

ERASMUS+ InCEPPP

Project title:

Innovative method of circular economy in public and private procurement

Project number: 2020-1-CZ01-KA202-078442

METHODOLOGY FOR TRAINERS AND LECTURERS







Structure:

- I. Introduction, explanation: reasons and aims of the methodology (p. 3)
- II. **General experience with a course on circular public procurement**: how to design a course (p. 7)
- III. **Specific methods, existing practices** (description, recommendations, pros & cons, different target groups) (p. 11)
- IV. **How to work with participants**: suggestions what a lecturer should not omit while presenting the topic of circular economy, circular public procurement/purchases and sustainable consumption in general (p. 30)
- V. **Instructions**: list of recommendations on how to prepare a lecture on circular procurement and the preparation process (p. 33)
- VI. **Our experience**: kind of activities we have realised (all organisations will share their activities during seminars and webinars with a focus on online teaching as a reaction to the current pandemic measures and new style of training, including general presentations in national languages) (p. 36)
- VII. **Practical cases**: examples of presentation; good and bad examples of teaching, good and bad practices (including greenwashing and most common challenges), tips for facilitation and feedback (p. 38)
- VIII. Videos (p. 47)
 - IX. **Conclusion** (p. 50)
 - X. **Resources**: the methodology will provide a list of the most important source and other usable methodologies in specific countries (p. 51)
 - XI. Appendix: Summary of the Methodology on circular public procurement (p. 52)

I. Introduction

This methodology was created within the Erasmus+ project by its Czech, Slovak and Spanish partners as a tool for all those who will be training on the topic of circular public procurement and private purchases or those who want to get on the sustainability board with their colleagues. Methodology on this topic (in Czech, Slovak, Spanish and English) is available as a source of important information needed where we introduced the new approach to the definition of the procurer's need and lead the future procurers and buyers on how to improve their skills in more environmentally and socially responsible purchasing. It should serve as a basement for any training on circular procurement or circular economy topics in general.

This methodology aims to prepare all trainers and lecturers on how to teach because being an expert is one thing but being able to share the knowledge is a much more difficult task. Managers, employees from the sales department and representatives of the private sector are also very welcome to read this methodology to get their colleagues on their side. First and foremost, it is important to persuade the audience about the necessity to change the current mindset lying in the linearity of the global economic system. Many challenges are having negative impacts on people's lives and the environment caused by human activities which need to be changed. Thus, circular public procurement makes up a very important and present topic not only for public officers but also for private business companies where sustainability becomes a crucial aspect in any purchase decision. Also, we consider the current context and events linked to the global pandemic and the war in Ukraine which have shown the fragility of global economic settings. Thus, circular public procurement needs to be understood as a key step to applying the circular economy in practice.

For many years, the main criteria in both public and private procurement was the price. This led to purchasing products and services with the lowest prices which didn't involve the costs of impact on the environment. Creating the procurement where the price is the main criteria requested using less information and less knowledge about the service or the product than green or circular procurement. This is why circular procurement requires a more detailed definition of the product or service we want to procure.

This methodology is not only a body of existing methods for interactive learning but also a material where we share our long-term experience in lecturing on the topics of circular economy in general based on years of lecturing. At the same time, we would like to pinpoint the importance of awareness-raising and continual (self)education as well as environmental education for the younger generations.

Changes that we need to realise:

- 1. Change of public authorities' practices in public procurement towards a quality shift and involvement of circular criteria in tenders.
- 2. Circular principles are adopted as a norm within private companies.
- 3. Different definitions of our needs and criteria for products and services.
- 4. Mindset change of the whole society towards rational use of natural resources.

But first, why Circular Procurement?

Circular public procurement represents one of the first steps to realise circular economy in practice. The public sphere should take the lead and make an example. In light of the current challenges (climate change negative impacts, unsustainable primary/natural resource use, resource depletion, and growing population), a circular economy is considered a key solution to these challenges and current problems.

The main principle of a circular economy is to maximise material usage (secondary sources), save primary resources and prevent waste production in general. That is why it is extremely important to change our consumption habits and find new ways to minimise our negative impacts on the global environment.

Global resource scarcity context

The rate of global change in nature during the past 50 years is unprecedented in human history. The direct drivers of change in nature with the largest global impact are changes in land and sea use; direct exploitation of organisms; climate change; pollution; and invasion of alien species.

Over the past five decades, our global population has doubled, the extraction of materials has tripled and the gross domestic product has quadrupled. Moreover, the extraction and processing of natural resources have accelerated over the last two decades and accounts for more than 90% of our biodiversity loss and water stress and approximately half of our climate change impacts.¹

"Take-make-dispose" is the pattern of our current economic model based on a linear economy. In practical terms, this linear system entails a chain that begins with companies harvesting and extracting the materials that will be needed to manufacture products which are sold to customers on a later stage, and kept until they are no longer needed, when they are then disposed of.²

The current system generates large amounts of waste that are unevenly distributed in the different types of economic activities. With the current consumption levels, resources are being extracted from nature at an unsustainable pace.

What is the Circular Economy?

The European Parliament defines the Circular Economy as "a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products to keep materials within the economy wherever possible." A circular economy implies that waste will itself become a resource, consequently minimising

¹ Global Resources Outlook 2019: Natural Resources for the Future We Want: The International Resource Panel

² Ellen MacArthur Foundation, 2013

³ EP: https://www.europarl.europa.eu/thinktank/infographics/circulareconomy/public/index.html

the actual amount of waste. It is generally opposed to a traditional, linear economic model, which is based on a "take-make-consume-throw away" pattern.

The 9R framework represents the hierarchy of circular practices, from the ones with low circularity to the ones with high circularity: Refuse, Rethink, Reuse, Repair, Refurbish, Remanufacture, Repurpose, Recycle and Recover.

What is circular procurement?

The European Commission uses the term Green Public Procurement (GPP) to describe a situation when consumers are using their purchasing power to choose environmentally friendly goods, services and works.

Organisation Copper8 defines Circular Public Procurement (CPP) this way: "Circular procurement is the process in which a product, a service or a project is purchased according to the principles of a circular economy. In this process the technical aspects of the product are as circular as possible, taking maintenance and return policies at the end of the use period into account, as well as



including financial incentives to guarantee circular use."4

According to the EC: "Circular procurement sets out an approach to green public procurement which pays special attention to the purchase of works, goods or services that seek to contribute to the closed energy and material loops within supply chains, whilst minimising, and in the best case avoiding, negative environmental impacts and waste creation across the whole life-cycle".⁵

In response to resource management linked to primary resource scarcity and depletion, circular public procurement seems to be an ideal (but not an easy) step to realise circular economy principles in practice. It should help stimulate the demand for more sustainable goods and it is, therefore, a strong stimulus for social or eco-innovation. It is also important to understand the procurement process from a broader perspective – it is not only the process of demand specification and purchase. It is a whole process of rethinking our needs (and possible re-definition) and considering a product life cycle or other forms of possibilities (rent, service, reuse). It is not only the public procurer who needs to change the attitude, but it is the whole institution and supply companies (and the whole society in general) whose mindset needs to be changed towards more sustainable thinking by accepting circularity in everyday life.

https://www.pianoo.nl/sites/default/files/media/documents/Circular-Procurement-in-8-steps-oktober2018.pdf

⁴ Copper8: Circular procurement in 8 steps:

⁵ EC: https://ec.europa.eu/environment/gpp/circular procurement en.htm

Circular procurement is more than just purchasing circular products, you must also consider the circular use of the product. It means that if you procure a recycled product but after its usage, it would end in a landfill, it is not circular. You have to take into account how it can be reused, down/upcycle or dismantled. This is the difference between recycling and a circular economy.

Benefits and problems in circular procurement

Circular procurement can bring many benefits to the institutions that are applying its principles. It can bring transparency but also social and environmental benefits since the lowest price is not the only criterion to be fulfilled. Circular procurement is the way to meet environmental and social standards by defining the measurable requirements and going beyond the lowest price at purchase.

Implementation of circular procurement is new to many EU countries which are not prepared for its application in its full potential. Sometimes the problem is the market since there are not so many companies providing the services or selling the products that fulfil the circular criteria. For the organisation that is providing the procurement, it is hard to define the measurable requirements and that is the reason why it is hard to meet ones. In some countries, one of the biggest problems is bureaucracy and legislative obstacles.

You can learn more about these topics in our "Methodology on Circular Public and Private Procurement", where you will also find more about specific guidance on circular procurement, instructions on problematic situations, details on individual procurement areas and know more about the legislative frameworks on Czech Republic, Slovakia and Spain.

II. General experience with a course on circular public procurement

The aim of the methodology is not only to teach instructors how to work with participants in general but to deal with the specifics of circular assignments and the specifics of working with real projects. That is why this part of the methodology focuses on a specific course, organised by the Institute of Circular Economy in the Czech Republic (INCIEN CZ) and in Slovakia (INCIEN SK). This two-year experience might bring interesting insights and tips for anyone interested in organising a similar course. Even if you are not planning to organise such a course, some tips might be useful for an event/seminar/webinar preparation.



1. Preparation

While starting with the preparation of such a course, it needs at least 2 months (ideally 3 months) of careful preparation and a full-time working person. What you need to take into account strategically:

Aim of the course

First of all, you must decide what you want to achieve by organising such a course. Usually, it would be awareness-raising and education, in other words, you want to spread your knowledge and topic to different people and stakeholders, ideally reaching a spill-over effect and promoting the topic to society.

You might have a different aim, such as creating a network of like-minded people but you always need to have it in mind while designing your course.

