average 3,9 out of 5.

**Tinkering session on Plastic Craftwork** is a topic that the stakeholders consider:

- interesting for the unemployed adults with an average grade 3,6 out of 5.
- relevant for the unemployed adults with an average grade 3,8 out of 5.
- likely to help someone in improving the labor market prospects with an average 3,7 out of 5.

**Theoretical and practical session on co-design** is a topic that the stakeholders consider:

- interesting for the unemployed adults with an average grade 3,7 out of 5.
- relevant for the unemployed adults with an average grade 3,8 out of 5.
- likely to help someone in improving the labor market prospects with an average 3,85 out of 5.

Highest percentage of the stakeholder on the question what work can they suggest for the unemployed low skilled adults listed work in companies that practice the concept of circular economy and for the others like installers of photovoltaic panels, theoretical and practical in production of vegetables (0%). Most of the stakeholders know companies and institutions that employ low skilled adults (20%), like construction companies (10%) industrial zones (0%).

### 1.3. Desk research on good practices of non-formal education for adults in the area of circular economy, plastic craftwork and tinkering – Bosnia and Herzegovina

For the needs of the project, with the purpose of analyzing existing good practices in the relevant fields, we collected 3 good practices from Bosnia and Herzegovina

#### 1. CIRCULAR ECONOMY

Overview	
<b>Title</b>	Podsticanje održivog i inkluzivnog razvoja u BiH kroz modele cirkularne ekonomije Encouraging sustainable and inclusive development in Bosnia and Herzegovina through models of circular economy
<b>Location</b>	Bosnia and Herzegovina
<b>Timeframe</b>	01.07.2021. – 01.07.2022
<b>Contributors</b>	<ul style="list-style-type: none"> <li>• Centar za politike i upravljanje – CPU</li> <li>• FOD BiH (Fond otvoreno društvo Bosna i Hercegovina)</li> </ul>
<b>References</b>	<ul style="list-style-type: none"> <li>• <a href="http://cpu.org.ba/vijesti/podsticanje-odrzivog-i-inkluzivnog-razvoja-u-bih-kroz-modele-cirkularne-ekonomije/?fbclid=IwAR1A06yLT-GoxcTUmyYLVooRlXoZ12t8XZRVqS8oqnnvsDip7w6xU4Kq">http://cpu.org.ba/vijesti/podsticanje-odrzivog-i-inkluzivnog-razvoja-u-bih-kroz-modele-cirkularne-ekonomije/?fbclid=IwAR1A06yLT-GoxcTUmyYLVooRlXoZ12t8XZRVqS8oqnnvsDip7w6xU4Kq</a></li> <li>• <a href="http://www.cpu.org.ba/projekti/projekti-u-toku/podsticanje-odrzivog-i-inkluzivnog-razvoja-u-bih-kroz-modele-cirkularne-ekonomije/">http://www.cpu.org.ba/projekti/projekti-u-toku/podsticanje-odrzivog-i-inkluzivnog-razvoja-u-bih-kroz-modele-cirkularne-ekonomije/</a></li> <li>• <a href="http://www.cpu.org.ba/media/50760/Bijeli-Papir_Publikacija_280422.pdf">http://www.cpu.org.ba/media/50760/Bijeli-Papir_Publikacija_280422.pdf</a></li> </ul>
Description	
<b>Abstract</b>	<p>The use of natural materials in the world is unfortunately in rapid growth. If the global market continues with the same amount and intensity, it is estimated that by the year 2050 humanity will be in need for resources three similar planets have. Present raise of consumption. limitation of certain resources that are used constantly and destroyed launches of supply that are coming together with raises of prices are predicting the next economic crisis, which proves the fact that business models currently used are not sustainable and present the potential cause of instability. In order to stop the rapid use of resources from causing catastrophic consequences to human communities and economies in the world are going through structural changes with the aim of reducing its negative impact on the environment. After the Green agreement that took place in 2020 European Union focused on ongoing coping with climate change and accordingly promised to become carbon neutral continent by 2050. Transitioning to a circular economy is the most important element of this plan. When it comes to the urgency of a circular economy in Bosnia statistics say it all; in 2019 in Bosnia 11.5 on average was spent by the citizen, while in EU that average is estimated to be 14.5 tons by the citizen.</p>

<p><b>Aims and objectives</b></p>	<p>1.To create analytical contents in the area of circular economy that strive to present the concept adjusted to BiH with the examples of business model of circular economyz</p> <p>2. To inform the key roles about the concepts, the benefits and ways to implement circular economy business models.</p> <p>3. To encourage development of local capacities in the field of circular economy and initiate the process of associating individuals and organizations that are active in this field.</p>
<p><b>Framework of competences</b></p>	<p>Center for politics and administration has defined the main goal which is presented in the proposal in the section for argumentation and creating a base of knowledge necessary for the successful meeting of both public and interested parties need with the need to create a systematic framework that will allow effective use of principles circular economy states. By doing so the growth of the BiH economy would be assured and marginalized parts of society will be included which will lead to an increase in the export of domestic products and services in the market of the EU as our most significant trading partner.</p>
<p><b>Methodology</b></p>	<p>Creation of a knowledge base for interested parties to successfully acquaint the public with the need to create system frameworks that will enable the effective application of the circular economy.</p>
<p><b>Outcomes and results</b></p>	<p>In order to fulfill the aims precisely defined in the Green agreement Eu is setting up green transitions at the top of its priorities as numerous strategies, plans, investments, and standards are taking officially being described as pollutants and have negative effects on the interventions on the environment. In that context, the Green agenda for Western Balkans was initiated which will create better relations between the Eu and these countries and possibly guarantee them a better position in their membership application.</p>
<p><b>Conclusions</b></p>	<p>The project is relevant for IDEA project because of its connections with sustainability and Green Agenda.</p>
<p><b>Other information</b></p>	<p>/</p>

## 2. PLASTIC CRAFTWORK

Overview	
<b>Title</b>	"Čista umjetnost"- "Pure art"
<b>Location</b>	Sarajevo, Bosnia and Herzegovina
<b>Timeframe</b>	Autumn 2021
<b>Contributors</b>	Nestle Adriatic Bosnia and Herzegovina in cooperation with Center for art and artistic education "Arka"
<b>References</b>	<a href="https://www.nestle.ba/umjetnicka-djela-od-otpadnog-materijala">https://www.nestle.ba/umjetnicka-djela-od-otpadnog-materijala</a> <a href="https://www.klix.ba/magazin/skoro-250-kg-otpadnog-materijala-pretvoreno-u-unikatna-umjetnicka-djela/210915068">https://www.klix.ba/magazin/skoro-250-kg-otpadnog-materijala-pretvoreno-u-unikatna-umjetnicka-djela/210915068</a> <a href="https://www.fokus.ba/kultura/misija-studija-arka-je-promocija-kulture-i-umjetnosti/2110600/">https://www.fokus.ba/kultura/misija-studija-arka-je-promocija-kulture-i-umjetnosti/2110600/</a> <a href="https://letsdoit.ba/glasanje/">https://letsdoit.ba/glasanje/</a>
Description	
<b>Abstract</b>	Five unique works, created by renowned artists of the Arka Center for Art and Art Education, were created as part of Nestlé's "Pure Art" initiative and served as a tool for donation of the seedlings to schools in Sarajevo
<b>Target group</b>	40 volunteers who contributed to collecting the plastic materials for craft and artists/ members of the Center "Arka" + more than 90 000 visitors for the exhibition in Sarajevo
<b>Timeline</b>	It took few months to collect 250 000 kg of plastic and for the artists to create statues for exhibition /summer-autumn 2021
<b>Aims and objectives</b>	"Pure Art" is a new project launched by Nestlé in B&H with the aim of raising awareness of the importance of environmental protection.
<b>Framework of competences</b>	5 artists whose competences contributed in creation of the statues who served as an inspiration for fundraising + more than 40 volunteers and employers who contributed in raising awareness and promotion
<b>Methodology</b>	Recycling, art creation

<p><b>Outcomes and results</b></p>	<p>In order to locally contribute to the preservation of green spaces, Nestlé will donate seedlings to schools in B&amp;H that are part of the Hello! Project. Visitors had the opportunity to witness the works of art created from 250 kilograms of waste material, which the artists gave a new purpose and turned it into visionary works with a strong message about the importance of preserving nature. The goal of the initiative itself, as the company points out, is to encourage each of us to act when it comes to reducing waste, recycling and reusing materials, but also conservation of water resources and forests. The initiative is also supported by the Hands Association and the Let's Do It project, and friends of the project, Sarajevo City Center and MCI. During the first day of the exhibition, attendees were able to help in the action of donating garden seedlings to schools in BiH by simply pressing a button, so citizens in less than 12 hours ensured that Nestlé donates over 3,000 seedlings.</p>
<p><b>Conclusions</b></p>	<p>The project went extremely well, and due to quality promotion in an extremely busy and public place, it managed to achieve success and connect recycling, volunteerism, art and creation with awareness of environmental protection and the need for afforestation of Bosnia and Herzegovina.</p>
<p><b>Other information</b></p>	<p>/</p>



### 3. TINKERING

Overview	
<b>Title</b>	Tinkering and Making for Human Rights – improving cultural participation of children with disabilities
<b>Location</b>	Sarajevo Trebinje Zenica
<b>Timeframe</b>	July 2019 – June 2020
<b>Contributors</b>	Balkan Museum Network City Museum in Zenica Museum of Herzegovina (Trebinje city)
<b>References</b>	<a href="https://www.bmuseums.net/the-project-tinkering-and-making-for-human-rights-improving-cultural-participation-of-children-with-disabilities-has-started/">https://www.bmuseums.net/the-project-tinkering-and-making-for-human-rights-improving-cultural-participation-of-children-with-disabilities-has-started/</a> <a href="https://www.bmuseums.net/creating-together-learning-together/">https://www.bmuseums.net/creating-together-learning-together/</a>
Description	
<b>Abstract</b>	focusing on developing, documenting and evaluating inclusive educational workshops
<b>Target group</b>	Children with disabilities and young people
<b>Timeline</b>	/
<b>Aims and objectives</b>	Improve the inclusion of children with disabilities in the cultural life and making museums more accessible and inclusive to all individuals and groups based on the social model of disability.
<b>Framework of competences</b>	Museum educators, volunteers, persons with disabilities, social workers, primary school pedagogues, speech therapist and other stakeholders on both local and regional level
<b>Methodology</b>	Workshops about traditional techniques (weaving, felt production and painting on textile) Workshops based on making handcraft costumes from the medieval period

<p><b>Outcomes and results</b></p>	<p>-created transferable educational activities for young people with disabilities that supports continuous educational programs in museums</p> <p>- beside creating specific objects, the goal was: to raise the awareness of participants and the public about the rights of persons with disabilities (Articles 12 and 27 of the UN Convention on the Rights of Persons with Disabilities) and developing understanding about what persons with disabilities can do and how they can contribute to the society</p> <p>-gaining skills such as weaving, painting etc.</p>
<p><b>Conclusions</b></p>	<p>The project was great opportunity for kids with growth disabilities to work and learn about skills that can be used In future. Skills such as weaving, painting, and overall handcrafting, are great connection between two different generations.</p>
<p><b>Other information</b></p>	<p>Regarding the project goal, this type of project is great basis for similar workshop that could be implemented, focusing on target group of older people.</p>

## 1.4. Conclusions – Bosnia and Herzegovina

Key points from the survey results:

-Unemployed low skilled adults attended training in some form whether it is work related, skills qualification or in their free time (90%) and list lack of finances as the biggest barrier from preventing them to attend such trainings (13 of 20 respondents). Most of the unemployed adults don't know what Circular Economy is (55%), but feel it is something important and they should get more information about it (55%).

High percentage of unemployed adults (55%) are not informed about examples of trainings in the field of Circular Economy and skills related teamwork for the unemployed. The most interesting session from the survey which they want to attend is Good Practices on Circular Economy Businesses, but they are also interested in Theoretical and practical session on Co-design

Stakeholders - Most of the stakeholders have examples of their trainings in their own companies/institutions (35%) and know examples of circular economy related trainings, like composting (%), installers of photovoltaic panels (%). Most of stakeholders who answered the survey consider that sessions for Circular Economy are something that would interest the adults and they will improve their labor market chances. They also feel that sessions: Theoretical Session on Plastic Craftwork (11 of 20 stakeholders), How to manage Plastic Craftwork in practice-risks and guidelines (14 of 20 stakeholders) are important and will be useful for the future employment of the low skilled adults.

In general, adult unemployed people (45+) in Bosnia and Herzegovina are interested in more opportunities that are free and in line with their interests and stakeholders have educational opportunities for adults which can contribute to qualification of those adults and employment.

## 1.5. Unemployed adults (45+) – questionnaire form - Poland

The questionnaire for unemployed adults includes questions on their needs, barriers for not attending training and educational opportunities, profile and awareness of the topics of circular economy, plastic craftwork, tinkering and how they can be helpful in their pursuit of job.

### Needs

First, the needs for the unemployed adults were analyzed. According to the survey's answers 26,67% of the people who answered, attended an educational program, course, training or workshop in the last 5 years. All of them attended 1 to 5 trainings, while the rest – 73,33 % of them didn't attend any training, course, workshop or educational program.

Most of the unemployed adults not attended on the job training (33 of 45 respondents), followed by courses for obtaining formal qualification ( 4 of 13 respondents), workshops and seminars (5 of 13 respondents), non-formal learning opportunities (1 of 13 respondents), open or distance education (4 of 13 respondents), other courses or private lessons (2 of 13 respondents).

Biggest percentage of those who attended a training were participating at job related training on computers courses (23,08 % of respondents) social economy (7,7% of respondents), soft skills (7,7% of respondents), office course (7,7% of respondents), welding (7,7% of respondents), Fundamentals of accounting, working with a computer, labor code (7,7%).

Regarding the barriers that prevent adults from taking part in trainings and educational programs, most of the respondents (20 of 45) consider lack of finances to pay for the courses as the main reason for not attending such educational opportunities, followed by lack of time due to work (2 of 45 respondents), lack of time due to family responsibilities (12 of 45 respondents), the training prerequisites (3 of 45 respondents), while 19 of 45 listed trainings aren't offered at the place that suit them as a reason for not attending.

### Profile

Regarding the education, most of the respondents listed secondary education as the highest degree of education obtained (72,1%), followed by primary education diploma (23,3%), bachelor's degree and master's degree or above (4,6 %).

More of the unemployed adults who answered the surveys were men (62,8%), compared to women (37,2%).

Regarding the place of living, most of the respondents live in urban setting (67,44%), suburban setting (32,56%) and rural area. People who answered they live in a city, according to size of the city most of them live in medium city with 100 000 to 500 000 inhabitants (54,55%), small city with less than 100 000 inhabitants (39,39%), and compared to large city with more than 500 000 inhabitants (6,06%).

### Skills

Regarding activities and words connected to them, the unemployed adults are most familiar with team building (26 of 45 respondents), followed by ice breaking (5 of 45 respondents), plastic craftwork (6 of 45 respondents), circular economy (1 of 45 respondents) and codesign (7 of 45 respondents).

Skills which the unemployed adults are most interested in improving are connecting with the others more easily (18 of 45 respondents), working with others (16 of 45 respondents), plastic craftwork and recycling (21 of 45 respondents).

More of the unemployed are not informed what is **Circular Economy** (79,1%), compared to those

who know (20,9%), while most of the people who do not know, think that it is important to be informed about circular economy (79,4%).

Regarding the topic **connecting with others unemployed adults are:**

- interested in on average 4 on a scale from 1 to 5.
- likely that this will improving their labor market prospects is graded with an average of 4,3.

Regarding **theoretical session of circular economy**, the unemployed adults are:

- interested in the topic on average 2,47 on a scale from 1 to 5
- think that it is likely that it will improve their labor market prospect with an average of 2,27.

**Simulation exercise of a Circular Economy** business is a topic that:

- interest them on average 2,6 out of 5
- they think it is likely that it will improve their labor market prospect with an average of 2,26.

The unemployed adults who answered the surveys the topic of **Good Practices on Circular Economy Businesses:**

- are interested to learn more about on average 2,26 of 5 and
- think it will improve their labor market prospect with an average of 2.

**Theoretical session on Plastic Craftwork** is a topic in which our target group:

- is interested in learning more on average 2,62 of 5
- think it will improve their labor market prospects with an average of 2,44.

**How to manage plastic craftwork – risks and guidelines** is a topic in which our target group:

- is interested in learning more on average 2,64 of 5
- think it will improve their labor market prospects with an average of 2,36.

**Tinkering on plastic craftwork is a session** in which the unemployed adults are:

- interested in the session on average 2,69 of 5 and
- think it will improve their labor market prospects with an average of 2,38.

**Theoretical and practical session on Co-design** is a session in which unemployed adults:

- are interested in with an average of 3,76 of 5
- think it will improve their labor market prospects with an average of 3,93.

All of the unemployed adults are not informed about training about Circular Economy.

## 1.6. Stakeholders - questionnaire form - Poland

The questionnaire for stakeholders was done with the purpose to map the relevant stakeholders in the fields of non-formal adult education on the topics of circular economy, plastic craftwork and tinkering.

In the survey for stakeholders, most of the stakeholders who responded are non-profit organizations (39,53%), companies and one-person business activity (60,5%). Regarding type of institutions most of the stakeholders are private (75 %), compared to public (25%).

Most of them are located in Silesia voivodeship (72%), followed by Opolskie voivodeship (4,65%), Podkarpackie and Lubelskie voivodeship (23,35%).

### Needs

Most of the stakeholders have examples of their trainings in their own companies/institutions (60,5%). Most of them don't know examples of circular economy related trainings, only part of them can give the examples (11,67%), showing following areas: computers programs (60%), sustainable future, soft skills (20%), and circular economy (20%).

Regarding the efficiency of delivery of the courses for the unemployed, most of stakeholders think that practical trainings with applicable skills will be more efficient, some of them answered that with physical presence (83,72%), some of them answered hybrid type, physical + online (9,3%), some of them think online is the most efficient way of delivering those course (6,98%).

According to stakeholders, lack of financing to pay for the courses is the biggest barrier that prevent adults to attend trainings (26 of 43 stakeholders answered), followed by lack of time due to family responsibilities (4 of 43 stakeholders), lack of time due to work (8 of 43 stakeholders), trainings are not offered at the place it suits them (2 of 43 stakeholders), training prerequisites (2 of 43 stakeholders).

### Skills

The stakeholders who answered the survey listed communication skills and soft skills as the most important skills that the unemployed adults should possess or acquire in order to be employed (53,49%), depends on the needs of the company (30,23%) and many examples with just 1 answer like: operation of power tools, welding machines, aerial platforms, computer operation, cash registers, operation of payment devices, practical skills that can be used from the second day of work (safety, GDPR and HR)

They are already familiar with Team building (28 of 43 stakeholders), ice breaking (4 of 43 stakeholders), co-design (7 of 43 stakeholders), Circular Economy (2 of 43 stakeholders), and no one is familiar with plastic craftwork.

**Ice breaking and Team Building** are topics that the stakeholders consider:

- interesting for the unemployed adults with an average grade 4,07 out of 5.
- relevant for the unemployed adults with an average grade 4,02 out of 5.
- likely to help someone in improving the labor market prospects with an average 4,05 out of 5.

**Theoretical Session on Circular Economy** is a topic that the stakeholders consider:

- interesting for the unemployed adults with an average grade 2,65 out of 5.
- relevant for the unemployed adults with an average grade 2,98 out of 5.
- likely to help someone in improving the labor market prospects with an average 2,86 out of 5.

**Simulation exercise of a Circular Economy business** is a topic that the stakeholders consider:

- interesting for the unemployed adults with an average grade 2,81 out of 5.
- relevant for the unemployed adults with an average grade 3,05 out of 5.
- likely to help someone in improving the labor market prospects with an average 2,86 out of 5.

**Good practices on Circular Economy businesses** are a topic that the stakeholders consider:

- interesting for the unemployed adults with an average grade 2,47 out of 5.
- relevant for the unemployed adults with an average grade 2,67 out of 5.
- likely to help someone in improving the labor market prospects with an average 2,77 out of 5.

**Theoretical session on Plastic Craftwork** is a topic that the stakeholders consider:

- interesting for the unemployed adults with an average grade 2,47 out of 5.
- relevant for the unemployed adults with an average grade 2,67 out of 5.
- likely to help someone in improving the labor market prospects with an average 2,77 out of 5.

**How to manage Plastic Craftwork in practice-risks and guidelines** is a topic that the stakeholders consider:

- interesting for the unemployed adults with an average grade 2,23 out of 5.
- relevant for the unemployed adults with an average grade 2,33 out of 5.
- likely to help someone in improving the labor market prospects with an average 2,23 out of 5.

**Tinkering session on Plastic Craftwork** is a topic that the stakeholders consider:

- interesting for the unemployed adults with an average grade 2,74 out of 5.
- relevant for the unemployed adults with an average grade 2,53 out of 5.
- likely to help someone in improving the labor market prospects with an average 2,47 out of 5.

**Theoretical and practical session on co-design** is a topic that the stakeholders consider:

- interesting for the unemployed adults with an average grade 3,77 out of 5.
- relevant for the unemployed adults with an average grade 3,98 out of 5.
- likely to help someone in improving the labor market prospects with an average 3,95 out of 5.

Highest percentage of the stakeholders on the question what activities can they suggest for the unemployed low skilled adults listed, searching work, internships, courses, training (both soft skills and professionals based on potential future job). Most of the stakeholders know companies and institutions that employ low skilled adults (86.05%) but they didn't suggest specific positions.

## 1.7. Desk research on good practices of non-formal adult education in the field of circular economy, plastic craftwork and tinkering in Poland

For the needs of the project with the purpose of analyzing existing good practices in the relevant fields we collected good practices from Poland.


1) Circular Tailor Workshops, Circular Fashion, Circular Chemist's, Circular Carpentry Workshops, Circular Bikes, Circular Jewelry

Overview	
<b>Title</b>	Circular Tailor Workshops, Circular Fashion, Circular Chemist's, Circular Carpentry Workshops, Circular Bikes, Circular Jewelry
<b>Location</b>	Katowice, Poland
<b>Timeframe</b>	12.2022 r.
<b>Contributors</b>	DOUGHNUT ECONOMICS LAB: Project co-financed by the ERASMUS + Program, during World Urban Forum 2022. An informal coalition was created: enthusiasts, formal organizations, companies and social activists.
<b>References</b>	<a href="https://doughnuteconomics.org/stories/214?fbclid=IwAR3FDk_k_NMEghh-mJJSYKloMPgYiX_PCkXz1wM-ZIYLOd5srW8t8i2Gs7SM">https://doughnuteconomics.org/stories/214?fbclid=IwAR3FDk_k_NMEghh-mJJSYKloMPgYiX_PCkXz1wM-ZIYLOd5srW8t8i2Gs7SM</a> List all references used for this analysis.
Description	
<b>Abstract</b>	<p>The workshop was focused on circular aspects using tinkering mode. First example was based on a making some useful things using basic environmental friendly products like cleaning powder, washing liquid, bath bombs, simple soap or a natural fragrance. Some chairs and a table were also repaired during the breaks. The second part was based on making wooden toys from recycled materials.</p> <p>Third part was based on trying to repair the jewelers yourself, but also to make new jewelers gems from recycled trinkets. The occasion of Christmas this time was a pretext to save money and create hand-made products.</p>
<b>Target group</b>	The workshops were defined generally for all, but most of the people participated in those activities were adults (40+).
<b>Timeline</b>	2 weekends, 4 days
<b>Aims and objectives</b>	Circular Workshops are a great possibility to change the way of thinking about stuff we buy, we use, we give, we throw away. The aim is also to share the knowledge about circular economy in the simple and friendly way.



<b>Framework of competences</b>	The goal of workshops was to learn useful skills, increase environmental awareness and act in accordance with ZERO WASTE approach and to meet circular economy meaning. I
<b>Methodology</b>	Tinkering - attempt to repair or improve something in a casual or desultory (unfocused) way. It is hands-on methodology, based on experiences, learning from failures, and unstructured time to explore and invent. Through the processes of exploration and invention lies the potential for innovation.
<b>Outcomes and results</b>	Many of the effects of circular workshops were festively packed (according to zero waste rules - in recycled packages) and used as gifts.
<b>Conclusions</b>	<ol style="list-style-type: none"> <li>1. Tinkering is really good way how to implement Circular Economy principles.</li> <li>2. People really like to work by themselves and creating something using zero waste approach and recycled materials</li> <li>3. Workshops are motivation for people to open their mind</li> </ol>
<b>Other information</b>	It's good to choose the learning by doing approach.

2) Senior Leader Zero Waste. Recycling wonders – 1st workshop  
 Senior eco-hero. We make our own herbarium – 2nd workshop

Overview	
<b>Title</b>	Senior Leader Zero Waste. Recycling wonders – 1st workshop Senior ecohero. We make our own herbarium – 2nd workshop
<b>Location</b>	7 cities in Poland
<b>Timeframe</b>	09.2021 r.
<b>Contributors</b>	 <b>Akademia WSB</b> <b>Uniwersytety</b> <b>Trzeciego Wieku</b>
<b>References</b>	<a href="https://zaglebieseniora.pl/">https://zaglebieseniora.pl/</a>
Description	
<b>Abstract</b>	The workshops are based on tickering and making circular things by participants and learn how to safe our environment and reduce the negative impact of our activities. The workshop has a goal to learn how to reduce the waste at home, how to learn about circularity and how to share this knowledge in public areas.
<b>Target group</b>	Adults 50+
<b>Timeline</b>	1 day workshop (many editions)
<b>Aims and objectives</b>	The aim of the workshop is to increase civic activity among seniors, prepare them for the role of a leader in local communities in which they operate on a daily basis, and raising competences in the field of interpersonal communication, social project management and awareness about environmental protection and circular economy.
<b>Framework of competences</b>	No specific framework. Form of the workshop. No documents available.
<b>Methodology</b>	Tinkering - attempt to repair or improve something in a casual or desultory (unfocused) way. It is hands-on methodology, based on experiences, learning from failures, and unstructured time to explore and invent. The workshop was focus on creation home things in ecological way.

<b>Outcomes and results</b>	<p>Own herbarium.</p> <p>Clothes and hand-made things.</p> <p>Increasing the knowledge how to save energy and reduce negative impact on the environment, knowledge about elements which we can change.</p> <p>Learn how to share the knowledge with others.</p>
<b>Conclusions</b>	<p>People are willing to share the knowledge with others. Especially it's good idea to link it somehow with children. It has huge potential for extended the workshops and educate wisely. The most effective way how to learn is teach someone.</p>
<b>Other information</b>	<p>It's good idea to conduct workshops in different cities.</p>

### 3) Innovation through Circular Economy - Train-the-trainer

Overview	
<b>Title</b>	Innovation through Circular Economy - Train-the-trainer
<b>Location</b>	Online
<b>Timeframe</b>	01-02.2023 r.
<b>Contributors</b>	EIT Climate-KIC Home
<b>References</b>	<a href="https://store.climate-kic.org/product?catalog=CircEcon_TtT">https://store.climate-kic.org/product?catalog=CircEcon_TtT</a>
Description	
<b>Abstract</b>	This blended course is providing training in the use of circularity thinking tools and methodologies to help you develop circular strategies as a facilitator for change. It will give a clear understanding of what is involved in applying circular approaches in an organisation and will help you develop the skills you need to train others to use these tools, with a special focus on the use of blended approaches.
<b>Target group</b>	<p>This blended course is intended for practitioners, coaches and trainers who have some experience facilitating systems-related change programmes.</p> <p>It is most fitting for participants seeking to nurture their circular mindset, experiment, learn, and share with others.</p> <p>Detailed knowledge of circular economy strategies is NOT required.</p>
<b>Timeline</b>	25-30 hours (2-3 hours for self-study and for each of the workshop modules + offline activities). The course consists of seven workshops, with dates and indicative topics/timings as indicated below in the schedule scheme.
<b>Aims and objectives</b>	The course also covers the competencies needed for trainers to apply to be part of the approved pool of facilitators for future delivery of circularity thinking tools. A final assessed submission will be required to gain this status.
<b>Framework of 'competences'</b>	No specific framework.
<b>Methodology</b>	Blended training course with self-study, workshops and offline activities/project components.

<p><b>Outcomes and results</b></p>	<p>After successfully completing the Innovation through Circular Economy course, participants will be able to:</p> <p>Develop a deep understanding of the circularity thinking tools utilised through the Circular Learning Site (CLS).</p> <p>Put into practice the knowledge gained on designing blended approaches for future use of the circularity thinking tools and methodologies.</p> <p>Access and contribute to the Circular Community of coaches, trainers and practitioners collaborating on circular economy and circularity thinking activities</p> <p>Demonstrate knowledge and ideas to complete the competency framework and become an approved trainer of the CLS materials.</p>
<p><b>Conclusions</b></p>	<p>The readymade program can be sell for future trainers. This is good option for unemployed people – to get money by teaching about circular economy.</p>
<p><b>Other information</b></p>	<p>The whole course is paid – 300 EUR</p>

#### 4) Akademia GOZ

Overview	
<b>Title</b>	Akademia GOZ
<b>Location</b>	CSR Consulting ul. Kamykowa 1, 03-289 Warszawa
<b>Timeframe</b>	Ongoing
<b>Contributors</b>	CSR Consulting ( <a href="http://csrconsulting.pl/">http://csrconsulting.pl/</a> ), REKOPOL (Polish packaging recovery organization.),
<b>References</b>	<a href="https://gozwpraktyce.pl/akademia-goz/">https://gozwpraktyce.pl/akademia-goz/</a>
Description	
<b>Abstract</b>	<p>Circular Economy Academy (Akademia GOZ) is a series of webinars for companies concerning circular economy in practice. They are a pillar of knowledge on key topics related to the circular economy and the adaptation of enterprises to this economic model implemented in the EU.</p> <p>In 2020, the Circular Economy Academy began its activities with a series of webinars on the upcoming changes in the EU economy related to the implementation of the European Green Deal. A free webinar and a paid course European Green Deal in practice were created on this topic. During the course, the key strategic documents of the EU and their announcement of over 80 new legal acts, action plans and initiatives that will be implemented over the next 3 years are discussed. Practical tools for business that help prepare for the announced changes are also presented.</p> <p>As part of the GOZ Academy in 2021, four free webinars were prepared in cooperation with the Partners of the GOZ in Practice Portal (GOZ w Praktyce). They were devoted to practical solutions in the field of circular economy.</p>
<b>Target group</b>	General, employed and unemployed, no age limits
<b>Timeline</b>	Continuous
<b>Aims and objectives</b>	The Circular Economy Portal in Practice is a center of knowledge and practical solutions in the field of circular economy for business. He supports companies in the transformation towards circular economy.
<b>Framework of competences</b>	General knowledge on circular economy goals and objectives, regulations and tools

<b>Methodology</b>	Online webinars, recorded and available online
<b>Outcomes and results</b>	<p>Already delivered 7 webinars:</p> <ul style="list-style-type: none"> <li>• How labels can support circular economy?</li> <li>• Is circular economy profitable for companies?</li> <li>• Ecodesign of packaging</li> <li>• Overview of circular economy indicators</li> <li>• Chemical recycling and circular raw materials</li> <li>• The European Green Deal in Practice</li> <li>• European Green Deal – Earthquake</li> </ul>
<b>Conclusions</b>	Academy is a free of charge source of knowledge available online. It would help unemployed to gain necessary background to deal with circular economy issues. It could be started as a starting point in rising competencies of target group. .
<b>Other information</b>	Courses free of charge available online. No certifications are issued.

## 5) People's University of Arts and Crafts (Uniwersytet Ludowy Rzemiosła Artystycznego)

Overview	
<b>Title</b>	People's University of Arts and Crafts (Uniwersytet Ludowy Rzemiosła Artystycznego)
<b>Location</b>	Wola Sękowa 37, 38-506 Wola Sękowa
<b>Timeframe</b>	Continuous, 2 years courses and short courses
<b>Contributors</b>	Nationwide Network of People's Universities (Ogólnopolska Sieć Uniwersytetów Ludowych)
<b>References</b>	<a href="https://www.uniwlud.pl/">https://www.uniwlud.pl/</a>
Description	
<b>Abstract</b>	<p>The formula of Folk Universities is closely related to building dialogue, cooperation and understanding. Individualism goes hand in hand with the social and cultural context of education.</p> <p>The forms of activity are not limited to courses, they are also centers of culture in the local environment. They organize social actions, exhibitions, concerts, lectures, workshops, meetings with authors.</p>
<b>Target group</b>	General, employed and unemployed, no age limits
<b>Timeline</b>	<p>Continuous</p> <p>Recruitment for the next edition of the course 2023-2025 lasts from March to August 2023.</p> <p>To register for the Two-Year Artistic Handicraft Course, please complete the application form below - by August 8, 2023.</p> <p>After receiving information about being entered on the list of participants, you can pay the registration fee and the first installment of the tuition fee - by August 15, 2022 at the latest.</p>
<b>Aims and objectives</b>	<p>The main objective of the two-year course run by ULRA is to enable personal and professional development as well as to pass on traditions and cultural heritage in the field of artistic craftsmanship.</p> <p>The program assumptions of the course refer to Grundtvigian pedagogy, such as learning by doing, dialogue, facilitating an individual development path in contact with nature and cultural heritage, the importance of community experiences.</p> <p>The program also includes classes in the development of creativity, history of art, ethnography of socio-cultural animation, creation and implementation of socio-cultural projects and the principles of running a business.</p>



<b>Framework of competences</b>	Practical skills in different types craft art
<b>Methodology</b>	<p>The basic forms of implementing the program are classes practical workshops, as well as lectures, trips, conversations and discussions, valorization methods based on aesthetic impressions and emotions, problem methods and artistic expression.</p> <p>The classes cover a total of about 500 hours and are carried out in the formula of 3-4 days of twenty sessions, once a month /from Friday to Monday/. The center has lecture halls, workshops, a green area, and places to stay.</p>
<b>Outcomes and results</b>	The two-year course of artistic handicraft has been conducted continuously since 1986, first by the Folk University in Wzdów, and then by the Folk University of Artistic Crafts, which is its continuation.
<b>Conclusions</b>	University is not free of charge. Courses would help unemployed to gain necessary skills in order to conduct craft art projects in different areas including circular economy. .
<b>Other information</b>	<p>The tuition fee at ULRA is PLN 3,450 per semester. The program consists of 4 semesters</p> <p>However, you can pay for the course in monthly installments. The first installment of PLN 690 should be paid by August 15.</p>

6) Training for adults "Ekokreacje - creative recycling workshops" (Szkolenie dla dorosłych "Ekokreacje - warsztaty twórczego recyklingu")

Overview	
<b>Title</b>	Training for adults "Ekokreacje - creative recycling workshops" (Szkolenie dla dorosłych "Ekokreacje - warsztaty twórczego recyklingu")
<b>Location</b>	Zielona Szkoła w Schodnie, Schodno 1, 83-425 Dziemiany
<b>Timeframe</b>	31-03-2014
<b>Contributors</b>	Pomeranian Voivodeship
<b>References</b>	<a href="https://zielonaszkola.wdzydzkipark.pl/aktualnosci-4/szkolenie-dla-doroslych-quotekokreacje-warsztaty-tworczego-recyklinguquot-1/">https://zielonaszkola.wdzydzkipark.pl/aktualnosci-4/szkolenie-dla-doroslych-quotekokreacje-warsztaty-tworczego-recyklinguquot-1/</a>
Description	
<b>Abstract</b>	<p>Training for adult residents of the Kościerzyna powiat introducing the secrets of up-cycling - forms of recycling, which results in handmade products with a higher value than before. Up-cycling is not only a pleasure, but above all, it significantly reduces the consumption of raw materials for the production of artistic objects, as well as reduces the amount of waste.</p> <p>The training was a one-time initiative.</p>
<b>Target group</b>	The training was addressed to a professionally diverse group of adults. The workshops were aimed at teachers of art, technology, kindergarten teachers, caretakers of day care centers, occupational therapists, animators of community centers, environmental educators, nature and biology teachers.
<b>Timeline</b>	Single meeting held on 31-03-2014
<b>Aims and objectives</b>	The aim of the activity was to show ways to reduce waste production, the desire to change the attitude of a wide group of recipients by promoting a passion for handicrafts. The "Eco - Creations - Creative Recycling Workshops" workshop was aimed at showing participants methods and tools that would allow them to convince recipients that waste can have a high aesthetic dimension, that it can be useful and that it has value at all.
<b>Framework of competences</b>	Knowledge on the problems related to waste management and promotion of practical skills in upcycling.

<p><b>Methodology</b></p>	<p>Methodology include combination of workshops and lectures. The scope was:</p> <ul style="list-style-type: none"> <li>• Lecture - Waste segregation system in the Pomeranian Voivodeship and methods of dealing with different types of waste</li> <li>• Workshops - Reproductions from waste glass - Decoupage and stained glass techniques on bottles</li> <li>• Workshops - Reproductions from waste paper - Paper wicker, paper mache from newspapers</li> <li>• Workshops - Reproductions from plastic waste - Jewelry, flowers, containers, Christmas decorations from PET bottles</li> <li>• • Lecture - The idea of upcycling, the advantages of self-processing of plastic, paper and glass</li> </ul>
<p><b>Outcomes and results</b></p>	<p>The training resulted in an increase in participants' awareness of waste management. Beautiful trinkets were created, which quality and appearance do not differ from those bought in the store. Participants realized how dangerous excessive consumerism is, both socially, ecologically and in terms of intellectual development. We hope that the participants liked the idea of up-cycling and thanks to them it will quickly expand its reach in the local environment.</p>
<p><b>Conclusions</b></p>	<p>The workshop could work as a inspiration and example for making similar initiatives focused on unemployed.</p>
<p><b>Other information</b></p>	<p>Organized by public institution. Single run, free of charge.</p>

## 7) The Green Line (Zielona linia)

Overview	
<b>Title</b>	The Green Line (Zielona linia)
<b>Location</b>	Online
<b>Timeframe</b>	Continuous
<b>Contributors</b>	Government of Republic of Poland
<b>References</b>	<a href="https://zielonalinia.gov.pl/">https://zielonalinia.gov.pl/</a>
Description	
<b>Abstract</b>	<p>The portal connecting people trying to find a job with potential employers and organizers of courses and trainings. This is good example of public initiative offering support for unemployed.</p> <p>Training on the portal's portfolio is called extracurricular activities aimed at obtaining, supplementing or improving professional or general skills and qualifications needed to perform work, including job search skills.</p> <p>Trainings financed from the Labor Fund are organized in order to raise professional qualifications and other qualifications increasing the chance of taking up or maintaining employment, other gainful employment or economic activity.</p> <p>The poviats labor office initiates and organizes training for the unemployed in group and individual form.</p> <p>Group trainings are addressed to a specific group of unemployed people (depending on the type of training and occupation) and are preceded by organized recruitment conducted by the poviats labor office.</p> <p>Individual training is training indicated by an unemployed person and carried out at his request, provided that the purpose of the training is justified. The cost of training in the part financed from the Labor Fund in a given year may not exceed 300% of the average remuneration for work</p>
<b>Target group</b>	Unemployed people – no age limit
<b>Timeline</b>	Continuous

<p><b>Aims and objectives</b></p>	<p>The aim of the portal is to create a new quality in relations with:</p> <ul style="list-style-type: none"> <li>• the unemployed and jobseekers - making it easier for them to find a job, educating and informing about the current situation and the most important events on the labor market as well as forms of support that they can receive from the employment office.</li> <li>• seeking ways to improve their qualifications - by advising or helping in finding training suitable for them, indicating the possibilities of co-financing training from the employment office and others.</li> <li>• employers looking for employees - helping them find employees and informing them about the support options prepared by the employment office in the case of employing unemployed people and the formalities to be observed in the case of employing foreigners.</li> </ul>
<p><b>Framework of competences</b></p>	<p>Full range of competencies currently needed on the market</p>
<p><b>Methodology</b></p>	<p>Online access to database of job offers and courses.</p>
<p><b>Outcomes and results</b></p>	<p>Better connection and information flow form courses organizers and institutions offering job with unemployed persons who want to find a job and rise their competencies.</p>
<p><b>Conclusions</b></p>	<p>The portal is widely used by people looking for job opportunities. It could be helpful in promotion and collecting applications for new type trainings combining circular economy knowledge and traditional skills.</p>
<p><b>Other information</b></p>	<p>Free of charge access</p>

## 1.8. Conclusions - Poland

### Key points from desk research

There are a number of training courses in the field of Circular Economy. They are carried out in the stationary and online formula (e.g. Akademia GOZ - <https://gozwpraktyki.pl/akademia-goz/>). Some courses are available free of charge. They are addressed to a wide range of recipients, including the unemployed. They focus on theory, practical solutions and legal regulations related to the subject of circular economy.

