

Circular Economy Meets Social Enterprise

Towards a Curriculum for Adult Inclusion



**Circular City through educational
circular economy methods for social
enterprises**

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CIRcular City

through educational circular economy methods for social enterprises



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CIRcular City through educational circular economy methods for social enterprises

The project

The Erasmus+ KA2 project, “CIRcular City through educational circular economy methods for social enterprises” (CIRC), aligns with the European Green Deal’s priority to address environmental issues and fight against climate change. It is a 24-month collaboration focused on developing circular economy initiatives, careers, and entrepreneurship. It aims to combat environmental harms and social exclusion in the job market. The Project Consortium includes 6 European entities with expertise in circular economy, waste management, and social innovation, working together to create educational materials and implement mobilities to achieve these objectives.

It focuses on adult education and aims to empower adults, particularly those at risk of exclusion due to lower income, lack of education, or ethnic backgrounds. The primary goals are to equip adult educators with the knowledge and methodologies to implement trainings for adults at risk of exclusion, such as those with lower incomes, lack of education, or from ethnic minorities. Another aim of CIRC City is to provide these adults with knowledge, skills, and competences in the circular economy sector. And the last objective of the project is to foster entrepreneurial mindsets and self-confidence among these groups.

During the CIRC City we are implementing several key activities as production of a "CE and SE Guide" and "Training Curriculum" for entrepreneurship in the circular economy or Development of a Hub Platform for idea sharing, coordination, and networking on a European level. In the last months of the project we will organise a National Stakeholders Conferences to disseminate project results and facilitate networking opportunities.

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Curriculum

The Training Format (Curriculum) is designed to empower adult educators by providing them with the necessary tools and methodologies to train adults at risk of exclusion. These individuals, who often have lower income, lack education, or belong to ethnic minorities, will be equipped with skills and competences within the field of circular economy through this curriculum. The format includes non-formal education activities tailored to foster entrepreneurship and career development in the circular economy sector.

Modules

The curriculum is dedicated for trainers, teachers and other persons working with adults at risk of exclusion. It consists of 3 modules: **Sensibilisation, Circular economy and Learning by doing.**

The first part of the Curriculum dedicated to **Sensibilisation** aims to help the trainer understand the final target group. The first two methods, **Walk of The Live (CRN)** and **Circle of Change (SNRS)**, enable trainers to get to know the people they are working with, to better understand their situations and to familiarise themselves with their challenges and problems. The aim of sensibilisation is empathy and better preparation for the next part of the training, adapting activities to the form, level and abilities of the target group.

The second part of the training guide - **Circular economy** should explain and introduce to the final target group the topic of CE. There are four methods introduces CE: **CE R-framework (CRN), 5 R's of CE - Refuse, Reduce, Reuse, Recycle, Recover (CSI) Biomimicry & Biowaste Management (CSI), Circular Canva (ECREC).** This part of the curriculum is designed to help trainers understand the CE. It is a treasure trove of knowledge about the CE, providing trainers with a basic knowledge and some ideas on how to teach about the CE. Each trainer should, however, adapt the final methods of working with people from groups at risk of social exclusion to the specific characteristics of these people.

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The last part **Learning by Doing** is a collection of practical methods and examples of concrete activities to be used directly with the target group. These are **CE Music Instruments (Mine Vaganti NGO)**, **Communicating CE (Mine Vaganti NGO)**, **Living Lab (NARA-SK)** methodology as open innovation ecosystems in real-life environments based on a systematic user co-creation and co-orchestration (NARA-SK), as well as the study visits in Slovakia (**NARA-SK**). These examples of methods can be used directly in working with people at risk of social exclusion. Of course, in each case, they should be adapted to the situation, group and location. For example, study visits should be from a location where the target group is located. Trips to places where circular economy is practised are particularly recommended as part of the training.

The penultimate part of the curriculum is a description of the **pilot training sessions** carried out with the target groups by each of the consortium partners. Each organisation works with a different target group and adapts the training plan accordingly.

The last part of this document is a **description of the partners** who have implemented this project.

Module 1

Sensibilisation



Module 1 - Sensibilisation

Walk of the life (CRN)

The method “Walk of Life” is a method of sensitivity training. Through their own experience of the exercise, they will be able to see a wide range of difficulties of social mobility. They learn about the many factors that make mobility difficult.

Through the role cards, they are suddenly placed in a new social group and thus become sensitive to the situation of that group.

Method

Objective: : Through everyone own’s experience of the exercise, people will be able to see a wide range of difficulties on social mobility.

Length: 30 minutes

Material: Different Personas from different horizons . Questions based on their life has to be prepared in advance.



Module 1 - Sensibilisation

Walk of Life

1. Preparation and Introduction

- Welcome participants to the session and ask them to stand in a line
- What we can say to start the exercise :

"Let's review the goals of our session: Our aim is to encourage conversation and reflection about social problems, culture, family, as well as discrimination. The method "Walk of Life" is a method of sensitivity training."

2. Statements: Step forward or backward

- Introduce the warm-up exercise:

*"First, we are going to distribute the PERSONAS, and you will have to keep them for you. Do not share the Persona's informations with each other yet. I will read the questions that relate on different identities we can hold and the experiences we can faced in turn. If a statement is true for your, take a step forward, and if it is not true for you, take a step back. If you don't know or you don't want to guess, you can stand still. We will continue with the next statements in the same manner. Remember, only share what you feel comfortable with. **AND ONLY ANSWER FOR YOURSELF or YOUR PERSONA**".*

Module 1 - Sensibilisation

Persona - example one

EWA KOWALSKA

- 32 YEARS OLD
- MARRIED TO MAREK (35), A TRAINED ELECTRICIAN WHO IS NOW EMPLOYED AS A JANITOR AFTER A WORK ACCIDENT
- 2 CHILDREN : ZUZANNA (7) AND ANTONI (5)
- POLISH CITIZENSHIP
- LIVING IN BERLIN SINCE 2019

GOALS AND CHALLENGES

Ewa would like to work part-time to improve the family income. However, available jobs require atypical working hours and she would have no one to look after the children after school except for her husband, who has partly atypical working hours. She also wants to be there for her children who have entered school or are about to do so. Moreover her proficiency in German is limited : A2 to B1 for spoken language, A1 for reading and writing.

EDUCATIONAL BACKGROUND

Ewa finished lower secondary school and then vocational school, where she was trained as a hairdresser, but could not exercise this occupation because of allergies due to certain chemical products.

LIFE PROBLEMS

Since moving to Berlin, Ewa has suffered at times from depressive episodes. Although she has some Polish friends, she feels socially isolated and often homesick.

KNOWLEDGE ABOUT CIRCULAR ECONOMY

Ewa has no specific general knowledge of the circular economy or sustainability but is familiar with some practical aspects (recycling household waste, repairing, composting etc).

WORK EXPERIENCE

Unable to work as a hairdresser, Ewa took up a job as a cashier in a supermarket near her native village in the Opole Voivodeship and worked until the birth of her daughter; Since then, she has been a homemaker, at first because no daycare for the children was available in her village.

SKILLS AND INTERESTS

Haircare, some experience with sewing and gardening. In her spare time she enjoys dancing, shopping and spending time with her children and friends.

Module 1 - Sensibilisation

Persona - example two

LAYAM DEMIR

- 43 YEARS OLD
- MARRIED TO TARIK (44), WHO OWNS A FRUIT AND VEGETABLE STORE IN WEDDING.
- 3 CHILDREN : ADAM (17), MERYEM (15) AND HAYDEN (14)
- TURKISH CITIZENSHIP
- LIVING IN BERLIN SINCE 2006
- MUSLIM RELIGION

EDUCATIONAL BACKGROUND

Layam comes from a rural village next to Ankara, one of the biggest city in Turkey. Although she would have liked to study, she never got the chance because she had to work to help her parents financially. She married her husband Tarik at 19 y.old and they decided to move to Germany in 2006 when she was pregnant with her first child to raise them in a healthier environment. The integration in Berlin is still tough because of the cultural and language differences.

GOALS AND CHALLENGES

The goal of Layam would be to start her own coffee place in Berlin. It would be very important for Layam to manage to create a safe and cozy place where people can just sit alone or with friends/family to do whatever they want. The idea of rassembling people makes Layam feel happy. However, it makes her sad because she thinks that she will never be able to change her routine and open this coffee place.

KNOWLEDGE ABOUT CIRCULAR ECONOMY

In turkish society, donation is more accepted than recycling. Unless you come of a big city or you were born in a very leftwing / green environment, you are not very educated on the subject of circular economy. Because Layam comes from a rural village, she is not very educated about direct circular economy, although she practices it unconsciously when they give each other clothes in her community.

WORK EXPERIENCE

Layam is now working with her husband in their fruit and vegetable store in Wedding, a neighbourhood in nothern Berlin. When they arrived in Berlin, her husband worked there as an employee, but he took over the store after the retirement of the previous owner. They have one other employee working with them.

LIFE PROBLEMS

Layan is having a hard time to integrate in the german society. Working and living with her husband can be very demanding, especially because she is the one who takes the most care of her children. They don't leave the neighbourhood so much. She often feels that her life is too routine and wish she had more various friends than just friends from her community. She also struggles a lot with her mental health because of the language barrier and the homesickness.

For more personas please see annex - page 80



Module 1 - Sensibilisation

Questions to PERSONAS.

1

Please take a step forward if you really know and understand well the language of the country you live in.

Please take a step back if you do not know.

2

Please take a step back if you are struggling with mental health problems.

Please take a step forward if you do not have any problems with it.

3

Please take a step forward if you have a higher education degree

Please take a step back if you do not have it.

4

Please take a step forward if you have a well paid job.

Please take a step back if you do not have it.

5

Please take a step forward if you could fulfil your dreams with the profession you have.

Please take a step back if you could not.

6

Please take a step back if you are a person with a disability or social problems.

Please take a step forward if you are not such person.

7

Please take a step back if you cannot understand complicated concepts like quadruple helix.

Please take a step forward if you can understand it.

8

Please take a step back if you abhor waste and would not like to deal with it.

Please take a step forward if you can work with waste without finding it disgusting

9

Please step forward if you think that waste can be used as a resource.

Please take a step back if you do not think so.

Module 1 - Sensibilisation

10

Please take a step back if you do not know what Circular Economy is.

Please take a step forward if

11

Please step forward if you know how to get your dream job.

Please take a step back if you do not know.

3. Debriefing in pairs

Thank everybody for sharing, and **ask them to choose a person they want to engage in a small debrief with**. Select a few of the following questions as guidelines:

- *How are you feeling after participating in the exercise?*
- *Do you have any reflections or observations you'd like to share?*
- *What was it like for you to disclose a privileged identity?*
- *How did it feel to disclose an oppressed identity?*
- *When you stepped in, how did you feel ?*
- *And how did it feel when others stepped in when you didn't?*

4. Conclude in plenary session

- Ask all participants to sit back.
- To conclude, **emphasize that our own lived experiences and assumptions influence the way we perceive the world and the lives we lead**. Explain that this method was conducted so that everybody may be aware of the differences within a group and to recognize that we share experiences and viewpoints but that we also differ. This method can help the development of empathy. It helps to imagine different situations and problems, which can take you closer to the solution.



Module 1 - Sensibilisation

5. More about the method Walk of Life

This method can be used with children, and adults as well, for example in a workplace, or as part of a supervision session. It can help the development of empathy. It helps to imagine different situations and problems, which can take you closer to the solution. Through the role cards, participants will get to know in more depth some specific disadvantaged situations. By answering questions, moving forward, standing still or stepping back, they gain their own experience of the falsity of society's apparent equality.

The cards are dealt out first, and it is asked from the participants that no one shares what is on their card with anyone else. Then the questions are asked in turn and participants are instructed to step forward or stepping back according to how true the statements are for them. When the play gets to the end, participants are asked to look at where exactly they stand. Initiating a conversation about how it feels to be where you are, how it feels to see others. Ask specifically about the person who got to the middle the longest. At the end of the exercise, participants can return to their seats to continue discussing the topic, sharing their own experiences, and drawing larger conclusions. The ideal is 8-12 people. If the group is smaller there will be fewer viewpoints, if it is bigger there is less time to discuss the thoughts and feelings. It usually last between thirty minutes to 1 hour.



Module 1 - Sensibilisation

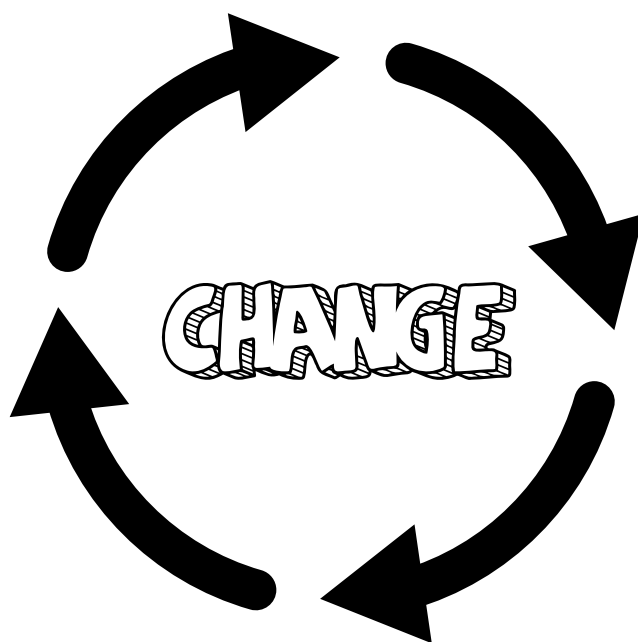
Circle of change (SNRRRS)

Method

Objective: The aim of the game is to support participants in building trust between educators and vulnerable people through the practical application of circular economy principles. The game is designed to develop skills in designing educational workshops that not only promote a sustainable approach to resources, but also emphasize empathy, mutual understanding and open communication. By taking into account the specific needs of different social groups, participants learn how to create spaces that foster relationships based on mutual respect and cooperation. The overarching goal of the game is to sensitize educators to the needs and limitations of people at risk of social exclusion by type of exclusion.

Length: The game requires a minimum of 3 hours to be played effectively, ensuring that participants have enough time to complete all tasks and fully engage with the activities.

Material: Game board, game rule board, character cards, resource cards, energy cards, challenge cards, cube, game pawns. Sheets of paper, pencils.



Module 1 - Sensibilisation

1. Preparation and Introduction

The game master (the person in charge) welcomes the participants and briefly explains the purpose of the game and the basic principles of the circular economy. Participants learn that their task will be to design an educational workshop for vulnerable groups, focusing on the practical aspects of the circular economy. The game master then divides the participants into teams of approximately 3-4 people. If the total number of participants is smaller, teams must consist of at least 2 people to ensure the game remains meaningful and engaging. The best results are achieved when the total number of participants is around 15.

2. Steps:

Phase 1:

Drawing character cards.

Each player draws one character card that identifies the group for which they will design the workshop (e.g., senior citizens, unemployed people, youth from difficult backgrounds). Players can take a moment to review the details of their character (persona) and the specific challenges this group faces.

Age: 45

Background: Anna is a mother of two children and worked as a saleswoman in a small store for 15 years. After the store closed, she lost her job and has been unemployed for two years. She struggles with low self-esteem and difficulty finding a new job in the face of a rapidly changing market.

Challenges: lack of modern skills, lack of access to training, low motivation, difficulty balancing childcare and job search.

Needs: job training, psychological support, career mentoring, job search assistance.

Age: 70

Background: John is a retired math teacher who has worked at a high school for most of his life. Since retiring, he has felt increasingly socially isolated, especially since his children live abroad. He has health problems and lacks motivation to get involved in society.