Content

After being clear about the aim of the course, you can start preparing the content. It will very much depend on your working topics and the functioning of your organisation. It is a question about what you can offer and where you will need help from external experts. Each

webinar/seminar should have a specific topic and assigned lecturers. We recommend having a theoretical part at the beginning and a practical part afterwards (e.g., lecture on circular economy principles and then case studies or good examples from the field).

Form the team

Form the team for the course and define the roles of each member: who is responsible for which part of the organisation (expert support, technical support, accountancy) or promotion of the course. Regular meetings and information sharing are important, especially during the planning phase and at the beginning of the course. You will need a tool for this information sharing (such as a shared table or any tool you use in your organisation).

Design of the course

You need to carefully prepare the design - the target groups, the form (online, offline, hybrid), extent (how many hours altogether), lengths (how long the seminars/webinars will be), periodicity (how often), thematic scope, responsibilities (who will do what from an organisation - moderator, lecturers, technical backup, administration), to target groups and programme with a specific timeline. Finally, it is important to set a price having in mind different target groups (business, public institutions, students/physical person) and time spent on the course and its preparation.

Partners

It is recommended that you find support for your course. Partners should be financial, media or organisational helping to promote the course itself. You should either discuss them before or invite them while you have the course prepared. Do not forget to put their logos anywhere you advertise the course.

Communication and PR strategy

It is one thing to have a good and solid programme but without a good communication strategy you might end up with too few participants. This strategy needs to be prepared beforehand with a specific timeline and target groups. Besides your social media, you may consider press releases, targeted mailing lists, newspaper advertisements, personal contacts and addresses.

You have to explain what the participants will learn, how they could use the information they received and why your specific topic (circular economy, public procurement, responsible production and consumption...) is so important and a "must-have" (e.g., Green Deal and future EU policies, current challenges...).

Participants

Communication with potential participants takes a lot of time. To make it smooth and easy, you need to prepare detailed information about the course (on a blog or web page) and make clear where they can find the information (timelines, programme, speakers, price, partners, contact person). Prepared a form for online registration and a communication system with the registered participants (first common email, invoicing email, internal communication between the contact person and the rest of the team).

Special features

You may think about special features you would like to offer, such as a place in the course as a prize for any competition or specific subscription. You may also offer a scholarship (for instance for students or parents on maternity leave). Here, the communication strategy is also very important.

Invitation to the lecture

Do not forget to send the link or clear instructions in advance. If you organise a regular course, it is recommended that you send the invitation email on the same day so participants can expect it. It is also recommended that you prepare a list of the lecturers with their short bios.

A. The realisation of the course

Online course

You have to decide what kind of platform you will use and learn how to work with it. A technical backup is key. Participants must be given very detailed instructions on how to participate in the lecture. These instructions must be repeated at the beginning of at least the first three courses. Any troubles with the platform used may be linked to corporate directions or outdated updates on one's computer. Due to the technical issues, you have to count on some time for all participants to launch the course.

Having some external lecturers and experts, you need to consult the topic and the date. They must be given the most precise instructions too (also about the target audience, length of their input, the aim of the course, information about other lecturers and their topics). It is good to send them the invitation to their calendar and it is necessary to test their possibilities to share the screen before every course unless you can get into big trouble during the course itself.

You can decide whether you want to record the lecturers. It is an advantage for participants who missed a lecture but you must make it clear before the course or a webinar. The lecturers must be noticed and asked in advance too.

Offline / on spot (in more detail in the part V. Instructions)

Meeting with participants can be much more pleasant for a lecturer as he sees the instant reaction to his presentation. But it is more complicated regarding all arrangements. You need to arrange the venue, catering, equipment... The presentation room must be visibly marked with a specific navigation system. If you organise a longer meeting, catering or refreshments must be ready at a specific time in a specific place. You also need to have a participant list for signing and consider photo documentation. Equipment is also key - a compatible computer with a beamer, internet connection and wifi password, and audio equipment in case of a bigger audience.

Follow-up and communication with participants

After every webinar or seminar, you should thank the lecturers. You may consider sharing their presentations if they are willing to. You can suggest some tips for reading or good resources about the topic you presented so the participants can study the topic more deeply.

Consider what kind of shared drive or space you can use for this purpose. We recommend creating a special group on social media too as a support for participants and an informal space for any notes and comments (special group on Facebook, LinkedIn).

Individual projects

A very important element of the course may be the independent work of participants on their projects. For a team of lecturers, this means helping to solve real problems, giving feedback, helping them directly with their projects and promoting cooperation between participants. At the end of the course focused on circular public and private procurement the participants will be able to independently and efficiently apply newly gained knowledge and skills to their jobs.

Termination of the course

Decide on how you want to finish the course. Will participants meet personally after an online course? Will you realise an excursion? Do you plan any other common activity? Do you plan any follow-up or other courses? Just be creative and ask what they would appreciate.

Feedback

We recommend collecting feedback from the participants to improve your possible weaker points. You may realise you would change the design for the subsequent year for instance or add some interesting topic /skip a lecturer etc... The easiest way to do this is an anonymous questionnaire on google. Use the potential of the participant network and keep them informed about your organisation's activities even after the course is finished.

III. Specific methods, and existing practices for a lecturer

In this part, we are going to present interactive methods, that we consider important, in how to keep the audience active and attentive. As technologies and innovations have advanced, new teaching tools and techniques must also consider the variety of online tools which seems to be even more relevant during the pandemic measures when participants and workers stay home more than ever in history. That is why we focus on both offline/classic and online possibilities.

Since this methodology is focused on training future circular (procurement) experts, we recommend using the **Train the Trainer model** - a framework for training potential instructors or subject matter experts to enable them to train other people in their organisations. In other words: A group of employees receive a compact training program that focuses both on specific training content and on how to teach this training content to others.⁶

For example, a subject matter expert trains a select group of employees on meeting facilitation skills and simultaneously teaches them how to train other colleagues on how to run effective meetings. The expected outcome is that attendees learn new knowledge or skill, and they will instruct further groups of people in the organisation. This approach was first applied in NGOs and non-profit organisations and since then enterprises picked it up and applied it to their learning and development programs.

According to Cambridge Dictionary, facilitation is the act of helping other people to deal with a process or reach an agreement or solution without getting yourself directly involved in the process, discussion, etc.⁷ Through facilitation, we can get trainees to develop critical thinking skills. Facilitation has never been more important. In an age of ever-more meetings, workshops, and training courses, having someone in the room whose job it is to create engagement and make things easier for the group is vital to creating great outcomes.

A. CLASSIC TOOLS WITH PARTICIPANTS PRESENT ON SPOT

1. Understanding the limitations of circular economy, introduction to downcycling

Building a coherent and trustworthy narrative around circular economy includes also an introduction to the audience to the limitation of the circular economy approach involving their critical thinking. One of the common notions of the current circular economy limitation is the issue of downcycling, which could be illustrated to participants with a simple, yet effective way of igniting the discussion.

⁶ https://www.sessionlab.com/blog/train-the-trainer-model/

⁷ https://dictionary.cambridge.org/dictionary/english/facilitation

Goal: Understand the issue of material degradation and the need for creative solutions to sustain an effective circular economy.

Give each person a paper clip. Instruct them to bend the paper clip into a straight line or as straight as possible. Then instruct them to form a specific shape or shape of their choice (e.g., circle, square, heart, etc.). Then tell them to reform the original paper clip shape. Ask the participants if anyone is confident with their reformed paper clip.

Ask for general comments, about any difficulties (e.g., broke, hard to bend it right, etc.), and if any paper clip still seems usable. Open the discussion on how reusing and recycling can cause objects and materials to lose value (downcycling). As the paper clip bends in different ways for different purposes, the material weakens and it becomes less feasible that the paper clip can be reused for the original purpose. Explaining how paper clips can be recycled in bulk, generalise to say there are specific criteria for certain objects to be reused and recycled. Therefore, we should stay informed on how to effectively dispose of certain objects while we advocate for different technologies and new ideas to maintain material value and trend more towards up-cycling, which increases the material value and usefulness.

Group Discussion:

Goal: Have participants use critical thinking and teamwork to learn and understand the basic limitations of a circular economy.

Following the discussion about the paper clip, we'll have the participants discuss and try to come up with more limitations on their own. In this activity, the participants will be broken up into small groups of 3-4 persons each and have independent discussions about what other limitations a circular economy may pose. Give them the prompt of coming up with 1 or 2 limitations associated with the circular economy and why they're problematic.

Give the participants about 10 minutes or more if needed to discuss. The instructor should walk around and chat with each group. Ask how it's going and what they've come up with. Remind them of the paper clip and ask what they thought about that discussion. If they're having trouble coming up with anything, have them try and build off of the paper clip analogies. Give them hints like trying to relate the paper clip to the environment or have them think about what a circular economy means for relationships (ie competitiveness), resources, and job security.

After 5 minutes the participants will come out of their groups and get ready for a group discussion. Have one person from each group share what their group came up with and encourage an open discussion with the whole class. The trainer will write each valid idea on the board and circle our main limitations, environmental degradation, climate change, resources security, economic competitiveness, and job security. Once each is brought up the trainer can go back over and briefly explain more about the limitation with the help of the participants' thoughts.

2. Pro and con grid⁸

Time requirements: 15-20 minutes

Special features: This technique helps participants develop analytical and evaluative skills, and encourages them to go beyond initial reactions to complex issues. It can be used in any discipline: they can evaluate the pros and cons of a procedure, technique, conclusion, action of a fictional character, political decision, etc.