The second group of courses is related to craft activities, handicrafts and artistic handicrafts. The courses are designed for a wide range of people who want to broaden their qualifications and, consequently, get a better job or start their own business. The courses are very practical and focused on acquiring specific skills.

Courses that cover both the circular economy and the arts and crafts together are rare.

In Poland exists scheme of training for unemployed financed by labor offices (Urząd Pracy). Training for the unemployed and job seekers is a form of professional activation financed by labor offices and conducted in the form of a course. The training participant receives a monthly scholarship equal to 120% of the unemployment benefit, if the monthly number of training hours is at least 150 hours; in the case of a lower monthly number of training hours, the amount of the scholarship is determined pro rata, however, the scholarship cannot be lower than 20% of the allowance. After completing the training, the participant receives a certificate or other document issued by the training institution.

Training courses, through which it is possible to obtain, supplement or improve professional or general skills and qualifications needed to perform work, are financed from the Labor Fund and organized by powiat labor offices.

In order to participate in them, you need to apply to the powiat labor office for a referral for training or submit an application for referral via the website [praca.gov.pl](http://praca.gov.pl).

An unemployed person may also receive a loan to finance the costs of training, which will allow him to take up or maintain employment, other gainful work or business activity. It is an interest-free loan granted by the powiat employment office from the Labor Fund. The amount of the loan may not exceed 4 times the average remuneration applicable on the date of signing the agreement (the average remuneration in the first quarter of 2020 was PLN 5,367.60).

Majority of courses supported by government and organized by currently present on the market entities are focused on shaping skills for already existing types of jobs. The type of courses are correlated with current need on the market. The new trends and initiatives are usually not covered by these types of courses. This could suggest that new approach combining skills with new trends (like circular economy) would be an important added value to current offer and could turn out to be successful.

### Key points from the survey results:

-Unemployed low skilled adults attended training in some form whether it is work related, skills qualification or in their free time (26,67 %) and list lack of finances as the biggest barrier from preventing them to attend such trainings (20 of 45 respondents). Most of the unemployed adults don't know what Circular Economy is (97,78%), but feel it is something important they should get more information about it (79,4 %). Full percentage of unemployed adults (100%) are not informed about examples of trainings in the field of Circular Economy and skills related teamwork for the unemployed.

-Stakeholders - Most of the stakeholders have examples of their trainings in their own companies/institutions (60,5%). Most of them don't know examples of circular economy related trainings, only part of them can give the examples (11,67%), showing following areas: computers

programs (60%), sustainable future, soft skills (20%), and circular economy (20%). Most of stakeholders who answered the survey consider that sessions for Circular Economy are something that would interest the adults and they will improve their labor market chances. Highest percentage of the stakeholder on the question what activities can they suggest for the unemployed low skilled adults, listed searching work, internships, courses, training (both soft skills and professionals based on potential future job).

In general, adult unemployed people (45+) are interested in more opportunities that are free and in line with their interests and stakeholders have educational opportunities for adults which can contribute to qualification of those adults and employment.

## 1.9. Unemployed adults (45+) – Questionnaire form - Italy

The questionnaire for unemployed adults includes questions on their needs, barriers for not attending training and educational opportunities, profile, and awareness of the topics of Circular Economy, plastic craftwork, tinkering and how they can be helpful in their pursuit of job.

### Needs

First, the needs for the unemployed adults were analyzed. According to the survey's answers, 95% of the people who answered, attended an educational program, course, training, or workshop in the last 5 years. Most of them attended 1 to 2 trainings, some of the unemployed while a little percentage of them (13%) didn't attend any training, course, workshop, or educational program.

There was a variety of answers concerning the following answer. Indeed, with respect to the type of course the participants attended they mostly answered on the job training (13 of 32), followed by courses for obtaining formal qualification (12 of 32) workshops and seminars (7 of 32 respondents).

Those who attended a training, claimed to have attended courses related to the topic of: "Citizenship and Sustainable Business Development", "Digital Marketing" and "Registered Behavior Technician".

Regarding the question about which barriers are supposed to prevent adults from taking part in trainings and educational programs, most of the respondents consider: 1) lack of time due to family responsibilities (25 of 32); 2) lack of finances to pay for the courses (17 of 32); and 3) lack of time due to work (4 of 32), as the main reasons for not attending such educational opportunities the training prerequisites.

A minority, however (4 of 32) also answered that available trainings aren't offered at the place that suit them as a reason for not attending.

### Profile

Regarding the education, most of the respondents listed secondary education as the highest degree of education obtained (70%), followed by those with a master's degree or above (20%) and, finally, those with a bachelor's degree (10%).

More of the unemployed adults who answered the surveys were women (60%), compared to men (40%).

Regarding the place of living, the respondents equally live in urban (40%) and suburban setting (40%) and the remaining 20% come from rural areas. People who answered they live in a city, according to size of the city most of them live in large city with more than 500 000 inhabitants, followed by those who live in medium cities with 100 000 to 500 000 inhabitants.

### Skills

Regarding activities and words connected to them, the unemployed adults are most familiar with team building (14 of 32), followed circular economy (10 of 32), ice breaking (3), plastic craftwork (2 of 32 respondents), circular economy (3 of 32 respondents) and codesign (2 of 32 respondents). Skills which the unemployed adults are most interested in improving are: 1) co-design (60%); 2) circular economy (40%); 3) plastic craftwork (30%); 4) team building and ice breaking activities (20%). Half of the unemployed are informed what is **Circular Economy**. On the other hand, all the participants think that it is important to be informed about circular economy (100%).



Regarding the topic **connecting with others unemployed adults are:**

- interested in on average 3.75 on a scale from 1 to 5;
- likely that this will improving their labor market prospects is graded with an average of 4.

Regarding **theoretical session of circular economy**, the unemployed adults are:

- interested in the topic on average 3.75 on a scale from 1 to 5;
- think that it is likely that it will improve their labor market prospect with an average of 4.

**Simulation exercise of a Circular Economy** business is a topic that:

- interest them on average 4.75 out of 5;
- they think it is likely that it will improve their labor market prospect with an average of 5.

The unemployed adults who answered the surveys about the topic of **Good Practices on Circular Economy Businesses:**

- are interested to learn more about on average 3.5 of 5;
- think it will improve their labor market prospect with an average of 3.5.

**Theoretical session on Plastic Craftwork** is a topic in which our target group:

- is interested in learning more on on average 3 of 5;
- think it will improve their labor market prospects with an average of 3.75.

**How to manage plastic craftwork – risks and guidelines** is a topic in which our target group:

- is interested in learning more on average 3 of 5;
- think it will improve their labor market prospects with an average of 3.

**Tinkering on plastic craftwork is a session** in which the unemployed adults are:

- are interested in the session on average 3.75 of 5;
- think it will improve their labor market prospects with an average of 3.75.

About **Theoretical and Practical session on Co-design**

- they are interested in with an average of 4.75 of 5;
- think it will improve their labor market prospects with an average of 4.75.

## 1.10. Stakeholders - questionnaire form – Italy

The questionnaire for stakeholders was done with the purpose to map the relevant stakeholders in the fields of non-Formal adult Education on the topics of circular economy, plastic craftwork and tinkering.

In the survey for stakeholders, we gathered answers from different type of stakeholders such as: responded are non-profit organizations and associations (55%), adult education centers (5%) and job consultant (40%).

Regarding their location, the answers came from: Milan, Florence, Rome, Venice metropolitan area and Sassari.

### Needs

All of the stakeholders have examples of their trainings in their own institutions and just a little part of them answered that they do know examples of circular economy related trainings (20%).

Regarding the efficiency of delivery of the courses for the unemployed, most of stakeholders think that practical trainings with applicable skills will be more efficient (29 of 36), some of them answered that with physical presence (25 of 36), some of them answered hybrid type, physical + online (15 of 36), some others claimed the need of offer courses that gives qualifications and prepare to a specific job (28 of 36).

According to stakeholders, lack of financing to pay for the courses is the biggest barrier that prevent adults to attend trainings (32 of 36 stakeholders answered), followed by lack of time due to family responsibilities (34 of 36 stakeholders), lack of time due to work (5 of 36 stakeholders), trainings are not offered at the place it suits them (33 of 36 stakeholders), training prerequisites (5 of 36 stakeholders).

### Skills

The stakeholders who answered the survey listed digital and IT skills as the most important skills that the unemployed adults should possess or acquire in order to be employed (33 of 36), job related (29 to 36) and, generically, those required by companies (34 of 36).

Respondents, when asked about their familiarity with the following topics answered: 1) Circular Economy (15 of 36 stakeholders have familiarity); Team building (36 of 36 stakeholders); ice breaking (30 of 36 stakeholders); plastic craftwork (6 of 36 stakeholders); co-design (20 of 36 stakeholders).

**Ice breaking and Team Building** are topics that the stakeholders consider:

- interesting for the unemployed adults with an average grade 3.5 out of 5;
- relevant for the unemployed adults with an average grade 3.5 out of 5.
- likely to help someone in improving the labor market prospects with an average 4 out of 5.

**Theoretical Session on Circular Economy** is a topic that the stakeholders consider:

- interesting for the unemployed adults with an average grade 3.5 out of 5;
- relevant for the unemployed adults with an average grade 3.5 out of 5;
- likely to help someone in improving the labor market prospects with an average 4 out of 5.

### **Simulation exercise of a Circular economy business is a topic that the stakeholders consider:**

- interesting for the unemployed adults with an average grade 3.5 out of 5;
- relevant for the unemployed adults with an average grade 4 out of 5;
- likely to help someone in improving the labor market prospects with an average 4 out of 5.

### **Good practices of Circular economy businesses is a topic that the stakeholders consider:**

- interesting for the unemployed adults with an average grade 3 out of 5;
- relevant for the unemployed adults with an average grade 3 out of 5;
- likely to help someone in improving the labor market prospects with an average 4 out of 5.

### **Theoretical session on Plastic craftwork is a topic that the stakeholders consider:**

- interesting for the unemployed adults with an average grade 3.5 out of 5;
- relevant for the unemployed adults with an average grade 3.5 out of 5;
- likely to help someone in improving the labor market prospects with an average 3.5 out of 5.

### **How to manage Plastic craftwork in practice—risks and guidelines is a topic that the stakeholders consider:**

- interesting for the unemployed adults with an average grade 2 out of 5;
- relevant for the unemployed adults with an average grade 2 out of 5;
- likely to help someone in improving the labor market prospects with an average 2 out of 5.

### **Tinkering session on Plastic craftwork is a topic that the stakeholders consider:**

- interesting for the unemployed adults with an average grade 3.5 out of 5;
- relevant for the unemployed adults with an average grade 3.5 out of 5;
- likely to help someone in improving the labor market prospects with an average 3.5 out of 5.

### **Theoretical and practical session on co-design is a topic that the stakeholders consider:**

- interesting for the unemployed adults with an average grade 4.5 out of 5;
- relevant for the unemployed adults with an average grade 4.5 out of 5;
- likely to help someone in improving the labor market prospects with an average 4.5 out of 5.

## 1.11. Desk research on good practices non-formal adult education in the field of circular economy, plastic craftwork and tinkering - Italy

For the needs of the project, with the purpose of analyzing existing good practices in the relevant fields we collected 3 good practices from Italy: one in the field of Tinkering methodology, another related to Circular Economy and, finally, another in the field of plastic craftwork.

Despite the fact that the projects we found are not all aimed at an adult audience, we are convinced that they can represent good practices that can also be reproduced in adult contexts of learning subjects such as tinkering methodology, circular economy and plastic craftwork.

Moreover, the lack of good practices on the Italian national territory aimed at adults, stimulates us to reflect on the need to fill this gap through the implementation of new projects and to work to implement the IDEA project that shows itself as a necessity in this context.

### 1) Tinkering EU: building Science Capital for ALL

Overview	
<b>Title</b>	TINKERING EU: Building Science Capital for ALL
<b>Country/place</b>	Milan, Italy
<b>Date</b>	Start date 01-09-2017 - End date 31-08-2020
<b>Contributors</b>	Fondazione Museo Nazionale Della Scienza E Della Tecnologia Leonardo Da Vinci
<b>References</b>	<ul style="list-style-type: none"> <li>- <a href="https://erasmus-plus.ec.europa.eu/projects/search/details/2017-1-IT02-KA201-036513">https://erasmus-plus.ec.europa.eu/projects/search/details/2017-1-IT02-KA201-036513</a></li> <li>- <a href="http://www.museoscienza.it/tinkering-zone">http://www.museoscienza.it/tinkering-zone</a></li> <li>- <a href="https://ec.europa.eu/programmes/erasmus-plus/project-result-content/7d57cdc0-f7d3-49ec-88b6-a85f6a46c760/Tinkering_Science_Capital_2018_BASSA.pdf">https://ec.europa.eu/programmes/erasmus-plus/project-result-content/7d57cdc0-f7d3-49ec-88b6-a85f6a46c760/Tinkering_Science_Capital_2018_BASSA.pdf</a></li> </ul>
Description	
<b>Abstract</b>	The project Tinkering EU: Building Science Capital for ALL is an European based project which uses the innovative methodology of Tinkering to develop activities which aims at fostering the 21st Century skills Related to Science Capital. The project is particularly drawn of disadvantaged youth and aims at contributing to the development of inclusive science learning in schools.
<b>Aims and objectives</b>	<p>The aims of the projects are:</p> <ul style="list-style-type: none"> <li>- to develop young people's 21st Century skills related to Science Capital;</li> <li>- to improve school practice through an innovative pedagogy (Tinkering) and promote a new science education approach (Science Capital);</li> <li>- to encourage exchange of expertise and practice between formal and informal learning institutions;</li> <li>- to create a Europe-wide community of practices.</li> </ul>

<b>Framework of competences</b>	<ul style="list-style-type: none"> <li>- Tinkering methodology</li> <li>- Science Capital learning</li> <li>- Expertise exchange</li> </ul>
<b>Methodology</b>	<p>Concerning the methodology, the project takes into account that science museums and schools together can play a key role in the development of 21st Century skills, Science Capital and social justice fostering science literacy amongst all individuals.</p> <p>The approach used, then, starting from the cooperation of formal and informal educational bodies, has been implemented through Non Formal Education activities, in order to involve the participants in the practical and learning-by-doing experience of achieving new skills through the through the direct involvement of all participants - from educators to students - and the implementation of activities in order to learn camp-related skills through direct, practical and Non Formal experience.</p>
<b>Outcomes and results</b>	<p>The actual results achieved by the project are:</p> <ul style="list-style-type: none"> <li>- Tinkering activities experienced by 3450 students, tested by 16 teacher ambassadors and evaluated by 179 more teachers.</li> <li>- The creation of a methodological framework on using Tinkering to develop the Science Capital of young people.</li> <li>- Development of training events for teachers and museum staff.</li> <li>- Dissemination through multiplier events for the wide implementation of the activities across disadvantaged schools.</li> <li>- Evaluation tools that can be used to foster a self-reflection approach to teaching and learning.</li> <li>- Creation of a website with resources and activities available to everybody and a dissemination reaching about 1000 more formal and about 500 informal education professionals, both inside and outside the consortium.</li> </ul> <p>The results collected from teachers' evaluation of the Tinkering experience indicated that the impact was highly beneficial for students because it has stimulated them to develop broad-ranging skills and knowledge in STEM, and of support to students with lower science capital.</p> <p>Moreover, as the Tinkering methodology deeply values existing skills, interests and talents, in this experience it has provided multiple pathways for success and boosted motivation and confidence between participants. The project also impacted the teachers who were supporting their students and stimulated them to reflect on their teaching practice and transform, through the help of this experience, their approach to a more learner-centred pedagogy.</p> <p>In addition, long-term benefits regard the work of educational institutions towards social inclusion and Science Capital and the collaboration between different type of organisations.</p> <p>Also, the use of innovative and concrete resources and methodologies helped to enrich practice and strengthen their mission towards a society founded on scientific citizenship, equity and democracy.</p>

<b>Conclusions</b>	<p>This project, despite being designed for young students, can be of great relevance to the idea project. In particular, it shows how the tinkering methodology has not only impacted on students' ways of learning, but how it has also involved educators and teachers, stimulating them to adopt teaching methodologies more focused on the pedagogical, practical and learning needs of 21st Century skills.</p> <p>Moreover, the collaboration between different types of institutions promoting formal and non-formal training models shows how the non-formal approach to learning this type of skills is probably the most suitable for involving the target group, since it is only through direct experience that the subject can acquire skills and be stimulated to continue the learning process.</p>
<b>Other information</b>	N/A

## 2) Circular Economy applied to FABULA Project Framework

Overview	
<b>Title</b>	Circular Economy applied to FABULA Project Framework
<b>Country/place</b>	Naples, Campania, IT
<b>Date</b>	Start date: 02/11/2020 End date: 01/11/2022
<b>Contributors</b>	Istituto Suor Orsola Benincasa
<b>References</b>	<a href="https://conform.it/en/fabula-cplus/">https://conform.it/en/fabula-cplus/</a> <a href="https://fabula.conform.it/it/fabula-cplus/il-progetto-cplus/">https://fabula.conform.it/it/fabula-cplus/il-progetto-cplus/</a>
Description	
<b>Abstract</b>	The project uses the logic of edutainment, i.e. educating while having fun, to involve, motivate and enthuse primary school pupils in entrepreneurship and financial literacy, broadens its scope and range of action, experimenting with innovative forms of interactive teaching, gamified and laboratory-based to develop in pupils of classes IV and V of Primary Schools in Italy, Spain and Greece an awareness, knowledge and ability to adopt behaviours oriented towards the circular economy, experimenting and producing, at the same time, new creative and inventive ideas for an early entrepreneurial vision in the field of reuse and recycling of resources and materials.
<b>Aims and objectives</b>	The project foresees: <ul style="list-style-type: none"> <li>- Raising students' awareness of the concept of waste and the ability to exploit it as a resource.</li> <li>- Stimulate reflection with respect to everyday places where good waste recovery practices can take place.</li> <li>- Promote knowledge of the circular economy not only among students, but also among teachers.</li> <li>- Stimulate students' creativity and entrepreneurial skills to help them understand that the problem of waste can be turned into a resource through the application of good circular economy practices.</li> </ul>
<b>Framework of competences</b>	<ul style="list-style-type: none"> <li>- Circular Economy</li> <li>- Non-Formal Education</li> <li>- Entrepreneurial skills</li> </ul>
<b>Methodology</b>	The methodology used is that of Non-Formal Education, together with the use of digital resources and learning-by-doing. Students learn skills in entrepreneurship and the circular economy in order to be stimulated to rethink the problem of resource waste and turn it into a positive challenge by learning good practices in the circular economy.

<p><b>Outcomes and results</b></p>	<p>As for the outcomes the project foresees to promote:</p> <ol style="list-style-type: none"> <li>1. the realisation of Open Educational Resources in the form of virtual tours to allow pupils to make an immersive and interactive visit to some symbolic locations of their everyday life (home, park, school, etc.) to accompany them to an early cultural leap to face with full awareness the challenge of the circular model, moving from the concept of disvalue inherent in waste to that of value, and thus learn the transformation process of each single material they will encounter along the virtual path.</li> <li>2. the design and implementation of the CIRCLE Game: Circular Learning Evaluation Game to train the target skills and assess the achievement of the learning outcomes</li> <li>3. The design of the methodological manual of Circular Creativity Labs for Entrepreneurship – CiCLE to enable teachers to conduct teaching workshops to develop the creativity, inventiveness and entrepreneurship of young learners to give waste a "second life", transforming it into something artistically and entrepreneurially new</li> <li>4. Methodological alignment of a pool of teachers from the partnership through transnational mobility on the "CiCLE" model.</li> </ol> <p>As for the results, the project implemented:</p> <ol style="list-style-type: none"> <li>1. A training program focused on entrepreneurial and circular economy skills.</li> <li>2. The fabuland, a 360 ° virtual tour , consisting of images that can be navigated from any device, to allow learners to make an immersive and interactive visit to some symbolic places of their daily life.</li> <li>3. Twin The Bin, an HTML5 arcade game in English.</li> <li>4. CIRCLE Game, an evaluation game, in an online and printable version, available in the different languages of the partnership</li> <li>3. CICLE - Circular Creativity Labs for Entrepreneurship - Manual, a guide for teachers in the operational phases necessary to evolve towards the role of facilitator.</li> </ol>
<p><b>Conclusions</b></p>	<p>Although the project described here is aimed at young students, it can stimulate - as a good practice - the actions of the IDEA project. through the use of digital resources, in fact, it is possible to stimulate the user to identify with everyday situations in which he or she is asked to use the frameworks of the circular economy and actively react to the waste of resources. The project also involves educators, who in this case do not only act as transmitters of skills, but rather as figures capable of stimulating the learning of the values of the circular economy through the implementation of actions, including entertainment - through gamification, for example - of the good deeds to be carried out and educating on the concept of the circular economy.</p>
<p><b>Other information</b></p>	<p>N/A</p>



### 3) Precious Plastic Salento

Overview	
<b>Title</b>	Precious Plastic Salento
<b>Location</b>	Salento, Italy
<b>Timeframe</b>	2020- ongoing
<b>Contributors</b>	Mobius Circle ODV
<b>References</b>	<a href="https://preciousplasticsalento.it/">https://preciousplasticsalento.it/</a>
Description	
<b>Abstract</b>	<p>The project involves the reuse of plastic waste through a chain of production and reproduction of the plastic material from the waste material. The project is articulated through the handcrafted creation of machinery that does the work of shredding the various types of plastic, and molding new objects made on handcrafted molds.</p> <p>The precious plastic project also not only creates value from waste plastic by creating new usable and saleable artifacts, but it also expends itself on the educational front, as it promotes courses for adults that serve to teach the methodology of building machinery and molds useful for recycling and reproducing new objects with the philosophy of zero waste.</p>
<b>Target group</b>	The precious plastic project, in an educational sense, is aimed primarily at adults and active citizens. However, the association has also activated courses aimed at children that aim more at spreading the framework of recycling and reusing plastic, which is no longer considered as a waste with a high impact on the environment, but as an object that can be re-used and acquire value.
<b>Timeline</b>	2020-ongoing
<b>Aims and objectives</b>	<p>The main aim of the project are:</p> <ul style="list-style-type: none"> <li>- Spread awareness of the value of plastic waste</li> <li>- Stimulate the citizens to improve their skills in recycling actions</li> <li>- Spread the know-how on plastic craftwork</li> <li>- Create new valuable objects based on the recycling of waste</li> <li>- Stimulate to spread the best practice through other audiences</li> <li>- Spread awareness of the plastic impact on the ecosystem</li> <li>- Stimulate a critical attitude toward the waste chain process</li> <li>- Acknowledge the differences between various type of plastics</li> </ul>
<b>Framework of competences</b>	<ul style="list-style-type: none"> <li>- Plastic craftwork know-how</li> <li>- Critical attitude</li> <li>- Creativity</li> <li>- Awareness on the impact of plastic waste</li> </ul>

<p><b>Methodology</b></p>	<p>The project adopts orientation and active learning approaches, which involve participants in the processes of elaborating the workshop topics through both manual and intellectual work. The participants, in this sense, are asked to actively work on the site to learn how to do. In particular, the methodology of problem-solving and experimental research is used to stimulate participants' understanding of the correlations between the environment and human activities.</p>
<p><b>Outcomes and results</b></p>	<p>N/A</p>
<p><b>Conclusions</b></p>	<p>The project is a good practice that highlights that there is an interest on the part of active citizens and in particular from associations to move and become active towards the problem of plastic waste. Moreover, the project involves not only citizens who are willing to devote time to build machinery and implement awareness-raising actions, but also involves designers and artists in the search for new objects that can become valuable to overcome the preconception of plastic as a disposable object.</p>

## 1.12. Conclusions - Italy

Key points from the survey results:

### **Unemployed low skilled adults:**

They attended training in some form whether it is work related, skills qualification or in their free time and listed:

1) lack of time due to family responsibilities (25 of 32); 2) lack of finances to pay for the courses (17 of 32); 3) lack of time due to work (4 of 32), as the main barriers to access training courses in general.

Half of the unemployed adults who took part in the survey claimed that they don't know what Circular Economy is, but on the other hand, all responded that they would like to get more information about this topic.

The most interesting sessions that emerged from the answers of the unemployed adults and listed in the survey form are: 1) co-design (60%); 2) circular economy (40%); 3) plastic craftwork (30%); 4) team building and ice breaking activities (20%).

### **Stakeholders**

Most of the stakeholders claimed that they have examples of their trainings in their own institutions, but just few of them know examples of circular economy related trainings (20%).

Most of stakeholders who answered the survey consider that sessions for Circular Economy are something that would interest the adults and they will improve their labor market chances (with an average of 4 of 5), but still more oriented to the simulation of Circular Economy Business (average of 4), than Theoretical Sessions (average of 3.75). They also feel that Theoretical and Practical sessions of Co-design could be relevant for both unemployed adults' interests and as a perspective opening tool in the job market (with an average of 4.5).

## 1.13. Unemployed adults (45+) – questionnaire form – North Macedonia

The questionnaire for unemployed adults includes questions on their needs, barriers for not attending training and educational opportunities, profile and awareness of the topics of circular economy, plastic craftwork, tinkering and how they can be helpful in their pursuit of job.

### Needs

First, the needs for the unemployed adults were analyzed. According to the survey's answers 43 % of the people who answered, attended an educational program, course, training or workshop in the last 5 years. Most of them attended 1 to 5 trainings (77,77%), some of the unemployed adults attended 5 to 10 trainings (11,11%), 11,11% attended more than 10 trainings while 57 % of them didn't attend any training, course, workshop or educational program.

Most of the unemployed adults attended on the job training (9 of 21 respondents), followed by workshops and seminars (6 of 21 respondents), other courses or private lessons (6 of 21 respondents), possibilities for non-formal education (2 of 21 respondents), courses for obtaining formal qualification (1 of 21 respondent) and while nobody attended educational opportunities on open or distance education.

Biggest percentage of those who attended a training were participating at job related training on first aid (33% of respondents), safety in the workplace (33% of respondents), women entrepreneurship (4,8% of respondents). Regarding the barriers that prevent adults from taking part in trainings and educational programs, most of the respondents (16 of 21) consider lack of finances to pay for the courses as the main reason for not attending such educational opportunities, followed by lack of time due to work (6 of 21 respondents), lack of time due to family responsibilities (4 of 21 respondents). For 4 of 21 respondents trainings aren't offered at the place that suit them, while 2 of them listed the training prerequisites as a reason for not attending, (2 of 21 respondents).

### Profile

Regarding their education, most of the respondents listed secondary education as the highest degree of education obtained (57,1%), followed by primary education diploma (9,5%), bachelor's degree (28,6%) and master's degree or above (4,8%%). More of the unemployed adults who answered the surveys were women (61,9%), compared to men (38,1%).

Regarding the place of living, most of the respondents live in urban setting (90,5%), rural area (9,5%), suburban setting (0%). People who answered they live in a city, according to size of the city most of them live in large city with more than 500 000 inhabitants (52,4%), compared to medium city with 100 000 to 500 000 inhabitants (38,1%) and small city with less than 100 000 inhabitants (9,5%). According to the place of living, 42,9% are from Skopje, from Kavadarci and Prilep 9,5%, while from all other towns Bitola, Tetovo, Ohrid and two rural areas we have 4,8% each.

### Skills

Regarding activities and words connected to them, the unemployed adults are most familiar with team building (15 of 21 respondents), followed by ice breaking (10 of 21 respondents), plastic craftwork (10 of 21 respondents), circular economy 5 of 21 respondents) and codesign (4 of 21 respondents).

Skills which the unemployed adults are most interested in improving are connecting with the others more easily (13 of 21 respondents), working with others (12 of 21 respondents), no waste generation (11 out of 21 respondents), recycling (10 out of 21 respondents) and plastic craftwork (6 of 21 respondents).

More of the unemployed are not informed what is **Circular Economy** (71,4%), compared to those who know (28,6%), while most of the people who do not know, think that it is important to be informed about circular economy (95,2%).

Regarding the topic **connecting with others unemployed adults are:**

- interested in on average 4,24 on a scale from 1 to 5.
- likely that this will improving their labor market prospects is graded with an average of 4,05.

Regarding **theoretical session of circular economy**, the unemployed adults are:

- interested in the topic on average 3,86 on a scale from 1 to 5
- think that it is likely that it will improve their labor market prospect with an average of 3,71.

**Simulation exercise of a Circular Economy** business is a topic that:

- interest them on average 3,62 out of 5.
- they think it is likely that it will improve their labor market prospect with an average of 3,52.

The unemployed adults who answered the surveys the topic of **Good Practices on Circular Economy Businesses:**

- are interested to learn more about on average 3,86 of 5 and
- think it will improve their labor market prospect with an average of 3,57

**Theoretical session on Plastic Craftwork** is a topic in which our target group:

- is interested in learning more on on average 3,43 of 5.
- think it will improve their labor market prospects with an average of 3,33

**How to manage plastic craftwork – risks and guidelines** is a topic in which our target group:

- is interested in learning more on average 3,57 of 5.
- think it will improve their labor market prospects with an average of 3,29.

**Tinkering on plastic craftwork is a session** in which the unemployed adults are:

- are interested in the session on average 3,29 of 5 and think it will improve their labor market prospects with an average of 3,29.

They think **Theoretical and practical session on Co-design**

- are interested in with an average of 3,9 of 5.
- think it will improve their labor market prospects with an average of 3,62

High percentage of unemployed adults (95,2%) are not informed about examples of trainings in the field of Circular Economy and skills related teamwork for the unemployed. Only 4,8% know examples in creative industries.

## 1.14. Stakeholders - questionnaire form – North Macedonia

The questionnaire for stakeholders was done with the purpose to map the relevant stakeholders in the fields of non-formal adult education on the topics of circular economy, plastic craftwork and tinkering.

In the survey for stakeholders, most of the stakeholders who responded are non-profit organizations (66.4%), business with circular economy (14%), individual (5%). Regarding type of institutions most of the stakeholders are private (90%), compared to public(10%).

Most of them are located in Skopje (35%), followed by Shtip(15%), Strumica\_(10%).

### Needs

Most of the stakeholders have examples of their trainings in their own companies/institutions (90%) and of the ones that know. In total 40% of the stakeholder know other examples of circular economy related trainings, like composting installers of photovoltaic panels reusing furniture carpentry workshops (5%).

Regarding the efficiency of delivery of the courses for the unemployed, there were different answers from the stakeholders. some of them answered that with physical presence (15%), some of them answered hybrid type, physical + online (15%), some of them think online is the most efficient way of delivering those course (5%), some of them think that practical trainings with applicable skills will be more efficient (5%).

According to stakeholders, lack of financing to pay for the courses is the biggest barrier that prevent adults to attend trainings ( 16 of 20 stakeholders answered), followed by), lack of time due to work (13 of 20 stakeholders), trainings are not offered at the place it suits them (12 of20 stakeholders), lack of time due to family responsibilities (10 of 20 stakeholders, training prerequisites (5 of 20 stakeholders).

### Skills

The stakeholders who answered the survey listed communication skills as the most important skills that the unemployed adults should possess or acquire in order to be employed (40%), computer skills (25%), depends on the needs of the company (15%). They are already familiar with Circular Economy (15 of 20 stakeholders), Team building (14 of 20 stakeholders), ice breaking (10 of 20 stakeholders), plastic craftwork (6 of 20stakeholders),co-design (2 of 20 stakeholders).

**Ice breaking and Team Building** are topics that the stakeholders consider:

- interesting for the unemployed adults with an average grade 3,25 out of 5.
- relevant for the unemployed adults with an average grade 3,3 out of 5.
- likely to help someone in improving the labor market prospects with an average 3,3 out of 5.

**Theoretical Session on Circular Economy** is a topic that the stakeholders consider:

- interesting for the unemployed adults with an average grade 3,6 out of 5.
- relevant for the unemployed adults with an average grade 3,4 out of 5.
- likely to help someone in improving the labor market prospects with an average 3,55 out of 5.

**Simulation exercise of a Circular economy business** is a topic that the stakeholders consider:

- interesting for the unemployed adults with an average grade 3,8 out of 5.
- relevant for the unemployed adults with an average grade 3,85 out of 5.
- likely to help someone in improving the labor market prospects with an average 3,95 out of 5.

**Good practices of Circular economy businesses** is a topic that the stakeholders consider:

- interesting for the unemployed adults with an average grade 3,85 out of 5.
- relevant for the unemployed adults with an average grade 3,75 out of 5.
- likely to help someone in improving the labor market prospects with an average 3,8 out of 5.

**Theoretical session on Plastic craftwork** is a topic that the stakeholders consider:

- interesting for the unemployed adults with an average grade 3,6 out of 5.
- relevant for the unemployed adults with an average grade 3,45 out of 5.
- likely to help someone in improving the labor market prospects with an average 3,4 out of 5.

**How to manage Plastic craftwork in practice—risks and guidelines** is a topic that the stakeholders consider:

- interesting for the unemployed adults with an average grade 3,5 out of 5.
- relevant for the unemployed adults with an average grade 3,7 out of 5.
- likely to help someone in improving the labor market prospects with an average 3,6 out of 5.

**Tinkering session on Plastic craftwork** is a topic that the stakeholders consider:

- interesting for the unemployed adults with an average grade 3,25 out of 5.
- relevant for the unemployed adults with an average grade 3,2 out of 5.
- likely to help someone in improving the labor market prospects with an average 3,4 out of 5.

**Theoretical and practical session on co-design** is a topic that the stakeholders consider:

- interesting for the unemployed adults with an average grade 3,3 out of 5.
- relevant for the unemployed adults with an average grade 3,25 out of 5.
- likely to help someone in improving the labor market prospects with an average 3,25 out of 5.

Highest percentage of the stakeholder on the question what work can they suggest for the unemployed low skilled adults, listed that they can offer education (15%). Others suggested installers of photovoltaic panels (10%), theoretical and practical in production of vegetables (5%), beekeeper in an ecologically clean rural environment for organic honey production, work in furniture industry, security, maintenance, driver, crafts.

Most of the stakeholders know companies and institutions that employ low skilled adults (40%), like construction companies (15%), industrial zones (15%).

## 1.15. Desk research on good practices non-formal adult education in the field of circular economy, plastic craftwork and tinkering in North Macedonia

### 1. Carpentry educational workshop to reduce waste from the furniture industry in Skopje

Overview	
<b>Title</b>	Carpentry educational workshop to reduce waste from the furniture industry in Skopje
<b>Location</b>	Carpentry Educational Center, Skopje, North Macedonia
<b>Timeframe</b>	March 2022 - February 2023
<b>Contributors</b>	Center for Sustainable Initiatives, Skopje – Project leader Furniture companies: Akron, Branimir Company, Monozero; Famod, Blazic, Biba Terk, Infinity Studio and Password Production
<b>References</b>	<a href="https://northmacedonia.un.org/mk/180460-pokazhi-mi-nekoi-raboti-od-programata-za-mali-grantovi-na-globalniot-ekoloski-fond-gef-pmg">https://northmacedonia.un.org/mk/180460-pokazhi-mi-nekoi-raboti-od-programata-za-mali-grantovi-na-globalniot-ekoloski-fond-gef-pmg</a>
Description	
<b>Abstract</b>	<p>The Carpentry Educational Workshop intended for people who want to acquire carpentry skills and want to do carpentry. Experience is not required.</p> <p>Women are encouraged to apply. The materials that will be used in the workshop are the rest of the furniture production from the companies – supporters of this initiative, thus they manage to reduce the waste generated in the furniture industry. "There is no waste in carpentry, only pieces that have yet to find its use."</p> <p>There is currently no carpentry education center for adults. People who work in carpentry are mostly self-taught, that is, they are people who have received training through the job, and people who have gone through carpentry school are rare. In addition, the furniture industry does not focus on production from the point of view of circular economy and they do not see the generated waste as a potential raw material.</p>
<b>Target group</b>	Adults who want to learn carpentry.
<b>Timeline</b>	It is a workshop which lasts from middle February 2023 to middle July 2023.