Challenges: limited mobility, social isolation, difficulty operating modern technology.

Needs: activation programs, computer courses, social support, access to health care.

Age: 30

Background: Catherine was born with cerebral palsy, which makes her use a wheelchair. Despite her disability, she graduated with a degree in psychology, but has difficulty finding a job due to the lack of workplace accommodations for her needs. Catherine lives with her parents, who support her, but dreams of living independently.

Challenges: limited access to adapted workplaces, social stigma, lack of accessible infrastructure.

Needs: adapted jobs, support for integration into the labor market, services to support independence, availability of infrastructure.

Module 1 - Sensibilisation

Tokens:



Phase 2

Gathering resources.

Moving around the board. Players roll the dice one by one and move their pawns around the board according to the number of dots thrown.

Each field on the board represents one of the stages of the circular economy cycle. After stopping on a field, a player receives a resource card from the corresponding category (raw materials, energy).

Players collect resources, will be needed in a later stage, and must face challenges that help them better understand how to apply the principles of circular economics in practice. Each resource or solved challenge is recorded on an individual player's card, which will be helpful in subsequent rounds.

plastic

Description: plastic obtained from the recycling process of consumer waste, such as bottles, plastic bags. It can be reused to produce new items such as furniture, containers or building materials.

Use: promoting products with a low carbon footprint, DIY (do-it-yourself) workshops, creating awareness about reducing the use of virgin raw materials.

Educational information: recycling plastic reduces the amount of waste going to landfills and the CO2 emissions associated with the production of new materials.

paper

Description: paper recycled from recycled paper, suitable for printer paper, bags, packaging and other paper products.

Use: educational classes on recycling, making your own paper products (e.g. notebooks, envelopes), workshops on reducing paper consumption in offices.

Educational information: using recycled paper reduces deforestation and energy consumption needed to produce new paper.

metals

Description: metals, such as aluminum, copper or steel, recovered from electronic products and other metal waste.

Uses: manufacturing new electronic devices, building recycled items, educating on energy and resource conservation.

Educational information: recycling metals is much less energy intensive than extracting and processing virgin raw materials, which helps conserve natural resources.

Module 1 - Sensibilisation

Phase 3

Challenge cards

When players leave the resource circles, analogous to the previous one, they move around the board by the number of eyes rolled with the dice. Each field is marked with a number, players collect challenge cards until the circle closes and they enter the circle from which they started.

high cost of alternatives

Description: Green alternatives are often more expensive than traditional options. What strategies will you propose to encourage participants to choose sustainable products and services, despite their higher price?

Task: Develop an educational plan that demonstrates the long-term savings and health benefits of choosing sustainable solutions.

Bonus Points: Extra points for conducting a cost-benefit analysis (CBA) for various products.

lack of access to modern technology

Description: Workshop participants do not have access to modern technologies such as the Internet, smartphones or computers. What educational methods will you propose to effectively teach them about circular economy?

Task: Suggest traditional but engaging educational methods, such as board games, visual presentations, handicraft workshops.

Bonus points: Extra points for creative use of available resources to transfer knowledge.

diverse group of participants

Description: Your workshop group is very diverse in terms of age, skills and knowledge level. How will you adapt the workshop program to make it understandable and engaging for everyone?

Task: Create a workshop plan that includes a variety of teaching methods and exercises to suit different age groups and skill levels.

Bonus points: Extra points for using educational methods that engage both younger and older participants.

Module 1 - Sensibilisation

Phase 4

Each player received 10 tokens. At this stage of the game, it is possible to purchase/exchange raw materials, as well as challenges.

The purchase of raw materials, energy or challenges can be made from the game master or can be transacted between players.

Cost of cards at the game master:

Resource card, draw - 1 token

Resource card of choice - 3 tokens

Challenge card, drawing - 3 tokens

Challenge card with choice - 5 tokens

The cost of cards between players is arbitrary and depends on negotiation skills

Phase 5

Workshop planning.

Players begin to design their workshops, using the resources they have collected and the challenges they have solved. Each player must consider the specific needs of their character (target group).

In this round, players must answer questions such as:

1. What resources can I use in my workshop?
2. What challenges do I need to take into account?
3. How can I adapt the educational content to the specific needs of my character group?

Players write down their ideas on workshop cards, preparing a workshop plan. They must include at least three elements: circular economy education, an interactive practical part, and how to engage participants.

Module 1 - Sensibilisation

Phase 6

Workshop presentations and simulations.

Each player presents their workshop in front of the other participants. The presentation should include a discussion of the goals of the workshop, the resources used, and how to engage participants.

After the presentation, the other players can ask questions and discuss the solutions presented. The players evaluate the workshop in terms of its reality, effectiveness and adaptation to the needs of the target group.

The game master can add an element of simulation, where one of the players takes on the role of a workshop participant (according to the drawn character card) to test how the workshop works in practice.

After the presentation, each player receives feedback from the other participants. The feedback concerns aspects such as creativity, application of circular economy principles, or adaptation to the target group.

The players can also share their thoughts on the difficulties they encountered while designing the workshop, and what strategies they used to overcome them.

Additional elements.

Points and rewards. Players can earn points for each challenge solved, creative use of resources, and for a well-prepared workshop including a person from the character sheet, and a group from the challenge sheet.

Cooperation and support. At certain points in the game, the game master can introduce an element of cooperation, where players must solve more difficult challenges together or share resources to create a better workshop together.

Scenario variety. If possible, the game master can introduce different scenarios that will affect the game, such as sudden changes in the workshop's budget, the emergence of additional participant needs, or new environmental regulations



Module 1 - Sensibilisation

After the session:

Summary and final conclusions.

The game master summarizes the course of the game, highlighting key moments and conclusions. Players discuss what they learned during the game, what skills they acquired, and how they can apply this knowledge in real-life learning situations.

At the end of the game, the game master invites the participants to reflect on how the lessons they have learned can help them work with people at risk of social exclusion and how they can further develop their skills in this area.

More about the game Circle of Change

“Circle of Change” is an educational simulation game whose main goal is to build trust and develop empathy between educators and people at risk of social exclusion. Through role-playing, exploration of diverse perspectives and practical application of circular economy principles, participants learn to design workshops that address the specific needs of different social groups. The game becomes a space for deep reflection on the challenges of social inclusion and how to build dialogue and cooperation to achieve a more just society.

One of the key values learned from the game is the development of empathy. By drawing character cards, participants take on the roles of people representing different social groups, such as seniors, unemployed people or youth from difficult backgrounds. The experience allows them to better understand what life is like from the perspective of others, as well as what barriers and limitations may affect their daily functioning. This exercise makes them realize how many challenges come with seemingly simple problems, and how important it is to take an individual approach to each person.

The second important aspect is building trust. The game shows that the creation of educational workshops is not only about transferring knowledge, but also about building relationships based on respect, understanding and openness. Participants learn the importance of listening to the needs of the people they work with, and how to create an atmosphere where everyone feels accepted and understood. This exercise also helps educators better understand what tools and methods they can use to strengthen the bond with those at risk of social exclusion.

Module 1 - Sensibilisation

Another value is understanding the importance of cooperation and dialogue. The game puts participants in situations that require interaction, negotiation and joint problem solving. This develops communication skills and shows the importance of building bridges between different groups, both in education and in society. The element of exchanging resources and solving challenges together shows that the best results are achieved through cooperation, not competition.

An invaluable result of the game is also the awareness of social barriers and inequalities. Participants learn to recognize and name the factors that impede excluded people's access to full participation in social and professional life. As a result, they can more consciously design activities to remove these barriers and support people who experience them.

On a practical level, the game promotes creativity and innovation in workshop design. Participants must find ways to use the resources collected and challenges solved to create a workshop program tailored to the needs of specific social groups. Creating such plans teaches flexibility, openness to diverse approaches and the ability to adapt activities to changing conditions.

Finally, Circle of Change enables participants to develop skills in reflection and lessons learned. The game is followed by a debriefing, during which players share their experiences, discuss the difficulties encountered during the game and point out the strategies that helped them achieve success. This part of the game reinforces a sense of responsibility for one's own actions and allows participants to better understand how the knowledge gained can be applied in the real world.

In conclusion, "Circle of Change" is not only a game, but also a tool that builds social sensitivity, empathy and understanding. Through it, participants not only explore the principles of a circular economy, but also learn how to be better educators and allies for people at risk of social exclusion.

Module 2

Circular economy



Module 2 - Circular economy

How to teach circular economy? (CRN)

Method

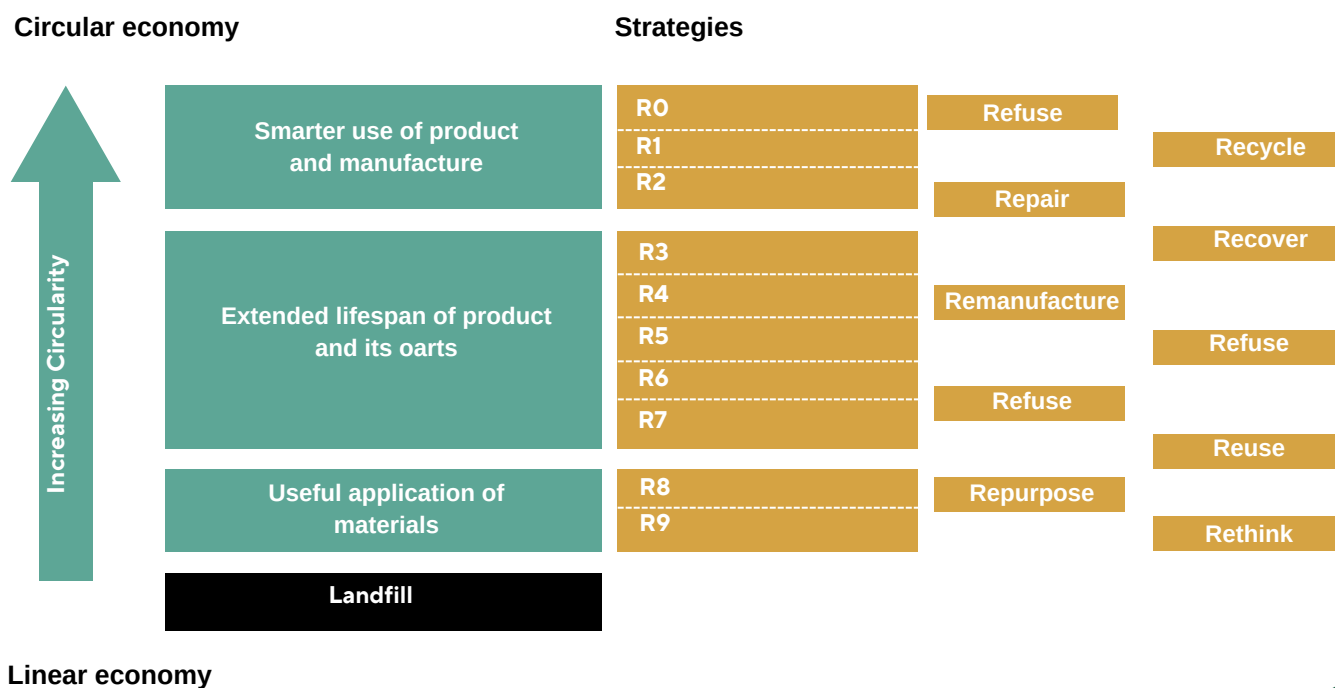
Objective: This collaborative two-step reflective exercise is aimed at producing better-adapted methods of teaching circular economy to the target audience. It can be used for adult educators but also involve learners.

Length: 90 minutes (20 + 70 min)

Material:

First Part :

- A larger print-out illustrating principles of the R-framework to be fixed on a wall or pin wall (see below)
- Sets of ten printed cards on which figure the names of circular strategies (verbs starting with an R and, on the reverse side, their equivalents in the national language), depending on the number of participants.



Module 2 - Circular economy

Second Part :

- Large sheet of paper, whiteboard or pin wall
- Drawing and writing materials (felt pens, markers)
- Sticky notes
- Glue and pins
- Printed-out graphical illustrations, etc.

Method

1. Preparation and Introduction

In the English-language literature on circular economy, the -framework – a set of ranked strategies expressed through verbs that all start with an R – has been promoted as a popular didactical tool to familiarise learners with the core notion of a waste hierarchy. As a warm-up activity, participants are asked to form tandems or small teams of three people and, with the help of the printed cards, rank circular strategies – here, ten Rs – in order of preference to achieve the best outcomes in terms of reducing waste.

Circular economy



Strategies	Definitions
R0 Refuse	Product is replaced or becomes superfluous (loss of function)
R1 Rethink	More intensive use of the product (e.g. by sharing)
R2 Reduce	More efficient production or use of the product
R3 Reuse	Reuse by another consumer or functional discarded product
R4 Repair	Repair and maintenance (without losing functions)
R5 Refurbish	Restore an old product and bring it up to date
R6 Remanufacture	Use parts of discarded product in a new one (same function)
R7 Repurpose	Use discarded product or its parts for a new one (different functions)
R8 Recycle	Process materials to obtain the same or lower quality
R9 Recover	Incineration of material with recovery of energy

Linear economy

Module 2 - Circular economy

After the participants have completed the task and compared their results, the facilitator explains why the R-framework has gained so widespread acceptance but will also point out its limitations. On the positive side, the framework, initially introduced as the three Rs, can be easily memorised (alliteration) and builds on the well-known cultural reference of the three Rs (Reading, wRiting, ARithmetic) used in the 19th century to promote universal education. On the negative side, the exercise is rather scholarly and may not be appropriate for the target audience. Moreover, the distinction between different R-strategies – three, four, five or more? – is somewhat arbitrary, depending on linguistic rather than on intellectual criteria. Finally, the R-framework cannot be easily adapted for most other languages. While it works well in some (e.g. Italian), it does less so in Germanic or Slavic ones for example, where appropriate verbs starting with an R are less frequent. The easy-to-memorise effect is therefore lost. In sum, there are good reasons to prefer other methods of teaching principles of circular economy to adults at risk of social inclusion.

Second part of the exercise

Participants are now asked to work in tandems or small teams to collect ideas on how circular economy principles can best be communicated to socially disadvantaged people and to visualize them graphically, through annotated drawings, on a flipchart. Several such methods, such as practical activities, games, the development of circular economy business models, the creation of learning material by the participants themselves or study visits, are described below. Finally, the individual proposals are jointly evaluated and discussed in a plenary session.

4. More about the method Teaching Circular Economy to Adults at Risk of Inclusion:

A playful methodological reflection activity can greatly help ensure better learning outcomes and continued motivation if it leads to adequate teaching content and methods that take into account the learning profile of the audience members. It obviously can take many forms and be used at all stages of a training, from planning to final feedback sessions, to improve the quality of the teaching.

Module 2 - Circular economy

5 R's of CE (Refuse, Reduce, Reuse, Recycle, Recover) (CSI)

Objective: To learn how to apply the 5 R's of the Circular Economy (Refuse, Reduce, Reuse, Recycle, Recover) in the context of social enterprises, enabling participants to develop practical strategies that promote sustainability, inclusivity, and social impact.

Length: 1.5 to 2 hours

Material:

1. Visual aids (e.g., presentation slides or posters) explaining the 5 R's
2. Group brainstorming templates or worksheets
3. Flip charts or whiteboards for group presentations
4. Handouts summarizing the 5 R's and their applications
5. Upcycling Materials: Items such as fabric scraps, cardboard, plastic containers, and old electronics for practical product creation during the brainstorming activities.
6. Crafting Supplies: Scissors, glue, tape, paint, markers, or any other materials to support participants in prototyping products for reuse or recycling.