Procedure

- 1. Divide participants into small groups, if necessary.
- 2. Specify how many pros and cons you'd like each individual or group to develop.
- 3. Allow five to ten minutes for discussion or silent thought.
- 4. Ask for input: write pros on one side of the board and cons on the other side.
- 5. Combine pros and cons that are very similar, and count the number of times they recur to show their perceived importance.

Function in the course/seminar: Consider using the pros and cons as the basis for a debate, or a discussion/lecture structured around the evaluation of course material. Regarding the topic of circular procurement, the lecturer can invent any general topic, such as the pros & cons of linear and also circular public procurement and purchases.

3. <u>Debate</u>

Time requirements: 15-25 minutes

Special features: Debates can be formal or informal: what follows is about informal debates (i.e., debating as a method of class discussion). See Bean (1996) for instructions for holding a formal debate – a much more complicated and lengthy process that can be a focal point for an entire segment of course material. A debate is a good way to encourage class participation in large groups without losing control, and they can work in any discipline. Instructors can plan debates, or they can emerge spontaneously from classroom material.

Procedure

- 1. Describe the background context, and explain why you are having a debate.
- 2. Consider establishing ground rules for the discussion (ex. Disagreements are welcome, name calling and interruptions are not).
- 3. Decide on the two (or more) sides of the debate.
- 4. Physically group the participants according to points of view: either assign participants a point of view depending on where they sit or ask people who want to argue each point of view to move to sit together.

⁸ Nine alternatives to lecturing: https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/alternatives-lecturing/active-learning/varying-your-teaching-activities

- 5. Invite someone from one side to begin the debate by stating his/her point of view.
- 6. Invite someone from the other side to state the opposite point of view.
- 7. Open the floor to comments that question or expand on the issues that were raised.
- 8. For large groups, you may want to have speakers raise their hands while you moderate, but for small groups, anyone can speak up.
- 9. The debate will probably start slowly at first, but the intensity should pick up as the participants become more comfortable with the new style of in-class interaction.
- 10. You, as moderator, can ask provocative questions, but don't express a judgement on any point of view or participants will hesitate to bring out new ideas for fear of being embarrassed.
- 11. After 10 to 15 minutes of debating, end the debate.

Function in the course: Use ideas and conflicts from the debate to lead into your presentation of course material.



Source: BIOAZUL

4. Case study

Time requirements: 20-50 minutes

Special features: The case-study method was pioneered at Harvard law and business schools. Business and law cases tend to be very detailed and long and take several classes to analyse, but instructors can apply a simplified case-study method (described below) for teaching in many disciplines. Applying theory to an instance as described by some source material can demonstrate the applicability of the course material beyond the classroom. A good case study:

- Presents participants with a situation they can relate to from their own life experience, such as a responsible way of purchasing.
- Includes realistic information. Examples can include scripts of exchanges that took place between key parties, news articles about situations of interest, background information about the organisation of interest, etc.
- Has a conflict that participants can resolve.

Procedure

- 1. Get source material (short story, news articles, account of a decision or procedure, video) to use as the basis for the case study.
- 2. Provide participants with a focus or framework to use in doing their analysis.
- 3. Give participants time to analyse the case individually or in groups, and to write down their analysis.
- 4. Begin a discussion of participants' analyses.
- 5. Act as a mediator of the discussion. Don't offer your own opinion except to guide the process (remind participants of the framework if the discussion becomes unfocused).
- 6. After the analysis has been completed, show how the case study illustrates an application of theoretical or background concepts in the course material.

Function in the course: Use a case study to lead into a discussion or lecture of course material, showing its relevance by referring back to the case study. The Methodology of circular public and private procurement can be used as a source of interesting cases regarding public procurement (see the link in the Introduction).

5. Field trip / excursion

Time requirements: At least 50 minutes; preferably a couple of hours

Special features: A field trip can be especially interesting for participants and instructors, and it facilitates some types of learning that cannot take place in a classroom. A field trip to gather data can give participants practise with research techniques and show them the relevance of course material to the outside world. You might be able to consider short field trips during your discussion groups.

- Consider arranging a visit to a circular company or public office known for its circular procurement case.
- If leaving the classroom is not feasible, consider using media such as videos or computer simulations as "virtual" field trips.



Procedure

- 1. Communicate a clear "mission" of the field trip to the participants.
- 2. Research shows that participants learn more from field trips in which they are not simply observers: encourage participants to participate in their surroundings by giving an assignment that must be accomplished using data from the field or notes from a visit.
- 3. Taking effective field notes and identifying the key points of a field trip can be hard: consider giving participants a worksheet allowing them to do a self-guided tour including questions to be answered.
- 4. Very important: allow enough time for debriefing (discussing and processing data obtained on the field trip) as soon as possible afterwards.

Function in the course: Generally, lectures before and afterwards can be used to prepare for and process the trip. A field trip can provide a good focus for a segment of course material and personal experience which is key after getting the theoretical background. Ideally, a field trip or excursion should be directed towards a local circular company or public office and include a discussion with the host organisation.



Source: BIOAZUL

6. Role-play

Time requirements: 20-30 minutes

Special features: Role-plays can be used to allow participants to experiment with different styles of interaction, practice new communication techniques or explore complex issues. They are generally used in classes dealing with social issues (social sciences, management sciences, etc.) or communication strategies (interviewing techniques, conflict management, etc.). If possible, participate in a role-play yourself before trying one in class. Essentially, a role-play is a form of an interactive case study where the experience of participating in the role-play is the basis for further discussion.

Procedure

- 1. Get scenarios and characters for role-plays from news stories, generic business situations, or by writing them yourself from scratch.
- 2. Explain why you are using a role-play to cover course material.
- 3. Describe the background context or setting of the role-play.
- 4. Give roles to "players": hand them a card with a brief description of the character they're playing, their point of view, characteristics, etc.
- 5. For groups with more participants than possible roles, you can either assign "observer" tasks to non-players (e.g., taking notes on a particular player), or assign identical roles to subgroups of participants (e.g., one participant can play a city council member, and a sub-group of four or five participants can play a homeowners' coalition).
- 6. Allow a few minutes for participants to prepare for their roles.
- 7. After 10-15 minutes, end the role-play.

Function in the course: Debrief and discuss the role-play. Use players' perceptions and observers' notes to lead into the discussion of course material. Pay special attention to conflicts, ambiguities, etc.

7. One-minute paper

Time requirements: 3-5 minutes

Special features: The one-minute paper and the ungraded quiz that follows are both examples of ungraded, written, in-class activities. These activities are a flexible way to acquire candid feedback on the course material and your presentation style. The one-minute paper can be done especially quickly and it shows participants that they can write quickly and spontaneously, and enhances general writing ability.

Procedure:

- 1. Give a prompt for the paper such as "what was the most important concept of this lecture?" or "what was the muddiest point of this lecture?"
- 2. Give participants one or two minutes to think about the topic without writing anything.
- 3. Give participants a short time (1 minute?) to write as much as they can.
- 4. Collect papers (depending on the class atmosphere and the types of questions used, you may ask participants to put their names on them but generally these ungraded assignments are left anonymous to encourage open responses to the questions.)

Function in the course: Assign one-minute papers at the end of a lecture to gauge comprehension, provide general writing practice, and give participants an incentive to absorb and comprehend course material. Consider using the content of one-minute papers to plan the content of upcoming classes: when participants see that the instructor responds to their concerns, confusion, and questions in future classes, they will be motivated to participate.

8. <u>Ungraded quiz</u>

Time requirements: 5-10 minutes

Special features: An ungraded quiz encourages participants to pay attention during lectures by presenting them with a short-term, personal learning objective. It can be done very quickly, and also provides you with a source of candid feedback on participants' knowledge levels.

Procedure:

- 1. Write question(s) on the board, overhead, or handout
- 2. Give participants five to ten minutes to respond on a blank sheet of paper (depending on the atmosphere in the class, you may keep the quiz anonymous, ask participants to put their names on papers or ask directly)
- 3. One variation: Prepare multiple-choice answer options and present each one, in turn, asking for a show of hands

4. Another variation: Before (or instead of) collecting quiz papers have participants exchange and "grade" each other's quiz papers based on the answers you present. This grading is to allow participants to provide participants with timely feedback so that they can gauge their understanding.

Function in the course: Use ungraded quizzes at the beginning of a lecture to determine the level of knowledge, or at the end of a lecture as a review and incentive for participants to retain and comprehend information. Alternatively, use an ungraded quiz at the end of a lecture to gauge how successful you've been in teaching the material.

9. Brainstorming

"Brainstorming" itself is part of a greater process, called "design thinking", which is the process of development and refinement "to understand and address rapid changes in users' environments".9 Brainstorming is a method that design teams use to generate ideas to solve clearly defined design problems. In controlled conditions and a free-thinking environment, teams approach a problem by such means as "How Might We" questions. They produce a vast array of ideas and draw links between them to find potential solutions.

Although teams have rules and a facilitator to keep them on track, they are free to use out-of-the-box and lateral thinking to seek the most effective solutions to any design problem. By brainstorming, they can take a vast number of



approaches—the more, the better—instead of just exploring conventional means and running into the associated obstacles. When teams work in a judgement-free atmosphere to find the real dimensions of a problem, they're more likely to produce rough answers which they'll refine into possible solutions later.

In a circular economy context, brainstorming can be an asset to reflect on the challenges posed by the linear model and ponder possible solutions. This can be key to encouraging

⁹ https://www.interaction-design.org/literature/topics/brainstorming

creativity and innovatively develop business ideas and solutions that address economic goals, social values, and environmental benefits at the same time.