<b>Aims and objectives</b>	<p>-The general goal of the project is to promote socially-responsible and ecological practices in carpentry to reduce waste in the furniture industry by creating a carpentry-educational center.</p> <p>The specific environmental goal is the use of at least 1 ton of material (primarily chipboard) that occurs as a residue in the production processes of the furniture industry.</p>
<b>Framework of competences</b>	<p>-Acquiring personal skills as in this educational workshop, part of the workshops will be personal skills workshops, where they will be able to learn just that and gain knowledge and confidence in basic carpentry skills related to using a hand tool.</p>
<b>Methodology</b>	<p>Practical workshop on using tools in a way it can be said it is tinkering, attempt to repair or improve something in a casual or desultory (unfocused) way. A methodology, based on experiences, learning from failures, and unstructured time to explore and invent.</p>
<b>Outcomes and results</b>	<p>The project is ongoing but it is expected promotion of sustainable practices in carpentry through the organization of 5 workshops, for a total of 50 people; to enable 500 people to benefit from products made from material that would otherwise end up as waste; and reach at least 10,000 people on social media.</p> <p>By organizing a workshop for 10 people it will be considered preparation for employment in the furniture industry, with this, the personal capacity of at least 5 people would be raised and they would have opportunities for employment in the furniture industry.</p>
<b>Conclusions</b>	<p>It is relevant for the IDEA project, because by reusing waste(residues) from furniture industry adults are taught about circular economy and can be equipped with practical knowledge which they can use for future employment.</p>
<b>Other information</b>	<p>The workshop costs 30 000 denars (less than 500 euros) for the 6 months in total. Women are encouraged to join.</p>

## 2. Art Cycle of Recycle

Overview	
<b>Title</b>	Art Cycle of Recycle
<b>Location</b>	Village Shlegovo, Kratovo, Macedonia
<b>Timeframe</b>	28.02.2022
<b>Contributors</b>	Elena Arsovska
<b>References</b>	<a href="https://www.youtube.com/@ellieart4233">https://www.youtube.com/@ellieart4233</a> <a href="https://www.youtube.com/watch?v=ofUMjXILQLY">https://www.youtube.com/watch?v=ofUMjXILQLY</a>
Description	
<b>Abstract</b>	Elena Arsovska is young women who makes jewelry from plastic waste. She makes jewelry from plastic bottles for years. She held a workshop for non-formal group Smetlana on reusing plastic waste through art, which can be also appreciated by people not just by being beautiful to see, but it can help environment.
<b>Target group</b>	Everyone from all ages interested in preserving the environment and want to learn making beads out of plastic bottles.
<b>Timeline</b>	It was a workshop conducted by Elena Arsovska from Art Cycle of Recycle, for non formal group Smetlana on 05.03.2022 <a href="https://www.youtube.com/watch?v=ofUMjXILQLY">https://www.youtube.com/watch?v=ofUMjXILQLY</a>
<b>Aims and objectives</b>	<ol style="list-style-type: none"> <li>1. Creating eco-friendly jewelry</li> <li>2. Plastic can be seen as a valuable precious material, waste is not trash.</li> </ol>
<b>Framework of competences</b>	Creativity, negotiation, interpersonal skills. Unique artistic skill which can be perfected and through persistence in the future can result in something bigger.
<b>Methodology</b>	It can be said it is tinkering, An educative approach, emphasising hands-on, creative problem-solving for unintentional gaining the knowledge and skills.
<b>Outcomes and results</b>	More environmentally aware people, more people using their (free) time to do something useful and in some cases profitable in a way.
<b>Conclusions</b>	It is important for the IDEA project, because by raising awareness about plastic pollution in this way, you also promote art and possibility of selling the pieces of jewelry you make as a way to start something for yourself which can grow in the future.
<b>Other information</b>	/

### 3. A beekeeper for basic beekeeping in a sustainable way

Overview	
<b>Title</b>	"A beekeeper for basic beekeeping in a sustainable way".
<b>Location</b>	Kochani, North Macedonia
<b>Timeframe</b>	04.2021 – 08.2021
<b>Contributors</b>	Zdruzenie Jadrena Grupa od Bregalnichkiot Region Meden Istok Kochani (Association Core Group of beekeepers from the Bregalnica region Honey East – Kochani)
<b>References</b>	<p><a href="https://cov.gov.mk/course/%d0%bf%d1%87%d0%b5%d0%b-b%d0%b0%d1%80-%d0%b7%d0%b0-%d0%be%d1%81%d0%b-d%d0%be%d0%b2%d0%bd%d0%be-%d0%bf%d1%87%d0%b5%d0%b-b%d0%b0%d1%80%d1%81%d1%82%d0%b2%d0%be-%d0%bd%d0%b0-%d0%be%d0%b4%d1%80%d0%b6%d0%bb/">https://cov.gov.mk/course/%d0%bf%d1%87%d0%b5%d0%b-b%d0%b0%d1%80-%d0%b7%d0%b0-%d0%be%d1%81%d0%b-d%d0%be%d0%b2%d0%bd%d0%be-%d0%bf%d1%87%d0%b5%d0%b-b%d0%b0%d1%80%d1%81%d1%82%d0%b2%d0%be-%d0%bd%d0%b0-%d0%be%d0%b4%d1%80%d0%b6%d0%bb/</a></p> <p><a href="https://aberdojde.mk/%D1%81%D0%BB%D0%B5%D0%B4%D0%B-D%D0%B8%D0%BE%D1%82-%D1%86%D0%B8%D0%BA%D0%B-B%D1%83%D1%81-%D0%BD%D0%Bo-%D0%BE%D0%B1%D1%83%D0%BA%D0%B8-%D1%9C%D0%B5-%D0%B7%D0%B0%D0%BF%D0%BE%D1%87%D0%B-D%D0%B5-%D0%B2%D0%BE/">https://aberdojde.mk/%D1%81%D0%BB%D0%B5%D0%B4%D0%B-D%D0%B8%D0%BE%D1%82-%D1%86%D0%B8%D0%BA%D0%B-B%D1%83%D1%81-%D0%BD%D0%Bo-%D0%BE%D0%B1%D1%83%D0%BA%D0%B8-%D1%9C%D0%B5-%D0%B7%D0%B0%D0%BF%D0%BE%D1%87%D0%B-D%D0%B5-%D0%B2%D0%BE/</a></p>
Description	
<b>Abstract</b>	Association Meden Istok offers training for "Beekeeper for basic beekeeping in a sustainable way", which has been verified by the Center for Adult Education. The goal of the program is for the participant to acquire basic knowledge, skills and competencies for applying the basic practices and techniques for beekeeping production in a sustainable way.
<b>Target group</b>	All interested people who wish to engage in beekeeping and apply biotechnical methods have the right to apply for the training.
<b>Timeline</b>	4 month Programme April to August 2021
<b>Aims and objective</b>	The goal of the program is for the participant to acquire basic knowledge, skills and competencies for applying the basic practices and techniques for beekeeping production in a sustainable way.
<b>Framework of competence</b>	Problem solving, organization, practical in sense of setting up an apiary in suitable location,

<p><b>Methodology</b></p>	<p>The program has a modular character, and consists of 7 different thematic modules with a total of 110 hours. Each module consists of professional theoretical content, practical training and assessment of theoretical and practical knowledge.</p> <p>Professional theoretical content is realized in a classroom equipped according to the rules for space and equipment standards, with necessary visual aids, tools and equipment for beekeeping. The theoretical part of the training is taught by a graduate agricultural engineer, master of agricultural sciences, doctor of agricultural sciences, doctor of veterinary medicine, graduate doctor of veterinary medicine, master of science in veterinary medicine or doctor of science in veterinary medicine.</p> <p>The practical training is carried out by a registered beekeeper-practitioner, in a registered stationed observation apiary with participants distributed in groups, so that they are enabled to effectively and efficiently achieve the set goals of the program. Practical training is carried out according to weather conditions and natural cycles in beekeeping</p>
<p><b>Outcomes and results</b></p>	<p>As a result of the program, the participant will be trained to: set up an apiary in a suitable location; recognition of bee diseases and application of biotechnical methods for dealing with diseases; reproduction of bees; feeding and wintering of bee families; collection, storage and packaging of bee products; application of standards and production control; correct use of machines, equipment and tools at the workplace and protection of health and the environment.</p>
<p><b>Conclusions</b></p>	<p>It is important for the IDEA project, by this training people will be trained about sustainable beekeeping, meaning less antibiotics spent. Through this educational program and the application of the concept of sustainable beekeeping, beekeepers will be able to produce safe and quality beekeeping products with special care for nature and create economic profit, thereby strengthening the development of rural areas.</p>

## 1.16. Conclusions - Macedonia

Key points from the survey results:

-Unemployed low skilled adults more of the respondents didn't attend trainings or any educational opportunities (57% didn't attend) list lack of finances as the biggest barrier from preventing them to attend such trainings (16 of 21 respondents). Most of the unemployed adults don't know what Circular Economy is (71,4%), but feel it is something important they should get more information about it( 93,3%). High percentage of unemployed adults (95,2%) are not informed about examples of trainings in the field of Circular Economy and skills related teamwork for the unemployed. The most interesting session from the survey which they want to attend is Team Building, but they are also interested in Good Practices in Circular Economy.

-Stakeholders - Most of the stakeholders have examples of their trainings in their own companies/institutions (90%) or some form of education and know examples of circular economy related trainings, like composting (10%), installers of photovoltaic panels (10%). Most of stakeholders who answered the survey consider that sessions for Circular Economy are something that would interest the adults and they will improve their labor market chances. They also feel that sessions on Team Building (15 of 20 stakeholders), Ice breaking (14 of 20 stakeholders)are important and will be useful for the future employment of the low skilled adults. The research showed that Simulation Exercise of Circular Economy Business is also important topic in training adults.

In general, adult unemployed people (45+) are interested in more opportunities that are free and in line with their interests and stakeholders have educational opportunities for adults which can contribute to qualification of those adults and employment.

## 1.17. Comparison of the data from the national reports

### 1.17.1. Unemployed adults 45+

#### Needs

1. Did you attend educational program, course, training or workshop in the last 5 years?

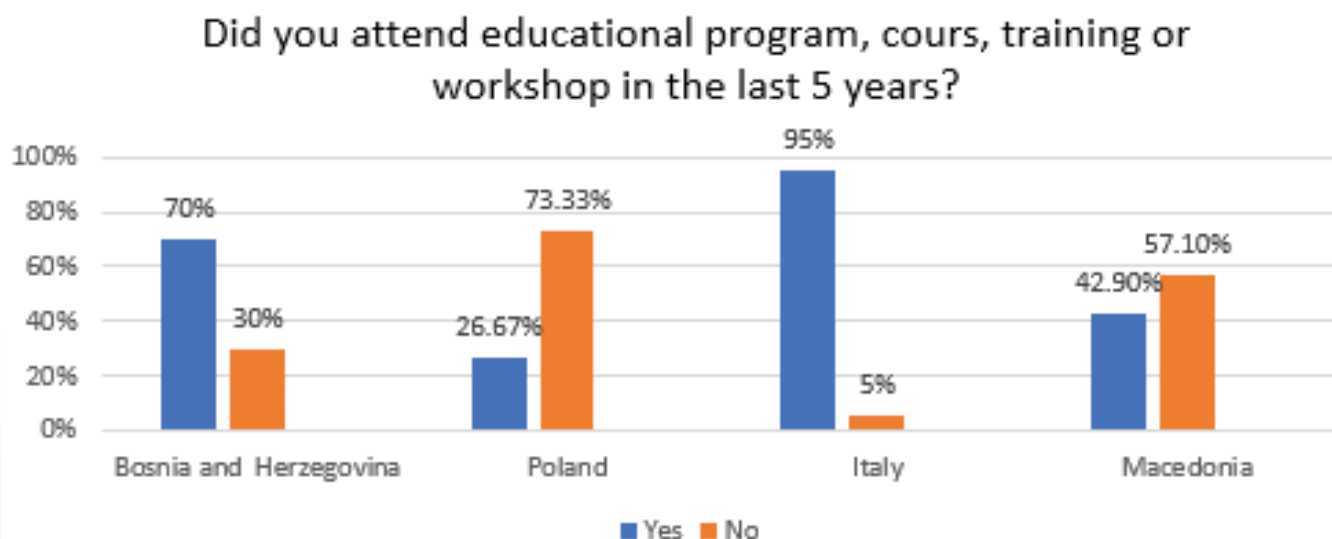


Chart 1. Percentage of unemployed adults who attended a training in the last 5 years in the partner countries

In the 4 partner countries, Bosnia and Herzegovina, Poland, Italy and Macedonia the online survey was responded by 20, 45, 32 and 21 unemployed adults above 45 years old. According to the results, highest percentage of the adults who attended a training are in Italy 95%, followed by Bosnia and Herzegovina 70%, Macedonia 42,9% and Poland 26,67%.<sup>2</sup> On the question, if you attended, how many trainings did you attend the answers were different among different countries.

2. If the answer is yes, how many of those you attended?

- Regarding the number of trainings, of the ones that attended in Poland all of them attended 1 to 5 trainings. In Macedonia, 77,77% attended 1 to 5 trainings and 11,11 attended till 10 trainings and more than 10 trainings.
- In Italy 87% attended one or two trainings, while the percentage in Bosnia and Herzegovina is 6 to 10 the most, followed by 1 to 5 trainings attended by the unemployed.

3. On the question did you attend any of the following courses in the last 5 years, the answers were the following:

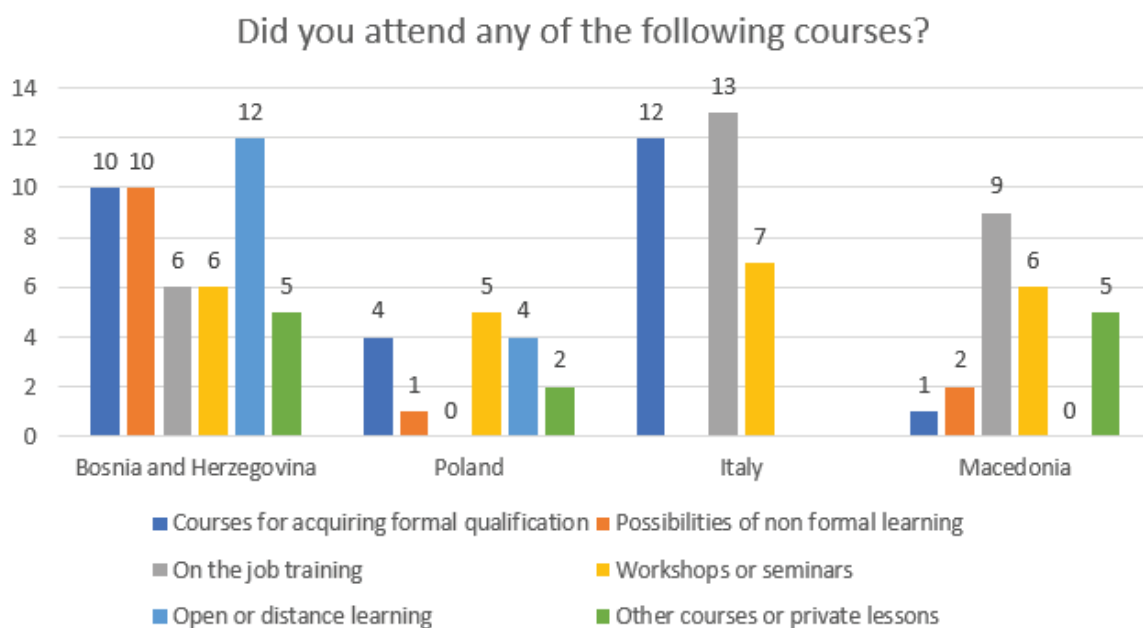


Chart 3. Different types of trainings that unemployed adults attended in the partner countries (number of respondents answering multiple choice question)

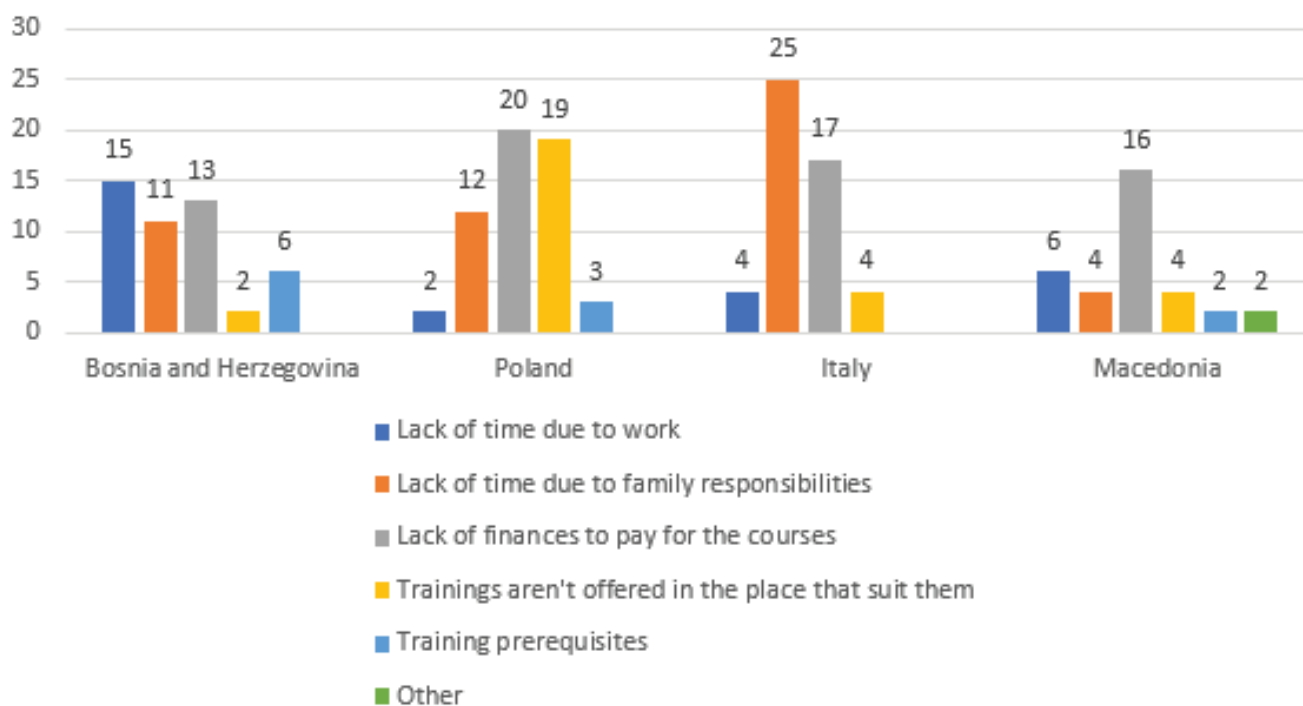
- Bosnia and Herzegovina, the highest number of respondents answered open or distance learning, followed by courses for obtaining formal qualification, non-formal learning and lower number of respondents attended workshops, seminars and other courses.
- Poland, where lowest number of the respondents attended an educational opportunity, the ones who attended, went to courses for formal qualification, workshops and seminars, open or distance learning, private lessons. Nobody attended on the job training in the last 5 years because the respondents were unemployed.
- Italy, most people attended courses for obtaining formal qualification, on the job training and less workshops or seminars. Nobody attended open or distance learning and non-formal learning.
- Macedonia, most people attended on the job training, while nobody attended open or distance learning and just one person attended course for obtaining formal qualification.

4. On the question, if you attended an educational opportunity please list the topic, these were the answers by the unemployed adults in the 4 partner countries:

- In Bosnia and Herzegovina: The unemployed adults who answered the questionnaire attended: Language courses the most, followed by PR, HR and Administrative and IT.
- In Poland, unemployed adults attended courses on variety of different topics, mostly computer skills, soft skills, social economy, welding, accounting, office course.
- In Italy the unemployed adults above 45 years of age attended, "Citizenship and Sustainable Business Development", "Digital Marketing" and "Registered Behavior Technician".
- In Macedonia, unemployed adults attended women entrepreneurship, it courses, computer courses, training on occupational safety and health, training in working with food and maintaining hygiene, digital marketing, sales skills, installations for auto industry, German language courses, educational tools for the unemployed.

5. On the questions what barriers prevent adult in participating in educational opportunities the answers are:

### Barriers that prevent the adult in participating in educational opportunities



On this question we have differences in answer:

- In Bosnia and Herzegovina, unemployed adults consider lack of time due to work, family responsibilities and finances as the biggest barriers.
- In Poland it is lack of finances and not in the place that suit them, but lack of time due to work isn't a barrier according to them
- In Italy, lack of time due to work and lack of finances, but not the place of the trainings or the lack of time due to work.
- In Macedonia, the biggest barrier for not attending those educational opportunities is the lack of money to pay for the courses.



## Profile

1. Regarding the profile, the first question was the highest education obtained of unemployed adults. The results are presented in this graph.

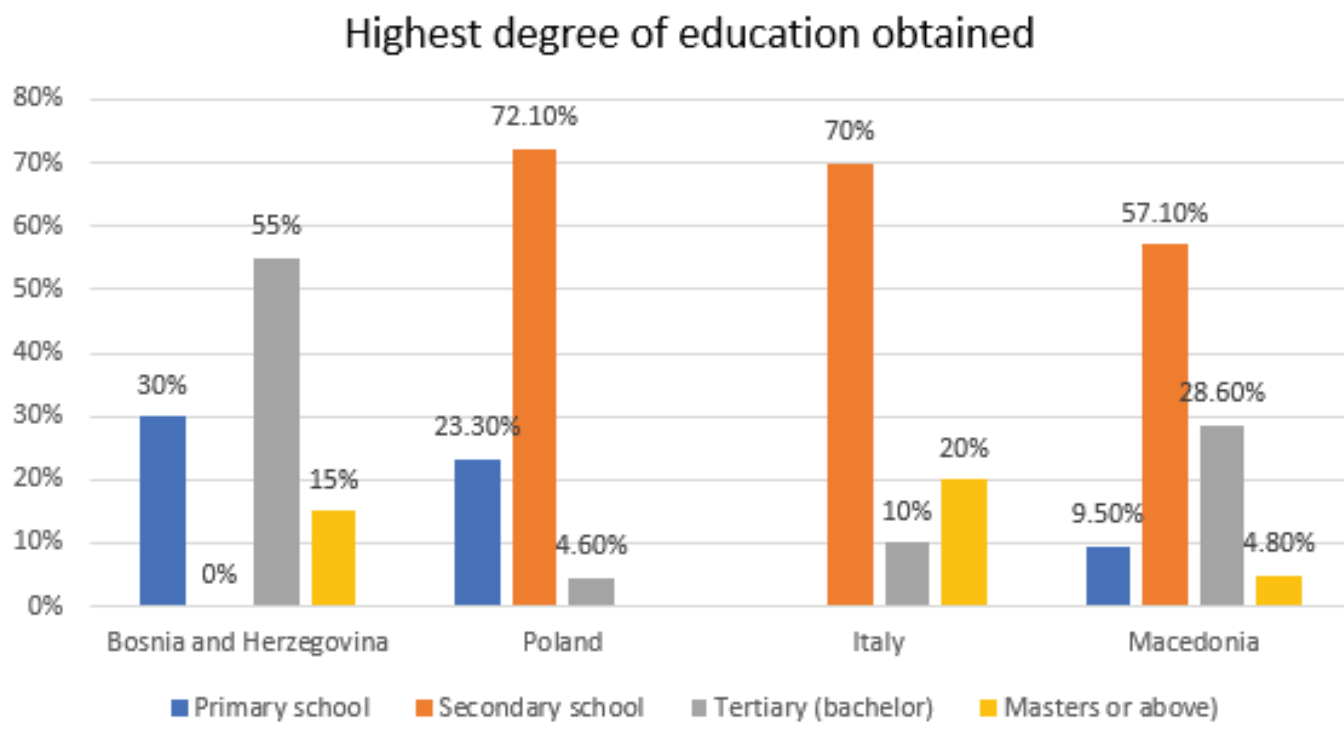


Chart 6. Formal education of unemployed adults

- In 3 of the 4 countries (Poland, Italy and Macedonia), highest percentage of unemployed adults who answered the online survey listed secondary education as the highest degree of education obtained with 72,1%, 70% and 57,1% respectively.
- In Bosnia and Herzegovina, the highest percentage of unemployed answered that they have bachelor's degree, but also highest percentage(30%) answered primary education as the highest compared to the other partner countries.
- In Macedonia, unemployed adults who answered listed that they belong in all the 4 different educational groups.
- In Poland, unemployed adults have primary education degree with around 23%, the second highest in all the partner countries in the project.

### 3. Gender of unemployed adults who answered the survey:

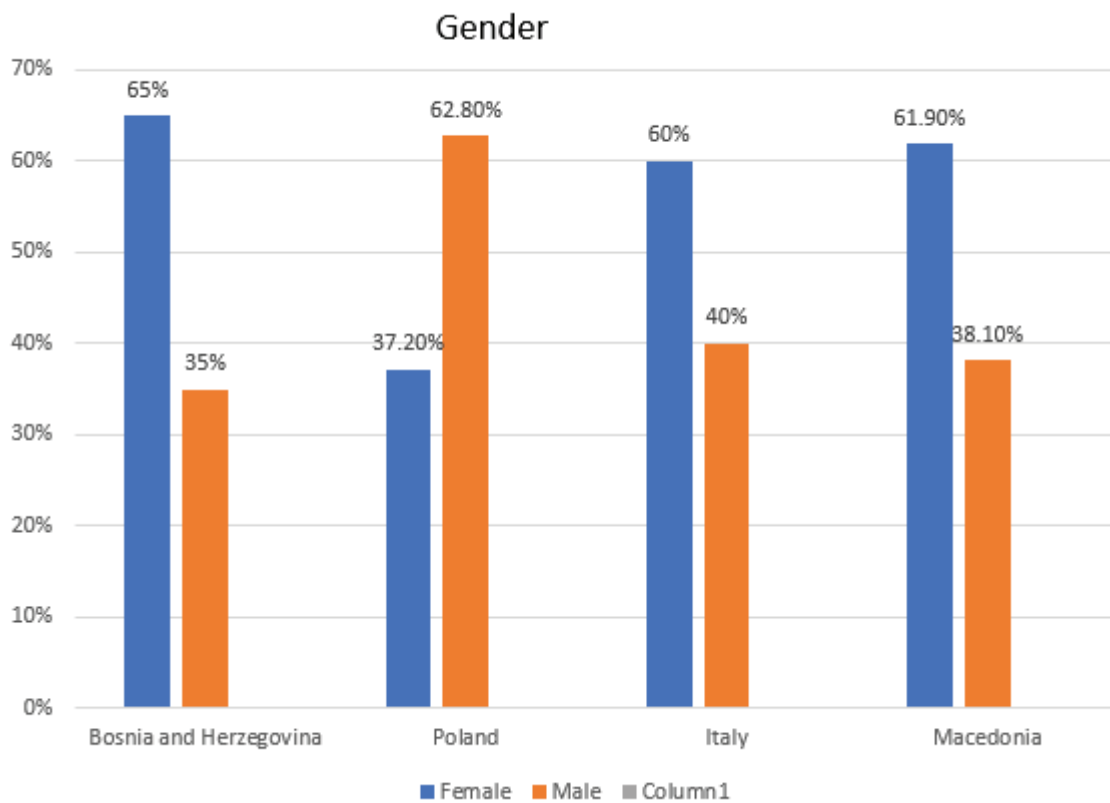


Chart 7. Gender of unemployed adults

In all the countries around or more than 60% of unemployed adults who answered the survey were female, except Poland where more than 60% were male.

#### 4. Place of living of unemployed adults who answered the survey:

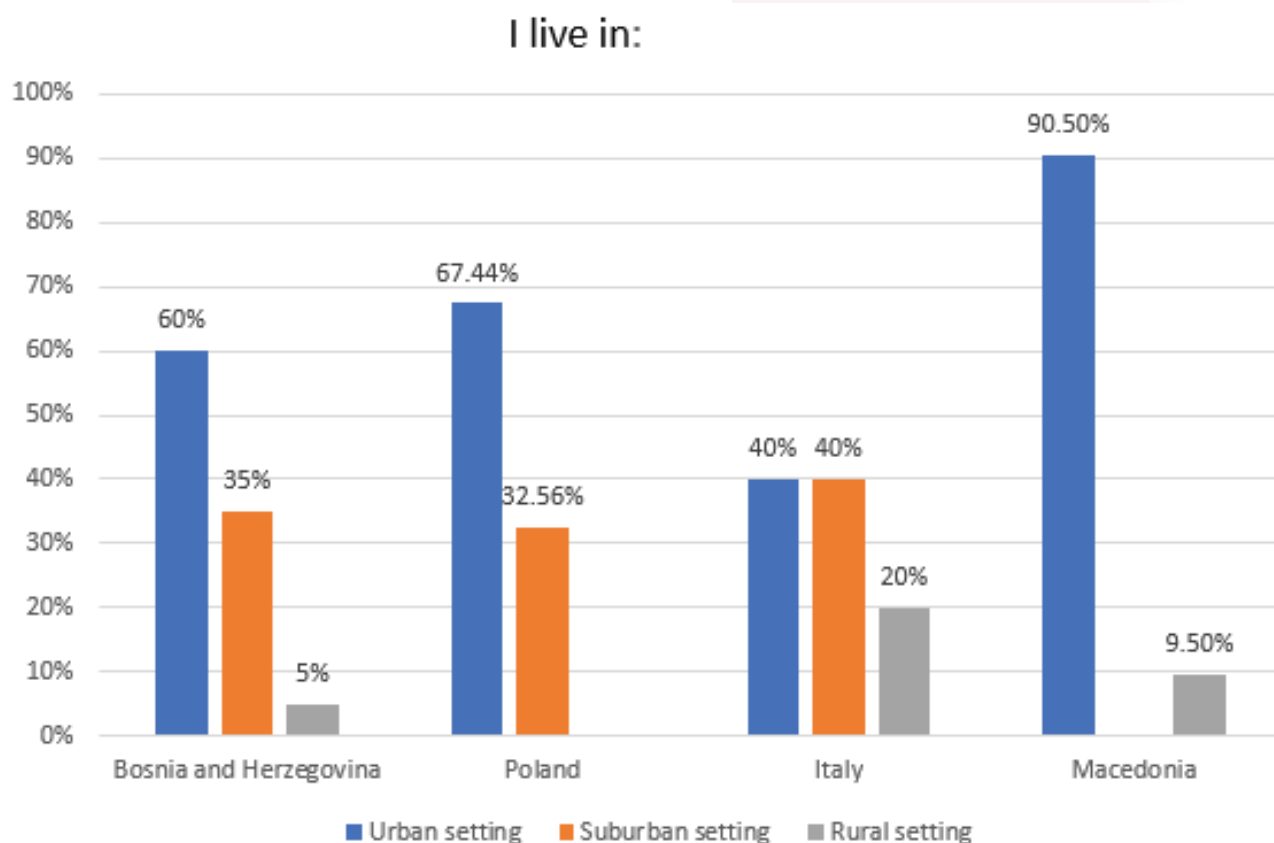


Chart 8. Place of living of unemployed adults according to setting

- In 2 of the 4 countries most of the respondents of the survey live in urban setting: Bosnia and Herzegovina 60% and Poland 67,44%.
- In Macedonia the percentage for unemployed adults who answered the online survey is more than 90%, while in Poland it is 67,44%
- In Italy we have equal number of people who live in urban and suburban setting.
- In Italy and Bosnia and Herzegovina we have people who live in all three settings.

5. People who answered they live in a city, regarding the size of the city they live in a:

- In Bosnia and Herzegovina and Poland, most unemployed adults who answered the survey live in a medium city with about 55%.
- In Bosnia and Herzegovina, Poland and Macedonia 35% to 39% live in a small city with less than 100 000 inhabitants.
- In Macedonia more than 50% (52,4%) live in a big city with more than 500 000 inhabitants.
- In Italy, people who answered they live in a city, according to size of the city most of them live in large city with more than 500 000 inhabitants, followed by those who live in medium cities with 100 000 to 500 000 inhabitants.

## Skills

1. Which of the following words are you already familiar with?

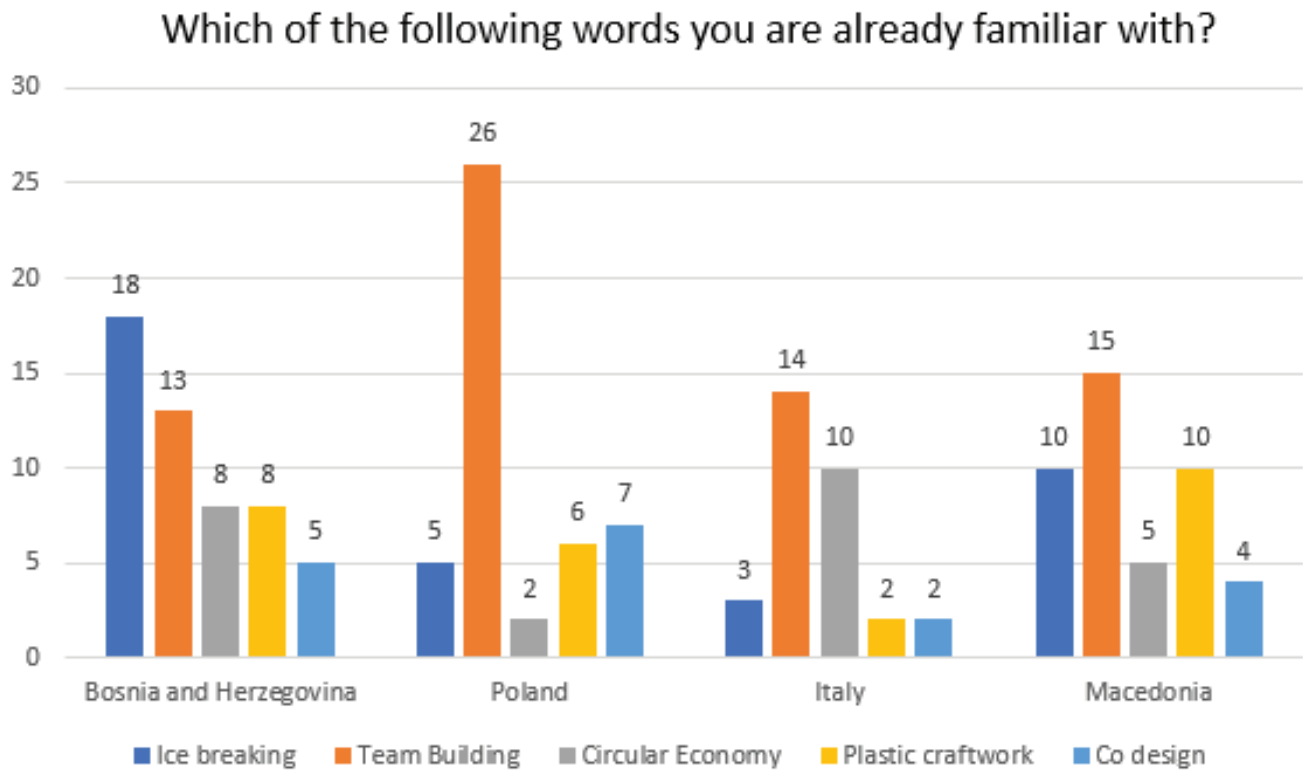


Chart 9. Terms of interest for the project which unemployed adults are already familiar with

- Team building is the word that unemployed adults are already familiar with in Poland, Italy and Macedonia, in Bosnia and Herzegovina is ice breaking.
- In Poland, unemployed adults are the least familiar about Circular Economy.
- In Italy co-design, plastic craftwork and ice breaking have about the same number of respondents as the least people answered they are familiar with the word.
- In Macedonia and Bosnia and Herzegovina co-design is the word with the least people who answered they are familiar with.

## 2. Which of these skills would you be interested in improving?

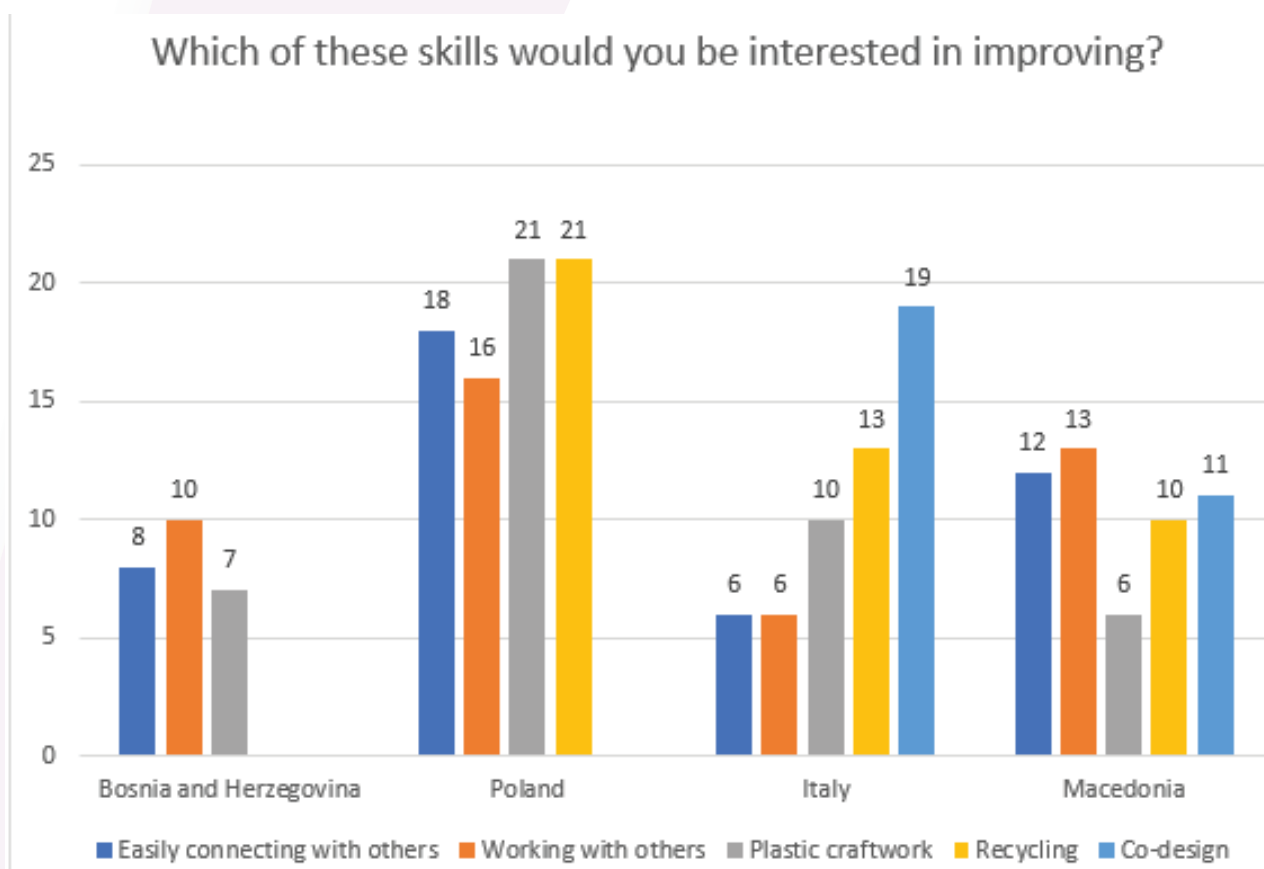


Chart 10. Skills which unemployed adults are interested in improving

- In Bosnia and Herzegovina the most unemployed adults answered that they are interested in improving working with others (team building), while nobody answered recycling (circular economy or co-design).
- In Poland, most people are interested in improving recycling and plastic craftwork, but also nobody answered co-design.
- In Italy, most of the respondents are interested in co-design, while the least are interested in improving connecting with other easily or working with others.
- In Macedonia, the unemployed adults 45+, who answered the online survey are the least interested in plastic craftwork, while all the other topics interest them almost equally.