Method

1. Preparation and Introduction:

Understand the Audience:

- Confirm participants' familiarity with the Circular Economy and their experience in practical, hands-on activities.
- Identify potential skill levels for crafting or product design tasks.

Materials Preparation:

For visual aids, prepare slides that explain the 5 R's, including their definitions, benefits, and practical examples. Include visuals showcasing upcycled or repurposed products to inspire participants. In terms of activity materials, provide a variety of reusable or recyclable items for product creation, such as fabric scraps, old clothing, cardboard, plastic bottles, jars, tin cans, and e-waste components.



Module 2 - Circular economy

Basic crafting supplies, including scissors, glue, tape, markers, paints, sewing kits, and small tools for assembly, will also be essential. Additionally, printed templates or guides for product ideas, such as upcycled bags, storage containers, or decorative items, will help guide participants. Participant handouts should include instructions for the crafting tasks, along with examples of finished products, as well as a summary of the 5 R's principles and their applications.

Room Setup:

For the room setup, arrange workstations that offer sufficient space for small groups to collaborate effectively. Provide separate tables or bins for organizing materials by category, such as textiles, plastics, and metals. Designate a display area where the finished products can be showcased at the end of the session. For the demonstration prep, prepare sample products to inspire participants, such as a tote bag made from fabric scraps or a planter created from a plastic bottle. Ensure that all tools and materials are tested for safety and usability before the session begins. For technical setup, ensure a projector is available to present ideas and showcase examples, and have a camera or mobile device ready to document the creative process and final outcomes.

Introduction:

Welcome Participants: Gather participants and explain the goal of the workshop. For example:

"This session will help us understand the importance of the Circular Economy and how applying the 5 R's can support sustainability, reduce waste, and create opportunities for social inclusion. By participating in these activities, you'll develop insights into how these principles can be applied in your own contexts."

2. Steps:

Circular Economy Introduction: The trainer should begin by providing an overview of the Circular Economy, explaining its principles and purpose. This includes highlighting how it shifts away from the traditional linear model of "take, make, dispose" to a regenerative approach that minimizes waste and keeps resources in use for as long as possible.



Module 2 - Circular economy

The trainer should then discuss how these principles align with the mission of social enterprises, which aim to create positive social and environmental impacts while addressing community needs. Finally, the trainer should emphasize the importance of the Circular Economy for achieving sustainability and driving social impact, showcasing its role in conserving resources, reducing environmental harm, and fostering economic opportunities within communities.

2. The 5 R's of the Circular Economy:

The trainer should introduce the 5 R's—Refuse, Reduce, Reuse, Recycle, and Recover—as practical guidelines for implementing circular practices. Each principle will be explained with a clear definition and real-world examples.

- a) *Refuse*: Refusing involves saying no to products and materials that contribute to waste and environmental harm. Avoid single-use plastics or unsustainable packaging.
- b) *Reduce*: Reduction focuses on minimizing the use of resources and energy. This can be achieved through innovative designs, improved efficiency, and conscious consumption. Highlight technologies or designs that minimize energy or resource use.
- c) *Reuse*: Reusing emphasizes extending the life of materials and products through repurposing or repairing. Provide examples of upcycled products or repair programs.
- d) *Recycle*: Recycling transforms discarded materials into raw inputs for new products. Effective systems for recycling can ensure materials like metal, plastic, or paper are reprocessed into valuable resources. Discuss systems that transform waste into new resources.
- e) *Recover*: Recovery focuses on extracting value from waste that cannot be recycled or reused. This often involves converting waste into energy, such as generating biogas from organic materials or using non-recyclable materials for energy production.



Module 2 - Circular economy

3. Group Activities (45-60 minutes)

Refuse and Reduce Strategy

Objective: Explore practical ways to avoid unnecessary materials and minimize resource use.

Task: Participants will brainstorm how an enterprise can eliminate or reduce wasteful materials. They will analyze a sample business process or product, identify inefficiencies, and propose alternatives. Their goal will be to design a prototype for a low-waste product or system, such as reusable packaging or a multi-functional product that requires fewer resources.

Reuse Project Development with Product Creation

Objective: Discover creative ways to repurpose materials into functional or decorative products.

Task: Groups will be provided with reusable items such as old textiles, jars, and electronic waste. Using these materials, they will craft new items like tote bags from fabric scraps, planters from jars, or small tools from electronic components. Participants will also discuss the potential market value and social impact of their creations, demonstrating how repurposing contributes to both environmental and economic goals.

Recycle and Recover Process Planning

Objective: Develop a system for recycling and recovering waste to generate new products or energy.

Task: Participants will design a mock recycling and recovery system for provided materials. They will focus on sorting waste and creating prototypes such as jewelry from metal scraps or insulation material from shredded textiles. The activity will conclude with a discussion on how these processes can create income opportunities, especially for underserved communities, by turning waste into valuable resources or energy.

Module 2 - Circular economy

4. Reflection and Display of the activities

Each group will present their completed projects, explaining their design process and the reasoning behind their choices. They will discuss how practical and scalable their solutions are and identify the social or environmental benefits they could bring.

To conclude, participants will reflect on their experiences through guided questions:

- What obstacles did you face during the activity, and how did you overcome them?
- How could your designs be adapted or expanded for social enterprises?
- In what ways did this activity embody the principles of the 5 R's?

By participating in these activities, attendees will gain practical insights into applying Circular Economy principles to create innovative solutions for sustainability and social impact.

3. After the session:

During the reflection session, facilitate a discussion on how participants can implement the 5 R's in their work or community settings. To evaluate the session's effectiveness, distribute feedback forms or conduct a brief verbal feedback round, encouraging participants to share their thoughts and suggest improvements for future workshops. Capture photos of the finished products and group activities to document the outcomes. Additionally, compile a summary of the key insights, creative ideas, and successful prototypes that were developed throughout the session, highlighting the practical applications and innovative solutions generated by the participants.

4. More about the method

The Exploring the 5 R's of Circular Economy method offers an engaging, hands-on approach to learning and applying the principles of sustainability. This method aims to promote awareness by educating participants about the Circular Economy and its foundational concepts, enabling them to understand its relevance in addressing environmental and social challenges.



Module 2 - Circular economy

It fosters creativity by encouraging participants to think innovatively and design practical, nature-inspired solutions for managing resources and minimizing waste.

Additionally, the method focuses on skill development, helping participants build capabilities to identify, reduce, and reuse waste while effectively planning recycling and recovery processes. A key feature of this approach is its emphasis on social impact, demonstrating how Circular Economy practices can generate job opportunities, support marginalized communities, and advance sustainability goals.

Highly adaptable, this method is suitable for workshops tailored to educators, social enterprises, or community groups and can be scaled to address larger audiences or specialized industries such as textile recycling or e-waste recovery. It provides a versatile framework for fostering environmental responsibility and driving impactful change across diverse settings.

5. Annex of useful materials needed for the method

Materials for Hands-On Activities:

The materials needed for the session include reusable and recyclable items such as fabric scraps, old clothing, cardboard, paper, plastic bottles, jars, and tin cans, as well as e-waste components like wires, old gadgets, and small appliances. Crafting supplies will consist of scissors, glue, tape, markers, paints, sewing kits, and small hand tools like pliers and cutters. For group work, participants will be provided with brainstorming templates or worksheets to assist with project planning, along with flip charts, whiteboards, and markers for group presentations. These materials will support the hands-on activities and collaborative efforts during the session.



Module 2 - Circular economy

Biomimicry & Biowaste Management (CSI)

Objective: To introduce participants to the concept of biomimicry and how it can be applied to biowaste management, enabling them to design sustainable, nature-inspired solutions for managing organic waste within communities and social enterprises.

Length: 1.5 hours to 2 hours

Material:

- Visual aids (e.g., presentation slides or posters) explaining biomimicry principles and examples
- Materials for composting and vermiculture demonstrations (organic waste, worms, containers)
- Crafting or modeling materials for product creation (e.g., biodegradable items, paper, fabric, etc.)
- Group brainstorming templates or worksheets
- Flip charts or whiteboards for group presentations
- Markers and pens
- Handouts summarizing biomimicry principles, composting, and vermiculture techniques

Method

1. Preparation and Introduction:

1. Preparation:

- Set up a demonstration space for composting and vermiculture, ensuring all materials are ready for hands-on activities.
- Prepare slides or posters that illustrate biomimicry principles and real-life applications.
- Gather organic waste materials (food scraps, paper, etc.) for composting and worms for the vermiculture demonstration.
- Arrange tables for group work, and prepare necessary tools (scissors, markers, paper, etc.) for product creation exercises.

2. Introduction:

- Welcome participants and introduce the session's goals: understanding how nature-inspired solutions (biomimicry) can be applied to biowaste management.



Module 2 - Circular economy

Biomimicry & Biowaste Management

- Provide a brief explanation of **biomimicry**:
 - *Nature as a Model*: Nature's designs inspire innovative solutions.
 - *Nature as a Measure*: Nature's systems provide benchmarks for sustainability.
 - *Nature as a Mentor*: Learning from nature to innovate practical solutions.
- Explain the significance of biomimicry in creating sustainable systems that are efficient and adaptable.

2. Steps:

The workshop begins with **Session 1: Introduction to Biomimicry**, a 15-minute segment that defines biomimicry as the practice of drawing inspiration from nature's designs and processes to solve human challenges sustainably. Participants will learn about its relevance to environmental innovation and sustainability through key examples. These include the Kingfisher-inspired bullet train, which mimics the bird's beak to reduce noise and enhance speed; whale-inspired wind turbines, which adopt the shape of humpback whale fins for efficiency; and spider silk, whose lightweight yet strong properties inspire advanced material design.

In **Session 2: Biomimicry in Waste Management**, lasting 20 minutes, the focus shifts to how biomimicry offers innovative solutions for biowaste management. Participants will explore natural systems like composting, where organic waste breaks down into nutrients, and vermiculture, where worms decompose waste into high-quality fertilizer. These examples highlight how nature efficiently recycles resources. The concept of circular waste systems, modeled on nature's nutrient cycling, will also be introduced as a sustainable approach to waste management.

Session 3: Live Demonstration – Composting & Vermiculture, a 25-minute hands-on activity, allows participants to observe these processes in action. For composting, the demonstration shows how a balance of "greens" (e.g., food scraps) and "browns" (e.g., dry leaves) creates nutrient-rich compost, along with the optimal conditions of moisture, air circulation, and temperature. In vermiculture, participants will meet red wigglers, a worm species that accelerates organic decomposition. The benefits of worm castings as a premium fertilizer will be highlighted, along with real-world applications of these techniques in soil enrichment and waste reduction.



Module 2 - Circular economy

Biomimicry & Biowaste Management

The interactive **Session 4: Group Brainstorming – Biomimicry-Inspired Biowaste Solutions**, lasting 30 minutes, challenges participants to design innovative projects inspired by nature. Working in small groups, they will create concepts for social enterprises or community projects that incorporate biomimicry principles, such as composting hubs or vermiculture programs. Participants will also consider how their solutions can provide employment or training opportunities, particularly for marginalized groups, while addressing waste management challenges.

Finally, **Session 5: Group Presentations**, a 20-minute session, provides an opportunity for each group to share their ideas. Participants will present their biomimicry-inspired solutions, followed by a facilitated discussion on the feasibility, potential challenges, and social impact of their designs. This closing segment encourages collaboration, critical thinking, and an understanding of the real-world applications of biomimicry in sustainability efforts.

3. After the session:

The reflection session invites participants to reflect on their learning experience by considering the new insights they gained about the relationship between nature, waste, and sustainability. They will be encouraged to think about how they can apply biomimicry in their own projects or communities. Feedback will be gathered on the session, with participants sharing what they found most valuable and suggestions for improvement. In terms of documentation, the group's ideas, product designs, and key takeaways will be recorded, and prototypes or diagrams created during the brainstorming session may be photographed. For action planning, participants will be encouraged to explore how they can implement the ideas discussed in real life. Follow-up resources, such as further readings on biomimicry, composting, and vermiculture, will be provided, along with guidance on launching small community-based projects.

4. More about the method

Biomimicry offers a transformative approach to biowaste management by drawing inspiration from nature's proven systems to develop sustainable and efficient solutions. Nature's ecosystems operate on principles of resource efficiency and closed-loop processes, where waste is continuously recycled into valuable resources.



Module 2 - Circular economy

Biomimicry & Biowaste Management

By mimicking these processes, biomimicry encourages innovative strategies that promote environmental stewardship and help close the loop in waste management, ensuring that discarded materials are transformed into nutrients or energy rather than becoming pollutants.

The application of biomimicry in waste management brings a range of significant benefits. From a sustainability perspective, it reduces waste and prevents resource depletion by emulating the efficient and regenerative processes found in nature. By inspiring innovative approaches, biomimicry encourages creative, efficient, and practical solutions to tackle waste management challenges, offering methods that are both environmentally sound and economically viable.

Moreover, biomimicry has a profound community impact. It opens up opportunities for social enterprises to engage marginalized groups in sustainable practices, fostering inclusion, skill development, and economic empowerment. This approach is particularly well-suited for educators, community leaders, and social enterprises seeking to introduce innovative, nature-inspired solutions into their waste management strategies, making it a versatile and impactful method for advancing sustainability.

5. Annex of useful materials needed for the method

Visual Aids:

- Presentation slides illustrating the concept of biomimicry with real-world examples (e.g., Kingfisher bullet train, whale-inspired wind turbines).
- Diagrams showing natural waste management processes (composting, vermiculture).

Materials for Composting and Vermiculture Demonstration:

The materials and resources needed for the session include organic waste items such as food scraps, paper, and dried leaves, along with worms like red wigglers and composting bins or containers for hands-on activities. Tools like turning forks and moisture control devices are essential for maintaining composting systems. Activity materials include brainstorming templates and worksheets for group discussions, as well as crafting supplies for creating product prototypes, such as biodegradable packaging or natural fibers.



Module 2 - Circular economy

Biomimicry & Biowaste Management

Flip charts and markers will support group presentations, while participant handouts will provide a summary of biomimicry principles, guidelines for starting composting and vermiculture systems, and additional resources on the circular economy and biomimicry. For technical setup, a projector, laptop, and screen will be used for presentations, and a camera or mobile device will document the session's activities and outcomes.

Module 2 - Circular economy

Circular Canva (ECREC)

Objective: The main objective of the assignment was to enhance capacities of the participants in transforming waste into business opportunities through circular economy business canvas. The primary scope of the presentation was to identify current waste challenges every partner country is encountering (different types of waste stream) and then brainstorm on tackling such challenges by applying the CE business canvas concept. Moreover, the participants brainstormed about the innovative business opportunities that might be applied to the local context for a clean environment, job creation and income generation.

Length: 1.5 hours

Material:

The trainer used the circular economy business canvas as a tool for elaborating the case studies. Moreover, the power-point presentation presented from the trainer was shared with the participants.

Method

1. Preparation and Introduction:

A. Presentation of the material - Circular Economy business models

Initially, the trainer presented in detail the main concepts of circular economy business models. From the theory, there are 5 main circular economy business models that are usually applied. The participants get acquainted with the concepts and the case studies presented. During the introduction, we shared several case studies from the CE business models that give a more comprehensive understanding about the concepts and its application.

B. Presentation of the material - Circular Economy business canvas

During the second part of the training, the trainer shared more in-depth information about the practices and business opportunities the circular economy concept represents. In the following tables are shown the main components of the CE business canvas. The first component is about the drivers and trends, which underline the main challenges in regards to waste streams, followed by activities that are foreseen to set up the plan, key resources including humans resources, etc.