This method can either be performed face to face or during online workshops. The only consideration will be to adapt the format and the timing to the specific conditions of the organised event. Brainstorming may seem to lack constraints, but everyone must observe eight house rules and have someone acting as facilitator:¹⁰

- I. Set a time limit Depending on the problem's complexity, 15–60 minutes is normal.
- II. Begin with a target problem/brief Members should approach this sharply defined question, plan or goal and stay on topic.
- III. Refrain from judgement/criticism No one should be negative (including via body language) about any idea.
- IV. Encourage weird ideas Further to the ban on killer phrases like "too expensive", keep the floodgates open so everyone feels free to blurt out ideas (provided they're on topic).
- V. Aim for quantity Remember, "quantity breeds quality". The sifting-and-sorting process comes later.
- VI. Build on others' ideas It's a process of association where members expand on others' notions and reach new insights, allowing these ideas to trigger their own. Say "and" rather than discourage with "but"—to get ideas closer to the problem.
- VII. Stay visual Diagrams and Post-Its help bring ideas to life and help others see things in different ways.
- VIII. Allow one conversation at a time to arrive at concrete results, it's essential to keep on track this way and show respect for everyone's ideas.

10. Storytelling

Storytelling is an action, as well as a tool, which can be used in a process as a means of realising a goal. Through storytelling, action or goal can be explained as necessary and demonstrated. It informs the listeners of the history, nature, and reality of a particular issue and builds a relationship between the listeners and the issuers. Through storytelling, a sympathetic, emotional tie can be formed which invests the listeners in the issue. Storytelling unites people with projects and moves both along to goals.¹¹

Although it may not be viewed as the only solution or most effective solution, storytelling may be understood as a tool which builds connection in the minds and hearts of listeners and convinces them to become invested in working towards a goal. Storytelling builds a tangible connection between people, projects, and goals and brings them together in pursuit of something better.

Storytelling targets people. It comes to them in their environment and speaks to them directly. It emotionally involves them with a project and makes the end goal their goal.

¹⁰ https://public-media.interaction-design.org/pdf/Brainstorm.pdf

¹¹ https://www.pmi.org/learning/library/storytelling-project-managers-six-core-elements-6877

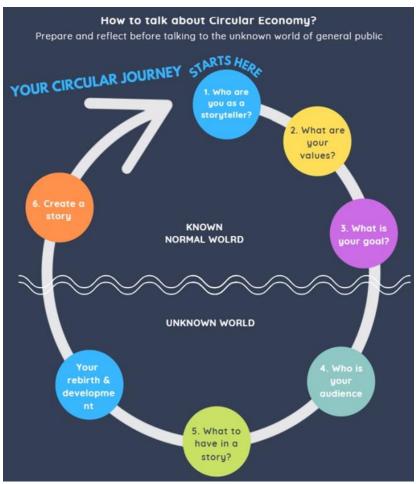
Projects, although standing on their own, are furthered by storytelling. Their purpose is captured by storytelling and projected to a wider audience. Every story has an ending-this is the goal. Storytelling reminds the audience of that goal and maintains determinedness to reach that goal.



Source: BIOAZUL

Steps to Storytelling:

- 1. Know your audience: this is crucial to determine how long the story should be and what language you should be using.
- 2. Make them care: make it clear why your audience should be interested in your story, and why this is relevant for them. Make them care, either emotionally, intellectually or aesthetically. Tip: Write it on a post-it and stick it on your desk to remind yourself why this story matters.
- 3. Set the scene: engage your audience's senses. Set the scene and provide your audience with the context for the story.
- 4. Be creative with chronology: you can choose how you want to tell your story (e.g., start right into the action, at the end of the story, etc.).
- 5. Know your punchline: What is the purpose of telling the story? Be creative, but don't forget to always make it relevant and interesting.
- 6. Engage your audience: Use questions to engage your audience and erase the boundary between them and your story.
- 7. Use tension: Be descriptive, expressive and get excited when telling the climactic moments in your story
- 8. End with a grand finale: there should always be closure in the story. You can, however, leave with a "big question" to create suspense and a sense of awe.
- 9. Don't be limited by words: use different assets such as pictures, videos, hashtags, etc.
- 10. Enjoy the process: you should also enjoy reliving the experience in your stories.



Source: IECEP12

Note: For example, you can use Ellen MacArthur's story to present the concept of the Circular Economy and start the conversation from there:

"In 2005, Ellen MacArthur became the fastest solo sailor to sail around the world. Five years later, she set up the Foundation in her name to accelerate the transition to a circular economy. Her boat was her world and her survival was entirely dependent on the limited food, fuel, and other supplies she'd brought with her. She realised that our global economy is no different – it relies completely on the finite resources we extract, use and then dispose of. When she returned, she began a new journey of learning to understand how our economy works. She realised that the solutions to our biggest problems don't just lie in the way we make energy, but also in the way we use materials. Everything we use is in limited supply, from the precious metals in our computers and phones to the sand in cement used to make buildings. She found that the linear system in which we live is fundamentally flawed. She asked herself what would a successful economy that uses things, rather than uses them up look like?" ¹³

¹² https://iecep.info/2021/09/21/storytelling-in-communicating-circular-economy/

¹³ https://ellenmacarthurfoundation.org/about-us/ellens-story

11. Discussion axis

One of the valid methods for understanding the level of preparedness and background of the audience is to work with the discussion axis. This activity is to be performed offline and serves well in the introductory part of the course, also it could be perceived as an icebreaker for the group.

Set up one side of the space to be divided into 0%, 25%, 50%, 75%, and 100%. They will symbolise the level to which extent participants would agree with the following statement. Provide a short list of statements in regards to the course material to the participants, and ask them to walk towards the number they feel is the most accurate answer.

Example statements:

- Plastics could be recycled indefinitely.
- A circular economy can offer a solution to the climate crisis.
- I already have implemented circular economy criteria into the procurement process at my work.
- It is hard to merge circular economy and social responsibility criteria in a tender.

Encourage the discussion after each question, by asking the specific participant why they chose their specific answer.

B. ONLINE TOOLS

Do not forget that participants must be given all instructions on how to use all tools in your platform before the webinar.

1. Brainstorming on an online platform

You can use classic online tools for brainstorming in small groups. For bigger groups, it is better to use breakout rooms where a bigger group can be divided into small groups and discuss certain topics in a smaller circle.

Brainstorming on an online platform has to be organised and moderated by one person who will ask the group questions or make an order in asking the questions from the participants.

2. <u>Using break-out rooms</u>

For bigger groups, it is better to divide them into smaller groups and use the breakout rooms. For every room define the topic and ask the participants in which group they want to participate.

Digital interactive tools:

MURAL https://www.mural.co

• PADLET https://padlet.com

• JAMBOARD: https://jamboard.google.com

MIRO: https://miro.com/education-whiteboard/

• CONCEPTBOARD: https://conceptboard.com

• FREE ONLINE SURVEYS: https://freeonlinesurveys.com

SURVEY MONKEY: www.surveymonkey.comMENTIMETER: https://www.mentimeter.com/

• SLIDO: www.sli.do

Visualisation: Word clouds

Word Clouds are a visual representation of the frequency of words within a given body of text. Often they are used to visualise the frequency of words within large text documents, qualitative research data, public speeches, and website tags. Word cloud can be used to visualise the results of brainstorming which is not as structured. You can use these word clouds creators.

- www.wordclouds.com
- https://wordart.com
- www.edwordle.net
- www.tagxedo.com
- http://wordcloudmaker.com

C. BOTH PRESENCE ATTENDANCE & ONLINE TEACHING

1. Videos

Time requirements: 5-10 minutes

Description: Video is a good part of how to keep the audience engaged within the lecture but it should not be too long. It is suggested to have 2-3 short videos rather than just one long video. If it is not in the language of the audience, it must be subtitled or the audience must be informed beforehand.

2. Gantt diagram

The Gannt diagram is very often used in project management - its purpose is to visualise the time sequence of steps and the people who are in charge of them. You can also create it with

a simple Excel spreadsheet, where you colour in specific boxes. A Gantt chart is a useful way of showing what work is scheduled to be done on specific days. It helps project managers and team members view the start dates, end dates and milestones of a project schedule in one simple stacked bar chart.¹⁴

The procurement process preparation and the process itself requires a lot of time. To avoid cutting off any important steps (especially when you need more time for research and preparation), the Gantt diagram is a great tool to plan the whole process.

The uses of a Gantt chart, as you can see by the sheer number of teams and roles who can benefit from using Gantt charts, are many. Here are just a few:

- Plan & Schedule Projects
- Plan & Schedule Tasks
- Plan & Schedule
- Tasks across multiple projects
- View Tasks Over Time
- Plan in Sprints
- Team Collaboration
- Resource Management
- Scheduling Teams' Work
- Determining Planned versus Actual Timelines on a Project

There is a large number of online tools available where there is no need to create a given spreadsheet: <u>TeamGantt GanttPro Tom's Planner Easy Project ¹⁵</u>or you can make a simple Gantt chart in Excel.

3. Presentation

A bad presentation can spoil the whole lecture despite your effort and interesting topic. Here are some tips¹⁶ on how to make a presentation effective:

- Show your passion and connect with the audience be enthusiastic and honest.
- Focus on your audience's needs make it easy to understand and respond.
- Keep it simple focus on core messages.
- Smile and make eye contact.
- Start strongly, beginning is crucial grab their attention by an attention-grabbing image or slide.
- Tell stories stories help us to pay attention, and also to remember things. If you can use stories in your presentation, your audience is more likely to engage and to remember your points afterwards.