2. On the question what Circular Economy is the answer on the unemployed adults were the following:

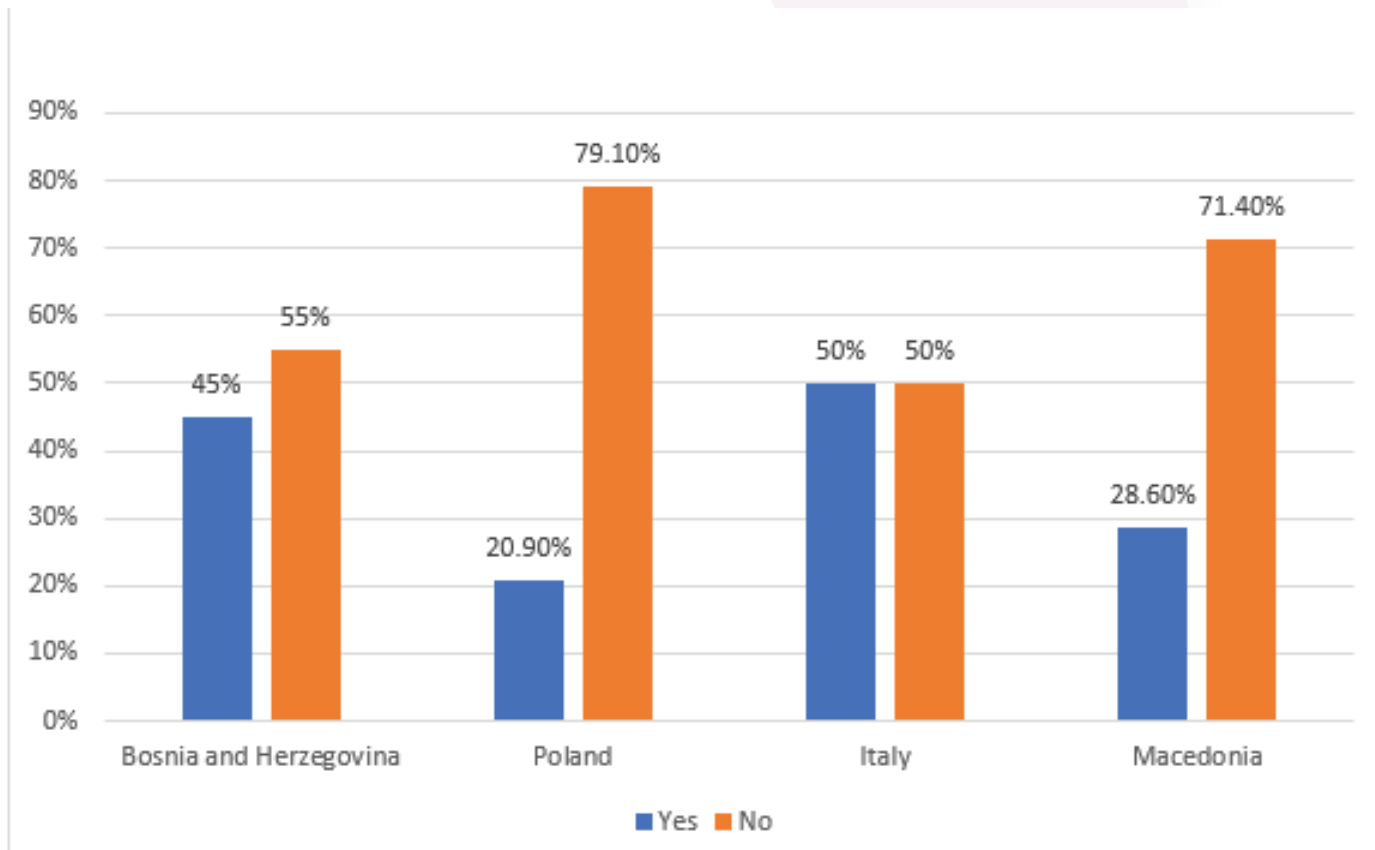


Chart 11. Percentage of people in the partner countries familiar with circular economy

- Unemployed adults in Bosnia and Herzegovina and Italy have similar percentage of whether they know about circular economy, 45 and 50% respectively.
- More than 70% of unemployed people who answered the survey in Poland and Macedonia don't know what circular economy is.

#### 4. Do you think it is important to be more informed about Circular Economy?

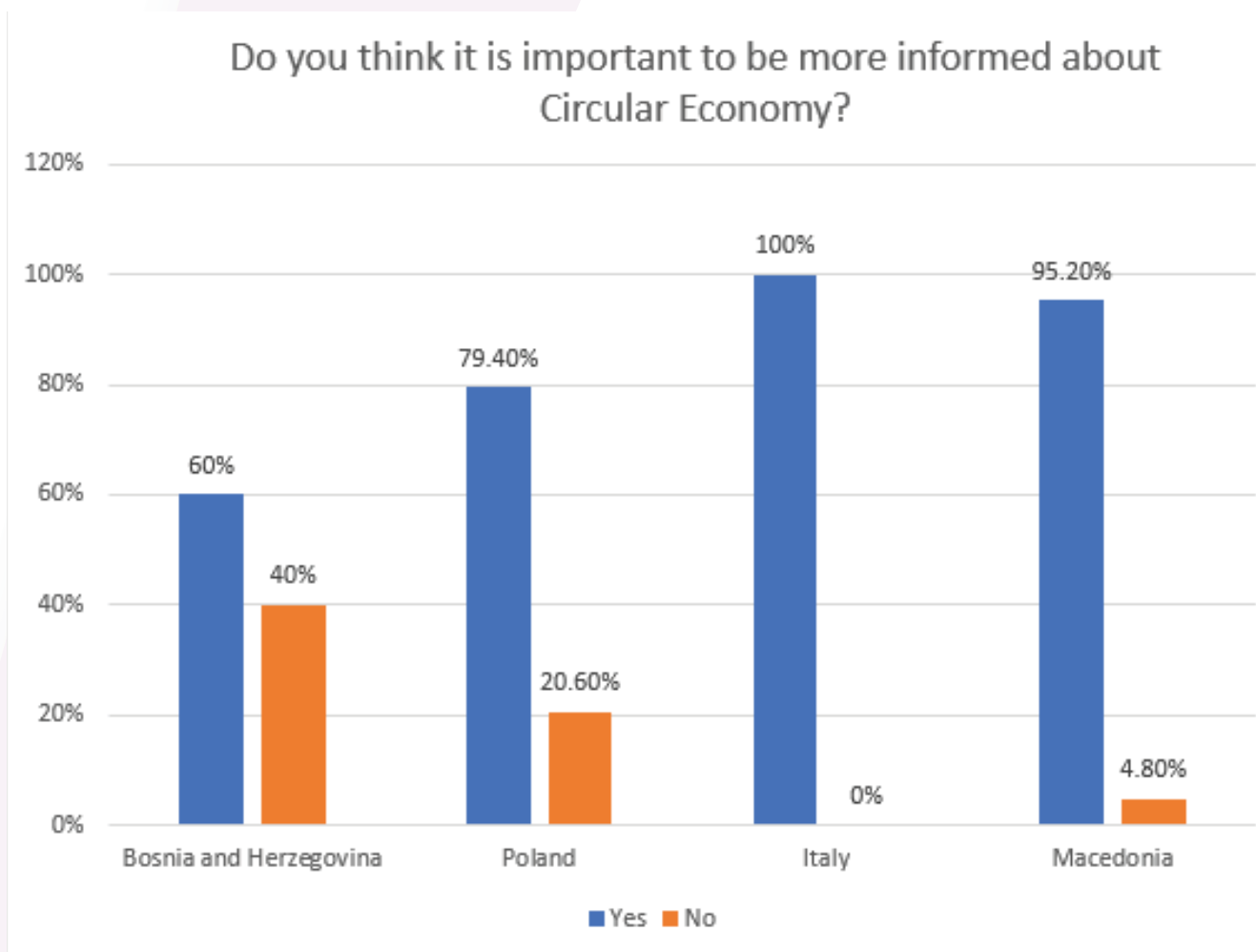


Chart 12. Importance of being informed about circular economy in the partner countries

- According to answers it is important that unemployed adults are informed about Circular Economy.
- The percentages vary from 60% in Bosnia and Herzegovina, 79.4% in Poland, 95.2% in Macedonia and 100% in Italy.



5. Please rate from 1 to 5 how important it is for you to improve your skills in:

**Easily connect with others and work with others.**

a) How interested are you in this topic?

b) How likely is this topic to improve your labor market prospects?

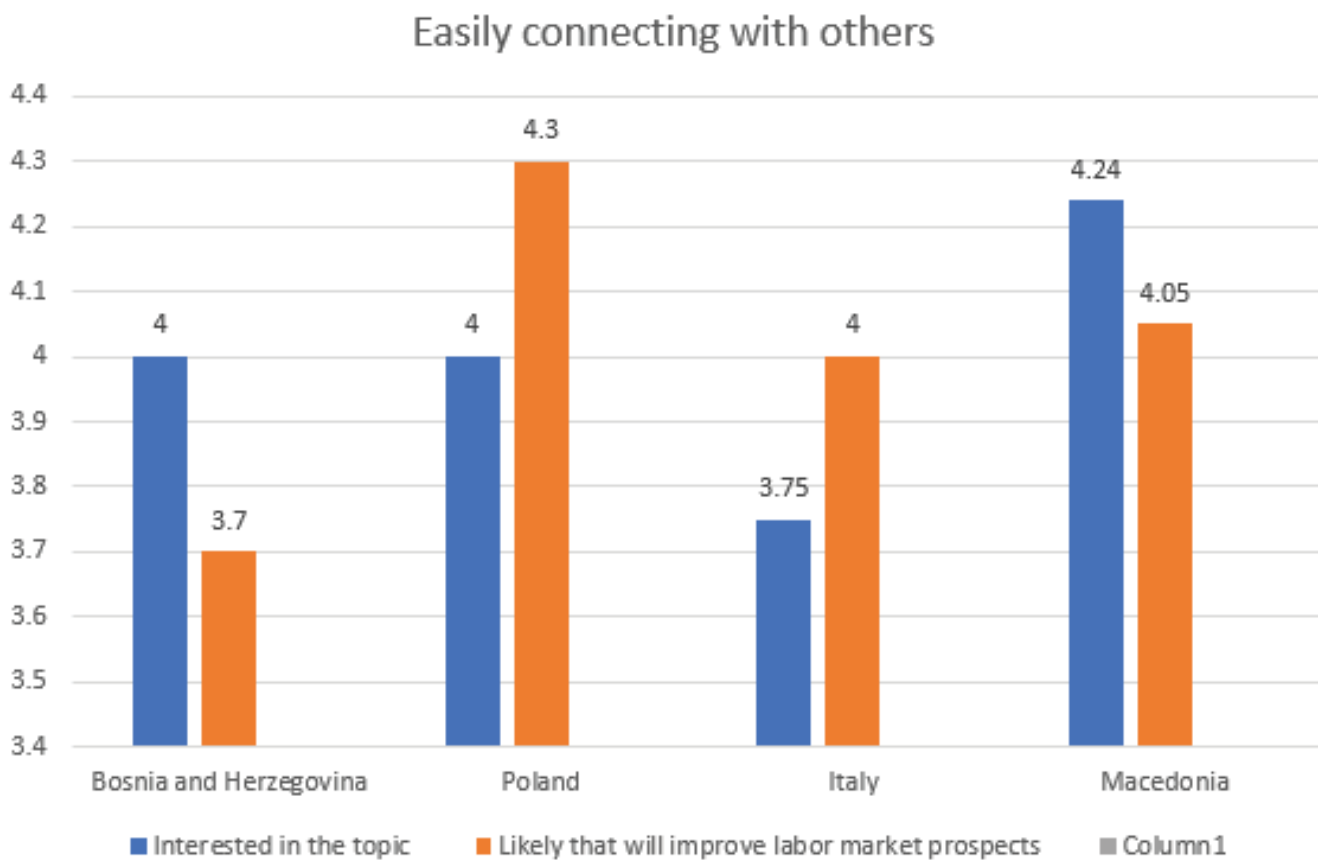


Chart 13. Average grade on a scale from 1 to 5 about how interested are and how likely is for unemployed adults that this topic will improve their labor market prospects

- In all of the partner countries, people are interested in the topic, with an average grade of 3,75 out of 5 in Italy, 4 in Bosnia and Herzegovina and Poland, and 4,24 in Macedonia.
- In all of the partner countries, people think that knowing more about this topic will improve their labor market prospects, Bosnia and Herzegovina 3,7 out of 5, Italy 4, Macedonia 4,05 and in Poland 4,3.

## Theoretical session on Circular Economy

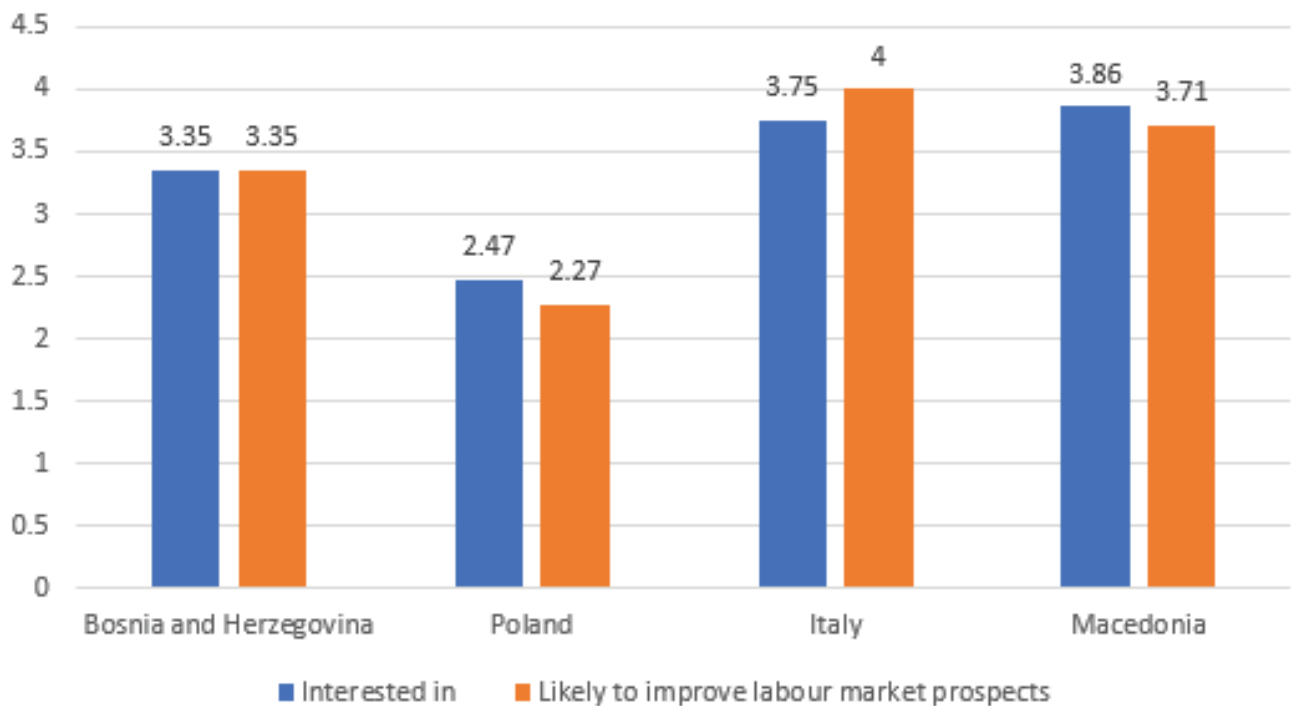


Chart 14. Average grade from 1 to 5 of unemployed adults interested in the topic, think that topic is going to improve their labor market prospects

- In Italy and Macedonia people are interested in the topic of Theoretical Session on Circular Economy on average, 3,75 and 3,86 respectively, in Bosnia and Herzegovina the average grade is 3,35.
- Unemployed adults in Poland are the least interested in this topic and also they think it won't improve their labor market prospect, on average 2,27.
- Unemployed adults in Italy and Macedonia think it will improve their labor market prospect with an average grade of 4 and 3,71 respectively, while for people in Bosnia and Herzegovina the grade is 3,35 out of 5.

7. A circular economy business simulation exercise.

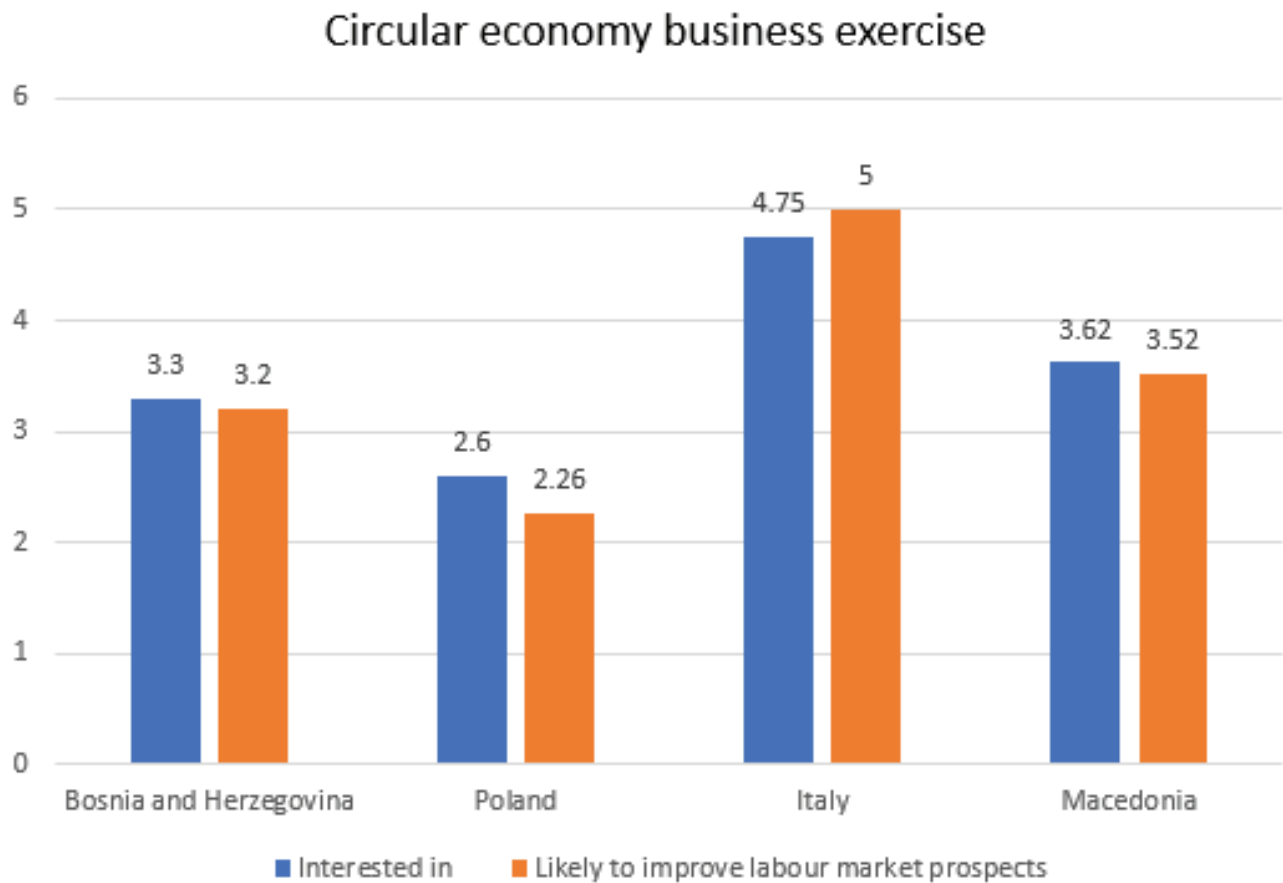


Chart 15. Average grade on a scale from 1 to 5 on how much people are interested and think it will improve the labor market prospect a Circular Economy Business exercise.

- In Italy unemployed adults are the most interested in Circular Economy Business exercise with an average grade of 4,75 of 5, in Macedonia it is 3,62, Bosnia 3,3 out of 5 and Poland 2,6.
- In Poland people are the least interested in this topic and think it won't improve their labor market prospects with an average of 2,26.
- In Italy all of the respondents answered that it will improve their labor market prospects, compared to Macedonia 3,52 and Bosnia and Herzegovina 3,3 out of 5.

## 8. Good practices on Circular Economy Businesses.

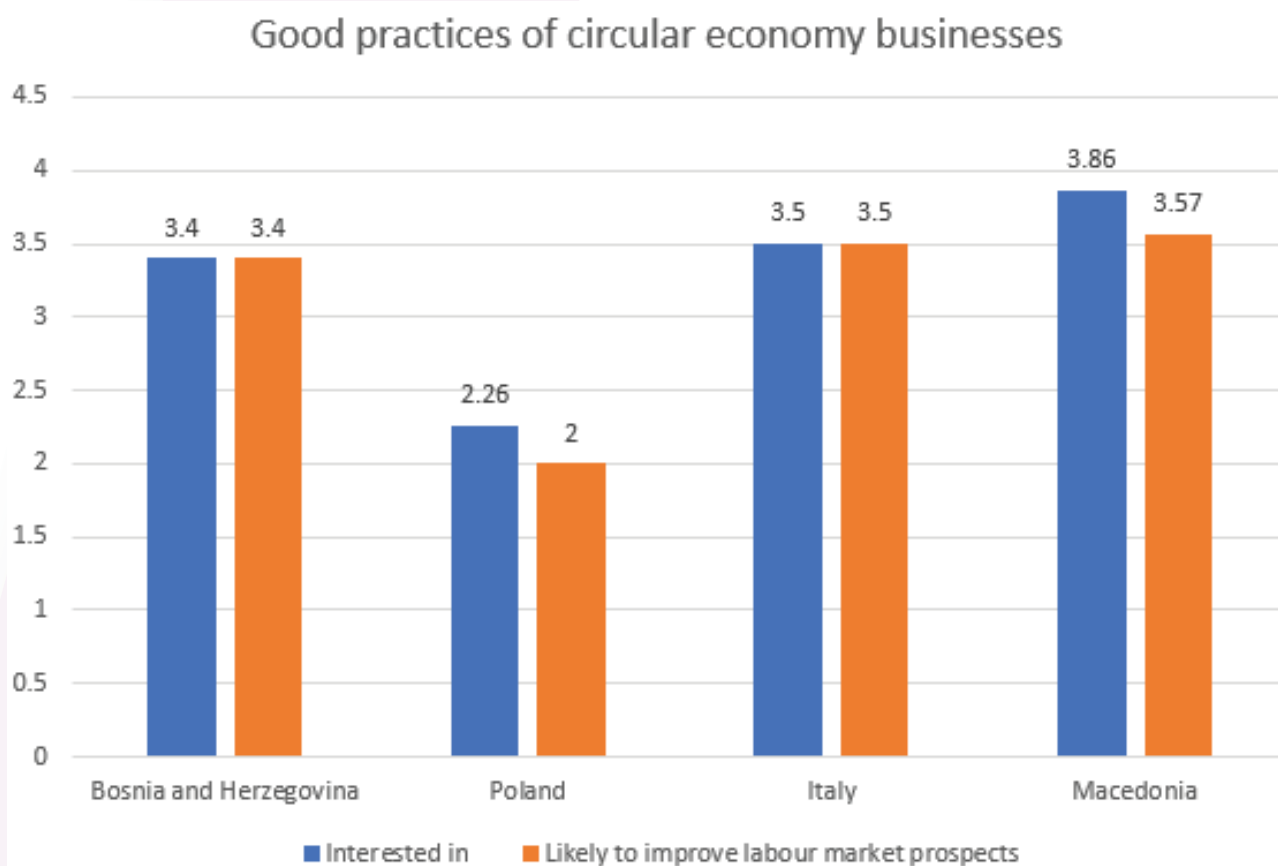


Chart 16. Average grade on a scale from 1 to 5 on how much people are interested in Good Practice on Circular Economy Businesses and how likely is that it will improve their labor market prospects

- Unemployed adults in Macedonia, Italy and Bosnia and Herzegovina on average are more interested in this topic than the people in Poland.
- Unemployed adults in the three above mentioned countries think that it will improve their labor market prospects than the unemployed adults in Poland.

9. Theoretical session on plastic craftwork.

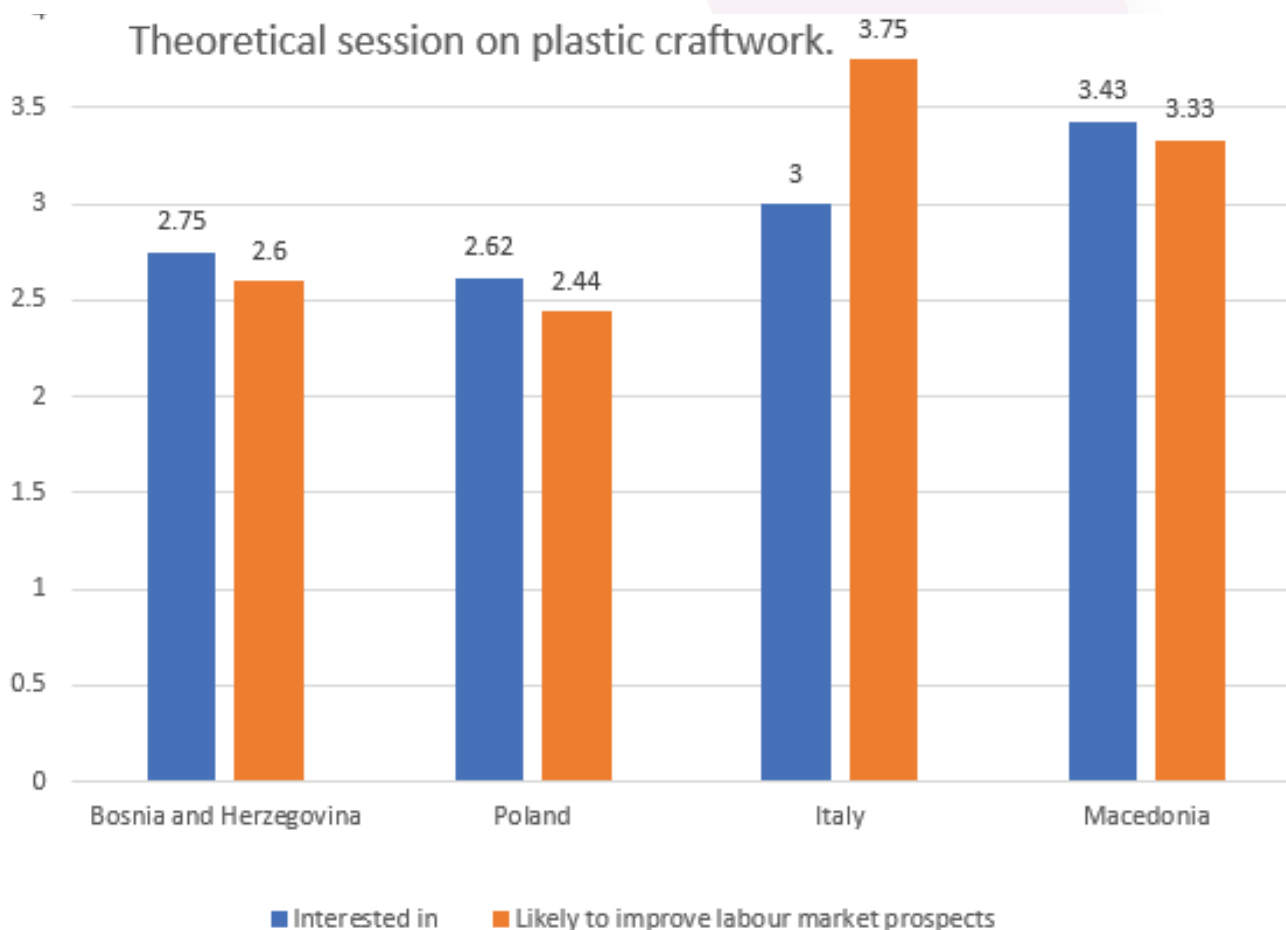


Chart 17. Average grade of unemployed adults on a grade on 1 to 5 how much they are interested in this topic and how likely is that it will improve their labor market prospects

- Unemployed people in Macedonia are the most interested in Theoretical Session on Plastic Craftwork with an average of 3,43 and are more interested than the unemployed adults in Poland, Bosnia and Herzegovina and Italy.
- Unemployed adults in Italy think that it will improve their labor market prospects with an average of 3,75 which is more than the averages in the other 3 partner countries.

10. How to manage plastic craftwork in practice – risks and guidelines.

### How to manage plastic crafts in practice – risks and guidelines

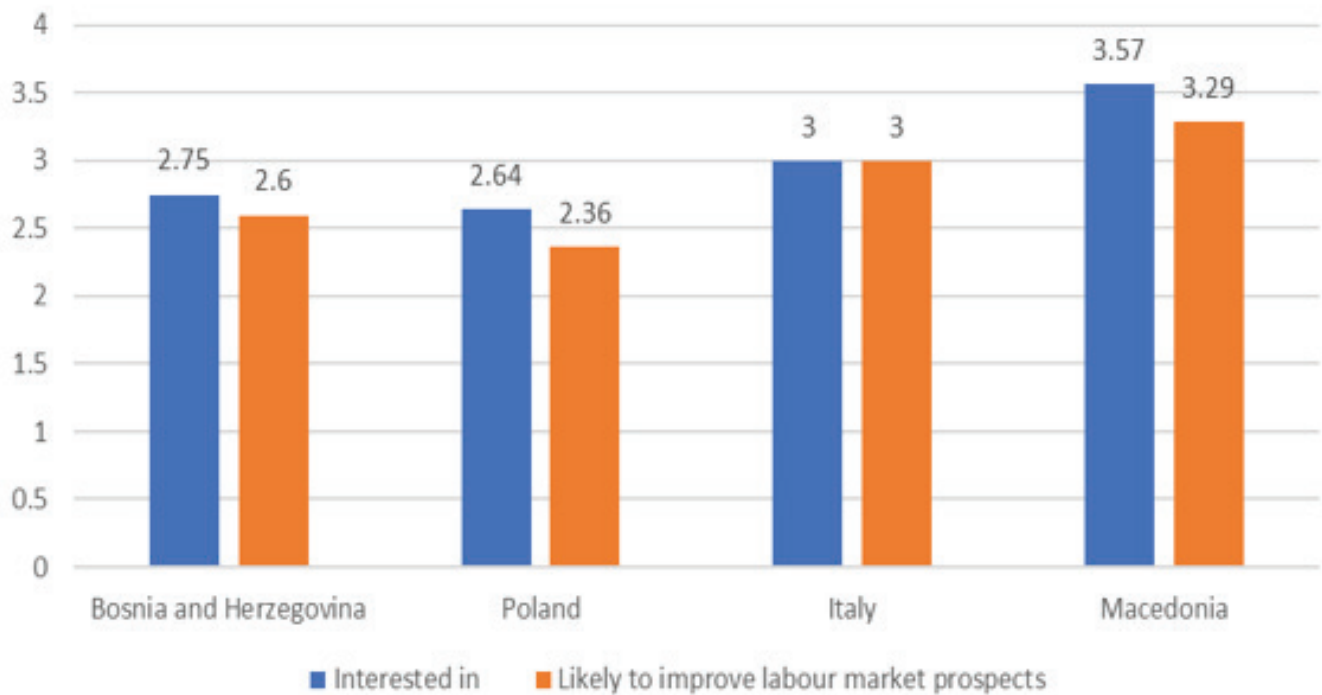


Chart 18 Average grade on a scale from 1 to 5 on how interested are the unemployed adults in How to manage plastic craftwork and how likely is that it will improve their labor market prospects.

- In general people are the most interested in this topic in Macedonia, while unemployed adults who answered the online survey are less interested on average in Bosnia and Herzegovina and Italy.
- Same trend is followed in the 4 partner countries regarding the likelihood to improve their labor market prospects.

## 11. Tinkering session on Plastic Craftwork.

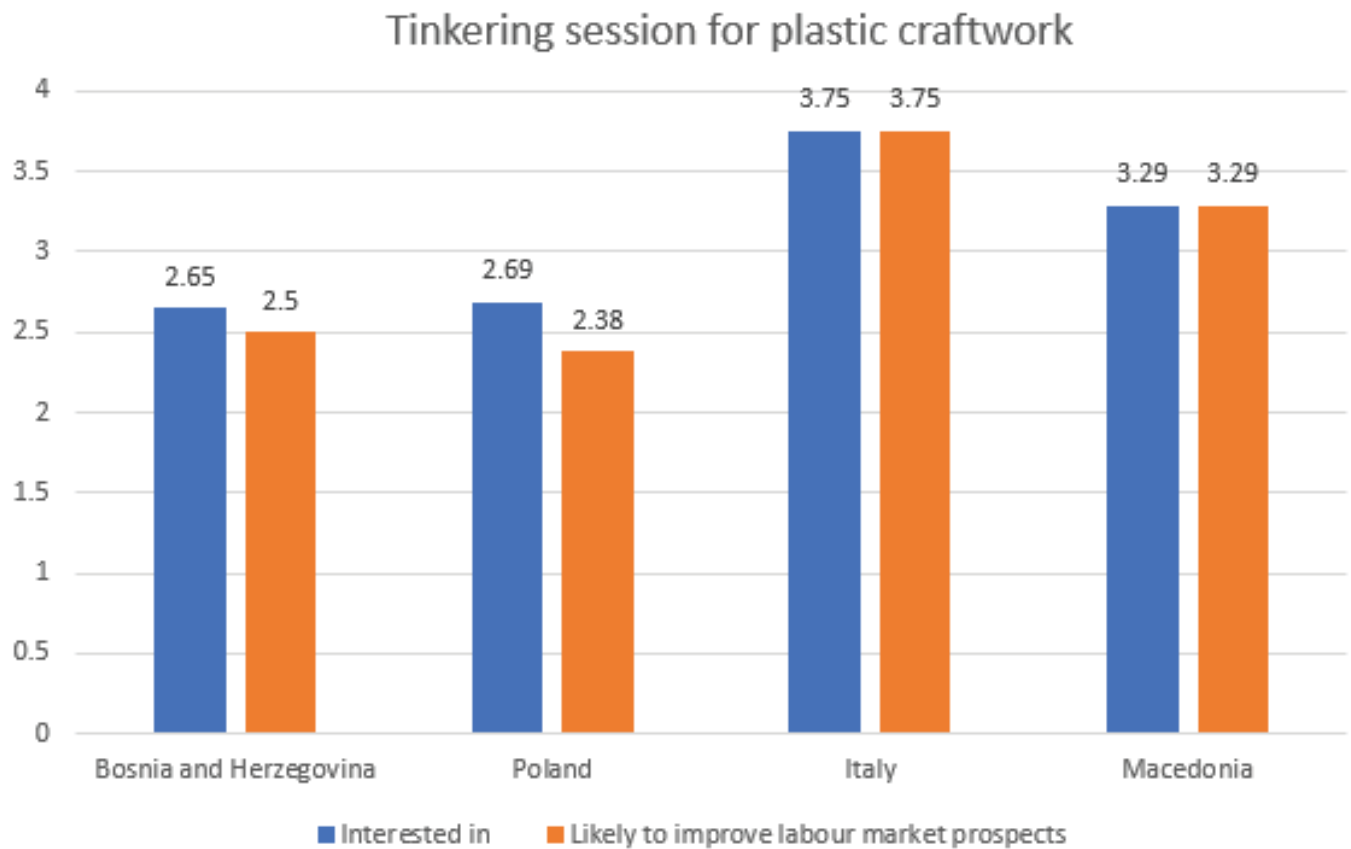


Chart 19. Average grade on 1 to 5 on how much unemployed adults are interested in Tinkering session on Plastic Craftwork and how much it will improve their labor market prospect

- Unemployed adults in Italy and Macedonia are more interested in Tinkering Session on Plastic Craftwork than the unemployed adults who answered the survey in Bosnia and Herzegovina and Poland.
- Unemployed adults in Italy and Macedonia think that it is likely that this will improve their labor market prospects on average more than the unemployed adults in Bosnia and Herzegovina and Poland.

## 12. Theoretical and practical session on Co-Design.

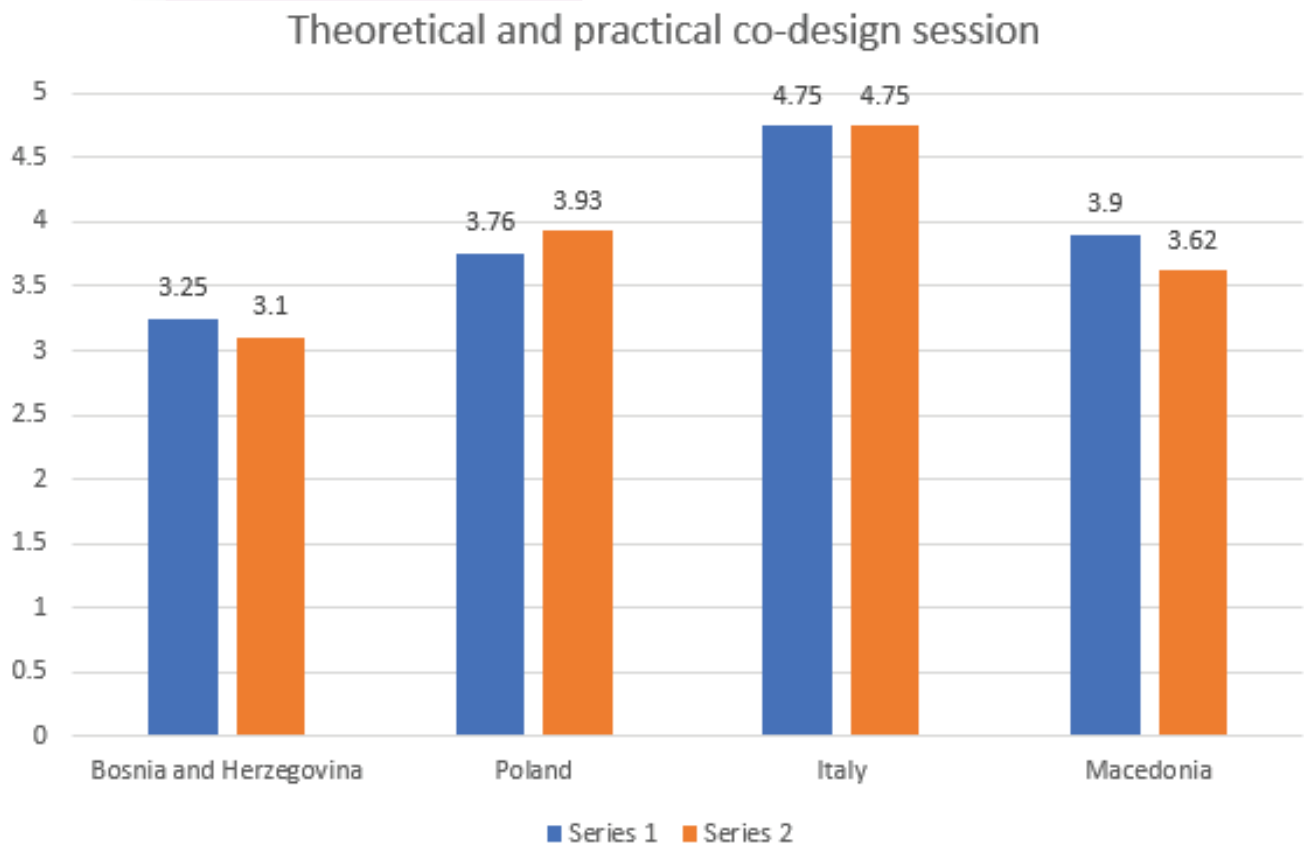


Chart 20. Average grade on a scale from 1 to 5 on how much unemployed adults are interested and think it will improve their labor market prospects a Theoretical and Practical Session on Co-Design

- Unemployed adults who answered the survey in Italy are the most interested in the topic, more than Poland and Macedonia, while Bosnia and Herzegovina on average is the least interested in this topic.
- Unemployed adults 45+ in Italy, Poland and Macedonia on average think that it will improve their labor market prospects more than the respondents in Bosnia and Herzegovina.