Module 2 - Circular economy

Trends and drivers			Stakeholder Involvement		
Key Partners	Key Activities	Value Proposition	Customer Relationships	Customer Segments	
	Key Resources		Channels		
Cost Stucture			Revenue Streams		
Sustainability Requirements			Sustainability Benefits		

2. Steps:

1. The first step was splitting up the participant into four groups. Each of the group was assigned a type of waste to refer to. The selection of the waste stream was discussed among the participants considering their country's challenges. The four case studies elaborated were about textile waste, organic waste, construction and packaging.
2. The participant had 30 min time to explore and address the waste stream challenges and provide some solutions/business opportunities by applying the CE business canvas. During the working group, each group shares ideas, opinions and thoughts on the current challenges. From the discussion, were noted that textile waste is a critical issue for most of the developing countries in the EU and there are few initiatives undertaken from the governments to address such issues. The team discussed collecting the textile, repairing and renting it to other people/vulnerable people with reasonable prices. Beside this idea, there might be several opportunities in the textile sector that are unlocked.
3. The last round was the presentation of the work that has been done from the participant. The presentation was well elaborated and the participants further enhanced their understanding about the level of complexity of waste treatment and possible ways of addressing it. The four CE business canvas was presented and at the end of the group an open discussion was held with the participant.



Module 2 - Circular economy

3. After the session:

The main result from the working group:

- The knowledge and understanding of the participant on circular economy business models was enhanced.
- The real waste challenges were addressed and several solutions through CE business canvas were presented.
- The new business ideas and opportunities to transform into business were discussed among the participants.

4. More about the method Circular Canva

The Circular Canvas is the first tool created by Circulab to help organizations rethink their business model or projects and create long-lasting impacts. Embrace systems thinking and find a balance between economic viability, the ecosystem and sustainability. With the Circular Canvas, the participant can build a business model, a product or service, a project and analyze value creation, mark all incoming and outcoming flows and identify all impacts. With this tool, the participant/experts/organizations take into account the system all around to design a solution to meet all needs and create positive impacts

5. Annex of useful materials needed for the method

1. Circular economy business models
<https://tinyurl.com/4b69nnuh>
2. The Circular economy business canvas
<https://tinyurl.com/mr45vpm5>
3. Waste Management Challenges
<https://tinyurl.com/msbf4ywz>

Module 3

Learning by doing



Module 3 - Learning by doing

Living Lab (NARA-SK)

Objective: As Malmberg and Vaittinen explained in 2017: "A Living Lab is a place where citizens, artists, technologists, businesses and public sector organisations can come together to co-create ideas, tools and technologies that will address local challenges. It's a place for innovation and exploring new possibilities but where reflection and evaluation are built into the working process to make sure the Living Lab can be flexible and responsive to the changing needs of stakeholders and communities."

Length: 60 minutes. Greater emphasis than on a one-time educational session duration has to be placed on the continuation of the living lab towards co-creation. Living Lab is a method intended for participants (trainees) who are determined to participate in a continuous process of multiple meetings from understanding the living lab working method as a part of co-creating social innovation and parallelly to transform independent stakeholders to the flexible, cost-effective decentralised managerial organisation.

Material: An ideal resource for the application of the Living Lab methodology is the ENoLL library – European Network of Living Labs (<https://enoll.org/knowledge-hub/>), which provides methodologies for each stage/s of the social innovation' co-creation process that the community of trainees is in. However, the basic rule for selecting and using specific tools is that theoretical education about the living lab method itself must respond to the needs of the trainees so that the priority remains the creation of social innovation, the implementation of which represents a unifying element of continuous cooperation between the living lab stakeholders.

Method

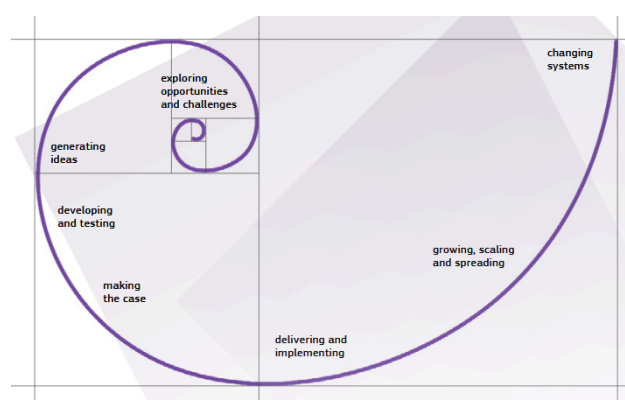


Figure: The Social Innovation Spiral, p.6, Social Innovation Playbook https://www.kl.nl/wp-content/uploads/2021/01/EUSIC_2020_Playbook_for-Social_Innovation.pdf

Module 3 - Learning by doing

A. The Need Definition = Exploring Opportunities and Challenges

This is a crucial stage for creating an actionable group of trainees - living lab participants who are ready to collaborate outside their organization and understand the strengths of other stakeholders to ensure mutual success. The goal of the stage is to collect the maximum amount of information about both social innovation itself as well as about the environment in which the social innovation is going to take place and further critically select the most effective steps that the trainees/stakeholders will do in order to implement the social innovation.

B. Generating Master Plan – JUST DO IT:

The result of critical selection is not a summary of all information, but the determination of as less as possible precisely measurable task/s in terms of time and costs, which the living lab participants (trainees/stakeholders) will divide among themselves as their own resources ready to be invested to the implementation of the social innovation.

3. After the session:

After the living lab, each participant perceives the existence and value of the resources invested by all precisely selected stakeholders in the co-creation of social innovation, the perception of the difference between pure brainstorming/happening and a design realistic workflow. At the same time, a trustworthy environment should be created for the continuous continuation of cooperation, associated with accurate recording of progress and the financial and other contributions made by the stakeholders involved.

4. More about the method Living Lab

Over the years, the organization of a collective event has proven to be the most effective form of educational event in the introduction of the circular economy into social consciousness in Slovakia. The event does not assume a uniform, precisely defined output, as each stakeholder takes away information, inspiration and contacts, which they then develop based on their own motivation.

Module 3 - Learning by doing

The hidden added value of organizing an educational event across 4 QH sectors (education science - business - local/state administration - community/ngo) lies in the cross-sectoral distribution of the need to accelerate own efforts and the need to create non-traditional, cross-sectoral effective collaborative cooperation (rolling self-curricula). This applies especially to the question of the GREEN DEAL transition to sustainability in the global world.

Since the Living Lab method is a continuous, long-term method of co-creation, highly sophisticated pedagogic-educational-methodological tools are developed for individual actions and activities that stakeholders go through in the process of creating social innovation. However, since activities in the social and circular economy needs to penetrate medium to low-skilled participants/stakeholders, it is extremely necessary that the moderator of the Living Lab process knows how to constantly maintain the motive for the social innovation'co-creation - it means the Living Lab will be not overloaded by used Living Lab'methodology, technicalities (Living Lab for Living Lab itself).

5. Annex of useful materials needed for the method

- **ENoLL library – European Network of Living Labs**
<https://tinyurl.com/bdfxfy96>
- **Recharge PLAYBOOK on Participatory Cultural Business Models**
<https://tinyurl.com/5y9mhctj>
- **Social Innovation Playbook**
<https://tinyurl.com/henxd5ua>



Module 3 - Learning by doing

CE Music Instruments (MINE VAGANTI NGO)

Objective: To teach participants how to make instruments from recycled materials, to develop their creative skills and to give them the experience of producing music in an orchestra through teamwork.

Length: 90 minute

Material:

- Plastic waste
- Cardboard
- cardboard boxes/tubes
- Textiles
- Plastic bottle caps
- Tin lids
- Colored paints

Method

1. Preparation and Introduction

The training begins with the importance of recycling. Instruments are introduced and their features are explained. The trainer explains how waste materials to be used can be used in an environmentally friendly way and how instruments can be made with these materials. The materials to be used in the project are introduced to the participants and examples are shown.

2. Steps:

Step 1: Instruments Classification

With the participants, the collected waste is divided into categories. Plastics, papers, glass, textiles and lids are grouped. During this process, information is given about recycling and proper waste separation.

Module 3 - Learning by doing

Step 2: Rain Stick Creation

A long cardboard tube or pipe is provided. Small waste (nails, plastic, branches etc.) is placed inside the pipe. This allows the materials inside to make sounds as they move. The pipe is tightly closed with plastic and textile materials at both ends. The pipes are personalized and colored as the participant wishes. Participants discover the sound of rain by bending the pipe.

Step 3: Rain Stick Sound

Participants try the rain stick they made and compare the tone of the sounds produced. The sound differences are discussed according to the length of the pipe and the material used.

Step 4: Kettledrums Creation

Cardboard pieces are cut into rectangular shapes approximately the size of the palm. These pieces are folded and shaped into the shape that the hand takes when the fingertips touch each other. Plastic bottle caps or small tin caps are mounted on the ends of the folded cardboards. The cardboard kettledrums created are colored and personalized. When ready to use, Participants hold their own kettledrums in their hands, try them by moving their fingers and discover the harmony of the sounds.

Step 5: Rehearsals

All participants rehearse with the instruments they made. Working in groups, they focus on the harmony of the sounds and rhythm organization. The sounds of each instrument group are brought into balance with each other.

Step 6: Live Concert

Participants take the stage together and perform a mini concert with the instruments they created. The importance of teamwork is emphasized in this performance.

3. After the session:

The concert is recorded and the results are shared with the participants. The videos shot during the training process can be used as a promotional material for recycling projects and creative works.

Module 3 - Learning by doing

4. More about the method

This method encourages both individual creativity and teamwork. The instruments created teach how harmony and concord can be achieved in an orchestra. This experience, where different sounds come together to form a whole, gives participants both environmental awareness and musical awareness.



Module 3 - Learning by doing

Communicating CE (MINE VAGANTI)

Objective: To empower adults at risk of exclusion by developing video tutorials on recycling and circular economy principles for households and enterprises.

Length: 2 hours

Material:

- Simple video recording tool (e.g., smartphone)
- Access to recycling materials (for demonstration purposes)
- PowerPoint template for video creation
- Computer/laptop with Microsoft PowerPoint
- Pen/pencil
- Note papers

Method

1. Preparation and Introduction

Introduce participants to the principles of circular economy and the importance of recycling.

Explain how video storytelling can effectively communicate these concepts.

Briefly demonstrate the steps for creating a video using PowerPoint.

2. Steps:

Research and Brainstorming:

- Discuss topics like waste separation, reuse strategies, and reducing mass consumption.
- Brainstorm and outline key points for the selected topic.

Content Development:

- Write a brief script for the video, detailing the flow of information and visuals.

Take photos related to the script, ensuring clarity and relevance.

Module 3 - Learning by doing

Presentation Creation:

- Insert photos and captions into PowerPoint slides.
- Add transitions and animations to enhance visual engagement.

Exporting as Video:

- Save the PowerPoint as a video using built-in features.
- Review the video for clarity and coherence.

3. After the session:

- Participants will share their videos on social media or within their communities.
- Trainers will provide feedback and suggest improvements for future projects.

4. More about the method

This interactive approach fosters creativity and hands-on learning. By involving participants in storytelling and video creation, it ensures active engagement and a deeper understanding of circular economy principles.

5. Annex of useful materials needed for the method

Communicating Circularity Script Template:

<https://tinyurl.com/mpr2np3t>

Communicating Circularity Video Template:

<https://tinyurl.com/2s382rw8>

Study visits in Slovakia

National Recycling Agency (NARA-SK)

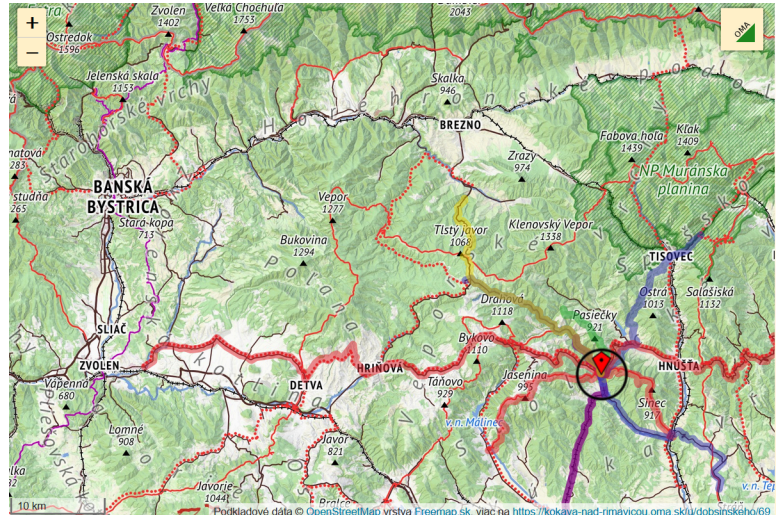


Study visits

1. Stará škola Kokava

**Address: Dobšinského 734,
985 05 Kokava nad Rimavicou
<https://staraskolakokava.sk/>**

The entire region of Novohrad with its center in Poltár (headquarters of REPRIK - the innovative industrial cluster founded by NARA-SK) has been among the least developed parts of Slovakia since the 1990s after the fall of communism.



In a territory with a lot of abandoned industrial brownfields, agricultural land, with a high percentage of socially and even ethnic marginalized population (unemployment 2013/29.3%, 2022/11.1 Slovakia 2022/5,9%), any bottom-up initiative is a rarity. The activation of the region is purposefully led through strengthening the self-confidence of the inhabitants, which has grown economically since the 18th century on the production of technical, but also world-unique collections of cultural glass.



Study visits

Elements of CE at visited place:

LESSON LEARNT: reuse of building and reasonable reuse of the construction materials, hire of local construction (social) enterprises in further Hub revitalisation

CE Job example:

LESSON LEARNT: power of personal initiative, self-help, cultural-hub, meet point for external knowledge and revitalization initiative' human resources circularity

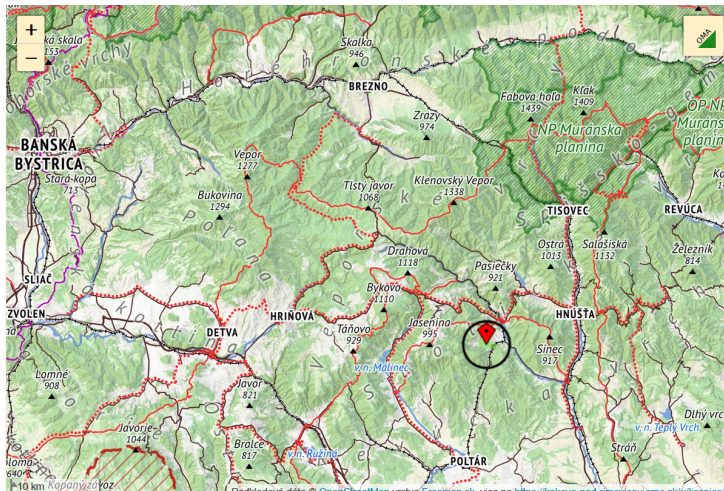


Study visits

2. Včelí kraj, civic society, ngo

**Address: Liešnica 1214/7, 985
05 Kokava nad Rimavicou
<https://kraj.sk/>**

One of the most inspiring projects/programs/institutions in the Slovak context in the sector of biodiversity conservation, landscape revitalization, employment, development of the bioeconomy by applying the principles of biomimicry



2018 Award of the Ministry of the Environment, 20201-European Landscape Convention-landscape Award of the Council of Europe).