¹⁴ https://www.projectmanager.com/gantt-chart

¹⁵ https://vudpap.sk/wp-content/uploads/2021/04/Priloha-c.-1-Facilitacne-techniky.pdf

¹⁶ https://www.skillsyouneed.com/present/presentation-tips.html; other tips: https://www.cbs.de/en/blog/15-effective-presentation-tips-to-improve-presentation-skills/

- Use your body approximately ¾ of communication is nonverbal. Make your gestures open and confident, move naturally around the stage.
- Relax and breath



Source: BIOAZUL

4. Flipped classroom

The participants/participants review and prepare for the class-to-come by studying the material prepared beforehand. This is then implemented through debates, problem-solving exercises, group discussions, quizzes, etc. under the teacher's guidance.

One of the main techniques in flipped classrooms is pre-recorded study materials. You can either tape your own or if possible, share your colleague's videos as well. You can also share these videos using a wider platform such as YouTube so that it is easier for a larger participant base to access it.

5. Self-study technique

The lecturers can assign topics to participants which they need to study on their own. This helps the participants to explore the topics in their own preferred ways according to their areas of interest. This type of teaching technique will help each participant to bring in a different and new perspective while understanding the topic or concept.

This will also help the participants to put in more efforts not only to understand the topic but also to explain it to others in their own words. Self-study will enable the participants to find ways of learning new concepts in the ways that interest them and also help to find their interest even in the most complex topics.

6. Dissecting case studies/articles

Analysing a specific case study or article serves as a viable method for deepening the knowledge of circular procurement practice. Participants may focus on successful cases from abroad, selected by the lecturer or they may find some interesting procurement cases themselves.

For this activity, participants will work either individually or with a partner to analyse and dissect the article provided. After reading the short article, they will prepare notes/short presentations. Give the audience an appropriate amount of time (minimum of 15 minutes) to complete the reading and the presentation.

Once everyone has completed their notes, open up a discussion and answer the questions as a group. The questions might focus on the selected aspects of circular economy, constraints of procurement or lessons learned. Emphasise the final question, "What solution would you propose?" As a group, come up with a list of several solutions for the given problematics.

7. Groupwork focusing on understanding the circular economy application is specific industries

The novice audience, which does not necessarily have the experience within circular economy related topics, might need to focus on the deeper understanding of what CE application means in the specific sectors of economy.

It is therefore suggested in the first introductory lectures within the topic you might focus on the activities where the audience would actively look up for examples of CE implementation and proactively learn about good practices with the help of their own research.

Divide participants into groups to cover the following sectors (e.g., healthcare, materials, consumer staples, consumer services, utilities, energy, logistics, financials, and technology – the list is orientational, the trainer can adjust it to the purposes of the lecture). Have the groups research the following points on their assigned sector. The final deliverable will be a presentation on their findings to the rest of the group.

- Provide an overview of the assigned sector including but not limited to: description, industries that fall under the sector, key players, financial metrics, etc.
- Describe trends and news applicable to the sector
- Research any sustainability movements in the sector and how consumers and producers contribute to each industry
- Offer resolutions on how this sector could have a more circular economy
- Create discussion questions and actively facilitate the discussion, ensure that all the participants are a part of it

8. "Jigsaw" groupwork activity

The jigsaw or puzzle approach to groupwork is another interesting method for organising groupwork and strengthening the understanding of teaching material and encouraging peer-to-peer learning within a group. The method is suitable for case studies and articles focused on one specific problem/issue. The teaching material should be dissected into a few logical blocks, which will be given to each group of participants for analysis. In our case, it could be a description of the procurement process or a specific case study. This method is valid for longer types of teaching materials, which would be demanding in terms of time if given to a single participant alone.

The module could begin with a quick introduction of the problem and a framework question, which would serve as guidance for participants: "how can public procurement contribute to increasing the level of textile recycling on a national level?" The instructor will ask participants to keep this question in mind while moving on to the class activity. From here, the instructor will present the "Jigsaw" activity.

An instructor will break the case study into a few parts (four for instance) and assign it to each group of participants. We suggest breaking the topic into blocks with a single framework, like the state of affairs, defining the problem, defining solutions, and lessons learned. Then the group work starts.

Part 1: (15 mins, including group organising and moving around the class)

The audience is split into 4 groups. Each group is assigned a section of the article or case study to read and discuss amongst group members. Every individual is tasked with becoming an "expert" in the section assigned to his or her group. **Groups should only focus on their section to minimise confusion and enhance detailed understanding.**

Part 2: (15 mins, including group organising and moving around the class)

New groups are made consisting of at least one expert of each assigned article section from Part 1. In Part 2, participants will utilise their status as experts to share **the most important** aspects of their respective sections. 1 individual from each group will be instructed to moderate the discussion: making sure all speak and that time is being used efficiently. After sharing the important aspects, the group members will determine the overall implications of the paper.

The remaining 15 minutes of the module will be utilised by the instructor to guide a debriefing discussion. Topics of discussion may come from the concluding chapters of the paper. The goal is to socratically direct participants to a certain conclusion related to the course material.

9. Socratic Circle Debate (Interactive Activity)

- 1) Split the audience into 4 groups. Each group will be asked to come up with one way in which current practices in public procurement (or any other topic related to the given lecture) can be improved.
- 2) Each group will have 10 minutes to brainstorm during the ideation process (rapid-this can involve a written description/list of features that should be included in their solution or a drawn-out sketch of what their solution could look like. At the end of the 5 minutes, each group will present their solution (3 minutes each).
- 3) After each group presents their solution, they will debate with one another as to the pros and cons they think of for each group's design almost as if they were trying to convince the government as to which solution is the best for implementation in their country. This debate should last about 15 minutes.

IV: How to work with participants

Suggestions what a lecturer should not omit while presenting the topic of circular economy, circular public procurement/purchases and sustainable consumption in general:

1. Defining the audience, understanding the audience's needs, changing the focal points

In the first place, a circular economy trainer should be able to engage with their audience, based on the target group they are working with and flexibly adjust the focal points of the narrative — whether listeners are representative of the specific public sectors or are representing the business community. The lecturer should focus primarily on the accurate assessment of the needs of their audience, and try to tailor the key message to it. However, sometimes it must be challenging to apply this approach to a diverse group of listeners, though it is desired to find a common ground between them.

2. Cohesive narrative

A circular economy is indeed a vast and complex topic and it is easy to get lost in the narrative. The lecturer should aim for cohesiveness, presenting circular economy and its practical implication is the procurement as a story with a clear flow. Such flow should consist of a clear message, its foundation lies at the beginning of the lecture and further blocks of it are interconnected and add additional details to it. One of the typical examples from the beginning of the circular procurement teaching course is when you give the audience the global context of the megatrends drastically affecting the environment. The trainer may start with the global material footprint, and then focus on cement and concrete consumption and their negative impacts on the linear economy. Later the trainer introduces the audience to circular economy principles in the construction industry, then focuses on the opportunities recycled concrete presents and finishes the example with the best cases of circular procurement within construction.

3. A circular economy is inspiring, playing with the contrasts

One of the most powerful and engaging elements of circular economy is its ability to connect with the broader audience via simple examples which appeal to the common sense of the public. "Waste as a resource" might be presented via examples which are based on the axis of "business-as-usual/good circular practice". The audience reacts well when presented with the problem "biowaste is being landfilled massively, producing the GHGs and presenting a wasted opportunity" VS. "a public company procures its public transport, with the emphasis on using biomethane as a fuel, therefore approaching the problem of the biowaste and stimulating the demand of its proper disposal at the biogas stations".

4. Don't be over-optimistic

Navigating the waters of the current environmental issues, including climate crisis and material overconsumption is a challenging adventure for a lecturer. Commonplace among circular economy practitioners is the situation when in pursuit of inspiring the audience which might be sceptical of any environmental topics, they might omit the negative parts and risks, connected with CE.

CE, however, is not a silver bullet for any environmental problem, therefore the stress should be put on the limits of the concept and at the same time inspire the audience to critical thinking and further action in their practice. This could be achieved by being authentic in this field, presenting the solutions as they are, but at the same time keeping the ease and lightness in the tone of the presentation.

The tone of the presentation is a key for a lecturer how they can achieve the desired effect within their audience – and environmentally conscious and circular procurement would not be stimulated by being extremely optimistic in the field of CE (a professional then would face the problems during their practice, they were not aware of – and therefore neglecting the concept as a whole) or extremely negative – that might lead to paralysing the action.

5. Be authentic and relatable

To transmit the gained knowledge into procurement practice, the lecturer should aim for being relatable to the audience and provide them with examples which are specifically selected for the target audience. Lecturers should ensure that the audience understands the political, economic, social and legal context where the best practices examples happen. Give relatable examples and cases, so it would feel empowering to the audience – they should feel that they can do it as well.

6. Give space for the audience

Frontal lecturing is a method bedevilling teachers and their audiences. When lecturing about circular procurement and sustainable consumption, make sure that you give enough space for the audience with their questions, at the same time it is recommended to use interactive teaching methods to engage with listeners further and secure the understanding of the material. Engaging with the audience – like transforming their specific procurement-related issues into a case study for the whole group – will help to directly transmit the theoretical knowledge into practice. Group brainstorming can bring some answers to the individual issues, which leads to the creation of practical outputs, which participants will take from the course.

7. Support peer-to-peer learning and collaboration

Following the previous principle, shared practices of the participants which are relevant to the teaching material are one of the best ways to amplify the learning process. Sharing one's

success stories or failures and collective deliberation about them organised in a form of short practical blocks could lead to more fast and more effective learning, and from our experience, a possibility of a future collaboration. It is important to understand that when your audience is not on a novice level in the circular procurement field, many times they would possess the potential to significantly enhance your teaching. One of the outcomes, which is not often discussed, is that such an educational event can serve as a platform where professionals meet and possibly can jointly collaborate on circular projects in the future. Networking and stakeholder engagement is one of the most vital building elements of a circular economy per se.