13. Do you know any examples of trainings in the field of Circular Economy and Teamwork related to skills for the unemployed? If yes, please add examples.

- In Poland and Macedonia, the percentage of unemployed adults that don't know any training in the fields relevant to the projects is high. In Poland all of those who answered don't know any examples, while in Macedonia only one of the respondents knew examples in creative industry.
- In Italy and Bosnia and Herzegovina, unemployed adults are not informed about trainings in the field of Circular Economy and Teamwork related skills for the unemployed.

## 1.17.2. Stakeholders

### 1. Type of stakeholder

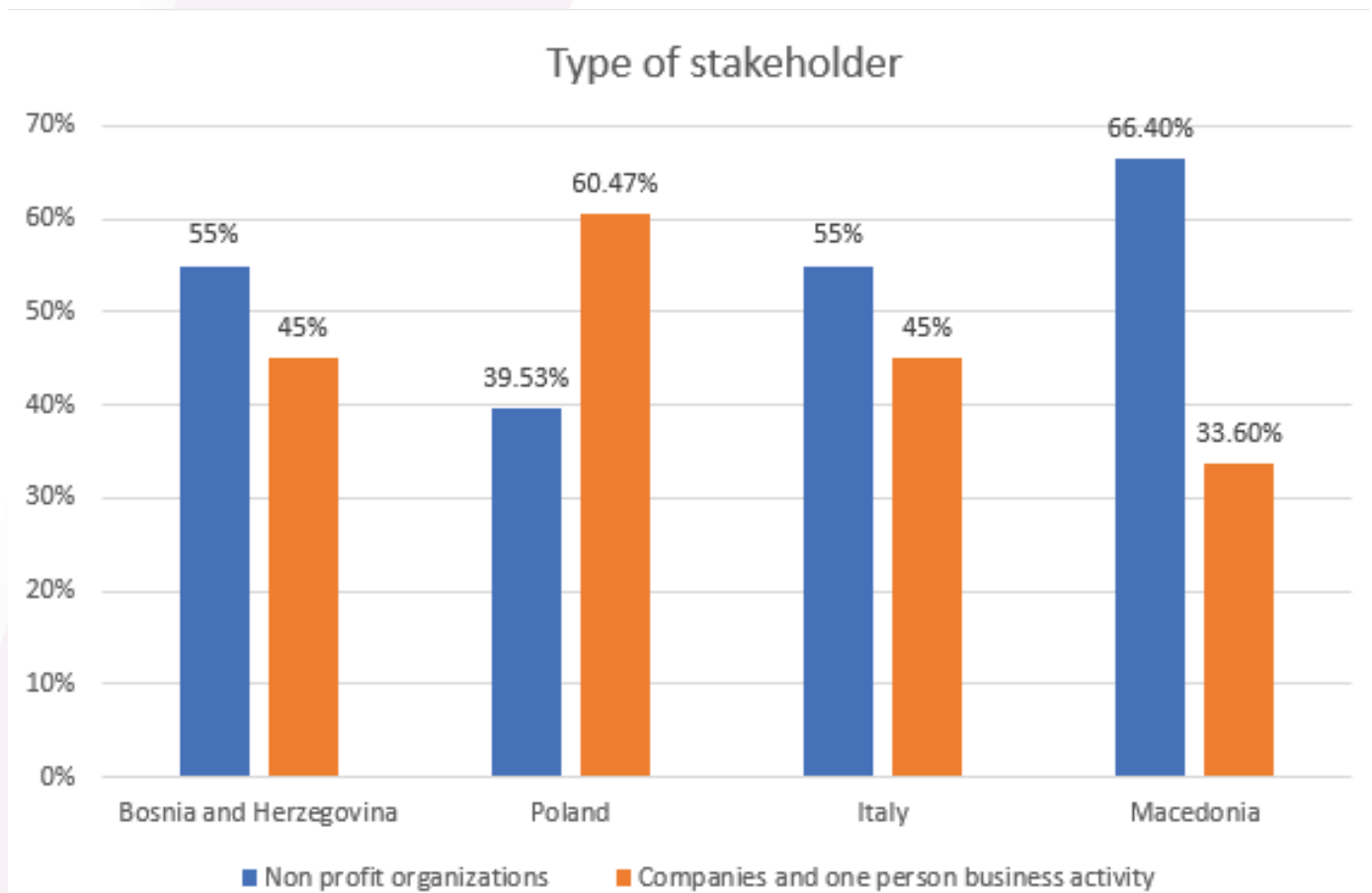


Chart 21. Type of stakeholder in the partner countries

- In Macedonia 66,4% are non-profit organizations, in Italy 55% and in Poland that percentage is 39,53%
- In Poland, most of the stakeholders are companies and one person business activity, compared to 45% in Italy, Bosnia and Herzegovina 45% and 33,6% in Macedonia.
- Bosnia and Herzegovina the percentage is 55% non-profit organizations to 45% companies.

## 2. Type of institution

- In general, the stakeholders in the field of circular economy, tinkering and plastic craftwork are private, in Bosnia and Herzegovina the percentage is 63,6% private to 36,4% public, in Poland the ratio private public is 75% to 25% and in Macedonia 90%-10%.
- The exact percentage of private and public stakeholders in the field of circular economy, plastic craftwork and tinkering and plastic craftwork in Italy is difficult to determine. The private sector likely makes up a significant portion of stakeholders in the field.

## Needs

### 1. Do you have examples of trainings in your company/institution?



Chart 24. Percentage of trainings in the companies of stakeholders in partner countries

- In Italy all of the stakeholders have examples in their companies/institutions.
- In Macedonia that percentage is also high, 90 %, in Poland it is 60,5%, while in Bosnia and Herzegovina 35% of the stakeholders have examples in their companies.

2. Do you know any other examples of trainings in the field of Circular Economy and teamwork related to skills for the unemployed?

## 2. Do you know any other examples of trainings in the field of Circular Economy and teamwork related to skills for the unemployed?

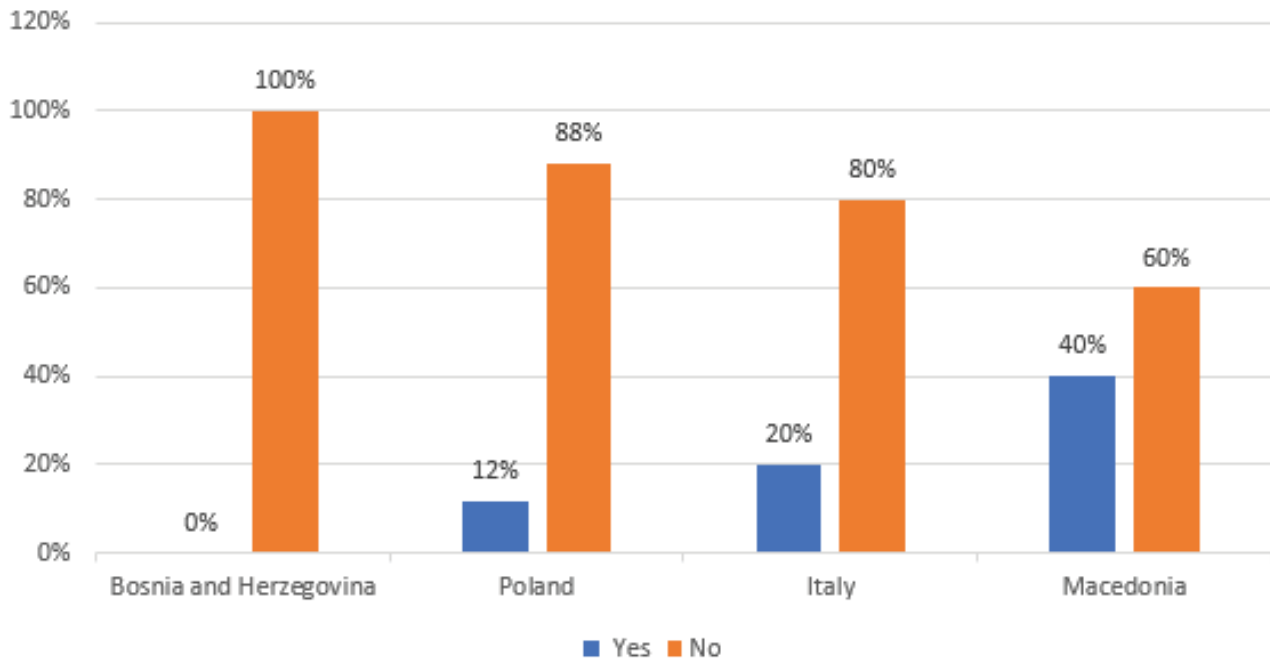


Chart 25. Other examples of trainings of Circular Economy in the partner countries

- In Macedonia, 40% of all stakeholders know other examples of trainings. Those trainings include: carpentry, plastic craftwork, composting, waste handler, installer of solar panels, reusing furniture.
- In Poland, 12% of stakeholders know other examples of trainings in the relevant fields for the project, 60% of those know computer skills trainings, and 20% each know soft skills and circular economy trainings.
- In Italy, only 20% know of examples, while in Bosnia and Herzegovina the stakeholders aren't aware of other related trainings.

### 3. What type of course delivery for the unemployed would be most effective?

- In Poland and Macedonia, the most effective way would be physical presence courses in one way or another, while in Bosnia the stakeholders answered the most that hybrid (physical plus online would be the most effective).
- In Italy, most of stakeholders think that practical trainings with applicable skills will be the most efficient some of them answered that with physical presence (, some of them answered hybrid type, physical + online), some others claimed the need of offer courses that gives qualifications and prepare to a specific job.

#### 4. What barriers prevent adults from participating in training and educational programs?

### What barriers prevent adults from participating in training and education programs?

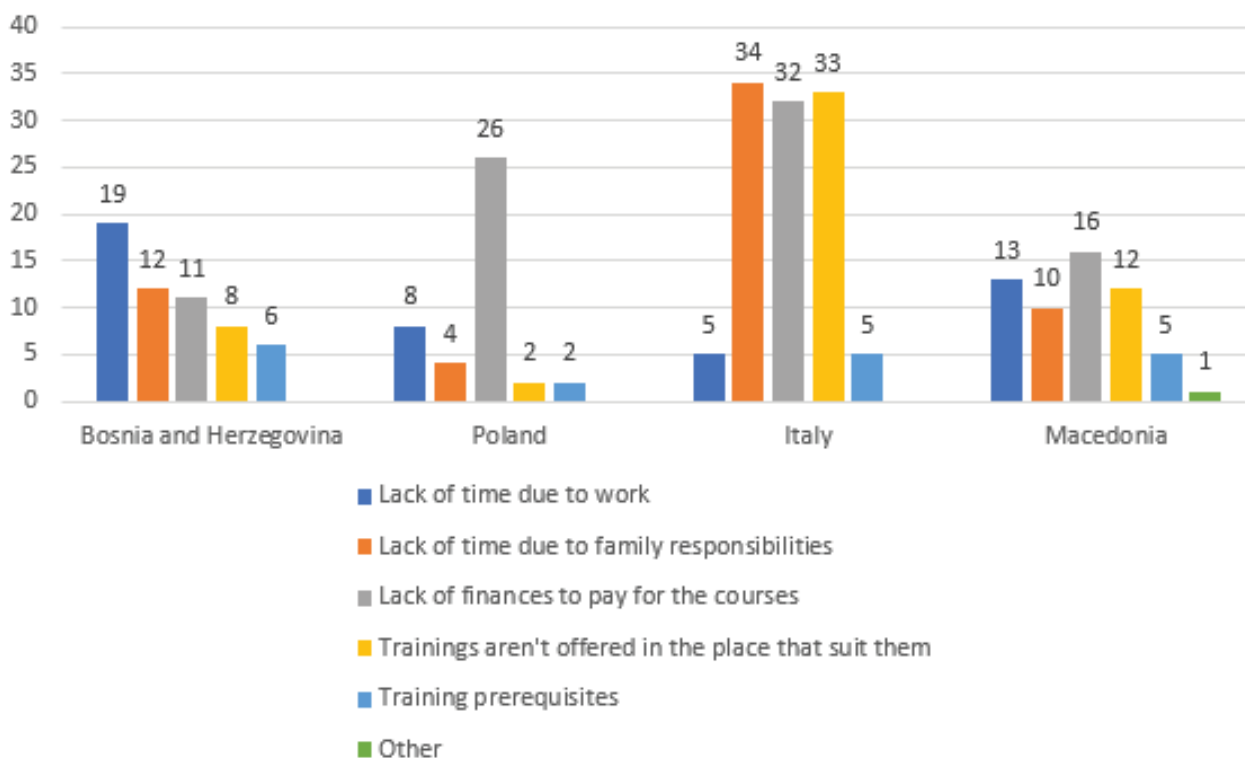


Chart 26. What barriers prevent adults from participating in training and education programs?

- In Bosnia and Herzegovina, according to stakeholders, the biggest barrier for not attending is lack of time due to work.
- In Poland the biggest barrier is lack of time due to lack of finances to pay for the courses, while training conditions and the place are not a barrier.
- In Italy three of the reasons that similar number of stakeholders answered are: lack of time due to family responsibilities, lack of finances to pay for the courses and the place of the trainings.
- In Macedonia, lack of finances to pay for the courses is the biggest reason for not attending according to stakeholders, followed by lack of time due to work and trainings place.

## Skills

1. What skills should the adult possess or acquire in order to be employed in your company?
  - In Bosnia and Herzegovina, Poland and Macedonia the biggest percentage of stakeholders consider communication skills as the most important skills for employment with 80%, 53% and 40% respectively.
  - In Poland we have many and many examples with just 1 answer like: operation of power tools, welding machines, aerial platforms, computer operation, cash registers, operation of payment devices, practical skills that can be used from the second day of work (safety, GDPR and HR).
  - In Italy, the stakeholders who answered the survey listed digital and IT skills as the most important skills that the unemployed adults should possess or acquire in order to be employed job related and, generically, those required by companies.

## 2. Which of the following skills are you already familiar with?

### 2. Which of the following skills are you already familiar with?

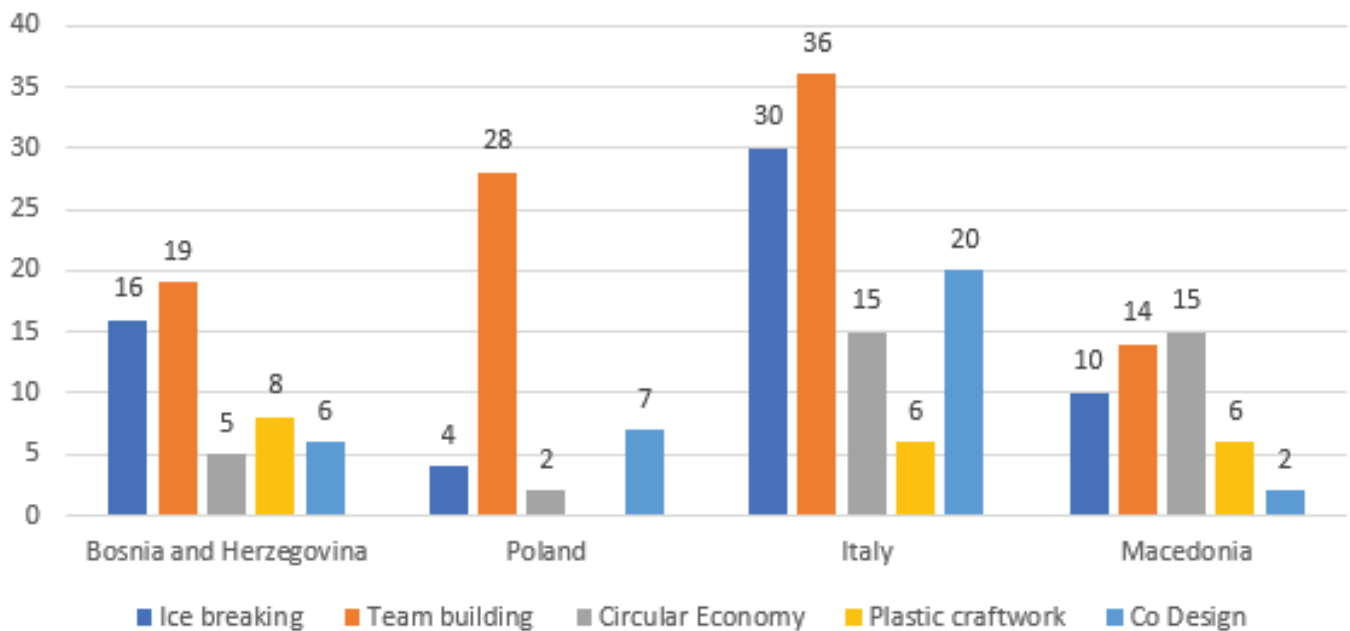


Chart 27. Familiarity of stakeholders with skills

- In Poland, Italy and Bosnia and Herzegovina, stakeholders are already familiar with team building, more than the other topics, while in Macedonia the two which the stakeholders are most familiar with are circular economy and team building.
- In Poland, stakeholders are not familiar with plastic craftwork, ice breaking and co-design (compared to their familiarity with team building)
- In Macedonia, stakeholders are not familiar with co-design and in Bosnia and Herzegovina, circular economy, co-design and plastic craftwork are topics that they are less familiar with.
- In Italy, plastic craftwork is the topic the stakeholders are least familiar with.



3. Rate the following skills from 1 to 5 in the selected categories for unemployed adults.

### Ice breaking and team building

How

a) interesting would this topic be to unemployed adults?

b) relevant?

c) likely to improve their labour market prospects?

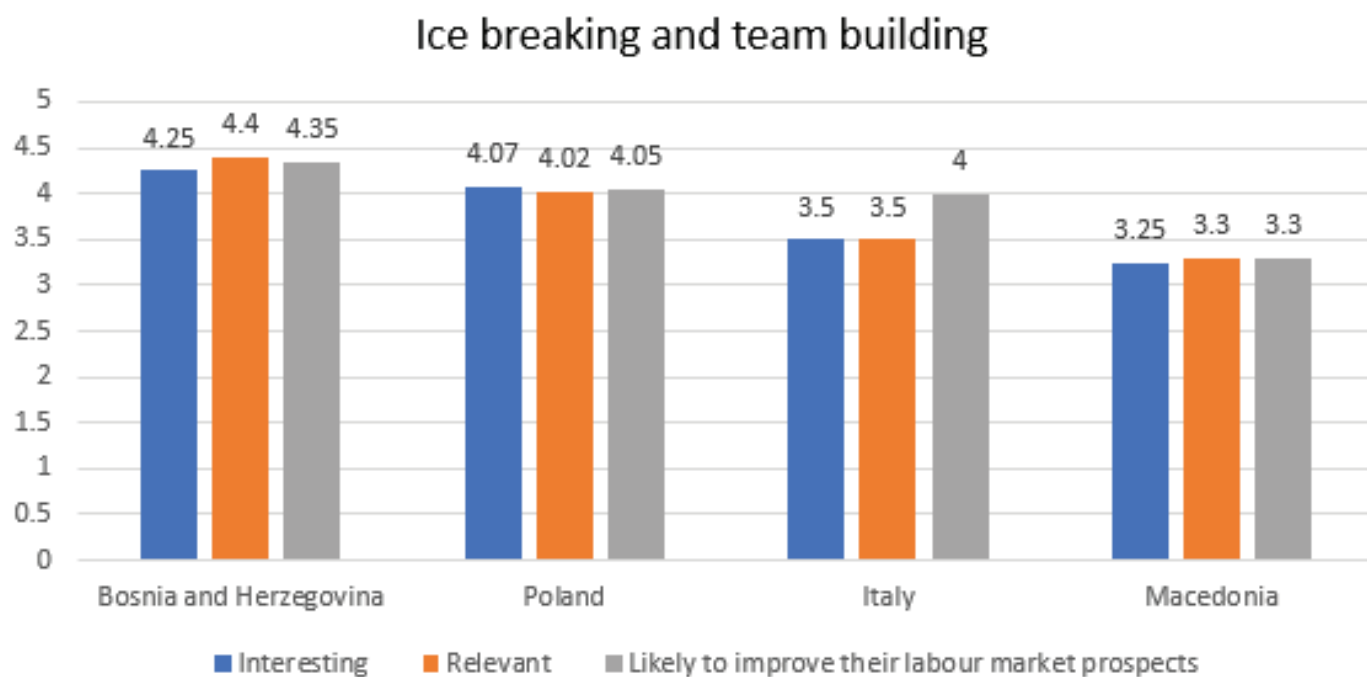


Chart 28. Ice breaking and team building according to stakeholders

- Ice breaking and team building is a topic that the stakeholders consider interesting, relevant and likely to improve their labor market prospects more in Bosnia and Herzegovina and Poland than in Macedonia and Italy.
- In Italy, stakeholders graded it higher, that it is more likely to improve the labor market prospects.

#### 4. Theoretical session on Circular Economy.

### Theoretical session on Circular Economy

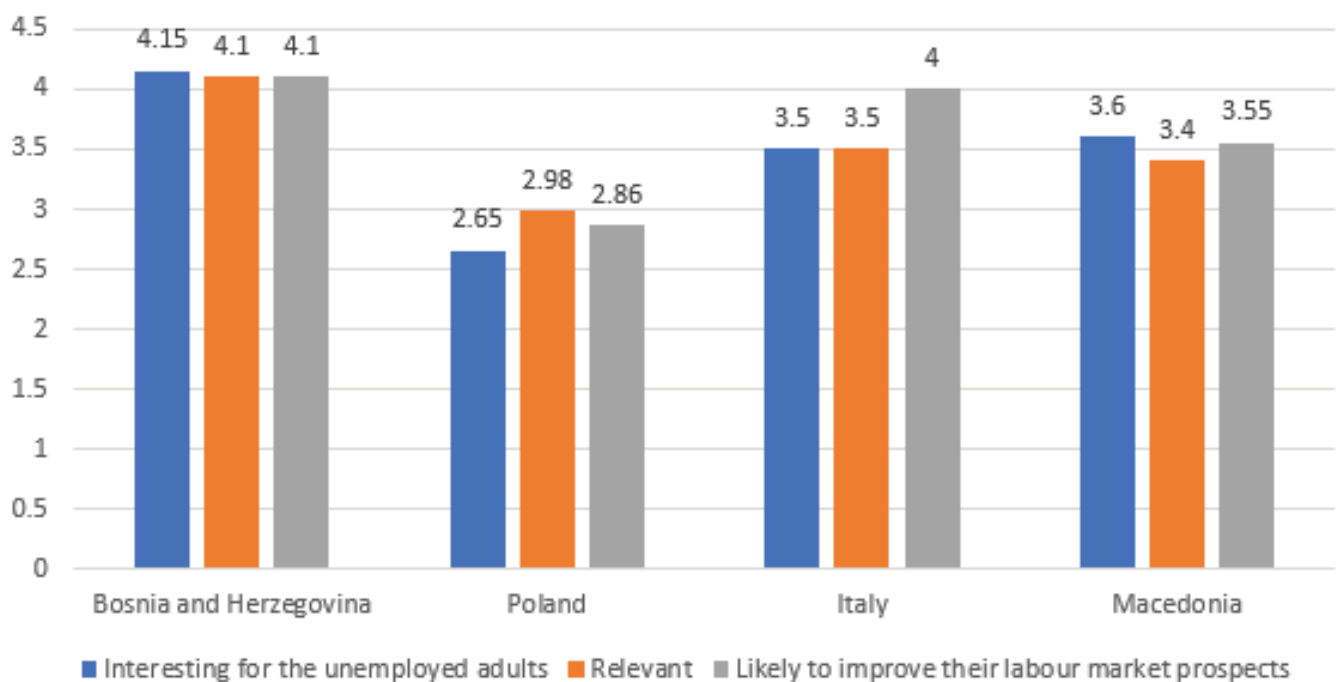


Chart 29. Theoretical session on Circular Economy according to stakeholders on a scale from 1 to 5

- Stakeholders in Bosnia and Herzegovina think that Theoretical Session on Circular Economy is interesting, relevant and likely to improve the labor market prospects compared to the other 3 partner countries.
- Stakeholders in Bosnia and Herzegovina on average consider this topic less interesting, relevant and likely to improve their labor market prospects compared to stakeholders in Bosnia and Herzegovina, Italy and Macedonia.

## 6. Circular economy business simulation exercise.

### Circular Economy Business Simulation Exercise

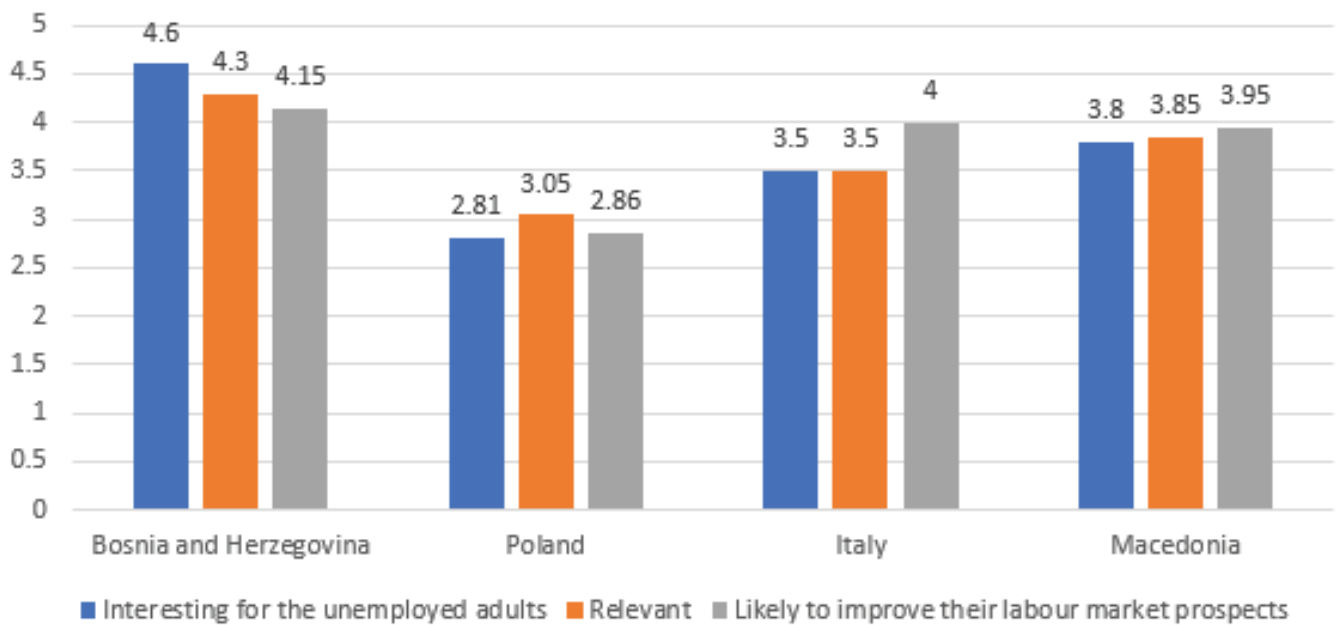


Chart 29. Circular economy business simulation exercise according to stakeholders.

- On average, stakeholders in Bosnia and Herzegovina consider this topic interesting, relevant and likely to improve their labor market prospects more than the other countries.
- Macedonian stakeholder consider this on average from 3,8 to 3,95, while stakeholders in Poland consider this less than the other countries with an average varying from 2,85 to 3,05.

## 7. Good practices on Circular Economy Businesses

### Good practices on Circular Economy Businesses

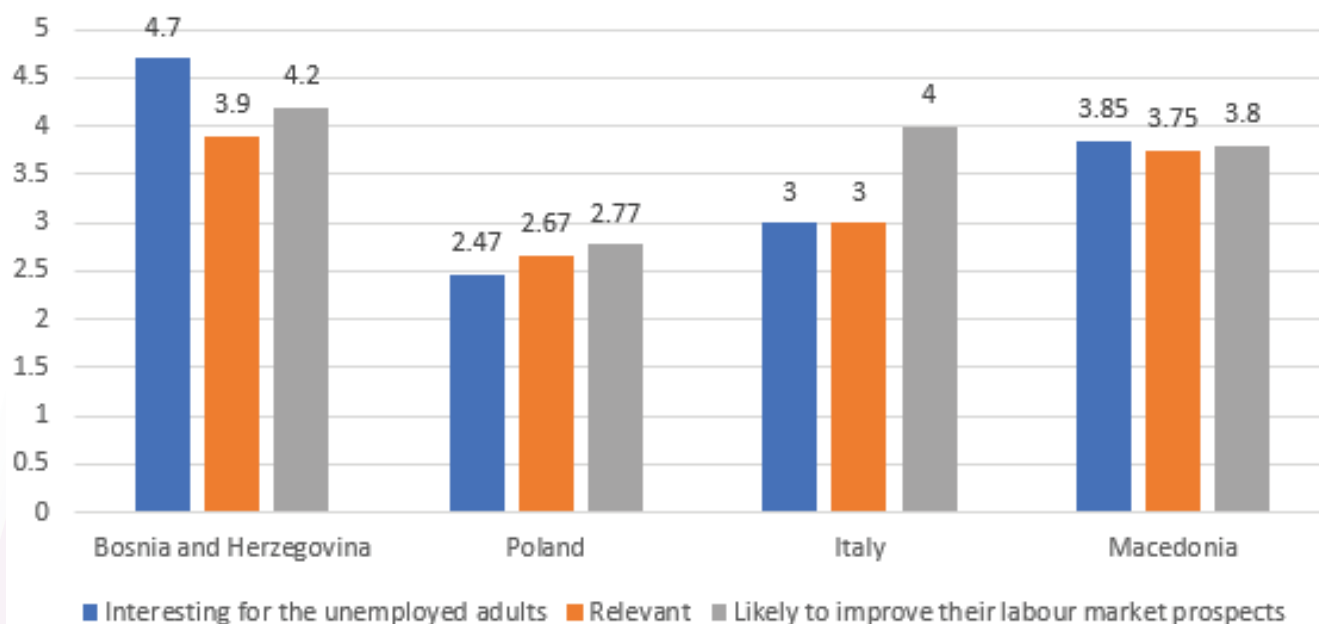


Chart 31. Good practices on circular economy businesses

- Stakeholders consider session on Good Practices on Circular Economy Businesses the most interesting for the unemployed adults in Bosnia and Herzegovina with an average of 4,7, and least interesting in Poland.
- Regarding relevance, in Bosnia and Herzegovina and Macedonia the stakeholders responded on average 3,9 and 3,75, while in Italy the average is 3 and the least in Poland with 2,67.
- In Bosnia and Herzegovina, Italy and Macedonia the stakeholders consider that this topic will improve the labor market prospects of unemployed, more than the stakeholders in Poland (average 2,77).

## 8. Theoretical session on plastic craftwork

### Theoretical session on Plastic Craftwork

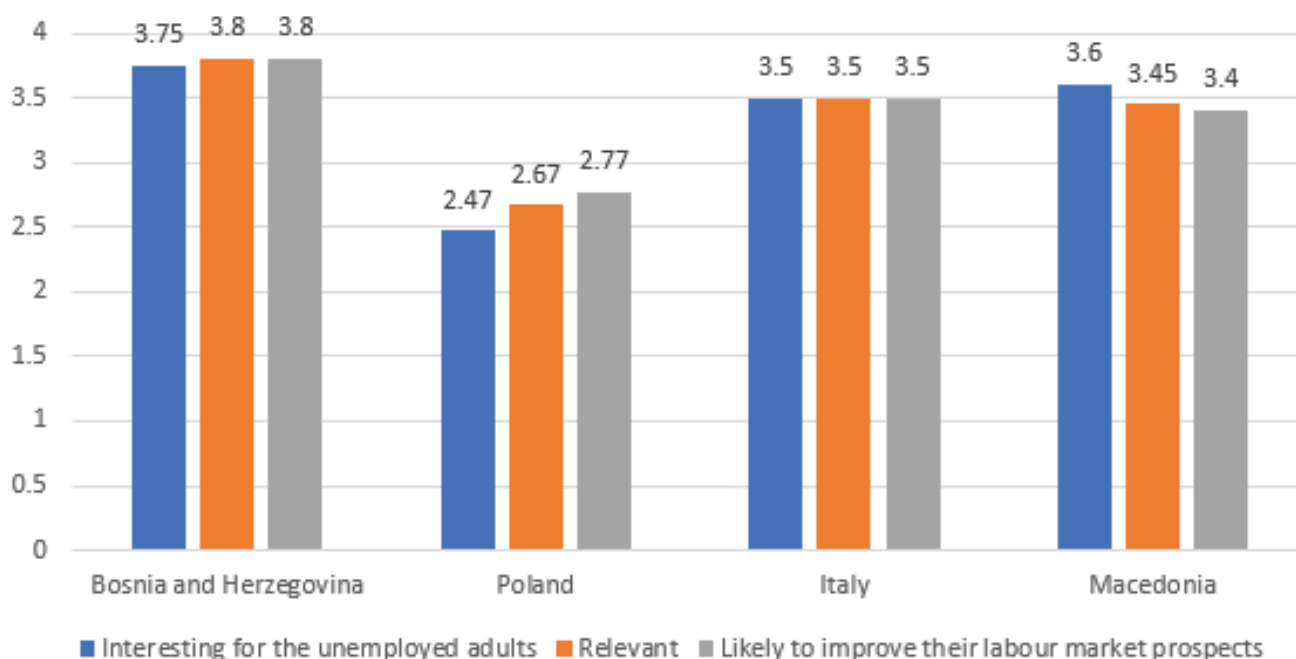


Chart 32. Average grade by stakeholders on a scale 1 to 5 for the partner countries on the topic theoretical session on plastic craftwork

- Stakeholders in Bosnia and Herzegovina, Italy and Macedonia consider Theoretical Session on Plastic Craftwork more interesting, relevant and likely to improve the labor market prospects of the unemployed adults than the stakeholders in Poland.

9. How to manage plastic craftwork in practice – risks and guidelines.

### How to manage plastic craftwork in practice – risks and guidelines?

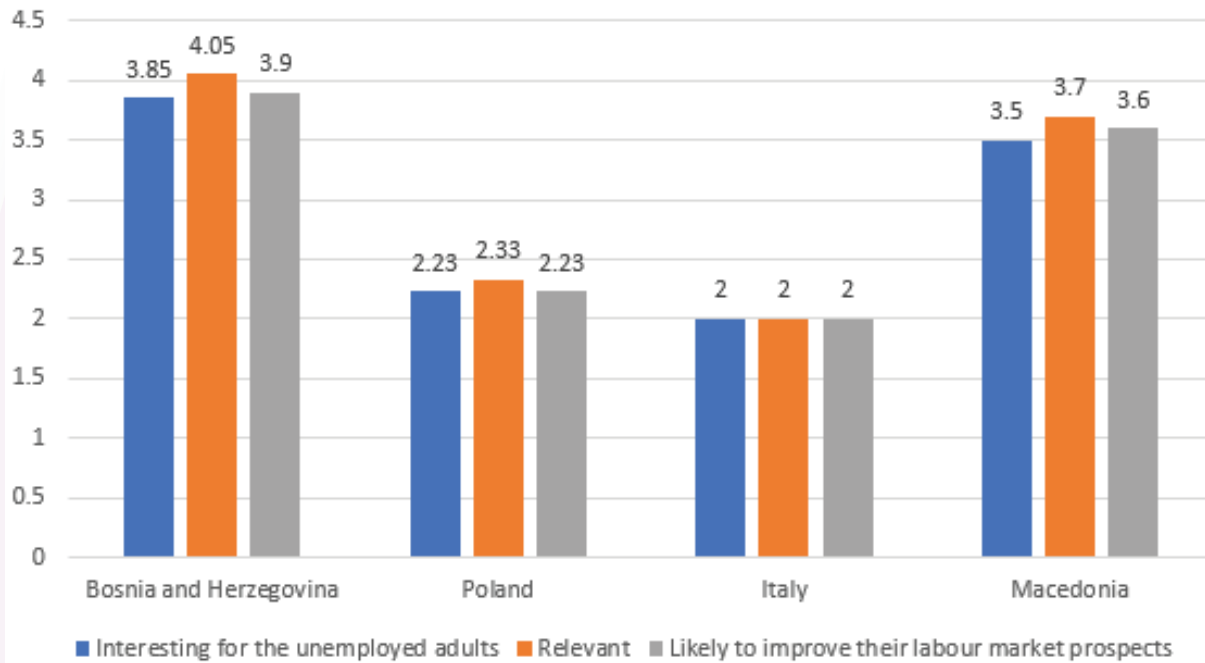


Chart 33. Average grade from 1 to 5 in the partners countries on the question of managing the plastic craftwork – risks and guidelines.

- The stakeholders in Bosnia and Herzegovina and Macedonia, on a scale from 1 to 5 consider this topic more interesting, relevant and likely to improve the labor market prospects of the unemployed , more than the stakeholders in Italy and Poland.