Bottom-up activist, 3rd generation of the family beekeepers, creator and cluster engine of an informal beekeepers' community. Was able to stabilize a collaborative business model for regional micro bee-farmers via a centralized business unit. It guarantees fair-trade prices for micro bee-farmers products accepting their price if they commit continual switching to historical biomaterials to ensure avoid chemical harm of bee-families and increase well-being of their bee colonies. Sensitization for EU-REACH regulation in agro production.



Study visits

The employer of at-risk individuals from the local, low mobility workforce. Creator of own packaging solution from waste collected/reused bottles, through creative micro-manufacturing processing and regional glass-blower design facelift.

Creator of the private community center. Designer of beekeeping and other formats of informal LLL education, for local, regional formal education institutions as well as promoter for all inclusive corporate team buildings with educational and voluntary work if asked for.

Elements of CE at visited place:

LESSON LEARNT: biodiversity and biomimicry pioneer in the most remote corner of the Slovak regions, low carbon footprint promoter via farm-to fork delivery, circular fair trade business model creator and engine, reuse, cultural values promoter, informal community leader

CE Job example:

LESSON LEARNT: out-of-box free thinker, power of personal initiative, self-help, hotspot for external knowledge and revitalization initiative, human resources revitalisation

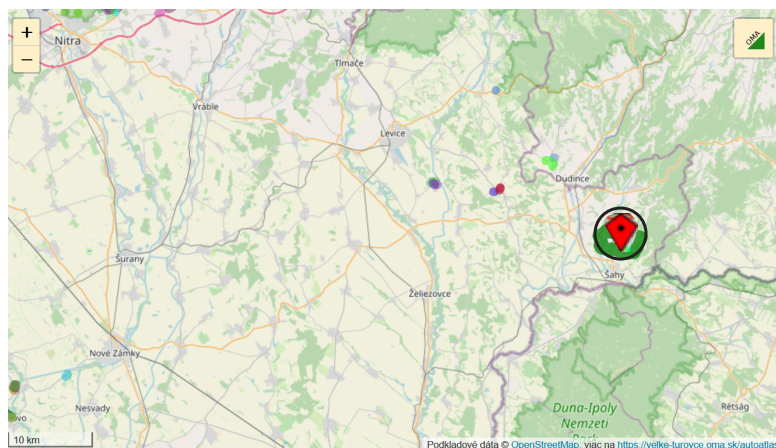


Study visits

3. MOLITAS, spol. s r.o.

**Address: Veľké Turovce 355,
935 81 Veľké Turovce
<https://www.molitas.sk/en/>**

The company is active in the furniture industry and on its own initiative, developed a new production program for the REuse of PUR foam scraps from (approx. 4,000 product models for its customers) as an alternative filler for filling furniture and home accessories (e.g. pillows).



The company, which is in straight neighborhood of the emerging social enterprise in Veľký Turovce, is eminently interested in developing cooperate on creation the sewing workshop, which will:

- 1, be directly involved in the MOLITAS Group internal fulfilling furniture and home accessories upholstery programme,
- be providing orders for the social enterprise's sewing workshop,
- serve as a training center for the recruitment of new employees, which is a critical factor in employability empowerment of locally available workforce in a logistically isolated region.



Study visits

As such, the company is an extremely important stakeholder in the establishment and business sustainability and business resilience of an emerging social enterprise.

As the largest employer in the remote bordering, linguistically isolated micro-region, the owner of the company represents a strategic person for the successful establishment and 1st regional transition of a start-up in the form of a social enterprise and the so-called cooperative economy. "start-up 3-year dead valley".

Elements of CE at visited place and CE Job example: :

LESSON LEARNT: Thanks to this circularity production program, the company managed to increase the use of primary "virgin" raw material - which if discarded must be classified as danger waste - up to the absolute level of 99.99% of the purchased input raw material.

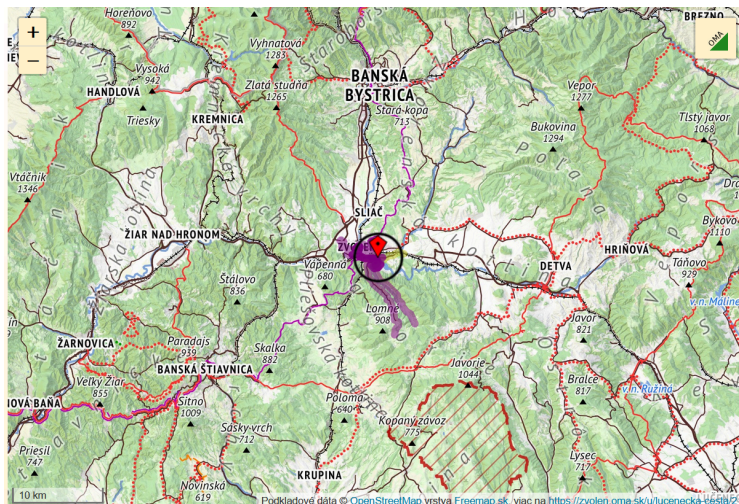


Study visits

4. KRONOSPAN, s.r.o

**Address: Lučenecká cesta č.
1335/21. Zvolen 960 01
https://kronospan.com/en_SK**

Bulky waste, including furniture, represents a specific group of waste with a high degree of pollution for possible processes of any R-sub-strategy in the circular economy. Bulk waste is exhaustively listed as the target waste stream in the CIRCular City project



In- for this reason, we considered it necessary to pay attention to it outside the scope of potential direct involvement in the circulation of the waste stream through the micro-business of social enterprises.

Due to the technological complexity of cleaning/processing this waste, the potential for inclusion of the CIRCular City project' target group is narrow. We may brainstorm just the furniture with a specific added (historical) value, where social enterprises without commercial realization of upcycled furniture have to compete with antique shops and craftsmen with their own market realization.



Study visits

However, with the strategic vision of connecting the micro-circular economy at the level of social enterprises with local business entities implementing scientific-research, large to global circularity, it is good to look for penetrations of large industrial organizations and clustered social enterprises in the vicinity - which can create mutually beneficial synergies. (in the premises of the KRONOSPAN company, two potential business plans were identified, which are outside the core business of KRONOSPAN, but can significantly increase the ESG credit of the company in Zvolen (environmental burden / bio-remediation and water retention measures on unused areas in and around KRONOSPAN).

The above-mentioned reasons represent a motivational framework for challenging negotiations regarding the possibility of joining a global concern with one branch at the venue of the C1 activity.

Elements of CE at visited place:

LESSON LEARNT: Know your place - know the realistic landscape for social enterprise and big picture /big and global circularity stakeholders within your brainstorm onto next social enterprise business plan

CE Job example:

LESSON LEARNT: Large industrial business entities pay attention to the circular economy of large waste streams within their core businesses. However, on the other hand, they represent an extremely suitable strategic partner for micro-waste solutions of collaborating and cooperating local social enterprises, which, by implementing micro-circular improvements in non-production activities and on the property basis, are able to increase the ESG benchmark of large companies. The social and micro circular organizations themselves acquire a strategic partner for their development, stability and sustainability. (Symbiosis and biomimicry of large and small living forms of biodiversity).



Pilots



Pilot

Center for Social Innovation (CSI), Cyprus

Dates of the Pilot: 27.01, 29.01, 31.01.25 and 1.02, 19.02.2025

Place of the pilot: CSI Headquarters Rigenis 62, Nicosia Cyprus

Target group: Six participants attended all five days of activities, including three young adults (ages 21-35) and two individuals aged 40-50. Additionally, three participants attended only one of the five activities (ages 21 and 44). Low income, unemployed, migrant.

Activities:

Pilot of the CIRC CITY Project, CSI					
Monday 27.01.2025	Wednesday 29.01.2025	Thursday 30.01.2025	Friday 03.01.2025	Saturday 01.02.2025	Wednesday 19.02.2025
17:00-19:00 Introduction to the Circular economy and art workshop	17:00 - 19:00 Turn Kitchen Waste into beautiful House indoor plants	17:00 - 19:00 Circular Business Model Canvas, examples and Video Creation	17:00 - 19:00 Visit at the precious plastic company (Dali Area)	11:00 - 12:00 Visit at the metal art Lab (old Nicosia)	17:00-19:00 Turn Kitchen waste into natural dyes

Short description:

The 5-day training program utilized a variety of dynamic and hands-on methods to equip participants with practical knowledge and skills in circular economy, sustainability, and upcycling. Experiential learning played a central role, with participants engaging in activities like an art workshop on Day 1, where they created pieces from recycled materials, and a natural dye workshop on Day 5, where they experimented with kitchen waste to produce dyes.

Pilot

Center for Social Innovation

Interactive workshops encouraged active participation and peer learning, such as the Circular Economy Introduction on Day 1, where participants discussed sustainability principles, and the Circular Business Model Canvas session on Day 3, which provided frameworks for applying circular economy concepts to business ideas. Site visits to organizations like the Precious Plastics Company on Day 4 and Sotiris Sevastides' recycled metal art lab on Day 5 allowed participants to see firsthand how waste materials are transformed into new products, reinforcing the concepts discussed in workshops. Additionally, collaborative project-based learning was encouraged through activities like an upcycling session on Day 3, where teams repurposed old clothing into functional bags, and a video creation workshop running from Day 3 to 5, where participants developed scripts, captured photos, and created a video on circularity in household and bulk waste. Daily reflection and group discussions provided space for participants to share insights, challenges, and key takeaways, further strengthening the knowledge gained throughout the program. The combination of these methods provided an immersive and engaging learning experience, ensuring that participants not only understood the theoretical aspects of sustainability but also gained the hands-on skills necessary to implement circular economy practices in their daily lives and communities.



Feedback:

Participants appreciated the hands-on, experiential learning activities, such as the art workshop and natural dyeing session, as these allowed them to directly apply the principles of upcycling and sustainability. They found these activities engaging and practical, helping them understand how waste materials can be repurposed creatively.

Pilot

Center for Social Innovation

Moreover, they valued the opportunity to deepen their knowledge of the circular economy and sustainability through interactive workshops and discussions. A key highlight for many was the chance to connect with like-minded individuals who share their passion for sustainability, fostering a sense of community and collaboration.



Pilot

Comparative Research Network e.V., Germany

Dates of the Pilot: 24.-28.02.2025

Place of the pilot: CRN Lounge, Müller Str. 70 B. 13349 Berlin

Target group: 10 youths (in aged of 21 - 25), migrants from European Union

Activities:

Pilot of the CIRC CITY Project, CRN				
Monday 24.02.2025	Tuesday 25.02.2025	Wednesday 26.02.2025	Thursday 27.02.2025	Friday 28.02.2025
14:00-16:00 Introduction to the Circular economy	14:00-15:00 R-frame method 15:00-17:00 Circular Walk	14:00 - 16:00 Visit-Glasbox at BTH Makerspace and learning space	14:00 - 17:00 Visit Nochmal	10:00 - 12:00 Refelections and possible CE jobs

Short description:

In the last week of February 2025 at the CRN office we organised a 5-day pilot in English inviting young migrants from EU countries aged 21 to 25. This is a group of persons who are looking for their place in the labour market, with different educational backgrounds and little knowledge of the German language, and who are at risk of social exclusion.

On the first day we welcomed the group and we focused on integrative activities to get to know each other and to test the group's knowledge about CE. On the second day we introduced the youngsters to the topic by explaining what CE is and what examples of social enterprises with CE can be found. On the third day we went to the Glasbox at BTH University which is a makerspace, meeting place and learning space.

Pilot

Comparative Research Network e.V.

On the fourth day we went to Nochmal, a second hand mall in Berlin Reinickendorf. The last day was dedicated to discussion, collecting conclusions, reflections and wondering, what kind of jobs can be found in Berlin and Germany in CE social enterprises.

Feedback:

The group of young participants mostly came in contact with the topic CE for the first time. It was a very interesting event for all of them, during which they realised the possibilities of finding a job in CE.



Pilot

European Center for Researching, Education and Consulting (ECREC), the Netherlands

Dates of the Pilot: 14.-18.01.2025

Place of the pilot: PFN Nieuweweg 5, 2685AP Poeldijk

Target group: Ten participants took part in all five days of activities, including four young adults (ages 21–35), three middle-aged individuals (35–50), and three older participants (50–70). The group included individuals with low income, those who were unemployed, and migrants.

Pilot of the CIRC CITY Project, ECREC				
Tuesday 14.01.2025	Wednesday 15.01.2025	Thursday 16.01.2025	Friday 17.01.2025	Saturday 18.01.2025
18:00–20:00 10 R's of Circular Economy	18:00–20:00 Physical & financial saving	18:00–20:00 The Circular Business Model Canvas	16:00–20:00 Field trips	12:00–15:00 Creating new products from recycled materials

Short description:

In January 2025, a 5-day training program titled “Sustainable in motion!” was organized in Poeldijk, the Netherlands, as part of the CIRC Circular City project. The program gathered 10 participants and two trainers, focusing on practical and community-oriented approaches to circular economy (CE).

The training utilized dynamic and hands-on methods to equip participants with practical knowledge and skills in CE. Experiential learning played a central role, incorporating interactive discussions, workshops, and collaborative activities.

Pilot

European Center for Researching, Education and Consulting

Key topics included the **10 R's of Circular Economy**, **physical & financial savings**, the **Circular Business Model Canvas**, **field trips**, and **creating new products from recycled materials**.

The program targeted individuals at risk of social exclusion, including young migrants aged 21–35 looking for their place in the labor market, as well as those with diverse educational backgrounds and limited knowledge of the Dutch language. Each day of the training explored a different aspect of CE, combining theoretical foundations with practical applications. Participants engaged in discussions on sustainability principles, explored circular business strategies, and visited local initiatives demonstrating innovative waste-to-product transformations.

The training utilized dynamic and hands-on methods to equip participants with practical knowledge and skills in CE. Experiential learning played a central role, incorporating interactive discussions, workshops, and collaborative activities.

Day 1 – The 10 R's of Circular Economy

The program began with an introduction to the **10 R's of Circular Economy**, providing participants with a strong theoretical foundation. Through interactive discussions and activities, they explored strategies such as refuse, rethink, reduce, reuse, repair, and recycle, analyzing how these principles can be applied in daily life and business.

Day 2 – Physical & Financial Savings

On the second day, participants examined how CE can lead to **physical and financial savings**. They learned practical ways to reduce waste, extend product lifespans, and make cost-effective choices that benefit both individuals and businesses. Activities included calculating the financial impact of sustainable choices and sharing personal experiences related to saving resources.

Day 3 – Circular Business Model Canvas

The third day focused on the **Circular Business Model Canvas**, helping participants understand how circular principles can be integrated into business ideas. Through group exercises, they developed their own circular business models, applying concepts such as product-as-a-service, closed-loop supply chains, and sustainable design.

Pilot

European Center for Researching, Education and Consulting

Day 5 – Creating New Products from Recycled Materials

The final day was dedicated to **creating new products from recycled materials**, allowing participants to apply their knowledge in a hands-on setting. Working in teams, they designed and crafted functional items using reclaimed materials, reinforcing the concepts learned throughout the training. The program concluded with group discussions, reflections, and an exploration of career opportunities in the circular economy sector.

This immersive and interactive approach ensured that participants not only gained theoretical understanding but also developed practical skills to implement circular economy practices in their daily lives and future careers.

Daily reflections and group discussions encouraged participants to share insights, challenges, and key takeaways. The immersive and interactive approach ensured that participants not only gained theoretical understanding but also acquired tangible skills to implement circular economy practices in their daily lives and future careers.

Feedback:

The Sustainable in Motion! training program was an incredibly positive experience for participants, who particularly appreciated the combination of theory and hands-on practice. “The mix of learning and real-life application was invaluable,” shared one participant, highlighting the activity with old products as a standout. The field trip was another major highlight, with many participants expressing how it gave them fresh insights into the real-world impact of circular economy practices. “Seeing businesses apply circular principles firsthand was truly inspiring,” said one participant.