V. Instructions

When preparing for any event, one of the most important things is of course preparation. As well as professional preparation, technical preparation is also important. An integral part of a successful event is, of course, its publicity.

1. Choose the event method (online, offline, hybrid)

How your event will be run is key to setting up the next procedures. In the case of a face-to-face format, you will need a space where the workshop will take place. In the case of a simple online event, you can hold the event in your office or from another space where you are located and have a good online connection. If you decide to have an online event, choose from a variety of app options that are easy to use and not technically challenging.

For a hybrid form of event, you will need to ensure you have streaming technology and probably staff who can deliver this form of event.

2. Determine the length of the event (short - two hours, medium - 4 hours, or full day) and a tentative date.

Decide how long you want the event to be. In the case of a webinar or discussion, it can be a short 1 to 2-hour event. If you want to work with participants in groups or want to go into greater detail on a topic - choose a medium-length event. If you think the topic requires presenting general information, examples of good practice and working with participants - choose a full-day event where you will apply different methods of working with the audience (lectures, focus groups, facilitation, etc.)

- 3. Make a dramaturgy of the event using questions:
- What is the topic of the event?
- What question is the event intended to answer?
- What information is it intended to bring?
- Who do I want to reach (who is the audience)?
- What level of event am I organising (do I want to invite politicians, experts, good examples from practice, etc.)
- Who are the authorities on this topic who will I call as a keynote speaker or as a guest?

After answering the questions, prepare an event scenario and detailed steps (for a larger event, you can also use a Gantt chart).

4. Create a checklist of everything you need before the lecture

While deciding on the format of the lecture, you must think in advance about each necessary tool you are going to use, whether it would be an online, offline or hybrid event. Create a checklist of the tools you would bring to an offline event (e.g., flipchart, name cards, water and cups etc.) or the range of tools you would need for an online lecture (e.g., Mentimeter, Padlet, etc.). Preparing this list goes hand in hand with the preparation of event dramaturgy – think about each phase of the plan and the tools you would need to prepare, assign the responsibility for it, and leave a reasonable time slot for the preparation itself.

5. Approach the speakers, and communicate with them about the length, content and format of the event

Once you have decided who your speakers will be at the event, reach out to them well in advance (at least a month or two before the event). Send them a short annotation about the event with information about the date, venue and format. Describe exactly their role, the scope and the output you expect from them. Consult the presentations before the event so that there is no duplication of information.

6. Create an invitation and registration form for the event

Create an invitation to the event that you will send by email (if the group is specific and you already know your participants) or make an event on social media. Make sure that you also make the publicity about registering for the event. Make a simple registration form that will help you to know how many participants registered, where they are coming from, what's their focus or are their expectations, and why they are interested in the event.

7. Expectations of listeners

Working with a new audience? Collecting information about the educational event in advance would enhance the quality of the teaching. Some lecturers do this at the beginning of the teaching block by asking a direct question and referring to it at the end of a lecture. However, it is possible to take one step further and some time in advance you can ask your audience about their expectations from the lecture and adjust the teaching material tailored to their needs.

8. Don't be afraid of homework

Even though your audience went to high school long ago, preparing homework for them could be useful for teaching complex topics and will save a great amount of time on-site. Dedicate a reasonable amount of time in your time plan for the creation or collection of the materials you want to send in advance, based on the selection of teaching methods and the goal of the educational unit.

Sending respective materials and case studies before the lecture can free time for in-depth discussions and group work. Try to avoid complex and heavy homework tasks so you would not end up in a situation where much of the educational event is based on the tasks which should've been prepared in advance – there would always be a few people who would not undertake it. Give the audience an appropriate amount of time for preparation.

9. Create a press release and invitation on social media and in various media

Make a one-page press release with the most important information about your event: date, place, the goal of this event, and keynote speakers. Send the press release to various media: news agencies, media that is focused on the topic of a circular economy or related topics. Post the press release on your web page and social media with some comments that will attract the audience.

10. For online events and hybrid events, secure technical support well in advance

Don't leave it to the last minute and try out the connections and different features of the app you have chosen. Dedicate the right amount of time to testing the technologies for online and hybrid formats. Assign the supporting roles — in case of online events you might need an assistant for the speaker, which will take care of allowing people to enter the event, assign participants to breakout rooms, and help with the other online tools like Padlet or Mural. The assistant will serve as a backup in case of an unstable internet connection and will troubleshoot other issues, so the lecturer can focus fully on presenting.

11. Build a follow-up

After the teaching event don't forget to send an email to all of your audience. It could include the keynote presentation, links to the materials and sources you've mentioned throughout the lecture, a summary of the discussion in the format of bullet points, contacts to other participants, and a video recording of the lecture in case of online or hybrid format. In the case of long-term educational events, it might be useful to create a digital channel (a group on LinkedIn or WhatsApp) for participants, where they can continue exchanging thoughts expost, and even spark a collaboration.

12. Collect the feedback

As a trainer and educator, you should aim to work proactively with your teaching material and raise your teaching capacities. One of the great ways for doing that is by collecting feedback directly from your listeners. Therefore, we suggest creating an anonymous poll for your audience, which would be rather short and wouldn't take too much time and effort. In case of offline events, it is possible to create a questionnaire and distribute it among the public or ask for feedback directly at the end of the session. The feedback though tends to be

more sincere when anonymized. Links to online polls could be sent to the group with the teaching materials/follow-up email.

VI. Our experience - workshops

1. Simulation of the procurement process

When making the workshops about green or circular procurement, one of the methods we have been using is the simulation of the whole process. It helps the attendees to understand the whole process and the process of defining the product or service they want to procure. Divide the attendees of the workshop into smaller groups (5-6 people) and explain to them the service or product you would like to procure (example: building reconstruction, cleaning services, travel services, furniture etc.). It is better to form the groups in advance and tell them the topic and give them information about the criteria they can be used during the process of defining their needs, products and services. We recommend using the EU GPP criteria for many different product and service groups.

The whole workshop should be up to 90 minutes and it should involve the next steps:

• Define what you are specifically going to procure (5 min)

Explain the service or product you want to procure. Also tell more about the organisation that is procuring the product or service (public authority, a private company, around 500 employees etc.)

Define what service you would like to receive – create criteria for that service (10-15 MIN)

Define the service or the product you want to receive from your future supplier. Do you want to deliver products with some special criteria or certifications? Do you want the services from a local supplier up to 100km away from your office? Do you want the food in catering services from a local organic farm? Ask as many questions as you can and define the maximum criteria you require from your future supplier.

Answer the question: How would you verify the criteria? (10 MIN)

To each of your criteria answer the question "how will I verify the criteria of that product/service?".

Answer the question: Based on which you would select suppliers? (10 MIN)

Do you want to set up criteria for your suppliers? You can also do that, but it should not favour any supplier on the market since that is against the rule of equal treatment?

Formulate the procedure for the entire procurement procedure? (15 MIN)

Define the steps and give them also a timeline - so you can also check how much time you need for the whole process.

Present Output (20 MIN - 5mins each group)

Every group should present their results and tell the rest of the attendees their experience.

Discussion and wrapping up

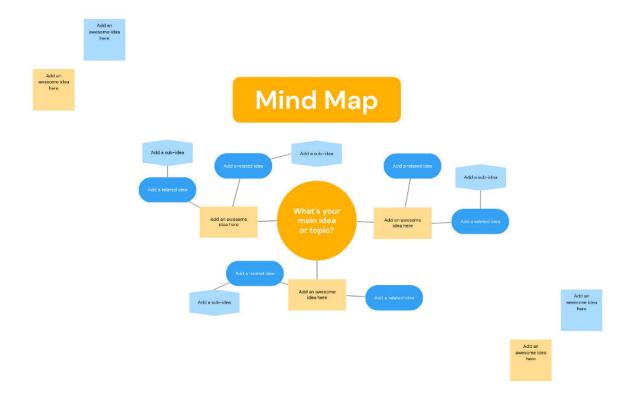
Discuss all the bottlenecks and obstacles in any of the services or products you were procuring in this session.

2. Good examples presentation

While presenting theoretical concepts, it is important to show how they work in reality. That is why we consider it necessary to also present good (and bad) cases of circular public procurement, especially in the country where we are, thus showing the application possibilities. The cases can be found in the Methodology on circular public and private procurement but also online (such as GPP Europeans cases).

3. Visualisation: Mind map

A Mind Map is an easy way to brainstorm thoughts organically without worrying about order and structure. It allows you to visually structure your ideas to help with analysis and recall. A Mind Map is a diagram for representing tasks, words, concepts, or items linked to and arranged around a central concept or subject using a non-linear graphical layout that allows the user to build an intuitive framework around a central concept. A Mind Map can turn a long list of monotonous information into a colourful, memorable and highly organised diagram that works in line with your brain's natural way of doing things.



4. Inviting experts

The topic of circular economy is very broad so one person is not able to cover all sectors and aspects of a circular economy. That is why it is important to have a network of experts who could cover those areas you (or your organisation) are not able to speak of. Making a bigger picture is important for the audience to understand the complexity of the whole issue.

VII. Practical cases

In order to provide concise information, we share a template presentation on the topic of circular procurement.