10. Tinkering session on plastic craftwork.

### Tinkering session on plastic craftwork

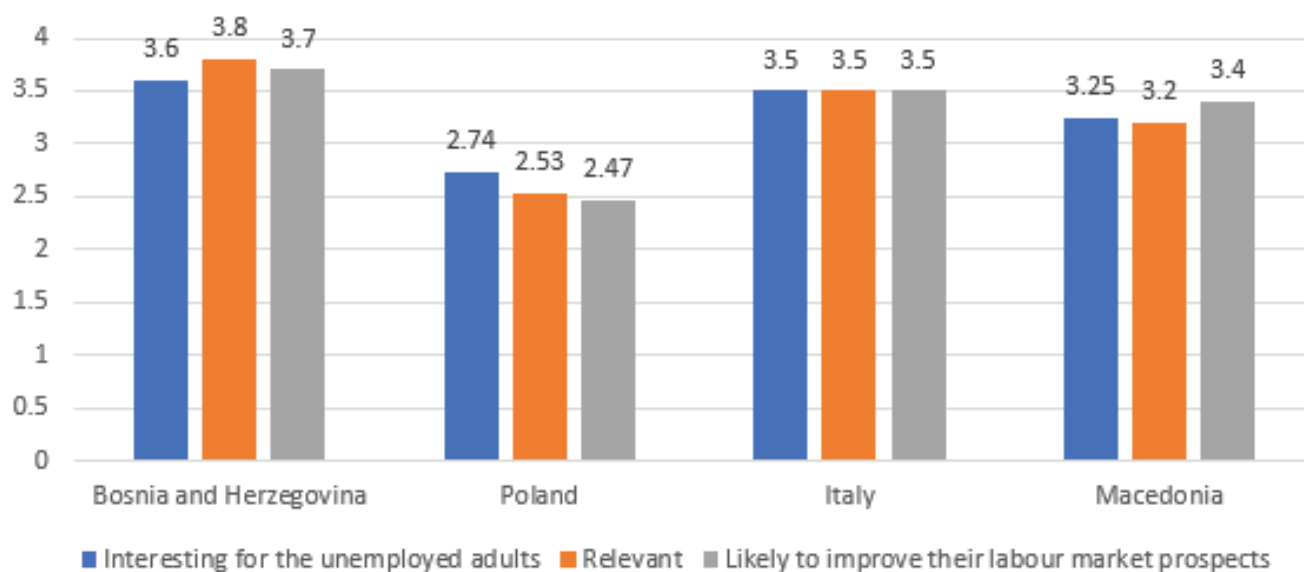


Chart 34. Average grade from 1 to 5 on the question about how interesting, relevant and likely to improve the labor market prospects is tinkering session on plastic craftwork.

- Stakeholders in Bosnia and Herzegovina, on average consider this topic more interesting, relevant and likely to improve the labor market prospect than the stakeholders in the other countries.
- Stakeholders in Poland consider this topic being less relevant, interesting and likely to improve labor market prospects than the stakeholders in the other countries.

## 11. Theoretical and practical session on Co-Design.

### Theoretical and practical session on Co-Design

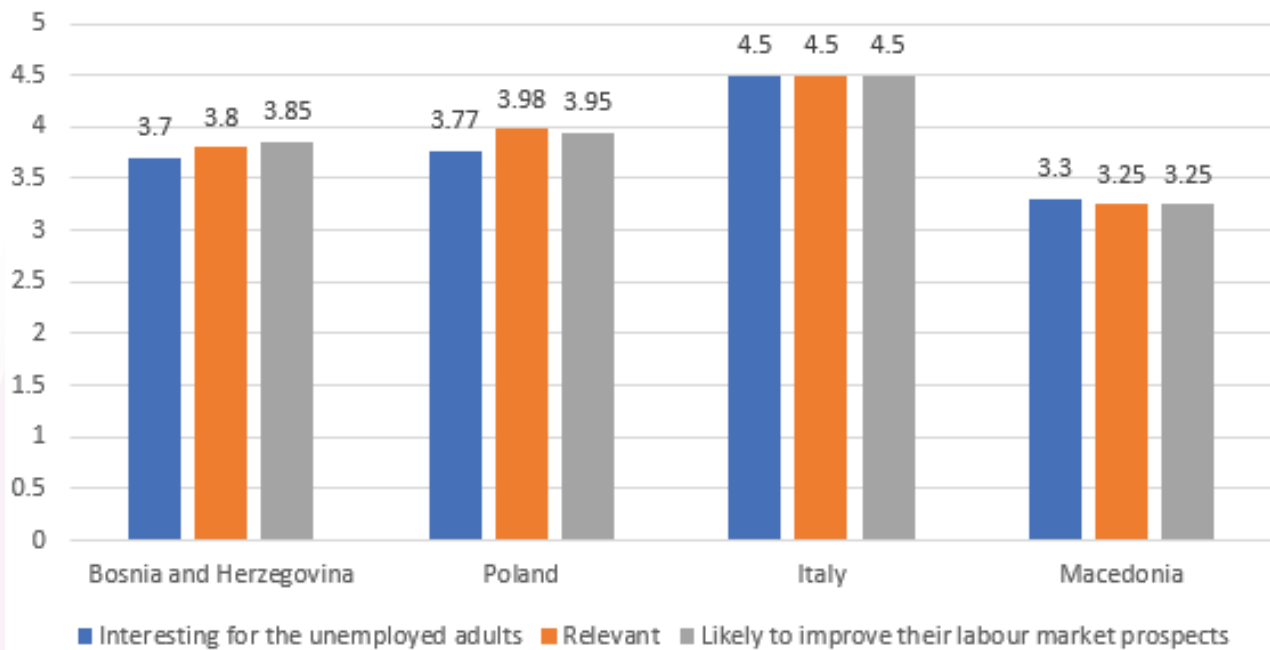


Chart 35. Average grade by stakeholders in the partner countries on how interesting, relevant and likely to improve the labour market prospects of the unemployed adults 45+ is Theoretical and practical session on Co-Design.

- Stakeholders in Italy on average, consider the Theoretical and Practical session on Co-Design more interesting, relevant and likely to improve the labor market prospects on unemployed adults than the stakeholders in the other 3 countries.
- The topic is less relevant, interesting and likely to improve the labor market prospects according to stakeholders in Macedonia.



## 12. Do you know any companies that employ low skilled adults?

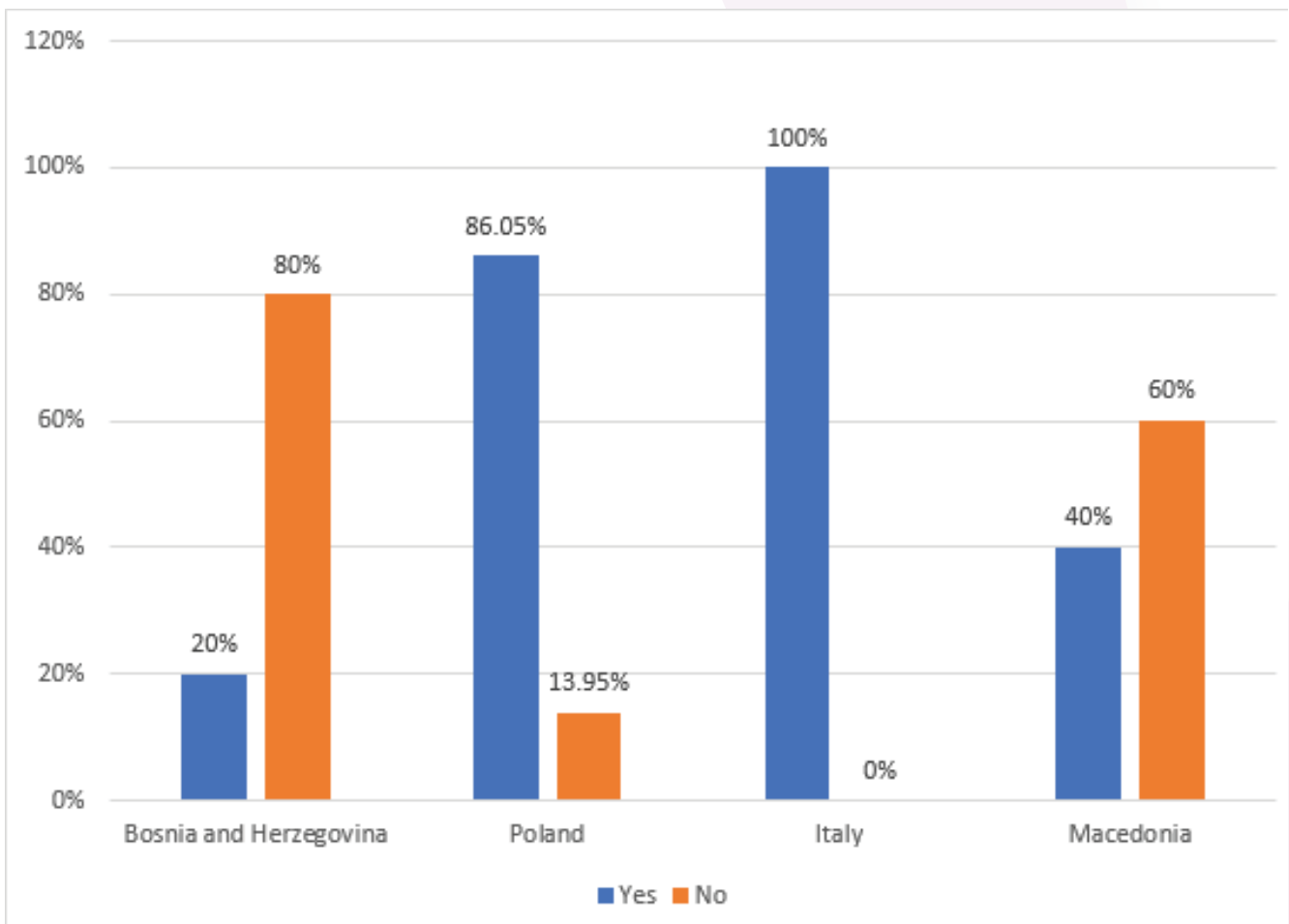


Chart 36. Companies that hire low skilled adults

- In Poland, stakeholder know companies that employ unemployed low skilled adults, but didn't mention any positions.
- In Bosnia and Herzegovina 20% mentioned that they know such companies, with construction companies and industrial zones as possible employments.
- In Macedonia the stakeholders 40% know such positions, and like in Bosnia and Herzegovina they listed industrial zones and construction companies as, well.
- In Italy, 100% of the stakeholders know examples of such companies.

## 1.18. Desk research on good practices on circular economy, tinkering and plastic craftwork

- In Poland there are a number of training courses in the field of Circular Economy addressed to a wide range of recipients, including the unemployed. They focus on theory, practical solutions and legal regulations related to the subject of circular economy. The second group of courses is related to craft activities, handicrafts and artistic handicrafts. The courses are designed for a wide range of people who want to broaden their qualifications and, Courses that cover both the circular economy and the arts and crafts together are rare.
- In Macedonia, for the purposes of the project three good practices were uploaded. First one, carpentry workshop with the general goal of the project to promote socially-responsible and ecological practices in carpentry to reduce waste in the furniture industry by creating a carpentry-educational center and specific environmental goal is the use of at least 1 ton of material (primarily chipboard) that occurs as a residue in the production processes of the furniture industry. The second good practice was workshop held by young women about creating jewelry from plastic waste and having video workshop on you tube and in person with informal group Smetlana. The third practice was about sustainable beekeeper, a structured program by local association verified by Center for Adult Education in Macedonia. Of all three good practices they can result in practical skills that can result In future employment. The one about practical carpentry workshop lasts 6 months and it is to be paid 500 euros.
- In Italy, two of the good practices about tinkering and circular economy is not specifically for adults, despite being designed for young students, can be of great relevance to the idea project. In particular, it shows how the tinkering methodology has not only impacted on students' ways of learning, but how it has also involved educators and teachers, stimulating them to adopt teaching methodologies more focused on the pedagogical, practical and learning needs of 21st Century skills. The precious plastic project has the target group adults, also not only creates value from waste plastic by creating new usable and saleable artifacts, but it also expends itself on the educational front, as it promotes courses for adults that serve to teach the methodology of building machinery and molds useful for recycling and reproducing new objects with the philosophy of zero waste. The lack of good practices on the Italian national territory aimed at adults, stimulates us to reflect on the need to fill this gap through the implementation of new projects and to work to implement the IDEA project that shows itself as a necessity in this context.
- In Bosnia and Herzegovina also one of the good practices about tinkering is not with the target group adults but like in Italy, this type of project is great basis for similar workshop that could be implemented, focusing on target group of older people. The other two good practices examples are 100% in line for the project as thy have the circular economy and plastic craftwork and people from all ages (adults included).

## 1.19. Summary of the desk research and online survey in all countries and conclusion

### 1. Poland.

- In Poland courses for unemployed are present on the market and are organized by NGOs, municipalities and government owned organizations. Majority of them are focused on formal education, practical skills oriented, computer-oriented skills. Currently training for unemployed are not so popular, mainly due to good situation on labor market. **However, considering economic cycles, it is reasonable to prepare an offer of courses of this type, especially in relation to new circular economic concepts.**
- The awareness of the importance of soft skills such as teamwork or ice-breaking is high both among the unemployed and representatives of companies. The topics of training related to this subject are considered attractive due to the fact that they increase the chances on the labor market. **Training courses should include elements related to the development of soft skills due to their importance and attractiveness, which can make them popular.**
- The degree of understanding of the concept of circular economy and the opportunities it creates for the future development of Europe is rather low. The offer of training courses in this area is small. The unemployed do not see this concept as a chance for future employment. However, most would like to expand their knowledge in this area. **Therefore, due to the novelty of this concept as well as the importance attached to it by the European Commission, there is a need to promote the circular economy among the unemployed, but also among entrepreneurs.**
- Practical courses should be recognized as a form of education that is particularly well perceived by both the unemployed and the employed. Taking this into account, **future courses should include a significant number of practical elements in addition to the necessary knowledge.**
- In Poland, more and more companies and institutions are starting the transformation towards a circular economy. For this reason, the demand for specialists with knowledge in the field of circular economics is becoming widespread. However, there is still a shortage of qualified staff capable of understanding and implementing the assumptions of this concept. Hence the need for education in the field of circular economy, which aims to prepare adult participants for changes in the functioning of the economy and for work in industries related to this sector.
- Such education can be implemented in various forms, e.g. in the form of courses, training, postgraduate studies or specialization programs. In Poland, there are already the first initiatives of this type, which are implemented by various institutions, such as universities, non-governmental organizations and consulting agencies.
- Thanks to education in the field of circular economy, participants gain not only specialist knowledge, but also skills such as: system thinking, creativity, innovation, teamwork and problem solving. This, in turn, translates into an improvement in their position on the labor market, the ability to work in industries related to the circular economy, and an increase in the level of innovation and competitiveness of the Polish economy.
- To sum up, education in the field of circular economy is not only needed, but also increasingly common. In Poland, there are already the first initiatives in this area, which are aimed at preparing qualified staff to work in sectors related to the circular economy.

## 2. North Macedonia

- In North Macedonia a lot of stakeholders who answered the survey know examples in the field of circular economy for adults. Most of them have them in their companies, as well. The general conclusion would be that the trainings for the unemployed adults are becoming more popular, at least in those stakeholder who answered the survey.
- Like in Poland, we can conclude that more and more companies and institutions are starting the transformation towards a circular economy. For this reason, the demand for specialists with knowledge in the field of circular economics is becoming widespread and people should be trained in this field.
- Like in Poland, team building and ice-breaking are topics that people and stakeholders are aware and interested in and as such, they should be included in the Training Format because they can improve the labor market prospects of our unemployed adults.
- Unemployed adults are not informed about Circular Economy, but would like to be informed about it and as such the topic should be included in the Training Format. **Practical courses in all these trainings are a must according to stakeholders and the unemployed, with most of them considering physical presence.**
- In North Macedonia, Centar for Adult Education in collaboration with some providers of Adult Education has verified programs and some of them are related to circular economy and the topics of our project, which is a small step in the right direction.

## 3. Italy

- In Italy, highest percentage of unemployed adults attended at least one training (95%) in the last 5 years and are now unemployed. Those who attended a training, claimed to have attended courses related to the topic of: "Citizenship and Sustainable Business Development", "Digital Marketing" and "Registered Behavior Technician. At the same they are least interested in improving skills in team building and ice breaking.
- Most of stakeholders who answered the survey consider that sessions for Circular Economy are something that would interest the adults and they will improve their labor market chances but still **more oriented to The Simulation Session of Circular Economy Business than Theoretical Sessions. They also feel that Theoretical and Practical sessions of Co-design** could be relevant for both unemployed adult's interests and as a perspective opening tool in the job market.
- The topic in which the unemployed adults are least interested is **How to manage Plastic Craftwork – risks and guidelines** with an average of 3. The stakeholders are more convinced that this topic is the least relevant, interesting for unemployed adults of all offered and the least it has the chances to improve their labor market prospects.
- In Italy, highest percentage of unemployed adults know what is circular economy (compared to the other countries), and all of them want to know more and as such, it should be included in training of unemployed adults.
- Like in the other countries, future courses should include a significant number of practical elements in addition to the necessary knowledge.

#### 4. Bosnia and Herzegovina

- The most interesting session from the survey which unemployed adults want to attend are **Good Practices on Circular Economy Businesses**, but they are also interested in **Theoretical and practical session on Co-design**.
- Most of stakeholders who answered the survey consider that sessions for **Circular Economy** are something that would interest the adults and they will improve their labor market chances. They also feel that **Theoretical Session on Co-Design** is important and will be useful for the future employment of the low skilled adults.

According to survey results we can conclude that in all the partner countries:

- Unemployed adults don't know enough about circular economy, but want to know more which makes it relevant for future training.
- Unemployed adults and stakeholders want a practical part in all these trainings with most of them considering physical presence for the trainings.
- Team Building and Ice Breaking are topics which are relevant, interesting and likely to improve labor market prospects.
- People graded that they are less interested in the Theoretical Part of Sessions except Theoretical and Practical Session on Co-Design which is graded higher.

The trainings that unemployed adults attended in the last 5 years are similar in:

- Bosnia and Herzegovina and Poland: office, administration courses.
- Poland and North Macedonia: computer courses.
- Bosnia and Herzegovina and North Macedonia: language courses.
- Italy and North Macedonia: Digital Marketing courses.

On the question what do the unemployed adult want to improve the most in the 4 countries we have slightly different answers on the survey:

- In Italy – co-design and circular economy,
- In Bosnia and Herzegovina – connecting with others and working with others,
- In Poland – Plastic craftwork and Co-design;
- In North Macedonia – team building.
- In Italy, how to manage Plastic Craftwork – risks and guidelines is a topic which is graded least interesting then the other, both by unemployed adults and stakeholders.

At the same time, Theoretical and Practical Session on Co-Design is graded the highest as interesting, likely to improve labor market prospects and relevant for the unemployed adults by the stakeholders.

- In Poland, ice breaking and team building sessions along and Theoretical and Practical Session on Co-Design are the most interesting, relevant and likely to improve the labor market prospects for the stakeholders and unemployed adults.
- In Bosnia and Herzegovina, all of the topics have a grade above 3,5 according to stakeholders, but like in Italy, but still **more oriented to The Simulation Session of Circular Economy**

**Business than Theoretical Sessions.** Highest graded is team building, both by the stakeholders and unemployed adults. The unemployed adults are less interested in Theoretical Session on Plastic Craftwork and Tinkering on Plastic Craftwork.

## 1.20. Final summary

The transition to a circular economy requires a significant shift in the way we produce, consume, and dispose of goods and services. Therefore, it is crucial that individuals, businesses, and governments have access to the knowledge and skills necessary to make this shift.

Circular economy workshops can provide a forum for discussion and exchange of ideas among stakeholders, including policymakers, industry leaders, academics, and civil society. Workshops can also provide practical guidance on how to implement circular economy principles, such as designing products for circularity, implementing closed-loop supply chains, and promoting sustainable consumption patterns.

Other forms of training, such as online courses, webinars, and training programs, can also be effective in building the capacity of stakeholders to transition to a circular economy. These training programs can provide more in-depth knowledge and skill-building opportunities, as well as the flexibility to learn at one's own pace.

Overall, we can believe that circular economy workshops and other forms of training are crucial for promoting the transition to a circular economy in the whole EU.

## 2. Training format

### 2.1. Introduction

The Training Format for the Erasmus+ Project Improved Employability Through Circular Economy Education for Adults – IDEA was elaborated based on the methodological framework in the context of Cross-analysis from the Consortium Research Report. Specific thematic educational modules of the training course, envisaged by the project proposal, address the different thematic areas of Circular Economy, Plastic Craftwork and Co-design. A Training Format incorporating the tinkering methods in combination with Non-Formal Education (NFE) approaches is developed as a practical resource. It addresses the development of the specific knowledge, skills, and competencies necessary for educators to reach out to the secondary target of unemployed adults, transfer their knowledge and competencies on the topics and foster their inclusion and employability.

This training format provides an introduction to the circular economy and plastic craftwork. This format aims to cross-analyse and match concepts, theories, and good practices. The learning modules of this format include soft skills, ice breaking, team building, circular economy theory, circular economy business, good practices of CE businesses, plastic craftwork theory, how to manage plastic craftwork in practice and associated risks and guidelines, tinkering and plastic craftwork, and co- design theory and practice.

### 2.2. Context

The Consortium of the project is composed of 5 partners from Poland, Bosnia and Herzegovina, Italy and North Macedonia with a high interest in both social inclusion and circular economy, thus being firmly committed to effectively supporting the synergies put in place by IDEA among the need for a greener economy in Europe, with the need for a real improvement of adult awareness and employability skills. Partners will contribute to the innovation in Adult education and training to meet climate change and waste management issues and improve employability skills. Individual efforts in this regard do not seem so effective, and it is only by joining efforts with other similar organisations that it will be possible for the Partners to scale up their level of intervention.

The project aims to promote Circular Economy and Plastic Craftworks by triggering a change of habits concerning circular economy topics such as waste management among unemployed adults. In this context, greater promotion of the positive social impacts that the Circular Economy (CE) can have on adults at risk of exclusion, particularly women. CE can foster both employability and social inclusion by promoting a greater sense of social justice and social equity within the greater framework of sustainable development, satisfying the needs of present and future generations. To reach its core aim, the project has identified the following specific objectives:

- Providing Adult Educators and trainers with skills, competencies and tools to engage women at risk of exclusion (45+) and / or who did not complete their studies
- Creating upskilling pathways for women at risk of exclusion (45+) and / or who did not complete their studies and increase their take-up of new adult education opportunities in the field of circular economy and sustainability.

## 2.3. Cross-analysis and matching

This training format is the results of the transnational research report and the cross-analysis. The most effective way to gain knowledge on CE and plastic craftwork has been determined to be physical presence trainings with the workshops designed accordingly.

The importance and awareness of soft skills such as teamwork and ice-breaking activities is quite high among unemployed adults and stakeholders. These soft skills can improve employability by developing the ability to work in a team, build and maintain relationships, and communicate effectively with others. Teamwork allows employees to develop problem-solving and decision-making skills, while ice-breaking encourages employees to break down barriers and build trust among co-workers. These skills are invaluable in today's workplace, as they can help employees work together to find solutions to problems, build stronger relationships with colleagues, and foster a positive work environment. Additionally, they can help employees develop self-confidence and increase their employability. The workshops on this module will lead to the fostering of these skills.

The circular economy is a model of economic growth that seeks to reduce waste and create more sustainable processes of production and consumption. It is based on the idea that resources should be kept in use and circulation for as long as possible in order to reduce the environmental impact of production and consumption.

This model contrasts with the traditional linear economy, which is based on the idea that resources are taken from the environment, used, and then discarded. Because the circular economy is a relatively new concept, there is still a lack of knowledge among many individuals and businesses about how to implement it as resulted from the Consortium research. The proposed training and workshops will build up the knowledge on circular economy. In addition, they will explore ways to utilize recycled plastic for functional and decorative purposes. Indeed, the knowledge seems to be low on the plastic craftwork, and hence, the training format will include an introduction to the concept of circular economy and its applications to plastic craftwork, an overview of the techniques and materials used in plastic craftwork, a demonstration of the techniques and materials, and a hands-on practical session to apply the techniques and materials.

Other elements of the training format could include a discussion of the environmental impacts of plastic craftwork and how to reduce them, a review of relevant regulations and best practices, and a review of resources and support available to help practitioners create plastic craftwork.

There will be also tinkering sessions of Plastic Craftwork- interactive and hands-on workshops designed to introduce participants to the world of creative reuse and plastic crafting. Participants will learn the basics of plastic crafting, including how to identify different types of plastic, how to upcycle and transform plastic into new and useful items, and how to make their own hand crafted creations. These sessions will be a great way to learn about sustainability, design, and the creative potential of plastics.

The simulation exercises on circular economy are considered as highly desirable; hence, the training format will proposal several exercises through which the target group will be tasked with researching and developing a strategy for transitioning to a circular economy, look into the current waste and resource management practices of the organizations and explore options for reducing plastic waste and reusing plastic resources.

Co-Design is a type of collaborative design process that involves multiple stakeholders with different perspectives and expertise. It is often used when designing products, services, or systems. The theoretical and practical aspects of Co-Design can be quite complex, but when approached correctly, it can result in creative solutions that are tailored to the needs of the stakeholders.



The theoretical and practical sessions on Co-Design are graded high, as per the Research, because they require the understanding of the basics of the process and how to apply it to their own projects. Both target groups must also be able to apply their knowledge in a practical setting and show that they understand the concepts they have learned.

In order to facilitate the transition to a circular economy, the Consortium believes that workshops using the NFE methodology should be implemented. These workshops will provide unemployed adults with the knowledge and skills needed to make the shift, and would also give them more employability opportunities. Ultimately, the Consortium recognizes that such a transition requires a major shift in how goods and services are produced, consumed, and discarded, and hence, through these educational modules and training, it will help raise the knowledge on how to do so.

## 2.4. Aim of the Training Format

The project IDEA foresees the production of a comprehensive training format based on a pedagogical learning process. This process joins efficient and practical methodologies such as the innovative tinkering methodology and NFE methods to transfer to the target group of unemployed adults' skills, competencies and knowledge on Circular Economy Education and Plastic Craftwork. It presents a critical educational/socialisation vehicle for promoting interaction, creative expression and active citizenship among unemployed adults, enabling inclusion processes and direct empowerment of the target group, leading to an up-take of further adult education.

This Training Format aims to be a practical resource for Adult Educators and Adult Education Institutions regarding tools and methodologies to foster Circular Economy and Sustainability within their organisations and in their work with the target group. It includes the tinkering methodology in synergy with Non- Formal Education methods designed for their direct application in future trainings or the daily work of organisations. The TF was based on the findings of transnational research identifying the needs and barriers, and societal exclusion factors of unemployed adults and the existing offer in the frame of Circular Economy Education and Plastic Craftwork. The Training Format wishes to impact the relevant sectors of Adult education and act as an essential instrument of general applicability (across countries and sectors) for educational/social support to unemployed adults.

The following Training Format includes the following educational modules:

- Ice Breaking and Team Building
- Theoretical session regarding Circular Economy
- Simulation exercise of a Circular Economical Business
- Good practices of Circular Economy Businesses
- Theoretical session regarding Plastic Craftwork
- Focus session: How to manage Plastic Craftwork in practice –risks and guidelines
- Tinkering session of Plastic Craftwork
- Theoretical and practical session on co-design

## 2.5. LEARNING MODULES FOR THE TRAINING FORMAT

### 2.5.1 Soft skills; Ice Breaking and Team Building

#### Overview

In this module, you will learn how ice breaking and team building activities can be successfully used to promote soft skills in the field of Plastic Art craft and Circular Economy. As a part of the IDEA project, this module aims at helping you to provide soft skills that can be spent for boosting Plastic Art craft and Circular Economy. To this regard, we will explain you what are Plastic Art craft and Circular Economy and how you acquire the skills in the fields of Plastic Art craft and Circular Economy. Moreover, we will demonstrate you how you can provide from new soft skills such as: problem-solving, decision-making, critical thinking and creativity in order to enhance their self- confidence and increase their employability and build stronger relationships with colleagues. They are valuable techniques for new people who wants to feel more comfortable in a group. Then, you will get to know that ice breaking games and team building activities are effective ways to build a positive work environment for employees since they can create the group bond, bring the group together and break down the barriers among employees.

#### Aim

- Build and maintain stronger relationships with colleagues
- Enhance problem-solving and decision-making skills
- Encourage employees to break down barriers
- Help employees work together to find solutions to problems

#### Expected Outcome:

##### Knowledge

- The importance and awareness of soft skills
- The place of soft skills in today's workplace

##### Skills

- Enhanced the ability to work in a team
- Building and maintaining relationships
- Enhanced communicating effectively with others
- Enhanced problem-solving and decision-making skills
- Enhanced a positive work environment
- Increased employability of unemployed adults and stakeholders

##### Attitudes

- Trust among co-workers
- Creativity
- Self-confidence

**Duration:** 1.30/ 2.30 hours

## What are the Soft Skills?

Soft skills are character traits and interpersonal skills that characterize a person's relationships with other people. People's soft skills are more about who they are than what they know. As a result, soft skills include the traits of character that influence how well a person gets along with other people and are typically an integral part of a person's personality. In addition, soft skills can be considered as people skills. Soft skills that can help you succeed in the sector include emotional intelligence, personal traits like patience and responsibility, as well as social and communication skills. Therefore, you will be both better ready to work actually with others, tackle issues, and be innovative, and you will likewise can expand your efficiency and your capacity to prevail inside your job.

Although soft skills are not always explicitly taught, they can be developed with the right training approach and self-reflection and provide numerous advantages for your career as an educator.

The following elements can be considered as soft skills:

Communication – Via communication, you can share your opinions and express your concerns.

Self-confidence – Being self-aware of your abilities and qualities, as well as how well you can use them in any situation, is a crucial team-building skill.

Leadership – You can help to motivate other team members and keep them on the path to success.

Trust – Trust develops through positive interactions and relationships, and productivity increases in environments.

Creativity – You can come up with new and creative ideas.

## What are the Team Building Skills?

To give answer to this question, at first, we should explain the purposes of team building. Team building is primarily the use of collaborative tasks to enhance social relations and define roles in teams.

Team building is the process of bringing people together, creating a cohesive team, and participating in activities that help and motivate the team while also improving its efficiency and performance. The main goal of team building is to make sure that everyone on the team gets along, knows what their roles are, and works together to reach the organization's goals.

Generally, team building activities aim these four goals:

1. Bringing the team together around specific goals.
2. Increasing clarity concerning team members' roles.
3. Finding solutions to problems experienced among team members.
4. Developing effective working relationships.

Team building skills are capabilities that help leaders form interactive, supportive, and high-functioning teams.

List of team building skills:

- Good communication
- Active listening – Since it focuses on what other people say and their opinions or concerns, active listening is an important part of team-building skills.
- Organisational skills – Individuals should ensure that all the team tasks are well-organized.
- Decision making – As a team member, this skill can help you prevent biases, make use of all available information, and help everyone make the best decision.
- Problem solving – Everybody has a different and unique style and perspective to solve a problem. You can help your team find a solution to a problem.
- Ability to build relationships - It is a team-building skill that helps members strengthen their personal connections and improve team performance.
- Confidence

The support of teamwork and team development is the goal of these skills. As one of the key capabilities, team building skills are fundamental tools to gather people to maintain effective, productive and motivated groups. An individual having developed team building skills and abilities can unite individuals for a common goal and maintain strong relationships. These skills can be acquired by participating in team building activities, by solving team building problems, and by following team building examples.

### How important are soft skills and team building skills?

Soft skills are qualities and personality traits that make it easier for employees to get along with others and do well at work.

Employees with strong soft skills can aid businesses in increasing productivity and efficiency.

Success in your career depends on how well you interact with and treat other people. Positive interactions and relationships foster the growth of trust, and environments where soft skills are cultivated are more productive.

It promotes open communication between individuals.

Team building shows employees how to confront problems and find solutions.

Soft skills and team building skills boost employees' morale, which encourages them to deliver better work and consequently raises the company's productivity as a whole.

Skills for team building bring people together to work toward a common objective, and when people work together, they may feel more satisfied knowing they are a part of something larger than themselves.

### Sources

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## Toolkit: workshop proposals

### Workshops on Ice breaking and team building

#### NAME GAME - Remember my name

The participants are in a circle. One of the facilitators can start the game in order to show an example. The first person will state their name and associate it with a movement. The movement can be a dance move, or a simple hand gesture, but you can also ask for the movement to be something eco-friendly in order to stay in the topic of Circular Economy (ex: mime an eco-friendly good habit). A variation without the movement can also be to state Name + something starting with the same letter.

Once the first participant has shown their sequence, the second participant repeats that same sequence, and proceeds to add their own sequence. The third participants will then repeat the 1 and 2 sequence and add their own on top of that. This will then be repeated until the circle is over. For an addition of fun, the First participant, who didn't have much difficulty, can take on the challenge of repeating the whole sequence.

## ICE BREAKERS

REMEMBER MY NAME	
Main Aim	To get people to talk and learn something about the other team members.
Used Tools, number of participants	A small group
Timeline	30 Minutes
Materials and Preparation	Copies of the Bingo grid for each participant or small teams Pens Small prizes
Session Description	<p>Optional: If you have your participants' contact before the event, and are able to communicate with them, you can ask them to describe to you what eco-friendly habit they already implement in their personal life. According to the answers they will give to you, generate a Bingo grid and insert in each square various habits that are already implemented by your participants. (You can generate Bingo grids on this website:</p> <p><a href="https://myfreebingocards.com/bingo-card-generator">https://myfreebingocards.com/bingo-card-generator</a></p> <p>Print the Bingo grid before the activity, one for each participant.</p> <p>Distribute one grid per participant.</p> <p>Explain the game: each participant will have to go talk to other participants and find out who implements the eco-friendly habits written on the Bingo grid. Once they find a person, they write their name on the corresponding square of the grid. One person's name cannot be used twice. The first person to fill in their Bingo Grid announces it publicly.</p> <p>The facilitator announces that the game starts.</p> <p>Someone finishes their grid and announces BINGO! &gt; The facilitator can decide if they stop the game or let some time for people to finish and meet more participants.</p>
Debriefing	<p>How did the activity go on? Was it interesting?</p> <p>How did you feel? Would you do something differently?</p> <p>Was this game necessary? What did you learn from this activity?</p> <p>If you were an instructor, would you apply this game as an ice breaking activity?</p>

TREASURE HUNT	
Main Aim	Use this icebreaker to help break the ice at the beginning of a training session or meeting.
Used Tools, number of participants	10-250 participants
Timeline	30 minutes
Materials and Preparation	Copies of the Treasure hunt printed for each participant or small teams Pens Small prizes
Session Description	<ul style="list-style-type: none"> <li>• Prepare a list of objects to look for (see example below).</li> <li>• Divide the participants into small groups.</li> <li>• Optional: For more fun, you can let the groups decide on a group name, draw a flag, and invent a "rallying cry"!</li> <li>• Explain the game: the teams will have to go on a quest and gather all of the items on the list as quickly as possible (You can use the list below, add more items to the list, or make your own). You can do one round for each item and deliver points for the quickest of each round. The first team to gather all of the items or to get the best score wins.</li> <li>• The facilitators verify the accomplishment.</li> </ul>
Debriefing	<p>How did the activity go on? Was it interesting?</p> <p>How did you feel? Would you do something differently?</p> <p>Was this game necessary? What did you learn from this activity?</p> <p>If you were an instructor, would you apply this game as an ice breaking activity?</p>



PERFECT ISLAND	
Main Aim	To break down some barriers and help the learners relax before the day ahead
Used Tools, number of participants	<ul style="list-style-type: none"> <li>• Paper</li> <li>• Pens and colours</li> <li>• One big A1 paper for each group, with the borders and type of island already written drawn (more info below)</li> </ul>
Timeline	1 hour
Materials and Preparation	<p>Before the session, prepare the A1 papers drawing the islands' borders and a small description of its characteristics (examples below). To guide your participants on the types of initiatives they can imagine, show a list of various fields their ideas can be applied to:</p> <ul style="list-style-type: none"> <li>• Food and agriculture and resources: what is cultivated, what is consumed, where does food and goods come from on your Island?</li> <li>• Mobility: what kind of transport is used on your Island?</li> <li>• Leisure (sports/arts/culture): what activities are popular on your Island?</li> <li>• Knowledge (education/health/science/technology/ innovation)</li> <li>• Governing &amp; Citizenship</li> <li>• Clothing</li> <li>• Construction and architecture</li> <li>• Economy, trade and distribution</li> </ul> <ul style="list-style-type: none"> <li>• People are divided into small groups and get to discover their island (see below). They are then presented with the first task to accomplish:</li> <li>• (10 minutes) Imagine individually 3-5 ideas of systems, infrastructures, regulations or initiatives of Circular Economy to implement to make your island awesome and super eco-friendly. You are free to imagine other characteristics to the island to feed into your ideas, just as long as they are realistic (What animals are on your Island? What is the main activity in your Island? What is cultivated on your Island?). Get inspiration from similar existing Islands. You can use the internet to research and learn more on Circular Economy initiatives.</li> <li>• (30 min) Share your ideas and come up with 5 main ideas (self-organized, choose your decision system). You can choose from the ideas presented by your group members or come up with new ones, compromising and composing, brainstorming together. Once your 5 propositions are chosen, draw your island and prepare a presentation</li> <li>• (20 minutes) Present your island to the rest of the group.</li> </ul>
Session Description	With this activity, the participants will be divided into groups of 4-6 people. They will be invited to imagine their perfect island. This activity will allow participants to imagine a positive future and innovative methods together, all while introducing notions of Circular Economy.

## Debriefing

- Did you enjoy this activity?
- What did you like? Were there any difficulties?
- How did you compromise within the group? What system of decision did you implement? Did you manage to decide on a common vision?
- Was it easy to imagine solutions to develop on your Island?
- What inspired your ideas?
- What would you like to see implemented in your city, or in the real world?
- Do you think these Islands could work together and share their resources or techniques? In which way?