Participants were enthusiastic about the knowledge gained, especially the 10 R’s of Circular Economy. “I’m excited to apply what I’ve learned to reduce waste and make smarter choices in my daily life,” said one participant, reflecting the high level of engagement. The Business Model Canvas was also appreciated, with several participants feeling more equipped to integrate circular practices into their future projects. “It provided a clear overview, and I now have a solid foundation to build on,” said one participant.

Pilot

European Center for Researching, Education and Consulting

Though some wanted more time for assignments and deeper discussions, the feedback was overwhelmingly positive. “The training was very complete,” noted one participant. Many were inspired by the collaborative spirit fostered throughout the week, and everyone agreed that the final activity—creating new products from recycled materials—was both fun and educational. “It was inspiring to see what we could create with materials that would otherwise be thrown away,” said another.

The training also inspired significant personal changes, with participants eager to adopt sustainable habits such as reducing plastic use, buying second-hand, and reducing food waste. “I feel empowered to make sustainable choices, and I’m excited to share this knowledge with others,” one participant shared. Overall, the training was a rewarding, eye-opening experience that left participants motivated and ready to make a positive impact in their communities.



Pilot

MINE VAGANTI NGO, Italy

Dates of the Pilot: 4--5., 11., 18.-19.12, 24

Place of the pilot: Terni, Italy

Target group: 10 young adults aged 18-25 at the risk of exclusion

Activities:

Pilot of the CIRC CITY Project, Mine Vaganti NGO				
Wednesday 04.12.2024	Thursday 05.12.2024	Wednesday 11.12.2024	Wednesday 18.12.2024	Thursday 19.12.2024
16:00-18:00 The role of circular economy and social enterprises in sustainable development	16:00-18:00 Introduction to the hands- on workshop Making Percussion Sticks	16:00-18:00 Creating Rainsticks – Understandin g sound and sustainability through upcycled materials	16:00-18:00 Crafting Shakers and Drumsticks – Hands-on session	16:00-18:00 Reflection and Community Impact

Short description:

The 5-day pilot program provided a dynamic learning environment for adults, blending theory with practical activities. Participants received an overview of the CIRC project and its relevance to community initiatives, helping them understand the broader purpose of their engagement. Creative hands-on sessions included the making of percussion sticks, rainsticks, shakers, and drum sticks, encouraging teamwork, cultural expression, and practical crafting skills promoting circular economy. These activities not only encouraged creativity and teamwork but also demonstrated practical examples of resource efficiency, waste reduction, and sustainability—the core values of the circular economy.

Pilot

MINE VAGANTI NGO

By combining theory, practical exercises, and sustainable crafting, participants gained a deeper understanding of how circular economy principles can be integrated into community initiatives, promoting environmental responsibility and social innovation.

Feedback:

The feedback from trainers and participants, particularly adults from disadvantaged backgrounds facing health challenges, was overwhelmingly positive. Participants reported a significantly improved understanding of circular economy principles and increased confidence in applying them within their communities. Many rated their knowledge and awareness between 8/10 and 9/10, acknowledging the achievement of learning objectives—some fully, while others partially, yet still valuing the experience for its broader perspective. The local activities were well received, with particular appreciation for the interactive and practical approach. Hands-on workshops, such as crafting percussion instruments from recycled materials, effectively demonstrated sustainability concepts in an engaging way.

Participants expressed enthusiasm for applying their newly acquired knowledge and skills, with many planning to initiate community projects related to the circular economy.

Trainers highlighted the program's impact on participants' motivation and engagement, noting that it empowered them to take proactive steps toward sustainability. Suggestions for improvement included a deeper dive into circular economy topics, structured group discussions, and guest expert sessions to provide real-world insights. The activity successfully fostered enthusiasm, confidence, and practical skills, equipping participants to drive sustainable change within their communities.



Pilot

National Recycling Agency (NARA-SK), Slovakia

Dates of the Pilot: 10.-14.03.2025

Place of the pilot: Šahy

Target group: 11 students of Gymnasium Šahy

Activities:

Pilot of the CIRC CITY Project, NARA SK				
Monday 10.03.2025	Tuesday 11.03.2025	Wednesday 12.03.2025	Wednesday 12.03.2025	Friday 14.03.2025
9:00-12:00 Icebreaker, introduction circular economy, social economy, living lab education	10:00-12:00 R-Strategies, Big vocabulary Transform the Waste - Think Out of Box	10:00-12:00 Touch the Waste - Understand the Waste as You Do Know It	10:00-12:00 Doing Circular Business, Circular Business Canva	9:00-12:00 filming day Living Lab as Non-Linear Cross-Sector Educational Approach

Short description:

As the testing group from 7 schools located in central town of the Ipel'-Hont - region, Šahy, students from the Gymnasium in Šahy came for pilot testing the circular education via living lab approach. Gymnasium in Šahy has approved school educational curriculum/programme the program Eductaion for Enviornmental Thinking (ISCED 3A). Its 11 students to the pilot "livinglabing" event. However, small environmental projects surrounding the school building can not offer for students such a wide range of circular solutions as in 1st RSD intended environmental and circular economy educational polygon which will be part of its core business in innovative bottom-up solutions in the circular economy.

Pilot

National Recycling Agency

Students became familiar with the wide range of problems and solutions that the circular economy encompasses, directly on site where the waste and solution may be touched and found. Four days of brainstorming and walking on the topic pre-designed from curricula was finally combined with testing of putting various groups of trainees (from Gymnázium, socially vulnerable inhabitants from villages and its mayors as next managers in 1st RSD).

Feedback:

The participants of the Living Lab application were three target groups: students of Gymnázium Šahy, founders of 1RSD - mayors of municipalities, who will act in the position of leaders of the work process. And finally, their future workers of 1RSD - socially endangered residents of municipalities sought at the local office which registers all unemployed, socially and health-disabled residents of the region. The accompanying teacher of Gymnázium Šahy on behalf of the students confirmed the benefit of demonstrating the huge amount of waste as an everyday problem and not just as ppt pictures and text in the school textbook Biology or Social Studies. The school campus provides minimal space for the practical presentation of all possible approaches in individual types of waste and R-strategies, while cooperation with the practical center of the circular economy is a required connection of formal education with work.



Pilot

National Recycling Agency

Students became familiar with the wide range of problems and solutions that the circular The founders of 1RSD livinglab, through continuous 12-month cooperation with the CIRCULAR CITY project, have understood the breadth of the circular social economy far beyond the waste of individual municipalities, but have begun to understand the long-term unused resources of the country for their own circular production and employment programs = through circular business canva modeling. In the participating municipalities, based on the activities of 1RSD, a record was made of immediately employable low-skilled, health, social, endangered groups of residents (municipality/number of unemployed): Velké Turovce/29, Horné Turovce/17, Hrkovce/15, Slatina/11, Lontov/32, Pastovce/3. Mayors - mentors and heads of job classification of future 1RSD employees are only interested in the fastest possible work integration and reintegration of their citizens, since this indicator is the most effective measure for the investment of other (financial) resources from the municipal councils of the participating municipalities. The future employees involved from the 1RSD municipalities appreciated the sensitive approach, the ample time, and the form of education that was more like school than they remembered, with the character of shared learning, questions, answers, and contacts with people they had never met before. In conclusion, we conclude that the Living Lab, as a constantly evolving process, has demonstrated that the participants become the role of the educated, changing to that of the educator, and thus increasing community awareness and social resilience strengthened by interpersonal ties

Pilot

Stowarzyszenie na Rzecz Spółdzielni Socjalnych (SNRS), Poland

Dates of the Pilot: 25.-29.01.2025

Place of the pilot: SNRSS headquarters, Wrzosowa 7, Konin; headquarters of the Association of Rural Women's Clubs, Adamów 19A, Golina

Target group: 13 woman (in aged of 30 - 65), women from rural communities at risk of social exclusion

Pilot of the CIRC CITY Project, Stowarzyszenie na Rzecz Spółdzielni Socjalnych				
Saturday 25.01.2025	Sunday 26.01.2025	Monday 27.01.2025	Tuesday 28.01.2025	Wednesday 29.01.2025
10:00-12:00 Her Majesty's Circular Economy" Introduction to the Circular economy 13:00-16:00 Workshop "Secrets of our fridge"	10:00 - 12:00 Planing is saving - the art of smart management 13:00-15:00 Team game "cooking with the fridge"	14:00 - 16:00 The second life of food 17:00 - 19:00 Cooking workshop	14:00 - 18:00 Share the extra Social project: shared community fridge	14:00 - 20:00 Taste Festival Conclusions and discussion about possible projects in future

Short description:

In January 2025 in Konin, Poland, a 5-day workshop titled *"Use, Reduce, Make it Last – A Circular Future Starts with the Past!"* was organized as part of the CIRC Circular City project. The event gathered 13 participants and two trainers, focusing on promoting circular economy (CE) principles through practical, community-oriented activities.

Pilot

Stowarzyszenie na Rzecz Spółdzielni Socjalnych

Each day explored a different aspect of CE. Participants learned about reducing food waste, smart planning, and the second life of food, including techniques like pickling and freezing. They engaged in creative cooking from leftovers and discussed strategies for sharing excess food, including the creation of a community fridge. The final day celebrated a "Taste Festival," where participants showcased dishes made from saved food items, fostering a sense of community and sustainable habits.

Feedback:

Participants expressed that the workshops broadened their perspective on waste reduction and sustainable living. They appreciated the practical, hands-on approach to learning about CE and found the experience both enlightening and empowering. Many highlighted the realization that small actions, like smart shopping and sharing excess food, can significantly impact their community. The concept of a community fridge was particularly well-received as an innovative way to reduce food waste and foster local cooperation.



Partners



Partners

Center for Social Innovation (CSI)

<https://csicy.com/>



Center for Social
Innovation

CSI focuses on developing and introducing disruptive solutions to systemic social, educational, and economic problems through collaboration with stakeholders. A team of 50 interdisciplinary professionals works in areas such as social innovation, education, health, environment, emerging technologies, and arts and culture. Its mission includes vocational education and training programs aimed at capacity building and enhancing professional skills. CSI fosters innovative solutions to support entrepreneurship and tackle critical societal challenges. It is committed to environmental sustainability by addressing ecological issues and promoting sustainable practices. By leveraging emerging technologies, CSI ensures responsible development to create inclusive and positive impacts.

Comparative Research Network e.V. (CRN)

www.crnonline.de

Comparative Research Network:

Aims – People – Projects – Methods – Results

The Comparative Research Network (CRN), established in 2007 has worked in the field of adult education. Beside organising training, qualifying teachers and performing research. CRN has experience in managing and leading diverse projects, including those funded by CERV. CRN has developed substantial expertise in addressing discrimination, promoting participatory democracy, and advancing sustainability through initiatives such as ACCT and EU24. Since 2012, CRN has been deeply involved in participation, inclusion, narration, climate change, sustainability, and the circular economy. Their activities are structured across three core areas: research, education, and publication. Noteworthy projects, including Horizon 2020's EUARENAS, have furthered CRN's expertise in implementing grass-roots policy recommendations and applying deliberative democracy and narrative techniques to ensure that diverse voices are effectively heard by policymakers. CRN is well-positioned to leverage its knowledge, experience, and resources to address the challenges faced by organisations and groups involved in its project.

Partners



European Center for Researching, Education and Consulting (ECREC)

<https://ecrec.eu/>

Purpose of ECREC is to promote entrepreneurship and innovation for green growth through researching, training, and consultancy. Within the organization are gathered experts with experience in the field of energy, environment, digitalization, and entrepreneurship. To inspire and transform social minorities by connecting with them, so that change and awareness about sustainability is created within our society.

In execution of the above-mentioned purpose, the foundation delivers programs to different stakeholders:

- 1) With the purpose to enhance employability, protect the environment and boost innovation, encourage civil and democratic participation (especially young people, migrants, social renting house people).
- 2) Conducts research and consultancy in the field of circular economy, re"newable energy, urban development.
- 3) Adjusts new business models in the field of agriculture, energy, water for food security, employability, and clean environment.
- 4) Implement EU subsidized projects with EU partnerships.

ECREC provides professional guidance to support innovations for improving the management level and education practices, to monitor and evaluate the performance of the project and suggest measures as required, and to mentor the project towards quality improvement in achieving the main goals.



Partners

Mine Vaganti NGO

<https://minevaganti.org/it/>



Mine Vaganti NGO is a dynamic non-profit organization founded in Sardinia in 2009, specializing in education, training, international mobility, and consultancy across youth, adult, education, and sports sectors. MVNGO operates regionally, nationally, and internationally to foster intercultural dialogue, green entrepreneurship, and social inclusion. The organization comprises a team of experienced professionals, including Salto-accredited trainers, who design and implement innovative projects and training courses. MVNGO emphasizes collaboration and capacity building through thematic research, partnership development, and knowledge exchange. Its mission is to leverage education and social entrepreneurship as tools for sustainable development and community empowerment.

National Recycling Agency (NARA-SK)

<https://www.narask.sk/en/>



National Recycling Agency – Slovakia, NARA-SK is a knowledge association of legal and natural persons, developers, academics, researchers, independent experts united on the basis of the paradigm of education for sustainable development. Innovations provide a framework for a systemic solution of circular economy, industrial ecology, promotion of BAT and innovative approaches in upcycling, recycling, remanufacturing, sanitation in the areas of key natural resources, air, water and materials for all stakeholders of society on a common methodological platform of the Quintuple Helix model.



Partners

Stowarzyszenie na Rzecz Spółdzielni Socjalnych (SNRSS)



Association for Social Cooperatives (ASC) was established in 2003 in Poznań as an umbrella organization for social enterprises, social cooperatives, and NGOs. The Association has vast experience in the management of the social economy projects co-financed by the European Social Fund and Erasmus+. ASC engages almost 40 experts and specialists. Among them, there are experts in the field of project management, social economy, education, marketing, accounting, evaluation, etc. The headquarters office of ASC is in Poznań (Wielkopolska) but we operate throughout the entire country. ASC's main goal is to create a sustainable and efficient ecosystem for growth and development for social cooperatives and social enterprises in Poland. To achieve that goal ASC is continuously creating multi-sectoral partnerships, coalitions, cooperation, and other collective initiatives. It gives us an opportunity to implement socially and environmentally responsible solutions in social policy, public procurement, and support people at risk of social exclusion due to their social background, age, gender, or disability. The Association's activity is a response to the disadvantages that we see in the social policy system.



Annex



Module 1 - Sensibilisation

Persona - example three

MAUREEN SADIG

Maureen
35 years old
Single
Lives in Cyprus since
2020
Soudanese citizenship

EDUCATIONAL BACKGROUND

Maureen completed her secondary education in her home country and then moved to Cyprus, where she studied business administration. She also holds a diploma in culinary arts from her home country, which complements her extensive knowledge of traditional north-african cuisines and modern culinary techniques.

GOALS AND CHALLENGES

Maureen aims to maintain consistent quality in her restaurant by streamlining the import process to reduce delays. She also plans to expand her customer base with catering services and cooking classes. Challenges include logistical issues with importing ingredients and a limited proficiency in Greek, which complicates negotiations and administrative tasks.

KNOWLEDGE ABOUT CIRCULAR ECONOMY

Maureen has basic awareness of circular economy principles, mainly in reducing waste and sourcing sustainably. However, her focus remains on maintaining her restaurant's authenticity, which sometimes conflicts with fully adopting these practices.