BIC Brno / INCIEN CZECHIA

- Problem statement
- Circular economy introduction
- Circular procurement introduction
- Circular procurement character
- Cases of good examples

Context

- resource scarcity; economic, social & envi sustainability
- CE as a response to global crisis
- EU plans
- CZ presidency

Circular procurement

"Circular procurement is the process in which a product, a service or a project is purchased according to the principles of a circular economy. In this process the technical aspects of the product are as circular as possible, taking maintenance and return policies at the end of the use period into account, as well as including financial incentives to guarantee circular use." (Copper 8)

Circular public procurement should focus on these circular business models:

- 1. Circular suppliers: supplying renewable, recyclable or biodegradable resources
- 2.Resource recovery: eliminate material leakage and maximize economic value of product return flows
- 3. Product life extension: through repairability, upgrading or reselling/reusing
- 4. Sharing platforms: stimulating collaboration among product users
- 5. Products as service: products are used by one or many customers through lease or pay-for-use arrangements

Cases from Czechia



Bark beetle wood bridge, South Bohemia

- unique ecological construction with the aim of minimizing the carbon footprint (Technical University in Ostrava)
- uses spruce wood for the loadbearing part of the bridge (domestic renewable source
- parts of the original bridge were also used
- by using the existing functional elements of the structure, state resources can be significantly saved.

South Moravia Innovation Center: green energy



- tender for the supply of electricity to itsbuilding
- in addition to the offer price, the decisive criterion was the percentage of energy that the supplier demonstrably purchased from renewable sources.
- the contracting authority did not set a fixed requirement for the share of energy produced from renewable sources (RES)
- the evaluation criteria were set as follows: offer price 70%, environmental aspect purchase of RES 30%

East Bohemian Museum in Pardubice



- requirement of a passive standard building for the construction of the new museum depository: an energy-efficient construction with low operating costs, minimal maintenance and a minimum of consumed energy for cooling and heating
- use of unfired bricksand recycled materials in the subsoil of the building (concrete)
- use of modern technologies such as recuperation and a heat pump located on a green extensive roof

INCIEN Slovakia

INCIEN SK has a practice in a simulation of green and circular procurement processes. Creating groups that will make a simulation of the procurement process is a great opportunity for participants to practise the whole process and answer the questions that could appear during the practical implementation of circular procurement. This workshop was organised for participants of Green Circular Academy.

TOPICS OF THE WORKSHOP

- GROUP NO. 1: RECONSTRUCTION OF THE BUILDING
- GROUP NO. 2: FOOD SUPPLIERS TO SCHOOL FACILITY
- > GROUP NO. 3: SERVICES IN TRANSPORT
- GROUP NO. 4: CLEANING SERVICES

TRAINING THE PROCESS OF THE PROCUREMENT

- 1. DEFINE WHAT YOU ARE SPECIFICALLY GOING TO PROCURE (5 MIN)
- DEFINE WHAT SERVICE YOU WOULD LIKE TO RECEIVE CREATE CRITERIA FOR THAT SERVICE (10-15 MIN)
- 3. ANSWER THE QUESTION: HOW WOULD YOU VERIFY THE CRITERIA? (10 MIN)
- 4. ANSWER THE QUESTION: BASED ON WHICH YOU WOULD SELECT SUPPLIERS? (10 MIN)
- 5. FORMULATE THE PROCEDURE FOR THE ENTIRE PROCUREMENT PROCEDURE? (15 MIN)
- PRESENT OUTPUT (20 MIN 5MIN EACH GROUP)
- 7. DISCUSSION AND WRAPPING UP

TRAINING THE PROCESS OF THE PROCUREMENT

MATERIALS USED IN THE WS:

CRITERIA FOR GPP:

- RECONSTRUCTION OF THE BUILDING: HTTPS://EC.EUROPA.EU/ENVIRONMENT/GPP/PDF/SWD_2016_180.PDF
- > FOOD SUPPLIERS TO SCHOOL FACILITY:

 HTTPS://EC.EUROPA.EU/ENVIRONMENT/GPP/PDF/190927_EU_GPP_CRITERIA_FOR_FOOD_AND_CATERING_SERVIC

 ES SWD (2019) 366 FINAL.PDF
- > SERVICES IN TRANSPORT: HTTPS://EC.EUROPA.EU/ENVIRONMENT/GPP/PDF/CRITERIA/TRANSPORT.PDF
- > CLEANING SERVICES: HTTPS://EC.EUROPA.EU/ENVIRONMENT/GPP/PDF/TOOLKIT/CLEANING_PRODUCT/EN.PDF

Within the framework of Slovakia's environmental policy, the application of the environmental perspective in green public procurement is an excellent tool for linking environmental protection, savings achieved through the use of life-cycle cost-effectiveness and the promotion of the sustainability of natural resources. In the Slovak Republic, the issue of green public procurement is regulated by the following strategic documents:

- The National Action Plan for Green Public Procurement in the Slovak Republic for 2016-2020 sets the use of GPP at 50% of all contracts out of the total volume of public contracts.
- The Environmental Policy Strategy of the Slovak Republic until 2030 ("A Greener Slovakia") sets the target that the Slovak Republic will procure 70% of its total public procurement contracts through green public procurement.
- The Waste Prevention Programme of the Slovak Republic for 2019 2025 where ministries and their subordinate organisations as well as central state administration bodies will consistently apply the principles of green public procurement in accordance with the current National Action Plan for Green Public Procurement in the Slovak Republic. Compulsory green public procurement will be gradually introduced for municipalities and cities. Gradual progress towards mandatory e-green procurement. Stimulate green innovation by increasing the share of green procurement.

The basic legislation for the application of green public procurement in the Slovak Republic is

Act No 343/2015 Coll. on Public Procurement and on Amendments and Additions to Certain Acts, as amended (hereinafter referred to as the Public Procurement Act) and

The Public Procurement Act, with effect from 31 March 2022, defines in Article 2(5)(q) the environmental aspect as such an aspect related to the subject of the contract which reduces or prevents negative impacts of the procured goods, works or services on the environment during any phase of their life cycle, contributes to environmental protection, promotes adaptation to climate change or promotes sustainable development, in particular by means of

- 1. reducing air, water and soil pollution,
- 2. reducing greenhouse gas emissions,
- 3. protection of forests,
- 4. waste prevention or reduction,
- 5. recovery or recycling of materials used,
- 6. the use of renewable resources; or
- 7. more efficient use of natural resources.



The mandatory use of the environmental aspect is valid for contracting authorities (representing the State) in 6 % of the tenders if they have fulfilled the condition in the first sentence, and the social aspect in at least 6 % of the tenders if they have fulfilled the condition in the first sentence.

Any application of the environmental aspect counts. The above applies if the contracting authority applies a green element with a low environmental impact and also if a green element with a high environmental impact is applied, which brings benefits for several years to come.

The Public Procurement Act allows for the application of environmental aspects in public procurement at all stages of the procurement process under:

- Conditions of participation,
- the description of the subject of the contract,
- the criteria for the evaluation of tenders pursuant to Article 44 of the Public Procurement Act,
- the terms and conditions of the contract.



The resources offered by the Public Procurement Act for the purpose of procuring greener products are generally considered to be voluntary tools in the pursuit of environmental policy. In the Slovak Republic, the following categories are defined:

- Copying and graphic paper,
- Computers and monitors,
- Road transport,
- Cleaning products and cleaning services (interior cleaning services).

The use of green public procurement criteria is mandatory for ministries and other central government bodies.

Section 10(7) of the Act introduces a new possibility to use the environmental aspect alternatively with the social aspect for contracting authorities (representing local government) and contracting entities that are obliged to use the social or environmental aspect in the description of the subject matter of the contract as a special condition for the performance of the contract or as a criterion for the evaluation of tenders in at least 6% of those tenders in a calendar year in which they have launched or carried out at least ten public procurements, excluding low-value contracts, as from 31.3.2022.

BIOAZUL (SPAIN)

WORKSHOPS FOR ENTREPRENEURSHIP IN THE CIRCULAR ECONOMY (Organized by Bioazul)¹⁷

We organized two Conferences for Entrepreneurship in Circular Economy that took place in person at the R&D Incubator Promálaga in Malaga. These sessions had a workshop format where you will be able to acquire more knowledge about the circular economy, its connection with entrepreneurship, training tips and inspiring businesses that use circular principles in their activities. The workshops were:

- I Conference for Entrepreneurship in Circular Economy. Turning business ideas into circular.
- II Conference for Entrepreneurship in Circular Economy. Connecting the needs of entrepreneurs with the priorities of stakeholders.

During these two days the following topics were addressed:

- Context and introduction to the Circular Economy
- How to apply the Circular Economy to companies and SDGs.
- Circular Economy Strategies at European, Spanish and Andalusian levels. Public purchase as a driver of the Circular Economy.
- Inspiring examples of a circular economy.

RETHINKING WATER (Organized by Bioazul)¹⁸

This event results from the combination of the EIT Water Scarcity Grand Event and FIT4REUSE Water Reuse Day joining efforts to make the best out of the European water community. Bioazul was one of the organizers of this event since it is a partner of both projects whose objective is to seek innovative solutions to water scarcity.

Rethinking Water event brought together researchers, innovators, entrepreneurs, experts, and policymakers with a genuine interest in water-related issues to discuss the most pressing challenges in Europe.

WORKSHOP WATER2RETURN SPAIN (Organized by Bioazul)¹⁹

Bioazul, a general coordinator of the Water2REturn (W2R) project, organized the Workshop Water2REturn Spain, which took place within the framework of Smart Agrifood Summit 2021, the leading event in the creation of ecosystems innovators within the European agri-food sector.