## SPOT THE WASTE, STOP THE WASTE

<p>Main Aim</p>	<p>The aim of this activity is to allow participants to reflect and consider the weight and impact of their consumption and waste, and the alternatives that can be implemented to lower their impact on the environment, to raise awareness on the emergency of the climate crisis, and to open their mind on the feasibility of a life with lower impact on the environment. This activity can be adapted to various contexts: in a conference room, during a walk in the city or during a study visit at a recycling centre...</p>
<p>Used Tools, number of participants</p>	<p>This activity is based on your environment and surroundings, so you shouldn't need material, but you can also print cards if objects are not available around you. If so, print on cards images and names of various sources of waste from daily life that can find Zero Waste or low waste alternatives, for example: plastic water bottle, shower gel, cotton swabs, single-use razor, kitchen sponges, paper towel, plastic cups, plastic bags.. (More examples below)</p>
<p>Timeline</p>	<p>1 hour</p>
<p>Materials and Preparation</p>	<p>To prepare for this activity, you should scan your surroundings and anticipate the kind of objects the participants will be able to find and analyse. Your participants should be able to find multiple objects, and you should be able to answer your participants' questions and come up with ideas of alternatives for most objects you will be shown. If the activity takes place outside, plan a programme of the spots you will visit or get in contact with the places you will visit so they know you will come with a group. Anticipate any legal or potential disruptive points such as taking pictures in public places, or disrupting a shop with a large amount of people.</p>

<p>Session Description</p>	<p>With this activity, you will invite your participants to scan their surroundings and gather examples of waste that can be prevented or lowered. The aim is to spot an object that produces waste and either:</p> <ol style="list-style-type: none"> <li>1. name and explain existing alternatives that can be implemented, or</li> <li>2. imagine a solution.</li> </ol> <p>You can do this in various contexts:</p> <p>For a short activity - Conference room</p> <p>If your event is limited in time and you can't explore your surroundings, you can convert this activity into a picture-based game. Two ways:</p> <ol style="list-style-type: none"> <li>1. Show with cards or a visual presentation image of daily objects that can find an alternative, and let the floor open for participants to reflect and imagine alternatives (You can also divide them in smaller groups to have better conditions for brainstorming).</li> <li>2. Show pictures or illustrations of daily scenes, and ask your participants to spot the waste that can be prevented, following the style of a "Where's Wally?" game.</li> </ol> <p>Week-long seminar - Hotel, youth centre...</p> <p>If you are hosted in a large facility such as a hotel, hostel, or youth centre, invite your participants to explore the place and its many different rooms: hall and check-in desk, bedrooms, bathrooms, kitchen/ canteen, conference room, lounge... They can either gather objects, or take pictures of objects.</p> <p>Day-long outdoor activity - Walk in the city or leisure activity</p> <p>You can do this activity in the context of a day-long promenade or touristic activity. Organise a leisure day with typical activities: lunch and pic-nic, cultural visits, tourist activities. You can also purposely take your group to strategic spots such as a supermarket, a clothing shop, a fast-food/take-away restaurant...</p> <p>Study visit - Recycling facility or community cleaning event</p> <p>If you have such a place in your area, getting in contact with a recycling center or waste management structure can be a great context for this activity. You can also organise a cleaning event in a public square or natural park. Having your participants see what happens to their waste once they dispose of it is one of the most impactful ways to show the impact our consumption has on the environment. Once in the facility or during the event, you can ask your participants to try to visually identify some items among the waste they will see pass through the machines or their bags and have them note and reflect on how to prevent these items from reaching the waste management facility.</p>
<p>Debriefing</p>	<ul style="list-style-type: none"> <li>• Ask the participants how they felt during the activity?</li> <li>• What did they learn?</li> <li>• Do they think this waste will still exist in 20 years?</li> <li>• How difficult would it be to lower this waste? What will they bring home from this activity?</li> <li>• Is there any alternative they think they would like to try to implement at home?</li> </ul>

## 2.5.2 Circular Economy- theory

### Overview

Circular Economy is an economic model that aims to create a sustainable future by reducing waste, reusing materials, and regenerating natural systems. It is based on the principles of designing out waste and pollution, keeping products and materials in use, and regenerating natural systems.

The session on the topic Circular Economy theory is designed to provide participants with a foundational understanding of circular economy theory and its application in modern-day industries and businesses. This workshop will cover the principles of circular economy, how it differs from a linear economy, and the key benefits it offers focusing on circular economy models.

During the session, participants will engage in various activities to reinforce their understanding of the circular economy theory. These activities include:

1. Understanding the key concepts and principles of the circular economy.
2. Identifying the difference between circular and linear economies.
3. Exploring the various business models and strategies that support circular economy.
4. Identifying opportunities for implementing circular economy practices in their own organization.
5. Analysing case studies of companies that have successfully implemented circular economy practices.

The goal of this workshop is to equip participants with the knowledge and skills necessary to implement circular economy practices in their organizations. By the end of the workshop, participants will have a better understanding of how circular economy practices can create value for their business while reducing environmental impacts.

Developing skills in circular economy theory and its application is increasingly important as businesses seek to adopt sustainable practices. The circular economy offers a promising path to achieving sustainability goals while creating economic value. By developing skills in circular economy theory, individuals can become more valuable to their organizations as they help identify opportunities for implementing circular economy practices.

Furthermore, as businesses face pressure to become more sustainable, individuals with skills in circular economy theory are likely to be in high demand. Developing skills in circular economy theory can increase employability and provide opportunities for career advancement.

### Aim

#### To Learn:

- Understand the key concepts and principles of the circular economy
- Identify the difference between circular and linear economies
- Learn about various business models and strategies that support circular economy

### To Enhance:

- Analyse case studies of companies that have successfully implemented circular economy practices
- Identify opportunities for implementing circular economy practices in their own organization
- Explore the potential benefits of circular economy practices for business and the environment

### To Build Up Skills:

- Develop skills in identifying circular economy opportunities and solutions
- Improve problem-solving skills related to circular economy challenges
- Gain knowledge and skills necessary to implement circular economy practices in their organizations.
- These aims can be adjusted based on the specific goals and needs of the education session and its participants.

### Expected Outcome

#### Knowledge:

- Understand the principles and key concepts of the circular economy
- Understand the difference between circular and linear economies
- Identify various business models and strategies that support circular economy

#### Skills:

- Identify circular economy opportunities and solutions
- Apply problem-solving skills related to circular economy challenges
- Implement circular economy practices in their organizations

#### Attitudes:

- Appreciate the importance of sustainability and environmental stewardship in business
- Recognize the potential benefits of circular economy practices for business and the environment
- Be motivated to implement circular economy practices in their organizations

Duration: 1.30/ 2.30 hours

## CIRCULAR ECONOMY

The traditional linear economy is based on the take-make-dispose model, which is unsustainable and leads to the depletion of resources, pollution, and environmental degradation. On the other hand, the Circular Economy model aims to create a closed loop system where resources are kept in use for as long as possible, waste is minimized, and natural systems are regenerated.

During the workshop, participants will engage in various activities to reinforce their understanding of the circular economy theory. These activities include:

- Understanding the key concepts and principles of the circular economy.
- Identifying the difference between circular and linear economies.
- Exploring the various business models and strategies that support circular economy.
- Identifying opportunities for implementing circular economy practices in their own organization.
- Analysing case studies of companies that have successfully implemented circular economy practices.

Circular economy is a term used to describe a regenerative economic model that aims to keep materials in use for as long as possible, by reducing waste, pollution and resource depletion. It is a concept that presents a significant departure from the traditional linear economy model, in which materials are extracted, transformed, used and then disposed of as waste.

At the heart of the circular economy concept is the idea of closing the loop in material flows, through designing out waste and keeping resources in use. This can be achieved by applying circular economy principles throughout the entire value chain, from product design to end-of-life management. The circular economy model focuses on the reduction of material extraction, minimization of waste and pollution, and maximization of resource efficiency and productivity.

Circular economy principles are based on three core concepts:

- **Designing out waste and pollution:** Products and services are designed to minimize waste and pollution, and to maximize material and energy efficiency. This can be achieved by using recycled or bio-based materials, designing for disassembly and reuse, and implementing closed-loop systems.
- **Keeping products and materials in use:** The goal is to extend the life of products and materials through repair, refurbishment, and remanufacturing. End-of-life materials are recycled or upcycled, rather than disposed of as waste.
- **Regenerating natural systems:** The circular economy model aims to support the regeneration of natural systems by using renewable energy sources and sustainable production methods. This includes the use of circular and regenerative agriculture, as well as the implementation of ecosystem restoration projects.

Adopting a circular economy approach can bring about a range of benefits, including:

- **Reducing waste and pollution:** By designing out waste and keeping materials in use, the circular economy model can help to reduce waste and pollution, as well as associated environmental impacts.

- **Saving resources and energy:** By reducing the need for new material extraction and production, the circular economy model can help to save resources and energy, as well as associated costs.
- **Creating new business opportunities:** The circular economy model can create new business opportunities in areas such as material recovery and recycling, product repair and remanufacturing, and circular service provision.
- **Encouraging innovation:** The circular economy model encourages innovation in areas such as product design, material selection, and end-of-life management, which can lead to the development of more sustainable and efficient products and processes.
- **Supporting social and economic development:** The circular economy model can help to create local jobs, support community development, and improve resource security, particularly in resource- constrained regions.
- **Overall,** the circular economy concept represents a fundamental shift towards a more sustainable and regenerative economic model, which places value on the long-term preservation and regeneration of natural systems. By adopting circular economy principles and practices, we can create a more resilient, equitable and sustainable future for all.

**Workshop title: “Circular Economy in Practice: Turning Plastic Waste into Resources”**

This workshop aims to provide participants with a hands-on experience of the Circular Economy theory in practice. Participants will learn about the principles and concepts of the Circular Economy and how they can be applied in real-world scenarios. Through interactive exercises and group discussions, participants will gain a deeper understanding of the Circular Economy’s potential to reduce waste, conserve resources, and create sustainable economic growth.

2h



Theoretical session regarding Circular Economy

CIRCULAR ECONOMY IN PRACTICE: TURNING PLASTIC WASTE INTO RESOURCES	
<p>Learning Outcomes (Purpose of the exercise Explain why this exercise is implemented)</p>	<ul style="list-style-type: none"> <li>• Participants will gain a deeper understanding of the Circular Economy theory and its practical applications</li> <li>• Participants will develop critical thinking and problem-solving skills by designing a Circular Economy business model</li> <li>• Participants will identify potential opportunities for implementing Circular Economy practices in their local community</li> </ul> <p>Participants will leave with practical ideas and strategies for incorporating Circular Economy principles into their work or personal lives.</p>
<p>Group Size (Number of participants)</p>	<p>The group size dedicated in the project.</p>
<p>Duration</p>	<p>1,5 h</p>
<p>Materials (What is necessary for the trainer/facilitator and participants to carry out the exercise)</p>	<p>In order to extend the presentation to the workshop style, some additional things could be prepared:</p> <ul style="list-style-type: none"> <li>• Flipchart paper and markers</li> <li>• Sticky notes</li> <li>• Laptop and projector for presentation slides</li> <li>• Handouts on Circular Economy principles and case studies</li> <li>• Materials for the interactive exercise (e.g., paper, scissors, glue, plastic waste eg. empty bottles)</li> </ul>
<p>Preparation</p>	<p>The teacher should be prepared with the circular economy principles and the most important information regarding this topic, includes the methods, different approaches etc. For the presentation only projector and whiteboard is needed.</p>

<p>Description/Steps</p>	<ul style="list-style-type: none"> <li>• Workshop outline: I. Introduction to the Circular Economy (15 minutes)</li> <li>• Definition and principles of the Circular Economy</li> <li>• Benefits and challenges of the Circular Economy</li> <li>• II. Case studies and examples of Circular Economy in practice (30 minutes)</li> <li>• Examples of companies and organizations that have successfully implemented Circular Economy practices</li> <li>• Discussion of challenges and opportunities for applying the Circular Economy in different industries</li> <li>• III. Interactive exercise: Designing a Circular Economy business model (45 minutes)</li> <li>• Participants will work in small groups to design a Circular Economy business model for a chosen product or service</li> <li>• Discussion and feedback on the designs</li> <li>• IV. Group discussion: Identifying opportunities for Circular Economy practices in the local community (30 minutes)</li> <li>• Participants will discuss potential opportunities for applying Circular Economy practices in their local community</li> <li>• Brainstorming of ideas and potential partnerships</li> <li>• V. Conclusion and next steps (10 minutes)</li> <li>• Summary of key takeaways from the workshop</li> <li>• Discussion of potential next steps for participants to implement Circular Economy practices in their own work or community</li> </ul>
<p>Learning Check/ Evaluation</p>	<ol style="list-style-type: none"> <li>1. Pre-Workshop Survey: A survey can be conducted before the workshop to check the participants' knowledge and understanding of circular economy concepts and identify their specific learning needs.</li> <li>2. Workshop Assessment: During the workshop, formative assessments such as quizzes, group activities, and case study analyses can be used to assess participants' understanding of the circular economy concepts and their ability to apply them.</li> <li>3. Post-Workshop Survey: A survey can be conducted after the workshop to evaluate the effectiveness of the workshop in meeting the participants' learning needs and to gather feedback on the workshop content, format, and facilitation.</li> <li>4. Follow-up Assessment: A follow-up assessment can be conducted a few months after the workshop to evaluate the extent to which participants have implemented circular economy practices in their organizations and the impact of these practices on their business and the environment.</li> <li>5. Feedback from Stakeholders: Feedback can be gathered from stakeholders such as supervisors, colleagues, and customers to assess the participants' effectiveness in implementing circular economy practices and the impact of these practices on their work and the environment.</li> <li>6. Continuous Improvement: Based on the evaluation results, the workshop content, format, and facilitation can be improved to meet the participants' learning needs and ensure the achievement of the workshop's goals.</li> </ol> <p>Red one – not obligatory</p>

## References

1. Ellen MacArthur Foundation. (2021). What is the circular economy? Retrieved from <https://www.ellenmacarthurfoundation.org/circular-economy/concept>
2. European Commission. (2021). Circular Economy. Retrieved from [https://ec.europa.eu/environment/circular-economy/index\\_en.htm](https://ec.europa.eu/environment/circular-economy/index_en.htm)
3. World Economic Forum. (2021). The Circularity Accelerator. Retrieved from <https://www.weforum.org/projects/>
4. Kirchherr, J., Reike, D., & Hekkert, M. (2017). Resources, conservation and recycling. Conceptualizing the circular economy: An analysis of 114 definitions, 127, 221-232.

### Databases:

1. Circular Economy Club. (2021). Retrieved from <https://www.circulareconomyclub.com/>
2. Ellen MacArthur Foundation. (2021). Circular Economy Case Studies. Retrieved from <https://www.ellenmacarthurfoundation.org/circular-economy/case-studies>
3. European Circular Economy Stakeholder Platform. (2021). Retrieved from <https://circulareconomy.europa.eu/platform/en>
4. GreenBiz. (2021). Retrieved from <https://www.greenbiz.com/>

## 2.5.3 Circular Economic Business

### Overview

Circular Economic Business is a session that explores the principles, strategies, and tools required to create sustainable and profitable businesses in a circular economy. The module covers various aspects of the circular economy, including the circular value chain, resource efficiency, and waste reduction.

The module begins by continuing describing of the concept of circular economy and its importance in today's world. It then covers the different strategies that businesses can use to adopt a circular economy model, including product design, materials management, and waste reduction. The module also covers the role of technology in promoting circular economy practices.

Throughout the module, students will learn about various real-world examples of circular economy businesses, both in developed and developing countries. They will also explore the challenges and opportunities faced by circular economy businesses, including regulatory issues, market barriers, and stakeholder engagement.

The module is designed to be interactive and engaging, with a mix of lecture, case studies, and group discussions. Students will have the opportunity to work on a real-life circular economy project, either individually or as part of a team, and present their findings at the end of the module.

Overall, Circular Economic Business is an excellent module for anyone interested in creating sustainable and profitable businesses that contribute to a more circular and resource-efficient economy. It provides the knowledge and skills required to become a circular economy leader and to make a positive impact on the environment and society.

### Aim

#### To Learn:

- Understand the key principles and practices of circular economy in business
- Learn about the various circular economy business models and their application in different industries
- Explore case studies of successful circular economy business models and their benefits
- Understand the potential challenges and barriers to implementing circular economy in business and how to overcome them

#### To Enhance:

- Enhance knowledge and understanding of the circular economy and its potential benefits for businesses
- Enhance awareness of the business opportunities and competitive advantages of adopting circular economy practices
- Enhance the ability to identify and evaluate circular economy solutions and opportunities in their own business context
- Enhance the ability to communicate the value of circular economy to stakeholders and engage them in the transition towards circular economy practices

### To Build Up Skills:

- Develop skills in circular economy innovation and problem-solving
- Build up skills in circular design, procurement, and supply chain management
- Build up skills in collaborating and engaging with stakeholders to drive circular economy initiatives
- Build up skills in measuring and reporting circular economy performance and impact

### Expected Outcome:

#### Knowledge:

- Understand the principles and concepts of circular economy and its importance in promoting sustainable and profitable businesses
- Identify the different strategies that businesses can use to adopt a circular economy model, including product design, materials management, and waste reduction
- Understand the role of technology in promoting circular economy practices and their impact on the economy and society
- Analyse the challenges and opportunities faced by circular economy businesses, including regulatory issues, market barriers, and stakeholder engagement
- Recognize the importance of data analysis and management in implementing circular economy strategies

#### Skills:

- Apply circular economy strategies to real-life business scenarios and assess their effectiveness
- Analyse the financial and economic implications of circular economy practices for businesses
- Develop problem-solving skills in addressing the challenges of transitioning to a circular economy model
- Collaborate effectively in group work and project management
- Communicate effectively in written and oral presentations

#### Attitudes:

- Appreciate the need for businesses to adopt circular economy practices and contribute to a sustainable future
- Develop a sense of responsibility towards the environment and society in their future business endeavours
- Foster a mindset of creativity and innovation in adopting circular economy strategies
- Foster a mindset of continuous learning and adaptation in response to changing economic and environmental conditions.

**Duration:** 1.30/ 2.30 hours

## CIRCULAR ECONOMY BUSINESS

The Circular Economy Business session is designed to provide participants with practical knowledge and skills to apply circular economy principles and practices in their own business context.

In this session, participants will learn about the principles and practices of circular economy in business, and how they can identify circular economy solutions and opportunities in their own industry. We will explore various circular economy business models and their applications, and discuss the potential benefits and challenges of implementing circular economy practices in business.

Participants will also learn how to apply circular design principles to their products, services, and business models, and how to collaborate and engage with stakeholders to drive circular economy initiatives. Additionally, we will discuss how businesses can measure and report their circular economy performance and impact.

By the end of the session, participants will have gained a deeper understanding of the circular economy and its role in creating a more sustainable and resilient future. They will also have practical knowledge and skills to drive circular economy initiatives in their own business, and contribute to positive impact for the environment and society.

Overall, these topics provide a comprehensive overview of the strategies and challenges involved in implementing a circular economic businesses and circular business model. The module would cover both theoretical frameworks and real-world examples to provide a practical understanding of circular economy practices. Additionally, the module would encourage critical thinking and problem-solving skills, and equip students with the knowledge and skills required to become circular economy leaders in their future careers.

1. Introduction to Circular Economy:
  - Definition and concept of circular economy in business meaning
  - The importance of circular economy for businesses and society
  - Circular economy business models
  
2. Strategies for Circular Economy Business:
  - Designing products for circularity
  - Material and resource management
  - End-of-life management
  - Circular value chains
  - Business model innovation for circular economy
  
3. Challenges and Opportunities:
  - Regulatory issues and policy frameworks
  - Market barriers and opportunities

- Stakeholder engagement and collaboration
- Circular economy business case studies
- Implementation of Circular Economy:
- Data management and analysis for circular economy strategies
- Financial implications of circular economy practices
- Project management for circular economy projects
- Communication and reporting of circular economy initiatives

1,5 h

## Toolkit: workshop proposals

### Simulation exercise of Circular Economic Business

CIRCULAR ECONOMY BUSINESS	
<p>Learning Outcomes (Purpose of the exercise Explain why this exercise is implemented)</p>	<ol style="list-style-type: none"> <li>1. Apply circular economy principles and strategies to a real-life business scenario.</li> <li>2. Collaborate effectively in group work and project management.</li> <li>3. Develop problem-solving skills in addressing the challenges of transitioning to a circular economy model.</li> <li>4. Communicate effectively in oral presentations.</li> <li>5. Recognize the importance of data analysis and management in implementing circular economy strategies.</li> </ol> <p>This workshop provides a practical and engaging way for students to apply their knowledge of circular economy business strategies in a simulated business scenario. It encourages critical thinking, problem-solving, and collaboration skills while also highlighting the importance of circular economy practices for businesses and society.</p>
<p>Typology</p>	<p>Workshop</p>
<p>Group Size (Number of participants)</p>	<p>Dedicated to the group of project.</p>
<p>Duration</p>	<p>2,5 h</p>
<p>Materials (What is necessary for the trainer/facilitator and participants to carry out the exercise)</p>	<p>In order to extend the presentation to the workshop style, some additional things could be prepared:</p> <ul style="list-style-type: none"> <li>• Flipchart paper and markers</li> <li>• Sticky notes</li> <li>• Laptop and projector for presentation slides and the best option – computers at least for the groups of participants</li> <li>• Handouts on Circular Economy principles and case studies</li> </ul> <p>Materials for the interactive exercise (e.g., paper, scissors, glue)</p>
<p>Preparation</p>	<p>The teacher should be prepared with the circular economic business topic and the most important information regarding this topic, includes the business models, case studies, different approaches and examples etc. For the presentation only projector and whiteboard is needed.</p>



Description/Steps  
(Procedure of the exercise)

The aim of this workshop is to provide students with an opportunity to apply their knowledge of circular economy business strategies in a simulated business scenario. The workshop will involve a group-based activity where students will work together to design and implement a circular economy strategy for a fictional business.

Workshop Outline:

1. Introduction (15 minutes):

- The workshop facilitator will introduce the concept of circular economy and its importance for businesses and society.
- The facilitator will explain the objectives of the workshop and the group-based activity.

2. Business Simulation (60 minutes):

- Students will be divided into groups of 4-5 and assigned a fictional business scenario.
- Each group will be given a set of resources, including product descriptions, raw materials, and financial data.
- The groups will have 60 minutes to design and implement a circular economy strategy for their business.
- The circular economy strategy should include elements such as product design for circularity, resource management, and end-of-life management.
- During the simulation, the facilitator will provide guidance and support as needed.

3. Presentations and Discussion (30 minutes):

- Each group will have 5-7 minutes to present their circular economy strategy to the rest of the class.
- Following the presentations, there will be a group discussion on the challenges and opportunities faced by the businesses in implementing their circular economy strategies.
- The facilitator will summarize the key takeaways from the workshop and highlight the importance of circular economy practices for businesses and society.

<p>Learning Check/Evaluation</p>	<ol style="list-style-type: none"> <li>1. Pre-Workshop Survey: A survey can be conducted before the workshop to check the participants' knowledge and understanding of circular economic businesses and circular business models and identify their specific learning needs.</li> <li>2. Workshop Assessment: During the workshop, formative assessments such as quizzes, group activities, and case study analyses can be used to assess participants' understanding of the circular economic businesses and their ability to apply them.</li> <li>3. Post-Workshop Survey: A survey can be conducted after the workshop to evaluate the effectiveness of the workshop in meeting the participants' learning needs and to gather feedback on the workshop content, format, and facilitation.</li> <li>4. Follow-up Assessment: A follow-up assessment can be conducted a few months after the workshop to evaluate the extent to which participants have implemented circular economy businesses in their organizations and the impact of these practices on their business and the environment.</li> <li>5. Feedback from Stakeholders: Feedback can be gathered from stakeholders such as supervisors, colleagues, and customers to assess the participants' effectiveness in implementing circular economy businesses and the impact of these practices on their work and the environment.</li> <li>6. Continuous Improvement: Based on the evaluation results, the workshop content, format, and facilitation can be improved to meet the participants' learning needs and ensure the achievement of the workshop's goals.</li> </ol> <p>Red one – not obligatory</p>
<p>References</p>	<ol style="list-style-type: none"> <li>1. Ellen MacArthur Foundation. (2021). What is the circular economy? Retrieved from <a href="https://www.ellenmacarthurfoundation.org/circular-economy/concept">https://www.ellenmacarthurfoundation.org/circular-economy/concept</a></li> <li>2. European Commission. (2021). Circular Economy. Retrieved from <a href="https://ec.europa.eu/environment/circular-economy/index_en.htm">https://ec.europa.eu/environment/circular-economy/index_en.htm</a></li> <li>3. World Economic Forum. (2021). The Circularity Accelerator. Retrieved from <a href="https://www.weforum.org/projects/">https://www.weforum.org/projects/</a></li> <li>4. Kirchherr, J., Reike, D., &amp; Hekkert, M. (2017). Resources, conservation and recycling. Conceptualizing the circular economy: An analysis of 114 definitions, 127, 221-232.</li> </ol> <p>Databases:</p> <ol style="list-style-type: none"> <li>1. Circular Economy Club. (2021). Retrieved from <a href="https://www.circulareconomyclub.com/">https://www.circulareconomyclub.com/</a></li> <li>2. Ellen MacArthur Foundation. (2021). Circular Economy Case Studies. Retrieved from <a href="https://www.ellenmacarthurfoundation.org/circular-economy/case-studies">https://www.ellenmacarthurfoundation.org/circular-economy/case-studies</a></li> <li>3. European Circular Economy Stakeholder Platform. (2021). Retrieved from <a href="https://circulareconomy.europa.eu/platform/en">https://circulareconomy.europa.eu/platform/en</a></li> <li>4. GreenBiz. (2021). Retrieved from <a href="https://www.greenbiz.com/">https://www.greenbiz.com/</a></li> </ol>

## 2.5.4 Good practices of CE Businesses

### Overview

Circular economy is an economic system based on the reuse and regeneration of materials or products, especially as a means of continuing production in a sustainable or environmentally friendly way. In this session, young unemployed adults will be educated in three areas through the theoretical part analysing provided materials about three important topics of Circular Economy.

### Aim

- To understand importance of circular economy business
- Establishing existing knowledge
- To build up Critical thinking
- Build up creative ways of reusing plastic
- Understand and learn the process of money/product cycle
- To spread awareness about reusable materials and ways of recycling
- To understand importance of reusable materials
- To gain knowledge of how an organization creates, delivers, and captures value to its broader range of stakeholders while minimizing ecological and social costs
- To gain creative skills of making art from recycled material

### Expected Outcome:

#### Knowledge

- To know more about circular economy in general
- To learn about CE Businesses in the field of circular economy tinkering methodology and plastic craftwork
- To know more about cycle of product

#### Skills

- Critical thinking
- Communication
- Presentation skills

**Duration:** 1.30/ 2.30 hours

## GOOD PRACTICES WORKSHOPS

Session of CE Businesses is interactive session where, through interactive way, participants will understand the process of CE Businesses in the field of circular economy in general, tinkering, art, plastic craftwork etc. in different countries by analysing projects.

### Toolkit: workshop proposals

#### a.) Circular Economy

Overview	
Title	Akademia GOZ
Location	CSR Consulting ul. Kamykowa 1, 03 -289 Warszawa
Timeframe	Ongoing
Contributors	CSR Consulting ( <a href="http://csrconsulting.pl/">http://csrconsulting.pl/</a> ), REKOPOL (Polish packaging recovery organization,)
References	<a href="https://gozwpraktyce.pl/akademia-goz/">https://gozwpraktyce.pl/akademia-goz/</a>
Description	
Abstract	<p>Circular Economy Academy (Akademia GOZ) is a series of webinars for companies concerning circular economy in practice. They are a pillar of knowledge on key topics related to the circular economy and the adaptation of enterprises to this economic model implemented in the EU. In 2020, the Circular Economy Academy began its activities with a series of webinars on the upcoming changes in the EU economy related to the implementation of the European Green Deal. A free webinar and a paid course European Green Deal in practice were created on this topic. During the course, the key strategic documents of the EU and their announcement of over 80 new legal acts, action plans and initiatives that will be implemented over the next 3 years are discussed. Practical tools for business that help prepare for the announced changes are also presented. As part of the GOZ Academy in 2021, four free webinars were prepared in cooperation with the Partners of the GOZ in Practice Portal (GOZ w Praktyce). They were devoted to practical solutions in the field of circular economy.</p>
Aims and objectives	<p>The Circular Economy Portal in Practice is a centre of knowledge and practical solutions in the field of circular economy for business. It supports companies in the transformation towards circular economy.</p>
Framework of competences	General knowledge on circular economy goals and objectives, regulations and tools
Methodology	Online webinars, recorded and available online

<p>Outcomes and results</p>	<p>Already delivered 7 webinars:</p> <ul style="list-style-type: none"> <li>• How labels can support circular economy?</li> <li>• Is circular economy profitable for companies?</li> <li>• Ecodesign of packaging</li> <li>• Overview of circular economy indicators</li> <li>• Chemical recycling and circular raw materials</li> <li>• The European Green Deal in Practice</li> </ul> <p>European Green Deal–Earthquake</p>
<p>Conclusions</p>	<p>Academy is a free of charge source of knowledge available online. It would help unemployed to gain necessary background to deal with circular economy issues. It could be started as a starting point in rising competencies of target group.</p>
<p>Other information</p>	<p>Courses free of charge available online. No certifications are issued.</p>

## b) Plastic Craftwork

Overview	
Title	"Čista umjetnost – pure art"
Location	Sarajevo, Bosnia and Herzegovina
Timeframe	Autumn 2021
Contributors	Nestle Adriatic Bosnia and Herzegovina in cooperation with Center for art and artistic education "ArkA"
References	<a href="https://www.nestle.ba/umjetnicka-djela-od-otpadnog-materijala">https://www.nestle.ba/umjetnicka-djela-od-otpadnog-materijala</a> <a href="https://www.klix.ba/magazin/skoro-250-kg-otpadnog-materijala-pretvoreno-u-unikatna-umjetnicka-djela/210915068">https://www.klix.ba/magazin/skoro-250-kg-otpadnog-materijala-pretvoreno-u-unikatna-umjetnicka-djela/210915068</a> <a href="https://www.fokus.ba/kultura/misija-studija-arka-je-promocija-kulture-i-umjetnosti/2110600/">https://www.fokus.ba/kultura/misija-studija-arka-je-promocija-kulture-i-umjetnosti/2110600/</a> <a href="https://letsdoit.ba/glasanje/">https://letsdoit.ba/glasanje/</a>
Description	
Abstract	Five unique works, created by renowned artists of the ArkA Center for Art and Art Education, were created as part of Nestlé's "Pure Art" initiative and served as a tool for donation of the seedlings to schools in Sarajevo
Aims and objectives	"Pure Art" is a new project launched by Nestlé in B&H with the aim of raising awareness of the importance of environmental protection.
Framework of competences	5 artists whose competences contributed in creation of the statues who served as an inspiration for fundraising + more than 40 volunteers and employers who contributed in raising awareness about reusing and recycling plastic as well as creating new products.
Methodology	<ul style="list-style-type: none"> <li>-Educative sessions about reusing materials</li> <li>-Workshop based on making handcrafts</li> <li>-Art creation</li> </ul>
Outcomes and results	In order to locally contribute to the preservation of green spaces, Nestlé will donate seedlings to schools in B&H that are part of the Hello! Project. Visitors had the opportunity to witness the works of art created from 250 kilograms of waste material, which the artists gave a new purpose and turned it into visionary works with a strong message about the importance of preserving nature. The goal of the initiative itself, as the company points out, is to encourage each of us to act when it comes to reducing waste, recycling and reusing materials, but also conservation of water resources and forests. The initiative is also supported by the Hands Association and the Let's Do It project, and friends of the project, Sarajevo City Center and MCI. During the first day of the exhibition, attendees were able to help in the action of donating garden seedlings to schools in BiH by simply pressing a button, so citizens in less than 12 hours ensured that Nestlé donates over 3,000 seedlings.
Conclusions	Academy is a free of charge source of knowledge available online. It would help unemployed to gain necessary background to deal with circular economy issues. It could be started as a starting point in rising competencies of target group.

### Other information

This type of project is of great importance for the development of awareness about recycling, art, and for the possibility of development in the business sphere, taking into account the amount of collected plastic waste and the creation of a large number of products. The interaction between young unemployed people and employed people/stakeholders makes it possible to open new paths and adequately teach young people about the mentioned topic and numerous skills.

c) Tinkering

Overview	
Title	"A beekeeper for basic beekeeping in a sustainable way"
Location	Kochani, North Macedonia
Timeframe	04.2021–08.2021
Contributors	Zdruzhenie Jadrena Grupa od Bregalnichkiot Region Meden Istok Kochani (Association CoreGroup of beekeepers from the Bregalnica region Honey East–Kochani)
References	<a href="https://cov.gov.mk/course/%d0%bf%d1%87%d0%b5%d0%bb%d0%b0%d1%80-%d0%b7%d0%b0-%d0%be%d1%81%d0%bd%d0%be-%d0%bf%d1%87%d0%b5%d0%bb%d0%b0%d1%80%d1%81%d1%82%d0%b2%d0%">https://cov.gov.mk/course/%d0%bf%d1%87%d0%b5%d0%bb%d0%b0%d1%80-%d0%b7%d0%b0-%d0%be%d1%81%d0%bd%d0%be-%d0%bf%d1%87%d0%b5%d0%bb%d0%b0%d1%80%d1%81%d1%82%d0%b2%d0%</a>
Description	
Abstract	Association Meden Istok offers training for "Beekeeper for basic beekeeping in a sustainable way", which has been verified by the Center for Adult Education. The goal of the program is for the participant to acquire basic knowledge, skills and competencies for applying the basic practices and techniques for beekeeping production in a sustainable way.
Aims and objectives	The goal of the program is for the participant to acquire basic knowledge, skills and competencies for applying the basic practices and techniques for beekeeping production in a sustainable way.
Framework of competences	Problem solving, organization, practical in sense of setting up an apiary in suitable location,
Methodology	The program has a modular character, and consists of 7 different thematic modules with a total of 110 hours. Each module consists of professional theoretical content, practical training and assessment of theoretical and practical knowledge. Professional theoretical content is realized in a classroom equipped according to the rules for space and equipment standards, with necessary visual aids, tools and equipment for beekeeping. The theoretical part of the training is taught by a graduate agricultural engineer, master of agricultural sciences, doctor of agricultural sciences, doctor of veterinary medicine, graduate doctor of veterinary medicine, master of science in veterinary medicine or doctor of science in veterinary medicine. The practical training is carried out by a registered beekeeper-practitioner, in a registered stationary observation apiary with participants distributed in groups, so that they are enabled to effectively and efficiently achieve the set goals of the program. Practical training is carried out according to weather conditions and natural cycles in beekeeping.
Outcomes and results	As a result of the program, the participant will be trained to: set up an apiary in a suitable location; recognition of bee diseases and application of biotechnical methods for dealing with diseases; reproduction of bees; feeding and wintering of bee families; collection, storage and packaging of bee products; application of standards and production control; correct use of machines, equipment and tools at the workplace and protection of health and the environment.



## Conclusions

It is important for the IDEA project, by this training people will be trained about sustainable beekeeping, meaning less antibiotics spent. Through this educational program and the application of the concept of sustainable beekeeping, beekeepers will be able to produce safe and quality beekeeping products with special care for nature and create economic profit, thereby strengthening the development of rural areas.

## 2.5.5 Plastic Craftwork

### Overview

Plastic craftwork is the process of creating accessories and different products using plastic materials. They can vary from art in some form, jewellery and some house items. Plastic as a medium is convenient for artists and people interested to learn, to show their creativity. Using different tools and products, the plastic can be coloured, shaped and molded, which makes it flexible and easy to use. In the last years, with the introduction of new plastic materials and technology, it is easier to create unique plastic crafts.

In this workshop, we will discuss the history of plastic craftwork (origin, presence), techniques, tools and materials used in plastic craftwork and how you can get started on your own plastic craft project.

### Aim

- To introduce the topic of plastic craftwork, including its origins, history, and its techniques;
- To equip participants with knowledge which types of plastic and how it can be used for creating new products;
- To make sure that the target group recognizes waste can be used as a resource;
- To share the types of tools are needed for plastic craftwork;
- To engage the target group: women (45+) at risk of exclusion and all unemployed people (45+) in general;
- To improve the awareness of the target group about the circular economy and, as a result, their better integration in society;
- To raise awareness that plastic craftwork can be used for promoting the social inclusion of elders;
- To make sure that the participants are aware that attention to detail and carefulness is essential in plastic craftwork.
- To share the potential career opportunities and how craftwork can be factor for economic development.

### Expected Outcome:

#### Knowledge

- Participants will understand and acquire the following knowledge and information:
- Waste can be used as a resource;
- What is plastic craftwork?
- Origin and tools used in plastic craftwork
- Types of plastic used in plastic craftwork?
- Techniques in plastic craftwork?

### Skills:

- Creativity, essential for plastic craftwork
- Technical skills, meaning how to use the tools to create something new.
- Understanding of materials used, which will help them in better selecting for their art.
- Safety: how to handle tools without getting injured.

### Attitudes:

- Patience, essential for beginners don't get disturbed if it is not going to plan in the beginning.
- Persistence, to handle every challenge.
- Increased awareness about environment, waste can be used as a resource to create something new, useful and artistic.

**Duration:** 1.30/ 2.30 hours

## PLASTIC CRAFTWORK

Plastic Craftwork has great contribution in the circular economy. By definition circular economy aims to minimize waste and is focused also on reusing. In this context plastic craftwork, can reduce waste in more ways such as:

- Reusing: The artists can create reusable every day products, which can replace the everyday single use plastics, the vast majority of people use. In this way less single use plastic is produced, which means, the materials don't use their value because they are reused.
- Upcycling: Means that waste or not anymore used materials are made into new products that have added value and sometimes different use. These products can be an alternative to new plastic products, preventing the need to extract more raw materials.

Plastic craftwork is an opportunity how to manage the plastic waste in the context of circular economy. Acting with awareness for the plastic waste, reusing and upcycling can help in conservation of the resources and thus reducing the pollution caused by plastic waste.

The workshop is theoretical session on Plastic Craftwork and this the proposed structure:

- Introduction
- Plastic craftwork origins and evolution
- Tools and equipment
- Techniques
- Successful stories on Plastic Craftwork

1. **Introduction:** The session should begin with a brief introduction about plastic craftwork. The trainer should inform the participants what they can expect to learn during the session. The introduction on plastic craftwork can serve as an explanation that although it enhances creativity, it also promotes a circular economy approach to waste reduction.
2. **Plastic craftwork origins and evolution:** The trainer should present a brief history of plastic craftwork, the evolution of the plastic industry, and which types of plastic has been utilized for various purposes over the years. Finding out about the history would give participants opportunity to get to know the skills needed as well as techniques for plastic craftwork and how and what has changed over the years in relation to new technologies.
3. **Tools and equipment:** General tools and equipment used in plastic craftwork:
  - Tools for cutting: Scissors, knives and rotary cutters.
  - Molds: Used for shaping the plastic. Can be made of metal or silicon.
  - Sandpaper: Can be used for roughing up surfaces and edges.
  - Paint: For painting or colouring your plastic art.
  - Safety glasses, gloves: Important to be safe so any of this equipment is necessary.
  - Work table: For cutting and working it is a must for plastic craftwork.
  - Heating source: In order to shape plastic, it is necessary to have a heat gun, maybe a candle. It depends on the type of plastic you are working with.
  - Adhesives: Types of glues are used to join two pieces together and it is important to follow the safety instructions using gloves and safety glasses for example.
4. **Techniques:** The trainer should explain the different techniques used in plastic craftwork such as: molding, thermoforming, laser cutting, welding, 3D Printing, colouring plastic.
  - Molding is a process in which melted plastic is heated, then stretched over a mold and vacuumed into shape. It is the most often used for creating something with more complex shape.
  - Thermoforming a process in which the plastic sheet is heated until it is soft. After that we use a press to shape the plastic.
  - Laser cutting – In this process a laser is used to precisely cut the plastic. Used in creation of custom plastic parts.
  - Welding – Using heat more plastic pieces are fused. Most often used in fixing the plastic products.
  - 3D Printing – First the plastic is melted and then extruded in layers in order to create a 3D object. It is also used to create more complex shapes and structures, but it has some limitations regarding the types of plastic that can be used as there are types of plastic that are not suitable for 3D printing.
  - Colouring plastic is important aspect in plastic craftwork as it allows personalization and customization of plastic art. There are more techniques in painting such as:

- Pigmenting - Before melting and molding a pigment is added which colours the plastic. Like this some household items and toys are made.
  - Dyeing - The plastic is put into dye solution which colours the surface of the plastic. This technique is the most used in colouring plastic such as polycarbonate.
  - Painting - The plastic is coated with paint, which connects to the surface and it colours the plastic. Compared to other colouring techniques it is simpler, but it is not suitable for all types of plastic. It is more suitable for PVC plastic; it covers the surface of the plastic and it doesn't allow light to pass through.
5. **Successful stories on Plastic Craftwork:** This is an important part of the theoretical session because it will help the participants to get motivated. It is important that the successful stories have that element how they contribute to reducing waste and circular economy. Participants will also be prepared about potential challenges and obstacles and in the end to create together a more sustainable world.