WORK EXPERIENCE

Maureen owns and operates an African restaurant in Cyprus. Her restaurant is renowned for its authentic Soudanese dishes. However, she faces significant challenges due to the need to import many ingredients from Africa. Delays in shipments often result in an inability to produce high-quality dishes, leading to dissatisfied customers and operational problems.

LIFE PROBLEMS

Since moving to Cyprus, Maureen has struggled with occasional homesickness and cultural adjustment issues. She sometimes feels isolated due to the language barrier and the challenges of running a business in a foreign country. Despite having a few supportive friends, she often misses her home in Africa and the familiarity of her native culture.

Module 1 - Sensibilisation

Persona - example four

CARLOS MENDES

NAME: CARLOS MENDES
AGE: 38 YEARS OLD
LOCATION: LISBON, PORTUGAL
ROLE: FOUNDER AND CEO OF ECOIMPACT
INDUSTRY: SOCIAL ENTERPRISE - SUSTAINABLE PRODUCTS
CITIZENSHIP: PORTUGUESE

EDUCATIONAL BACKGROUND

Carlos holds a degree in Business Administration from the University of Lisbon. After completing his undergraduate studies, he pursued a master's degree in Social Entrepreneurship in London. His education has equipped him with a strong foundation in both business management and the principles of social impact.

GOALS AND CHALLENGES

Carlos aims to expand EcolImpact's reach by introducing more sustainable products into the European market. A key goal is to partner with local artisans to create eco-friendly products while ensuring fair wages and ethical working conditions. However, he faces challenges in scaling the business due to limited resources and the difficulty of finding reliable, eco-conscious suppliers.

KNOWLEDGE ABOUT CIRCULAR ECONOMY

Carlos is highly knowledgeable about the circular economy. He is committed to reducing waste and promoting a circular supply chain in his company. Carlos actively seeks to implement closed-loop systems in production, where materials are reused, and waste is minimized, aiming to make EcolImpact a zero-waste enterprise.

WORK EXPERIENCE

Before founding EcolImpact, Carlos worked in corporate social responsibility (CSR) for a multinational company. His experience there exposed him to the importance of sustainable business practices. In 2015, he founded EcolImpact, a social enterprise that focuses on creating eco-friendly products from recycled materials. His leadership has driven the company to become a recognized name in the sustainable products industry in Portugal.

LIFE PROBLEMS

Carlos struggles with the stress of running a growing business while trying to maintain a work-life balance. He often finds it challenging to switch off from work, which impacts his personal life and well-being. Additionally, Carlos is concerned about the future of small social enterprises in a market increasingly dominated by larger, profit-driven companies.

Module 1 - Sensibilisation

Persona - example five

RAJESH PATEL

- 52 years old
- Married to Meera (49)
- 3 children (Priya, 22; Anil, 19; Kavita, 16)
- Indian
- Living in Milan since 2010

EDUCATIONAL BACKGROUND

Rajesh completed secondary school in India, excelling in technical subjects. He then attended a vocational training program in electronics repair, gaining practical experience in diagnosing and fixing electronic devices. Financial constraints prevented him from pursuing higher education, but he supplemented his knowledge with on-the-job training and informal learning.

GOALS AND CHALLENGES

Rajesh aims to secure stable employment in electronics repair or maintenance to support his family and dreams of opening his own repair shop in Milan. His limited proficiency in Italian (B2 level) and the need for local certifications are significant challenges. He struggles with job instability and finding positions that match his expertise.

KNOWLEDGE ABOUT CIRCULAR ECONOMY

Rajesh has practical knowledge of repairing and maintaining electronics, which aligns with circular economy principles. He understands the importance of fixing and reusing items to reduce waste, and he actively applies these practices in his work and daily life. This knowledge is a valuable asset in promoting sustainability and reducing electronic waste.

WORK EXPERIENCE

In India, Rajesh worked as an electronics repair technician, where he developed a reputation for his skill and reliability. Since moving to Milan, he has taken on various jobs, including working in a small electronics repair shop and doing maintenance work. These roles have allowed him to continue applying his expertise, although not always in the capacity or stability he desires.

LIFE PROBLEMS

Rajesh experiences financial stress and anxiety about providing for his family. He feels socially isolated and faces discrimination in the job market due to his immigrant status. Additionally, he struggles with cultural adjustment to life in Italy and maintaining his family's cultural identity. These challenges impact his mental well-being and his ability to fully integrate into the community.

Module 1 - Sensibilisation

Persona - example six

LARISSA IVANOVA

- 50 years old
- Widowed
- 1 son (Viktor, 20)
- Ukrainian
- Living in London since 2018

EDUCATIONAL BACKGROUND

Larissa completed her secondary education in Ukraine before attending a vocational training program in tailoring and dressmaking. She excelled in her courses, gaining comprehensive skills in garment construction, alterations, and fabric care. Her education laid a solid foundation for her career in tailoring, allowing her to develop a keen eye for detail and precision.

GOALS AND CHALLENGES

Larissa wants to expand her part-time seamstress job into a full-time business, aiming to build a client base for custom clothing and alterations. However, language barriers, being at a B1 level in English, and limited knowledge of local business practices are significant hurdles. She finds it difficult to navigate the competitive job market and feels isolated due to cultural differences.

KNOWLEDGE ABOUT CIRCULAR ECONOMY

Larissa possesses a good understanding of circular economy principles, particularly in the context of textiles. She is adept at recycling fabrics and mending clothes to extend their lifespan, reducing textile waste. Her tailoring skills allow her to repurpose old garments into new, stylish pieces, contributing to sustainable fashion practices.

WORK EXPERIENCE

In Ukraine, Larissa worked as a tailor for many years, honing her craft and building a loyal customer base. After moving to London in 2018, she struggled to find a job in her field due to language barriers and a lack of local credentials. She has since taken on various cleaning jobs and currently works part-time as a seamstress in a local alterations shop.

LIFE PROBLEMS

Larissa experiences financial strain, worrying about supporting herself and her son, Viktor, who is in higher education. She misses her home country and community, which exacerbates her loneliness in London. With limited social support, she often feels isolated and homesick, struggling to find a sense of belonging while striving for stability and success in her new life.

Module 1 - Sensibilisation

Persona - example seven

KAROL

- 53 years old
- car mechanic
- 2 children
- 25 years marriage

KNOWLEDGE ABOUT CIRCULAR ECONOMY

Karol has certainly had a hand in repairing and maintaining cars, which is a key element of the circular economy. Repairing and reusing car parts, rather than throwing them away, is a basic principle of the closed loop economy. He could also see the importance of recycling car parts, such as batteries, tires and oil, which contributes to reducing waste and pollution.

EDUCATIONAL BACKGROUND

Karol is an auto mechanic by training. He first graduated from vocational school, then from a mechanical engineering school. He never went to college, he couldn't afford it.

Karol comes from a small town near a big city. In his hometown, he gained experience as a car mechanic from an early age. He spent his summers helping his uncle in the auto repair shop. Car repair is his passion.

WORK EXPERIENCE

Karol was an active auto mechanic for most of his life, well respected by his customers and colleagues. He was also a loving father and husband, but the tragic death of his son deeply wounded him, leading to a gradual descent into addiction; he is an alcoholic.

GOALS AND CHALLENGES

His main goal is to maintain sobriety and avoid situations that could lead to relapse. He also strives to rebuild relationships with his family and loved ones, trying to regain their trust and love. Professional stability is crucial to him, so he seeks to establish himself in his new role, earning recognition as a reliable and responsible employee. Personal development is also important to him, both in terms of professional and personal skills that will help him in his future life.

LIFE PROBLEMS

Over the years, Charles became increasingly distant from family and friends, losing his job in the process and facing many difficult choices. His path to sobriety was difficult and bumpy, beginning after the tragic death of his son, who died of cancer. This event became a turning point in his life, pushing him toward alcohol as a way to escape pain and loss. After years of struggling with addiction, Charles took the decision to seek treatment and is now sober, but is still working to rebuild his life and relationships with loved ones.

Module 1 - Sensibilisation

Persona - example eight

ZOSIA

- 26 years old
- 5 sisters
- living with parents
- graduated from culinary school and is a "small catering chef" by training
- works in a dry cleaner

EDUCATIONAL BACKGROUND

Zosia graduated from vocational school, and is a small catering chef by training. Zosia does not work in her profession, working in the kitchen is too stressful for her. Zosia wanted to further her education, but due to the situation in the family home after graduation she had to go to work to support the household budget. All of her sisters have graduated or are in the process.

GOALS AND CHALLENGES

Zosia grew up in a large family, where she was always seen as "different" due to her mental challenges. From an early age, she had difficulty adapting socially, which was initially attributed to her introverted nature. Zosia dreams of becoming independent and having her own apartment.

KNOWLEDGE ABOUT CIRCULAR ECONOMY

In the school that Zosia graduated from, she wasn't very educated on the topic of the circular economy. However, because of her professions, Zosia defiantly knows a lot about how not to waste food, for example, and how to reuse it.

Zosia comes from a home where there was not much money. Especially since all of her sisters studied off-site, and that's a very big expense. Zosia learned how to reuse things because the family could not afford to keep buying new ones.

WORK EXPERIENCE

Zosia did an internship at a restaurant during her schooling. She worked mainly as a kitchen helper, sometimes as a waitress. This work was too stressful for her, the stress and pressure that was in the catering apprenticeship made Zosia know already during her education that she did not want to work like this. Now Zosia works in a laundry, 80% of the people working there are people with disabilities. The work is not easy, but Zosia feels safe there.

LIFE PROBLEMS

She struggles with a mental disorder, which significantly affects her daily functioning and relationships with her family.

Her relationships with her parents and sisters are strained, mainly due to differences in perception of her condition and needs. Zosia is a closed-in person, rarely sharing her thoughts and feelings with others, which makes it even more difficult to form close relationships and seek support.

Module 1 - Sensibilisation

Persona - example nine - your own

Name • Age • Civil status • Occupation • ... • ...	Educational Background Text ...	Goals and Challenges Text ...
Knowledge about Circular Economy Text ...	Professional Experience Text ...	Life Problems Text ...

Module 1 - Sensibilisation

CIRCLE OF CHANGE - game board



Module 1 - Sensibilisation

CIRCLE OF CHANGE - game board



Module 1 - Sensibilisation

CIRCLE OF CHANGE - game board



Module 1 - Sensibilisation

CIRCLE OF CHANGE - game board



Module 1 - Sensibilisation

CIRCLE OF CHANGE - game board



Module 1 - Sensibilisation

CIRCLE OF CHANGE - game board



Module 1 - Sensibilisation

CIRCLE OF CHANGE - cards - personas

Age: 45

Background: Anna is a mother of two children and worked as a saleswoman in a small store for 15 years. After the store closed, she lost her job and has been unemployed for two years. She struggles with low self-esteem and difficulty finding a new job in the face of a rapidly changing market.

Challenges: lack of modern skills, lack of access to training, low motivation, difficulty balancing childcare and job search.

Needs: job training, psychological support, career mentoring, job search assistance.

Age: 70

Background: John is a retired math teacher who has worked at a high school for most of his life.

Since retiring, he has felt increasingly socially isolated, especially since his children live abroad. He has health problems and lacks motivation to get involved in society.

Challenges: limited mobility, social isolation, difficulty operating modern technology.

Needs: activation programs, computer courses, social support, access to health care.

Age: 30

Background: Catherine was born with cerebral palsy, which makes her use a wheelchair. Despite her disability, she graduated with a degree in psychology, but has difficulty finding a job due to the lack of workplace accommodations for her needs. Catherine lives with her parents, who support her, but dreams of living independently.

Challenges: limited access to adapted workplaces, social stigma, lack of accessible infrastructure.

Needs: adapted jobs, support for integration into the labor market, services to support independence, availability of infrastructure.

Age: 38

Background: Martin is a father of three children and works as a laborer at a construction site. His earnings are very low, which makes it difficult for him to meet his family's basic needs. He often struggles with debt and wonders how to provide a better future for his children.

Challenges: low wages, lack of access to education, indebtedness, no prospects for improving his financial situation.

Needs: financial education, social support, professional development programs, debt repayment assistance.

Age: 28

Background: Ahmed came to Poland as a refugee from Syria, where his family fled the war. Despite having an engineering degree, he faces difficulties with the language and cultural barrier, making it difficult for him to find work in his profession. Ahmed is determined to build a new future in Poland, but needs support to acclimate.

Challenges: language barrier, difficulty integrating, lack of recognition of professional qualifications, discrimination.

Needs: language instruction, support for cultural integration, help with recognition of professional qualifications, social support.

Age: 52

Background: Gregory lost his home after a divorce and a series of unfortunate events that led him to homelessness. He often sleeps in shelters and on the street, struggling with health problems and alcohol addiction. Despite his difficult situation, Gregory dreams of rebuilding his life and returning to normalcy.

Challenges: lack of access to health care, addictions, social stigma, lack of life stability.

Needs: assistance in finding a place to live, health and psychological support, rehab programs, vocational activation.

Age: 35

Background: Thomas was born with a mobility disability that leaves him in a wheelchair. He is intelligent and ambitious, with a degree in computer science, but faces barriers in the job market due to a lack of accessible jobs and infrastructure. He lives alone, but often needs help with daily activities. Thomas dreams of living independently and finding a job that will allow him to grow professionally.

Challenges: limited availability of infrastructure, lack of equal opportunities in the labor market, need for assistance in daily activities, social isolation.

Needs: adapted jobs, support for integration into the labor market, availability of infrastructure, programs to promote independence and social integration.

Age: 40

Background: Jolanta is a single mother of three children, working part-time as a cashier at a supermarket. Her income is barely enough to cover her basic needs, and she often has to rely on social assistance. Jolanta worries about her children's future and tries to provide for them in the best possible way, but she often lacks resources and support. She also has health problems that make it difficult for her to take on additional work.

Challenges: low income, financial instability, lack of access to health care, lack of time for personal development.

Needs: financial education, social support, access to health care, support programs for large families.

Module 1 - Sensibilisation

CIRCLE OF CHANGE - cards - back site



Module 1 - Sensibilisation

CIRCLE OF CHANGE - cards - resources

plastic

Description: plastic obtained from the recycling process of consumer waste, such as bottles, plastic bags. It can be reused to produce new items such as furniture, containers or building materials.

Use: promoting products with a low carbon footprint, DIY (do-it-yourself) workshops, creating awareness about reducing the use of virgin raw materials.

Educational information: recycling plastic reduces the amount of waste going to landfills and the CO2 emissions associated with the production of new materials.

paper

Description: paper recycled from recycled paper, suitable for printer paper, bags, packaging and other paper products.

Use: educational classes on recycling, making your own paper products (e.g. notebooks, envelopes), workshops on reducing paper consumption in offices.

Educational information: using recycled paper reduces deforestation and energy consumption needed to produce new paper.

metals

Description: metals, such as aluminum, copper or steel, recovered from electronic products and other metal waste.

Uses: manufacturing new electronic devices, building recycled items, educating on energy and resource conservation.

Educational information: recycling metals is much less energy intensive than extracting and processing virgin raw materials, which helps conserve natural resources.

biodegradable materials

Description: materials that are biodegradable and can be composted, such as food scraps, leaves, wood, cotton, or paper without paint.

Use: education on composting, hands-on workshops on setting up compost piles, creating small urban gardens.

Educational information: composting helps naturally recycle organic waste, reduces the amount of waste going to landfills and enriches the soil.

glass

Description: recycled glass from broken bottles and windows, used to make new packaging and building components.

Use: production of new bottles, building materials, recycling workshops.

Educational information: glass recycling is infinite - glass can be recycled many times without loss of quality. Recycling glass reduces the need for natural raw materials (sand, soda ash) and reduces the energy required to produce new glass products.

wood

Description: wood obtained from the demolition of old buildings or furniture, which can be reused.