Under the title "Solutions for wastewater treatment aimed at resource recovery for the agricultural sector", the Water2REturn workshop was aimed at two specific sectors: farmers and final consumers. Several invited speakers, some of them selected from the project's

¹⁷ https://www.bioazul.com/evento/jornadas-para-el-emprendimiento-en-economia-circular/

¹⁸ https://www.bioazul.com/en/event/rethinking-water-the-event/

¹⁹ https://www.bioazul.com/evento/workshop-water2return-espana/

External Expert Advisory Council, contributed to the discussion with papers related to their specific sectors. The main topics included in the event program were:

- Water2REturn project: concept, objectives, expected results.
- Regional circular bioeconomy strategy.
- Water economy.
- Technologies and solutions for water regeneration and reclaimed water applications.
- Legislation on biofertilizers.
- Agronomic products: properties and efficacy.
- Ecological footprint / social analysis of the life cycle.
- Round table with consumers, farmers' associations and irrigation communities on the challenges and barriers to the use of reclaimed water and biofertilizers.

ANDALUSIA REGIONAL WORKSHOPS (Organized by Bioazul)²⁰

The Spanish partners of the SUWANU EUROPE consortium, BIOAZUL, ASERSA, UCO, FENACORE and CECU, had previously worked on the characterization of the reclaimed water sector in Andalusia, the evaluation of this resource and the study of the main barriers for its implementation. The results of all that work were shared and discussed in two regional workshops that took place in Córdoba and Málaga.

The first workshop held in Córdoba brought together the most relevant actors in the water and agriculture sector to discuss the future of reclaimed water and propose specific measures together. This workshop aimed to prepare among all the participants the strategy of REGENERA Plan, the Andalusian Regional Action Plan for the Use of Reclaimed Water.

The second workshop was organized in Vélez-Málaga at the facilities of TROPS, one of the leading Malaga-based companies in the production and commercialization of tropical fruit. The event was attended by 100 participants among authorities, irrigators, wastewater treatment operators, sanitation companies, researchers, associations, agricultural cooperatives and innovation actors.

CIRCULAR WATER ECONOMY CAJAMAR (Organized by Bioazul)²¹

This session addressed the relationship between the sustainable use of water resources and the circular economy. The need to move from a linear economy to a circular economy was highlighted and the business opportunities it offers were presented. Bioazul participated in this webinar where our colleagues Antonia Lorenzo and Pilar Zapata were speakers at the session.

Topics:

Introduction

- Circular economy and water, opportunities at a European level
- Success story: Circularity in the treatment and recovery of slaughterhouse wastewater. Water2Return Project

²⁰ https://suwanu-europe.eu/andalusia-regional-workshops/

²¹ https://www.bioazul.com/evento/webinar-agua-y-economia-circular-cajamar-innova/

- Success story: Food safety, circularity and reuse of water without chemicals. Applications in the agricultural and livestock industry
- Success story: Nanoparticles for water treatment and recovery of olive oil waste
- Discussion table

SUMMER COURSE "NATURE BASED SOLUTIONS AND CIRCULAR ECONOMY" (Bioazul participates)²²

The International University of Andalusia, together with the collaboration of IUCN, the International Union for Conservation of Nature, organized 2021 the summer course "Nature-Based Solutions and Circular Economy against climate change in the province of Malaga". The objective was to present the potential of SBNs and urban resilience strategies, prioritizing long-term and "glocal" vision (think global and act local).

Bioazul participated in this course where our CEO Antonia Lorenzo was one of the speakers in Session 2: The Malaga SbN Cluster model. Good Practices of SBN in the province of Malaga.

VIII. Videos

Within the project, we have prepared some motivating videos to help lecturers develop the topic of public and private procurement. It is another interesting form of lecturing or education, thus providing other tools than written texts.



Video 1: general introduction

Source: https://www.youtube.com/watch?v=76j7xEtK0yl

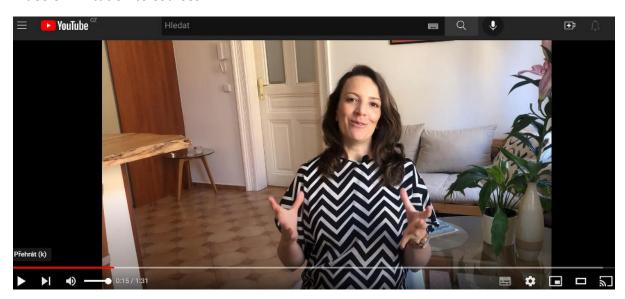
²² https://www.bioazul.com/evento/curso-de-verano-sbn-y-economia-circular-en-la-provincia-de-malaga/

Video 2: tips



Source: https://www.youtube.com/watch?v=lcA3PxHceo4

Video 3: Invitation to courses



Source: https://www.youtube.com/watch?v=Q42Vs1f7x2Y

Video 4: methodologies



 $Source: \underline{https://www.youtube.com/watch?v=znXiaUL9gcQ}$









IX. Conclusion

We are currently living in a global society, where economies and supply chains are highly interconnected, resulting in a very complex system, where changes at some point could have dramatic consequences. We have experienced how different global crises can cause uncertainty and instability in the global value chains and affect the economy of a whole country. If we take into consideration the resource scarcity we are facing and the negative effects climate change will have soon, we need to find a new way of organising our systems to preserve the availability of our resources. Redefining our economy according to circular principles will help us preserve materials and energy at every step of the process. Applying them to public and private procurement is the key to mainstreaming the Circular Economy, helping our economies to become more resilient, fair and sustainable.

The aim of this methodology is to help trainers, managers and anyone who needs to persuade his or her colleagues to purchase in a circular way because it is a first step towards circular economy in practice. We hope that any reader will find interesting ideas and will use them in everyday life.

X. Resources

Introduction:

- Global Resources Outlook 2019: Natural Resources for the Future We Want: The International Resource Panel
- Ellen MacArthur Foundation, WEF, McKinsey (2013): Towards the Circular Economy: https://www3.weforum.org/docs/WEF ENV TowardsCircularEconomy Report 201

 4.pdf
- European Parliament:
 - https://www.europarl.europa.eu/thinktank/infographics/circulareconomy/public/index.html
- Copper8: Circular procurement in 8 steps: https://www.pianoo.nl/sites/default/files/media/documents/Circular-Procurement-in-8-steps-oktober2018.pdf
- European Commission: GPP
 https://ec.europa.eu/environment/gpp/circular procurement en.htm
- Session Lab: https://www.sessionlab.com/blog/train-the-trainer-model/
- Cambridge Dictionary:
 https://dictionary.cambridge.org/dictionary/english/facilitation

Specific methods:

- Train the trainer model: https://www.sessionlab.com/blog/train-the-trainer-model/
- Definition of facilitation, Cambridge Dictionary: https://dictionary.cambridge.org/dictionary/english/facilitation
- Nine alternatives to lecturing: https://wwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/alternatives-lecturing/active-learning/varying-your-teaching-activities
- Gantt chart: https://www.projectmanager.com/gantt-chart
- Top tips for effective presentations: https://www.skillsyouneed.com/present/presentation-tips.html
- The ultimate list of effective online teaching methods: https://blog.epravesh.com/effective-online-teaching-methods/
- Bean, J.C. Engaging Ideas: The Professor's Guide to Integrating Writing, Critical Thinking, and Active Learning in the Classroom. San Francisco: Jossey-Bass, 1996.

Our experience:

- EU GPP criteria: https://ec.europa.eu/environment/gpp/eu gpp criteria en.htm
- Green Public Procurement: https://ec.europa.eu/environment/gpp/index en.htm

Practical cases:

•

- https://www.bioazul.com/evento/curso-de-verano-sbn-y-economia-circular-en-la-provincia-de-malaga/
- https://www.bioazul.com/evento/jornadas-para-el-emprendimiento-en-economia-circular

XI. Appendix: Summary of the Methodology on circular public and private procurement

- 1. Circular public procurement is inevitable and it is a solution to the current challenges. There is no other way and it represents a first step in realisation of the circular economy in practice (following the trend set within the European Green Deal).
- 2. Circularity and sustainability can be applied in any sector, but usually, there is lack of knowledge and consultation. Thus, experts should be invited to consult the goals, possibilities and specific aspects of any future circular public procurement.
- 3. It is more and more clear that market consultations (discussion among the public authority and potential suppliers) are key to understanding both sides' needs, plans and conceptions. It is not illegal but these consultations must be held in a transparent manner and open to any interested party.
- 4. Cooperation (and common solution-seeking) between the public authority and supplier(s) makes the procurement successful. It is also one of the key principles of the circular economy in general.
- 5. To apply the circular economy in practice, traditional consumption patterns must be changed as well as the current consumer mindset. Circular economy is not about growing consumption being "greener" but it is about focusing on quality instead of price and quantity and minimising our needs.
- 6. It is not only about circular public procurement but also about circular private purchase. Circular principles must be applied in the everyday life of every single consumer.
- 7. It is natural to make mistakes or to find obstacles in the process of circular procurement. This is a way of learning and getting valuable lessons but in any case, we should not be discouraged and follow the circular path again.

Project team:

Soňa Jonášová (BIC Brno), Dagmar Milerová Prášková (BIC Brno), Ivana Maleš (INCIEN SK), Katarína Bednáriková (INCIEN SK), Petra Cséfalvayová (INCIEN SK), Belén Montosa (BIOAZUL), Gerardo González (BIOAZUL).

We would like to thank Sara Hernández (BIOAZUL) for her supportive work on this methodology.

The contents of this document are the sole responsibility of the team members who created and can under no circumstances be regarded as reflecting the position of the European Union.

2022

Reproduction is allowed provided the source is acknowledged.