## Toolkit: workshop proposals

### Theoretical session regarding Plastic Craftwork

PLASTIC CRAFTWORK	
<p>Learning Outcomes (Purpose of the exercise Explain why this exercise is implemented)</p>	<p>The goals of the theoretical session regarding plastic craftwork is:</p> <ul style="list-style-type: none"> <li>• To introduce the topic of plastic craftwork, including its origins, history and its techniques;</li> <li>• To equip participants with knowledge which types of plastic and how it can be used for creating new products;</li> <li>• To make sure that the target group recognizes waste can be used as a resource;</li> <li>• To share the types of tools are needed for plastic craftwork;</li> <li>• To engage the target group: women(45+) at risk of exclusion and all unemployed people(45+) in general;</li> <li>• To improve the awareness of the target group about the circular economy and, as a result, their better integration in society;</li> <li>• To make sure that the participants are aware that attention to detail and carefulness is essential in plastic craftwork.</li> <li>• To share the potential career opportunities and how craftwork can be factor for economic development;</li> </ul>
<p>Group Size (Number of participants)</p>	<p>15 people, unemployed adults 45+.</p>
<p>Duration</p>	<p>90 minutes</p>
<p>Materials (What is necessary for the trainer/facilitator and participants to carry out the exercise)</p>	<ul style="list-style-type: none"> <li>• Lap top</li> <li>• Projector</li> <li>• Short presentation prepared by the trainer on plastic craftwork</li> <li>• Video about plastic waste</li> <li>• Markers</li> <li>• Board</li> <li>• Paper for taking notes for the participants</li> </ul>
<p>Preparation</p>	<p>The trainers should have a presentation including techniques, tools needed and origins of plastic craftwork as a preparation for the session and optionally to share a video about creative use of plastic waste.</p>

Description/Steps

1. Introduction (10 minutes)
  - Explain the goals of the session
  - State the objectives
  - What is plastic craftwork?
2. Plastic Craftwork origins and evolution (10 minutes)
  - Give a brief history
  - Types of plastic materials used in craftwork
  - How relevant is in art?
3. Tools and Equipment (10 minutes)
  - Types of tools used
  - How to handle them?
  - Where and how they can be used?
4. Techniques (20 minutes)
  - Introduction to different techniques in plastic craftwork
  - Show examples(videos)how with those techniques it is possible to create something new, creative and artistic.
5. Successful Stories in Plastic Craftwork (15 minutes)
  - Sharing examples of inspiring stories
  - Sustainability and eco-friendly practices
6. Conclusion (15 minutes)
  - Discussing lessons learned
  - Conclude with the most important parts of the workshop
  - Why is important to know Theoretical Part of Plastic Craftwork
7. Evaluation and Question and answer sessions (10 minutes)
  - Answer any questions from the participants
  - Give the evaluation questionnaire

<p>Learning Check/ Evaluation</p>	<p>EVALUATION Questionnaire</p> <ol style="list-style-type: none"> <li>1. How informative was the session about plastic craftwork? Rate from 1 to 5</li> <li>2. Do you think that the speaker covered everything needed to know about plastic craftwork?</li> <li>3. Did the session meet your expectations?</li> <li>4. How clear was the workshop?</li> <li>5. How would you rate the trainer?</li> <li>6. Did the presentations (slides, handouts, etc.) aid in your understanding of the session</li> <li>7. content?</li> <li>8. Did the speaker provide enough examples in order for you to be more informed about plastic craftwork?</li> <li>9. What are the new things you learned during the workshop</li> <li>10. Do you think this session is useful for somebody who never worked with plastic craftwork?</li> <li>11. Overall, how would you rate this session on a scale of 1-5. Please provide any additional feedback or suggestions for improvement of the session.</li> </ol>
<p>References</p>	<p>/</p>



## 2.5.6 Plastic Craftwork in practice – risks and guidelines

### Overview

Topics of the workshops would be introduction to plastic craftwork principles, sharing and implementing, showing off, evaluation and debriefing. Main tasks would be to focused on teaching the participants how to reuse plastic waste and make it useful but also interactively analysing all the risks and guidelines regarding the topic. The goals of these workshops are to learn how different countries deal with waste and to raise awareness about the climate change. The value of developing skills of reusing plastic waste is to develop and enhance soft skills of participants which will help them to make change in their lives and share the knowledge with their communities afterwards. The main focus will be that after an adequate educational presentation, the participants will aim to analyse possible risks in the field of plastic craftworks and, based on this, interactively create a guidebook as a team together with a trainer who will guide them through the session.

### Aim

- To inform participants how plastic impacts environment and climate change
- To ask participants to share how they store waste and how their communities deal with plastic waste and microplastic pollution and teach them how to store plastic
- To Explain the participants innovative ways to reuse plastic waste
- To Present examples of the countries that have enhanced strategies of controlling amounts of plastic waste
- Build up creative ways of reusing plastic to make glasses, bottles, vases and sculptures
- Encourage participants to share their own ideas about possible methods of reusing plastic waste
- Ensuring sustainability by requesting participants to implement these ideas in workshops in their local communities
- To interactively create "handbook" – risks and guidelines
- To build up communication and teambuilding skills
- To learn what are the possible risks in the field of plastic craftwork

### Expected Outcome:

#### Knowledge:

- Knowledge about reusing plastic in everyday life
- Knowledge about waste problem in different countries and ways of dealing with the problem
- They will analyse and learn what are possible risks in the field of plastic craftwork

#### Skills:

- Creativity

- Teambuilding
- Communication
- Presentation skills
- Critical thinking
- Analytical skills

**Attitudes:**

To increase the awareness of:

- climate change
- pollution
- decrease the purchase of plastic

**Duration:** 1.30/ 2.30 hours

## PLASTIC CRAFTWORK - Risk & Guidelines

Plastic craftwork is modelling, sculpturing and creating new elements and products out of plastic material. The benefits of reusing plastic and making new products are: durability, water-resistant products, lower energy and lightweight. In addition to the fact that recycling aims at sustainability in terms of reducing waste, it also contributes to reducing the use of non-renewable resources, i.e., oil from which the starting components (monomers) for polymer synthesis are obtained. Therefore, recycling also means recirculation, i.e., reuse of plastic waste. In addition, there are certain risks in the field of plastic craftwork that the participants will present after a detailed analysis and collection of information.

### 1. INTRODUCTION OF PLASTIC CRAFTWORK PRINCIPLES

#### a) Introduction to plastic craftwork principles:

Informing the participants about:

- the issue of climate change
- pollution
- harmful impact of plastic and its effects on the climate and environment
- Explain the participants innovative ways to reuse plastic waste – plastic craftwork

In this theoretical session, trainer can show video materials about the specific problems that are written, and in the end talk about innovative ways to reuse plastic making new products by craftworking and its impact in economy.

#### b) Risks in plastic craftwork

Each participant will be given 3 minutes to write down the what the risks are both in individual work and work in factories regarding the plastic craftwork.

#### c) How can we reduce the risks involved in plastic craftwork?

Participants will be divided in 5 groups (4 participants in each group) whereby they will first have the task of writing all the risks from the previous brainstorming session on paper, and then using online sources to write possible risks in individual work and work in the factory, presenting it on a flipchart.

#### d) Plastic craftwork in practice –risks and guidelines

In this workshop, participants should make “guidebook” divided in in 5 groups (different than in previous workshop) also collecting material from previous activities. Structure of guidebook:

- Introduction about the topic
- Creative ways of recycling plastic and making new products
- Risks and guidelines

HOW TO MANAGE PLASTIC CRAFTWORK IN PRACTICE – RISK AND GUIDELINES	
Number of participants	20
Duration	2 hours
Materials	flipchart, A4 papers, markers, sticky notes, laptop (if possible)
Description	<p>1. Introduction (30min)                      The session will start by coaching the participants on the mentioned topic using different video materials about climate change, pollution and the negative impact produced by plastic waste and finally showing creative ways of making plastic craftwork.                      Link to causes and effects of climate change: (9min) <a href="https://www.youtube.com/watch?v=G4H1N_yXBiA&amp;ab_channel=NationalGeographic">https://www.youtube.com/watch?v=G4H1N_yXBiA&amp;ab_channel=NationalGeographic</a>                      Link to global pollution video material: (3min) <a href="https://www.youtube.com/watch?v=gjOpNF2uc2M&amp;ab_channel=TheLancet">https://www.youtube.com/watch?v=gjOpNF2uc2M&amp;ab_channel=TheLancet</a>                      Link to few videos of plastic craftwork: <a href="https://www.youtube.com/watch?v=zAbWhnvl6qs&amp;pp=ygUYcGxhc3RpYyBjcmFmdHdvcmVzZmxvd2Vy">https://www.youtube.com/watch?v=zAbWhnvl6qs&amp;pp=ygUYcGxhc3RpYyBjcmFmdHdvcmVzZmxvd2Vy</a>  <a href="https://www.youtube.com/watch?v=fLEkneZS6-o&amp;pp=ygUYcGxhc3RpYyBjcmFmdHdvcmVzZmxvd2Vy">https://www.youtube.com/watch?v=fLEkneZS6-o&amp;pp=ygUYcGxhc3RpYyBjcmFmdHdvcmVzZmxvd2Vy</a>  <a href="https://www.youtube.com/watch?v=j-7grMXIXs0&amp;pp=ygUScGxhc3RpYyBjcmFmdHdvcmVzZmxvd2Vy">https://www.youtube.com/watch?v=j-7grMXIXs0&amp;pp=ygUScGxhc3RpYyBjcmFmdHdvcmVzZmxvd2Vy</a></p> <p>2. Risks in plastic craftwork (3min + 10 min presentation)                      Each participant will have 3 minutes for brainstorm session where they should write down risks regarding individual and craftwork in fabrics. They should write it on sticky note and stick it on one flipchart paper. Afterwards, one participant-volunteer will read them and discuss the risks together with trainer. Therefore, they will make collection of the terms and use them for guidebook</p> <p>3. How can we reduce the risks involved in plastic craftwork? (20min work + 25 min presentation)                      In this session, the participants will be divided into 5 groups of 4 participants each, where they will research the given topic by working interactively in teams. The task is to write down all the terms from session 2 on one A4 paper and based on that, research ways to reduce those risks on the Internet and present it on a flipchart. Each group has 5 minutes to present their work.</p> <p>4. Plastic craftwork in practice –risks and guidelines (30min)                      In this workshop participant should be divided in 5 groups (each group 4 participants) but different than previous one (session 3). The task is to make a guidebook on the topic "Plastic craftwork in practice – risks and guidelines" both in individual work and work in fabrics.</p> <p>*The guidebook should be made in electronic format, where it should have its title page and an additional minimum of 10 pages of text (Times New Roman, 12) and accompanying photos.</p>

Evaluation/Debriefing

\*Creation of google form for evaluation

1.How would you rate this session? 1-5

2.How would you rate the trainer? 1-5

3.Do you feel that your knowledge or skills have improved by the session?  
Yes/no

4.Name the things you enjoyed the most in this session:

5.How could we improve the learning experience?

## 2.5.7 Tinkering and Plastic Craftwork

### Overview

Tinkering and Plastic Craftwork session is intended to help unemployed adults to develop new skills, knowledge and attitudes. First, those sessions might improve their labor market prospects, not necessarily with plastic craftwork. The usage of different tools can be useful in other fields as well. During the workshop they will improve their creativity, networking skills and the feeling of accomplishment. The workshop is divided into several topics which are intended to make participants more engaged and learn about tinkering, plastic craftwork and circular economy.

The structure of the workshop is the following:

1. Introduction on the topic and safety guidelines
2. Types of plastic used and sustainability
3. Types of techniques
4. Working on the designs
5. Showing the final products

### Aim

- To encourage creativity and find innovative solutions to challenges that may arise;
- To develop practical skills, working with different tools and techniques;
- To increase confidence of participants;
- To promote sustainability by reusing plastic to create new products;
- To promote networking.

### Expected Outcome:

#### Knowledge

- To know more about tinkering and plastic craftwork.
- To know about sustainability and plastic craftwork
- To get to know future opportunities with plastic craftwork regarding employment.

#### Skills

- Technical skills, while working with different tools and techniques.
- Entrepreneurial skills, how can they open small business.
- Improved social skills, meeting and connecting with other people who share similar interests.
- Problem solving skills,

#### Attitudes

- Critical thinking;
- Raised awareness about sustainability and how plastic can be reused in creating something new useful, creative and artistic.
- Seeing opportunities and how plastic craftwork can generate income with a little persistence.

Duration: 1.30/ 2.30 hours

## TINKERING AND PLASTIC CRAFTWORK

Tinkering and plastic craftwork are creative activities that involve using various materials and techniques to design and build products. Tinkering is the process of experimenting with different tools and materials in order to create and new products. On the other hand, plastic craftwork is the use of plastic materials to create artistic or functional objects.

A session on Tinkering and Plastic Craftwork for unemployed adults is an interactive workshop that provides participants with the experience of working with a variety of tools and materials. The session is designed to enhance the skills of the participants in creating and designing sustainable plastic-based products while encouraging creativity and critical thinking.

The session itself it is divided into more parts which are connected to each other and is intended to make participants interested. The structure of the workshop is the following:

1. Introduction to the tinkering, plastic craftwork and safety guidelines
2. Types of plastic used and sustainability
3. Types of tools used, handling and brainstorm
4. Types of techniques
5. Practical part (working on the products and showing off the final products)

**1. Introduction of tinkering, plastic craftwork and safety guidelines** - The introduction to the workshop will start with basic information about the circular economy, its principles, and the challenges and opportunities associated with transitioning to a circular model. This will set the foundation for the rest of the workshop, emphasizing the importance of tinkering and plastic craftwork, which emphasize sustainability, resource efficiency, and waste reduction.

**2. Types of plastic used and sustainability** – In this part of the session the trainer will provide info about the most used types of plastic used in plastic craftwork like: PET, PVC, HDPE, PS, PP, PU, acrylic. This part of the session will have information about pros and cons of different types of plastic, like some of them are difficult to paint, glue, melt or cut.

**3. Types of tools used, handling and brainstorm** – In this part of the session the trainer will present the basic information about the tools used and will encourage the participants to share ideas about their intended plastic crafts.

- **Tools for cutting:** Scissors, knives and rotary cutters. Molds: Used for shaping the plastic. Can be made of metal or silicon.

- **Sandpaper:** Can be used for roughing up surfaces and edges.

- **Paint:** For painting or colouring your plastic art.

- **Safety glasses, gloves:** Important to be safe so any of this equipment is necessary.

- **Work table:** For cutting and working it is a must for plastic craftwork.

- **Heating source:** In order to shape plastic, it is necessary to have a heat gun, maybe a candle. It depends on the type of plastic you are working with.

- **Adhesives:** Types of glues are used to join two pieces together and it is important to follow the safety instructions using gloves and safety glasses for example.

**4. Techniques in tinkering and plastic craftwork** - The trainer should explain the different techniques used in plastic craftwork such as: molding, thermoforming, laser cutting, welding, 3D Printing, colouring plastic.

- **Molding** is a process in which melted plastic is heated, then stretched over a mold and vacuumed into shape. It is the most often used for creating something with more complex shape.
- **Thermoforming** a process in which the plastic sheet is heated until it is soft. After that we use a press to shape the plastic.
- **Laser cutting** – In this process a laser is used to precisely cut the plastic. Used in creation of custom plastic parts.
- **Welding** – Using heat more plastic pieces are fused. Most often used in fixing the plastic products.
- **3D Printing** – First the plastic is melted and then extruded in layers in order to create a 3D object. It is also used to create more complex shapes and structures, but it has some limitations regarding the types of plastic that can be used as there are types of plastic that are not suitable for 3D printing.
- **Colouring plastic** is important aspect in plastic craftwork as it allows personalization and customization of plastic art. There are more techniques in painting such as:
  - **Pigmenting** - Before melting and molding a pigment is added which colours the plastic. Like this some household items and toys are made.
  - **Dyeing** - The plastic is put into dye solution which colours the surface of the plastic. This technique is the most used in colouring plastic such as polycarbonate.
  - **Painting** - The plastic is coated with paint, which connects to the surface and it colours the plastic. Compared to other colouring techniques it is simpler, but it is not suitable for all types of plastic. It is more suitable for PVC plastic; it covers the surface of the plastic and it doesn't allow light to pass through.



## Toolkit: workshop proposals

### Focus session: Tinkering session on Plastic Craftwork

TINKERING SESSION ON PLASTIC CRAFTWORK	
<b>Number of participants</b>	15; unemployed adults 45+
<b>Duration</b>	120 minutes
<b>Materials</b>	<ul style="list-style-type: none"> <li>• Tools (such as scissors, hammers, pliers, screwdrivers, wrenches, or allen keys)</li> <li>• 3D printers</li> <li>• Molding equipment</li> <li>• Laser cutters or CNC machines</li> <li>• Safety gear (such as gloves, protective eyewear, or dust masks)</li> <li>• Various plastic materials (such as PLA or ABS filaments for 3D printing or acrylic or polypropylene sheets for laser cutting)</li> <li>• Markers or paints (such as acrylic, oil-based or water-based paint)</li> <li>• Plastic materials (such as plastics bottles or sheets)</li> <li>• Glues or adhesives (such as super glue, or hot glue gun)</li> <li>• Decorative materials (such as feathers, beads, or fabric)</li> </ul>
<b>Description</b>	<ol style="list-style-type: none"> <li>1. Introduction to the topic and safety guidelines (15 minutes) The session starts with an introduction to tinkering and what participants should expect to learn. It will be needed that the trainer provides guideline on how to use the tools safely and efficiently and thus minimize any possible accidents.</li> <li>2. Types of plastic used and sustainability (20 minutes) Next in the session there can be explanation about plastic craftwork, types of plastic used and how it can be used as a tool for reducing plastic waste.</li> <li>3. Types of tools used, handling and brainstorm (15 minutes) Next, the experienced trainer should introduce them to the tools and encourage the participants to brainstorm. During the session, participants can work on creating plastic sculptures, designing and building simple machines, or even repurposing old electronics. After that the trainer should help them to choose the appropriate plastic such as bottles, sheets and similar.</li> <li>4. Types of techniques (20 minutes) In the next part of the session the trainer explains, helps the participants on the basic techniques such as cutting, bending, or 3D printing of their plastic-based products.</li> </ol>

<p><b>Description</b></p>	<p>5. Working on the plastic craftwork products (30 minutes)</p> <p>After the participants create the product under the supervision of the trainer, they can continue to modify and decorate their products using different techniques like painting, different treatments with heating, or engraving. Finally, products are finished through sanding, buffing, or coating of finishes to achieve what they desired.</p> <p>6. Showing the final products (10 minutes)</p> <p>This part of the session is meant to encourage discussion between participants, possible ideas for improvement, feedback and to share their experiences.</p> <p>7. Evaluation (10 minutes)</p> <p>Participants fill the questionnaire forms, express their motivation and appreciation of the workshop and discuss if they see possible future employments in the field of plastic craftwork.</p>
<p><b>Evaluation/Debriefing</b></p>	<p>EVALUATION Questionnaire</p> <ol style="list-style-type: none"> <li>1. How informative was the session about tinkering and plastic craftwork? Rate from 1 to 5</li> <li>2. Do you think that the trainer covered everything needed to know about plastic craftwork?</li> <li>3. Did the session meet your expectations?</li> <li>4. How clear was the workshop?</li> <li>5. How would you rate the trainer?</li> <li>6. Did the practical workshop on tinkering and plastic craftwork fulfil your expectations?</li> <li>7. What are the new things you learned during the workshop?</li> <li>8. Do you think this session is useful for somebody who never worked with tinkering and plastic craftwork?</li> <li>9. Overall, how would you rate this session on a scale of 1-5 (with 5 being the best)?</li> <li>10. Which part of the session did you like the most?</li> </ol> <p>Please provide any additional feedback or suggestions for improvement of the session.</p>

## 2.5.8 CO-DESIGN

### Overview

The Circular Economy Co-Design Workshop is designed to help participants develop solutions to increase job opportunities for the unemployed 45+ through the lens of circular economy principles. The workshop is divided into several topics that build upon each other, with the main goal of equipping participants with the skills, knowledge, and attitudes necessary to apply Co-Design principles and tools to develop circular economy solutions.

The structure of the workshop is:

1. Theoretical part:
  - Introduction to co-design in CE context- role, importance
  - Co-Design Principles
  - Co-Design Techniques
  - Co-Design Tools
2. Practical part – simulation of the use of selected techniques of co-design.

The workshop will provide participants with the tools and knowledge necessary to apply circular economy principles to real-world challenges, emphasizing the importance of collaboration, diversity, and user feedback in the design process. By the end of the workshop, participants will be equipped with the skills, knowledge, and attitudes necessary to develop circular economy solutions that create value for all stakeholders.

### Aim

- To learn Co-Design principles, techniques, and tools
- To develop skills in Co-Design facilitation, prototyping, and collaboration
- To collaborate with diverse stakeholders in the development of circular economy solutions
- To identify and address challenges related to unemployment among the 45+ population through the lens of circular economy principles
- To prototype and test circular economy solutions that prioritize sustainability, resource efficiency, and waste reduction
- To emphasize the importance of user feedback, iteration, and continuous improvement in the design process
- To apply circular economy principles to real-world challenges and reflect on the value of these principles in solving social and environmental challenges beyond unemployment among the 45+ population.

### Expected Outcome:

#### Knowledge

- Understanding of Co-Design principles and best practices
- Knowledge of Co-Design techniques and tools, and their application to Circular Economy challenges
- Familiarity with successful Co-Design case studies in the Circular Economy

## Skills

- Ability to lead and facilitate Co-Design sessions
- Proficiency in using Co-Design techniques and tools to generate and prototype Circular Economy solutions
- Ability to incorporate stakeholder feedback and iterate on designs

## Attitudes

- Willingness to collaborate and engage with diverse stakeholders in the design process
- Openness to new ideas and perspectives, and a willingness to challenge assumptions
- Increased confidence in approaching complex Circular Economy challenges through Co-Design

Duration: 1.30/ 2.30 hours

## CO-DESIGN

Co-design, also known as participatory design, is a collaborative approach to designing products, services, or systems that involves end-users, stakeholders, and designers working together as equal partners. The aim of co-design is to create solutions that meet the needs and expectations of all stakeholders and users, and to empower them to be actively involved in the design process.

In co-design, stakeholders and users are considered experts in their own experiences, needs, and aspirations. They are involved in all stages of the design process, from defining the problem to developing and testing solutions. Co-design is based on the principle that by involving all stakeholders in the design process, the resulting solution is more effective, relevant, and sustainable.

### 1. Introduction to co-design in CE context

The introduction to the workshop will provide a brief overview of the circular economy, its principles, and the challenges and opportunities associated with transitioning to a circular model. This will set the foundation for the rest of the workshop, emphasizing the importance of designing solutions that prioritize sustainability, resource efficiency, and waste reduction.

### 2. Co-Design Principles

The following are some of the Co-Design principles that will be emphasized in the Circular Economy Co-Design Workshop:

**Empathy** is the ability to understand and share the feelings of others. In the context of Co-Design, empathy means understanding and empathizing with the needs, perspectives, and values of diverse stakeholders. Empathy is essential for developing solutions that meet the needs of all stakeholders and ensuring that everyone is heard and valued.

**Inclusion** is ensuring that all stakeholders are included in the design process and have an equal voice. Inclusion is essential for developing solutions that are equitable and sustainable. Inclusive design considers the needs of all stakeholders, including those with disabilities, marginalized communities, and other underrepresented groups.

**Co-Creation** is collaboratively creating solutions that meet the needs of all stakeholders. Co-Creation involves working together to generate ideas, test prototypes, and refine solutions based on feedback from stakeholders. Co-Creation is essential for creating solutions that are effective, sustainable, and widely adopted.

**Iteration** is continuously refining solutions based on feedback from stakeholders and testing. Iteration involves testing prototypes, gathering feedback, and making changes based on the feedback. Iteration is essential for creating solutions that are effective and sustainable.

### 3. Co-Design Techniques

The following are some of the Co-Design Techniques that will be emphasized in the Circular Economy Co-Design Workshop:

**Design Thinking** is a problem-solving approach that involves empathizing with users, defining the problem, ideating solutions, prototyping, and testing. Design Thinking is a human-centered approach that involves understanding and empathizing with the needs and perspectives of users to create effective solutions.

**Brainstorming** is a technique that involves generating as many ideas as possible in a short amount of time. Brainstorming encourages participants to generate a diverse range of ideas and build on each other's ideas. Brainstorming is an effective technique for generating a large number of ideas quickly.

**User Research** involves conducting research to understand the needs, perspectives, and experiences of users. User research can include surveys, interviews, and observations. User research is essential for understanding the needs of users and designing solutions that meet those needs.

**User feedback** involves gathering feedback from end-users throughout the design process. User feedback can be obtained through surveys, interviews, or usability testing. The feedback is then used to refine the design and improve its usability and effectiveness.

**Rapid Prototyping** involves quickly building and testing prototypes to gather feedback from stakeholders. Rapid prototyping allows designers to test ideas quickly and make changes based on feedback from stakeholders.

#### 4. Co-Design Tools

The following are some of the Co-Design Tools that will be emphasized in the Circular Economy Co- Design Workshop:

**Online collaboration platforms** such as Miro, Mural, and Google Docs are digital tools that allow stakeholders to collaborate remotely. These platforms offer virtual whiteboards, sticky notes, and other features to facilitate brainstorming, ideation, and collaboration among participants. Online collaboration platforms enable participants to work together regardless of their location.

**Design Thinking Software** such as IDEO's Design Kit, Trello, and Figma are digital tools that support the design thinking process. These tools offer templates, frameworks, and prompts to guide participants through the design thinking process. Design Thinking Software enables participants to collaborate and generate effective solutions in a structured manner.

**Rapid Prototyping Tools** such as 3D printers, laser cutters, and CNC machines are digital tools used to quickly produce prototypes of products and services. Rapid prototyping tools enable designers to test and iterate their designs quickly based on feedback from stakeholders.

**Social Media** platforms such as Facebook, Twitter, and LinkedIn are digital tools that enable stakeholders to connect and share information. Social media platforms can be used to gather feedback, generate ideas, and promote co-design workshops. Social media is an effective tool for engaging stakeholders and promoting co-design initiatives.

#### 5. Practical part.

The final topic will focus on the value of the specific skills developed throughout the workshop, such as collaboration, prototyping, and user feedback. Participants will learn how to apply these skills in their own work and in their communities, and will reflect on how the circular economy can be leveraged to solve other social and environmental challenges.

## Toolkit: workshop proposals

### Focus session: Theoretical and practical sessions on co-design (2)

THEORETICAL AND PRACTICAL SESSIONS ON CO-DESIGN	
Number of participants	Co-Design - Theoretical Part
Duration	1h 30 min
Materials	<ul style="list-style-type: none"> <li>Website of CO-CREATE PROJECT!. Webpage contains results of European cooperation project (ERASMUS+) that create and distribute a brand new curriculum on co-design: a set of valuable design skills that has gained increased relevance in recent years and can no longer be ignored. The curriculum will allow education institutions across Europe to provide their students with all the hands-on knowledge they will need to apply this process to their future professional practice <a href="http://www.cocreate.training/">http://www.cocreate.training/</a> especially:</li> </ul> <p>What is co-design: <a href="https://www.youtube.com/watch?v=54HTo63K4D4">https://www.youtube.com/watch?v=54HTo63K4D4</a></p> <p>Why Should We Co-Design? <a href="https://www.youtube.com/watch?v=CyT3x-DRunRM">https://www.youtube.com/watch?v=CyT3x-DRunRM</a></p> <ul style="list-style-type: none"> <li>WebSite of MURAL: <a href="https://www.mural.co/">https://www.mural.co/</a></li> <li>Website of MIRO: <a href="https://miro.com/">https://miro.com/</a></li> <li>Circular economy examples/case studies: <a href="https://ellenmacarthur-foundation.org/topics/circular-economy-introduction/examples">https://ellenmacarthur-foundation.org/topics/circular-economy-introduction/examples</a></li> </ul> <p>Circular economy examples/case studies (2): <a href="https://www.circulardesign.it/case-studies/#">https://www.circulardesign.it/case-studies/#</a></p>
Description	<p>This part will provide participants with an understanding of co- design and its role in the Circular Economy context, as well as the tools and techniques to implement co-design projects successfully.</p> <ul style="list-style-type: none"> <li>Definition of Circular Economy: brief overview of what the Circular Economy is and why it is important for sustainable development. Introduction to Co-design: co-design can be introduced as a collaborative approach to design where all stakeholders involved in a project have an equal say in the process.</li> <li>Importance of Co-design in Circular Economy: why co-design is essential in Circular Economy projects, where a collaborative approach is needed to design and implement solutions that are sustainable and cater to the needs of all stakeholders involved.</li> <li>Co-design Process: co-design process step by step, starting from identifying stakeholders, defining the problem, generating ideas, and prototyping.</li> <li>Tools and Techniques: various tools and techniques that can be used in co-design projects can be introduced, such as brainstorming, mind mapping, prototyping, and user testing.</li> </ul>

<p>Description</p>	<ul style="list-style-type: none"> <li>• Case Studies: case studies of successful co-design projects in the Circular Economy context. Participants can learn from these examples and apply the learnings to their own projects.</li> <li>• Challenges and Best Practices: best practices in co-design projects, such as stakeholder engagement, communication, and decision-making.</li> <li>• Conclusion: wrap-up, discussion on the importance of co-design in Circular Economy projects and the role of stakeholders in creating a sustainable future.</li> </ul>
<p>Evaluation/Debriefing</p>	<p>Observations: Observe the students during the workshop and take note of their participation, engagement, collaboration, and problem-solving skills.</p> <p>Pre- and post-workshop surveys: Ask the students to fill out a survey before and after the workshop to gauge their understanding and knowledge of the topic and assess the impact of the workshop on their learning. The understanding of following should be assessed:</p> <ul style="list-style-type: none"> <li>• Circular economy - definition and objectives with special emphasis of role of cooperation in implementation of circular economy;</li> <li>• Co-design – definition and its role due to need of cooperation of circular economy and its holistic character;</li> <li>• Co-design process – steps;</li> <li>• Co-design tools and techniques;</li> </ul> <p>Group discussions: Conduct a group discussion at the end of the workshop to encourage the students to reflect on their experience, share their feedback and ideas, and discuss how they can apply what they have learned in the future.</p> <p>When evaluating the students, it is important to keep in mind the objectives of the workshop and what you want the students to achieve. The evaluation methods should align with the objectives and provide a comprehensive understanding of the students' learning and engagement during the workshop. Use the feedback gathered to improve future co-design workshops and enhance the learning experience for the students.</p>



## Focus session: Theoretical and practical sessions on co-design (2)

THEORETICAL AND PRACTICAL SESSIONS ON CO-DESIGN	
Number of participants	Co-Design - Practical Part
Duration	1h 30 min
Materials	<ul style="list-style-type: none"> <li>• WebSite of MURAL: <a href="https://www.mural.co/">https://www.mural.co/</a></li> <li>• Website of MIRO: <a href="https://miro.com/">https://miro.com/</a></li> </ul>
Description	<p>The facilitator can guide the participants through the use of these online tools and provide training on how to use them effectively. The facilitator can also monitor the collaboration and provide feedback and support to ensure that the activities are successful. Overall, the use of online tools can enhance the workshop by providing a collaborative and interactive online platform for participants to work together in real-time, regardless of their physical location.</p> <p><b>The objective: to show the value of co-design by inclusion of many stakeholders and using their talent to boost the solution.</b></p> <p>Upgrading circularity of the item (for instance: PET bottle) The workshop could be conducted in following steps:</p>
Evaluation/ Debriefing	<ul style="list-style-type: none"> <li>• <b>Stakeholder Mapping:</b> Participants can use Miro or Mural to create a digital stakeholder map, where they can add stakeholders and prioritize their needs towards the item – collection of requirements for the item coming from stakeholders' side. Participants can collaborate on the same document in real-time, allowing for comments and feedback. Challenge: who could be interested in use and upgrade of the item towards circularity.</li> <li>• <b>Problem Definition:</b> Participants can use Google Docs to collaborate on defining the problem statement based on the needs of the stakeholders in the context of circular economy (what could be changed to make this item more circular). The document can be edited in real-time, allowing participants to add their ideas and perspectives. Challenge: what disadvantages could be identified from circularity perspective in the item under analyse.</li> <li>• <b>Idea Generation:</b> Participants can use Miro or Mural for digital brainstorming and ideation exercises, where they can add their ideas and vote on the most promising ones. This can be done in real-time, allowing for collaboration and feedback. Challenge: to generate number of ideas how to upgrade the item under analyse to make it more circular.</li> <li>• <b>Rapid Prototyping:</b> Participants can use Miro or Mural to create digital prototypes of the ideas generated during the ideation process – the upgraded item in terms of circular economy. They can add sketches, images, or digital designs to the document, allowing for real-time collaboration and feedback. Challenge: to structure generated ideas, discuss their value, combine some of them if needed and generate one common proposal.</li> </ul>

## Description

- **User Testing:** Participants can use Miro or Mural to create digital scenarios for user testing exercises. They can also use Google Docs to collaborate on interview questions and feedback forms for user testing to show how upgraded more circular item could work efficiently from perspective of users. Challenge: to test the value of common proposal, identify potential shortcomings and improve it.

- **Implementation Planning:** Participants can use Google Docs to collaborate on the strategies for implementing the co- designed solutions. They can create a shared document where they can add their ideas and perspectives and edit the document in real-time. Challenge: to generate potential scenario of practical implementation of the proposal (who could be interested, why et..) and summarize added value especially for circularity.

## Evaluation/ Debriefing

**Feedback forms:** Provide the students with a feedback form that asks them to rate the workshop on various aspects such as organization, structure, content, facilitation, and usefulness.

**Observations:** Observe the students during the workshop and take note of their participation, engagement, collaboration, and problem-solving skills.

**Group discussions:** Conduct a group discussion at the end of the workshop to encourage the students to reflect on their experience, share their feedback and ideas, and discuss how they can apply what they have learned in the future.

The final assessment should consist of two parts: 1st related to the quality of solution, second – related to individual work. This underlines the value of co-design and teamwork.

## Annex 1: Proposed Agenda for complete Training Format implementation

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
09.45-10.45	Introduction + Ice Breaking  workshops	Good practice of CE  Businesses	Simulation exercise of  Circular Economical Business	CE BUSI-NESS  visit	Focus sessions  -  How to Manage Plastic Craft-work in practice – risks and guide-lines	Focus sessions  Tinkering  session of Plastic Craft-work	Discussion & debriefing
Break							
11.15-13.00	Team Building workshops	Good practice of CE  Businesses	Theoretical session regarding  Plastic Craftwork	CE BUSI-NESS  visit	Focus sessions  -  How to Manage Plastic Craft-work In practice –risks and guide-lines	Focus sessions  -  Theoretical session on co-design	Questionnaire & Evaluation
Lunch							

14.15-16.45	Theoretical session regarding Circular Economy	Simulation exercise of Circular Economical Business	Theoretical session regarding Plastic Craftwork	CE BUSINESS visit	Focus sessions Tinkering session of Plastic Craftwork	Focus sessions - Practical session on co-design	Certificate of attendance/ Euro-pass
Break							
17.00-18:00	Theoretical session regarding Circular Economy	Daily Evaluation Groups	Daily Evaluation Groups	Daily Evaluation Groups	Daily Evaluation Groups	Daily Evaluation Groups	Networking/ Free time

## Conclusions

In conclusion, the Training Format developed for the Erasmus+ Project “Improved Employability Through Circular Economy Education for Adults – IDEA” represents a comprehensive and innovative approach to addressing the critical challenges of employability and inclusion among unemployed adults. Grounded in a methodological framework derived from the Consortium Research Report’s cross-analysis, this format embodies a strategic blend of pedagogical methodologies and thematic modules.

Through a thoughtful design, the Training Format integrates specific thematic educational modules that encompass Circular Economy, Plastic Craftwork, and Co-design. This integration is aimed at nurturing a holistic understanding of these interconnected areas, empowering educators to effectively transmit their knowledge and expertise to the secondary target audience of unemployed adults. By bridging the gap between theoretical concepts and practical applications, the format equips educators with the tools to foster employability, encourage skill development, and promote the principles of circular economy and sustainable practices.

A distinctive feature of the Training Format is its incorporation of tinkering methods in conjunction with Non-Formal Education (NFE) approaches. This pedagogical synergy enables a hands-on and experiential learning experience, which is pivotal for the development of practical skills and competencies. Through a diverse range of learning modules, the format delves into topics such as soft skills, team building, circular economy theory, circular economy business models, plastic craftwork theory, risk management, and co-design theory and practice. This multifaceted approach ensures a well-rounded educational journey that encompasses not only knowledge acquisition but also the cultivation of essential soft skills and the ability to adapt to real-world challenges.

In essence, the Training Format embodies a transformative educational tool that stands at the crossroads of theory and practice, enriching educators with the expertise required to empower unemployed adults with the skills they need to thrive in a circular economy. By imparting both theoretical knowledge and practical know-how, the format not only addresses the pressing issues of unemployment and skill gaps but also lays the foundation for a more sustainable and resilient future. As the Erasmus+ IDEA project continues to unfold, the Training Format is poised to make a tangible and lasting impact on employability, education, and the promotion of circular economy principles within the adult learning landscape.