Use: furniture manufacturing, building materials, carpentry workshops.

Educational information: using recycled wood reduces the need for logging and allows the use of wood that might otherwise become waste. Participants can learn wood refinishing and upcycling techniques that support sustainable construction and design.

fabrics

Description: fabrics extracted from garments and waste textiles that can be recycled into new materials.

Application: production of new clothes, upcycling, sewing workshops.

Educational information: recycling textiles reduces the amount of waste going to landfills and the need for raw materials to produce new fabrics. Participants can learn how textiles can be reused and recycled in various ways, promoting sustainable fashion.

building materials

Description: building materials obtained from demolition of buildings, used for road and foundation construction.

Use: infrastructure construction, education on sustainable construction.

Educational information: using recycled stones and aggregates reduces the need to extract new materials, which helps conserve natural resources and reduces emissions associated with transporting and processing raw materials. Participants can learn about recycling techniques in construction and how they can contribute to sustainable urban development.

Module 1 - Sensibilisation

CIRCLE OF CHANGE - cards - back site



Module 1 - Sensibilisation

CIRCLE OF CHANGE - cards - resources

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Application: production of new clothes, upcycling, sewing workshops.

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Use: infrastructure construction, education on sustainable construction.

Educational information: using recycled stones and aggregates reduces the need to extract new materials, which helps conserve natural resources and reduces emissions associated with transporting and processing raw materials. Participants can learn about recycling techniques in construction and how they can contribute to sustainable urban development.

Module 1 - Sensibilisation

CIRCLE OF CHANGE - cards - back site



Module 1 - Sensibilisation

CIRCLE OF CHANGE - cards - energy

solar energy

Description: Energy harvested from solar panels, used to power buildings and appliances.

Use: Workshops on solar panel installation, education on the benefits of renewable energy sources, DIY projects related to small solar panels.

Educational information: Solar energy is an inexhaustible source of energy that reduces dependence on fossil fuels and reduces CO2 emissions.

wind energy

Description: Energy extracted from wind turbines, used to power power grids.

Use: Education on renewable energy sources, workshops on the benefits of wind energy, mini wind turbine projects.

Educational information: Wind energy is clean and renewable, and its use helps reduce greenhouse gas emissions.

energy efficiency

Description: Principles and technologies to minimize energy consumption, e.g. building insulation, LED lighting.

Use: Workshops on improving energy efficiency in homes, education on energy savings, design of DIY solutions.

Educational information: Improving energy efficiency is one of the easiest ways to reduce energy consumption and lower bills.

biofuels

Description: Fuels produced from biomass, such as ethanol and biodiesel, which can be used to power vehicles and produce energy.

Use: Education on alternative energy sources, workshops on the production and use of biofuels, analysis of the benefits and risks of biofuels.

Educational information: Biofuels can help reduce dependence on fossil fuels, but their production must be sustainable to avoid problems associated with agricultural land use.

geothermal energy

Description: Energy extracted from the heat of the Earth's interior, used to heat buildings and produce electricity.

Use: Workshops on the installation of geothermal systems, education on the use of geothermal energy in various countries, geothermal heating projects.

Educational information: Geothermal energy is a reliable and renewable energy source that does not emit greenhouse gases during use.

hydropower

Description: Energy extracted from the movement of water, such as rivers, lakes, waterfalls, used to produce electricity.

Use: Workshops on the construction of small hydropower plants, education on the advantages and disadvantages of hydropower, DIY projects related to mini hydropower turbines.

Educational information: Hydropower is one of the oldest sources of renewable energy and has great potential to produce clean energy, but can affect aquatic ecosystems.

nuclear energy

Description: Energy produced by fission of atomic nuclei, used to produce large amounts of electricity.

Use: Education on nuclear physics, workshops on the advantages and risks of nuclear power, debates on the future of nuclear power.

Educational information: Nuclear power does not emit greenhouse gases during energy production, but generates radioactive waste that needs proper management.

ocean energy

Description: Energy extracted from the movement of waves, tides and ocean currents, used to generate electricity.

Use: Workshops on ocean energy technologies, education on the energy potential of the seas and oceans.

Educational information: Ocean energy is an innovative source of renewable energy that can help diversify the energy mix and reduce greenhouse gas emissions.

Module 1 - Sensibilisation

CIRCLE OF CHANGE - cards - back site



Module 1 - Sensibilisation

CIRCLE OF CHANGE - cards - challenge

limited workshop budget

Description: Your workshop is on a very limited budget. You need to use resources that are inexpensive or free, while maintaining a high level of education and participant involvement.

Task: Come up with three ways to conduct your workshop with minimal use of new materials, focusing on recycling, reusing and using available resources.

Bonus points: Extra points for creative solutions that engage participants and teach them to use limited resources effectively.

low motivation

Description: Your participants are discouraged and don't believe that their actions can make a difference. How will you motivate them to take an active part in the workshop and engage with the topic of circular economy?

Task: Create a lesson plan that includes motivational elements, interactive exercises and real-life examples that demonstrate the real benefits of circular economy actions.

Bonus points: Extra points for using success stories or local examples that inspire participants to take action.

No recycling infrastructure

Description: The local community lacks adequate infrastructure for recycling. What actions can you propose to nevertheless promote a sustainable approach to waste?

Task: Come up with three alternative methods to reduce waste, such as composting, DIY (do-it-yourself) waste workshops, or partnering with local businesses for sustainable practices.

Bonus Points: Extra points for introducing a plan to work with local organizations or businesses that can support recycling initiatives.

lack of knowledge of participants

Description: Participants have little knowledge of circular economics. How will you introduce them to the subject in a simple way so that they understand the basic principles and are interested in exploring the topic further?

Task: Develop an introductory educational module that explains the basic concepts of circular economy in a simple and accessible way. Include visual and interactive elements.

Bonus points: Extra points for creating accessible educational materials, such as infographics, videos or educational games.

communication difficulties

Description: The group of participants includes people who may have difficulty communicating due to language, cultural or communication skill barriers. What strategies will you use to ensure effective communication and integration of all participants?

Task: Create a workshop plan that incorporates different methods of communication.

Bonus points: Extra points for using communication methods that foster integration and mutual understanding, and involving the community to help with communication.

changing consumption habits

Description: Your participants are used to a consumerist lifestyle dominated by disposable products. How will you convince them to change these habits to more sustainable ones?

Task: Develop an educational campaign or workshop exercise that demonstrates the benefits of changing consumption habits, such as reducing plastic consumption and promoting reusable products.

Bonus points: Extra points for introducing gamification elements to make the workshop more engaging.

high level of plastic waste

Description: A large amount of plastic waste is generated in your community. What steps can you take to reduce it and encourage recycling?

Task: Organize a DIY workshop where participants learn to create new products from plastic waste, or initiate a plastic reduction program in the community.

Bonus points: Extra points for creative upcycling ideas and engaging the local community in long-term projects.

weak involvement of local community

Description: The local community has little involvement in environmental protection activities. What actions will you take to increase local residents' awareness and involvement?

Task: Create a plan for community events or initiatives that will engage local residents in environmental activities, such as neighborhood cleanups or recycling days.

Bonus points: Extra points for ideas for long-term initiatives involving local community leaders.

Module 1 - Sensibilisation

CIRCLE OF CHANGE - cards - back site



Module 1 - Sensibilisation

CIRCLE OF CHANGE - cards - challenge

high cost of alternatives

Description: Green alternatives are often more expensive than traditional options. What strategies will you propose to encourage participants to choose sustainable products and services, despite their higher price?

Task: Develop an educational plan that demonstrates the long-term savings and health benefits of choosing sustainable solutions.

Bonus Points: Extra points for conducting a cost-benefit analysis (CBA) for various products.

lack of access to modern technology

Description: Workshop participants do not have access to modern technologies such as the Internet, smartphones or computers. What educational methods will you propose to effectively teach them about circular economy?

Task: Suggest traditional but engaging educational methods, such as board games, visual presentations, handicraft workshops.

Bonus points: Extra points for creative use of available resources to transfer knowledge.

diverse group of participants

Description: Your workshop group is very diverse in terms of age, skills and knowledge level. How will you adapt the workshop program to make it understandable and engaging for everyone?

Task: Create a workshop plan that includes a variety of teaching methods and exercises to suit different age groups and skill levels.

Bonus points: Extra points for using educational methods that engage both younger and older participants.

resistance to change

Description: Some participants are resistant to the introduction of new sustainable practices because they are afraid of change and its impact on their daily lives. What arguments and methods of persuasion will you use?

Task: Prepare arguments and examples from your life that show that changing habits can be beneficial and easy to implement.

Bonus points: Extra points for using motivational psychology to convince participants.

low level of public trust

Description: There is a low level of trust in waste management institutions in your community. How can you build trust and increase cooperation between participants and institutions?

Task: Create a communication and transparency plan for activities that demonstrates the benefits and integrity of waste management activities.

Bonus points: Extra points for creating a platform for dialogue between participants and representatives of institutions.

families with children

Description: The workshop is attended by people who are also child caregivers. What solutions will you put in place to allow parents to participate without sacrificing child care?

Task: Design a workshop that takes into account the needs of parents with children, offering options such as children's activities conducted simultaneously with adult workshops, a play area, or workshop sessions involving both children and adults.

Bonus points: Extra points for creating a workshop program that promotes environmental and circular education for both adults and children through collaborative activities and interactive classes.

integration of people with disabilities

Description: The participants include people with various disabilities. How will you adapt the workshop to make it accessible and engaging for all participants?

Task: Create a workshop plan that takes into account the different needs of participants with disabilities, ensuring their full participation and engaging experience.

Bonus points: Extra points for proposing innovative solutions to increase accessibility and inclusion.

limited access to healthy food

Description: In the participants' community, access to healthy, wholesome food is limited due to low income and lack of local suppliers. What actions can you take to educate participants about healthy eating and support them in accessing healthy food?

Task: Develop a workshop plan that combines education about healthy eating with hands-on activities, such as cooking with inexpensive, accessible ingredients or growing your own vegetables.

Bonus points: Extra points for initiating cooperative programs with local food suppliers or creating community gardens.

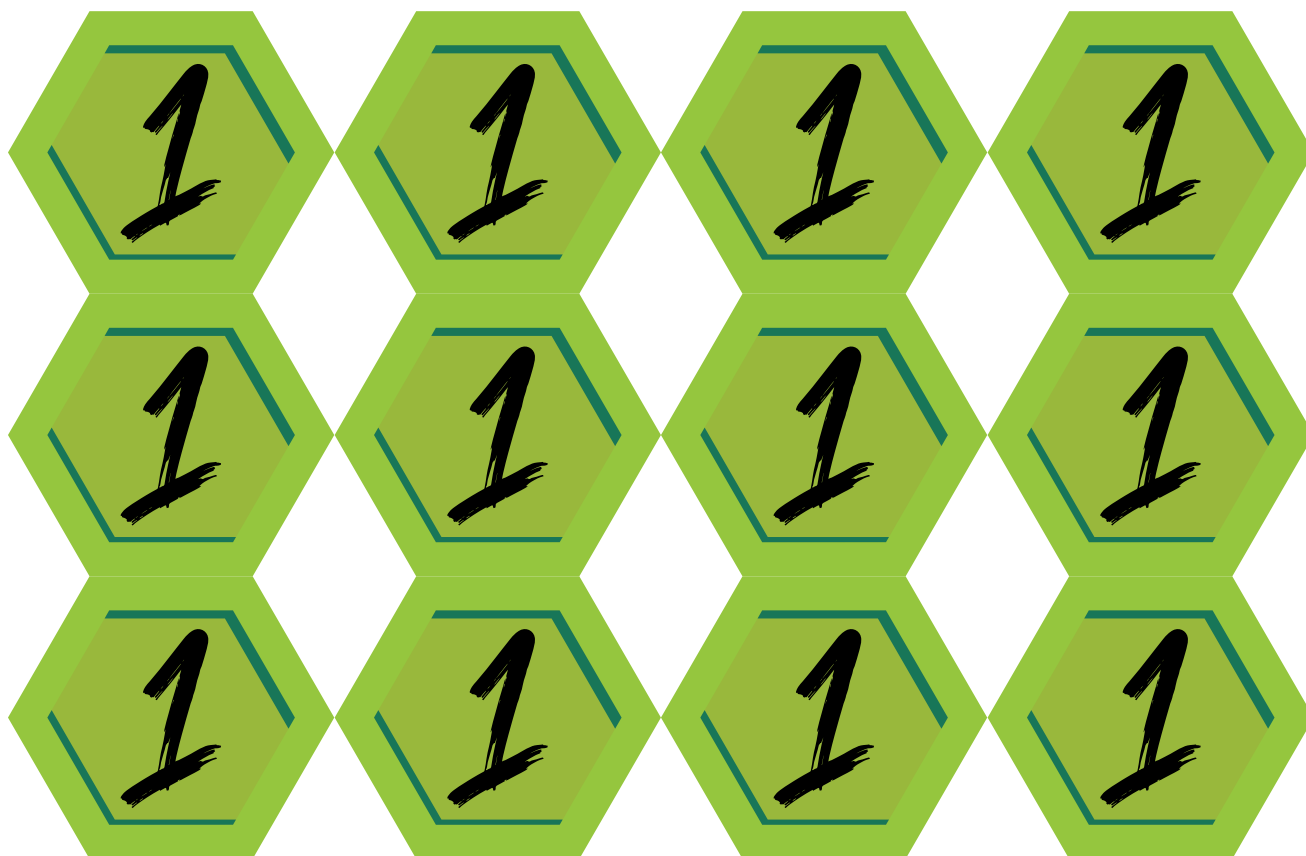
Module 1 - Sensibilisation

CIRCLE OF CHANGE - cards - back site



Module 1 - Sensibilisation

CIRCLE OF CHANGE - cards - tokens



Proposals for translation equivalents of the R-strategies in selected languages*

English	Polish	Slovak	Greek	Italian	German
Refuse	zrezygnuj	odmietni	απορρίψη	rifiutare	vermeiden
Rethink	przemyśl	premysl'a j	επανεξέταση	ripensare	umdenken
Reduce	ogranicz	znížiť spotrebu	ελαχιστοποίηση	ridurre	reduzieren
Reuse	użyj ponownie	znovupo uži	επαναχρησιμοποίη ση	riutilizzare / riusare	wieder- verwenden
Repair	napraw	oprav	επισκευή	riparare	reparieren
Refurbish	odnów	zrenovuj	ανακαίνιση	ricondizionare	instandsetzen
Remanufacture	przetwórz (zregeneruj)	prerob	ανακατασκευή	rigenerare	wieder- aufbereiten
Repurpose	zmień przeznaczenie (Użyj w innej funkcji)	zmen účel	επαναχρησιμοποίη ση	riqualificare	umnutzen
Recycle	recykluj	recykluj	ανακυκλώση	riciclare	recyclen
Recover	odzyskaj (energię podczas spalania)	získavať (energiu)	ανάκτηση ενέργειας	recuperare (energia)	energetisch verwerten

The terms used for the R strategies can, of course,
be replaced if appropriate (e.g. "redesign" instead of "rethink")
*It is possible to replace some of the above terms if more appropriate
(e.g. "rethink" by "redesign")



Center for Social
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Comparative Research Network:

Aims – People – Projects – Methods – Results



NARA  **SK**
NÁRODNÁ RECYKLAČNÁ AGENTÚRA SLOVENSKO

STOWARZYSZENIE
NA RZECZ SPÓŁDZIELNI SOCJALNYCH

