

# **D.T4.2.2**

## **Feedback reports on Co-Creation workshops**

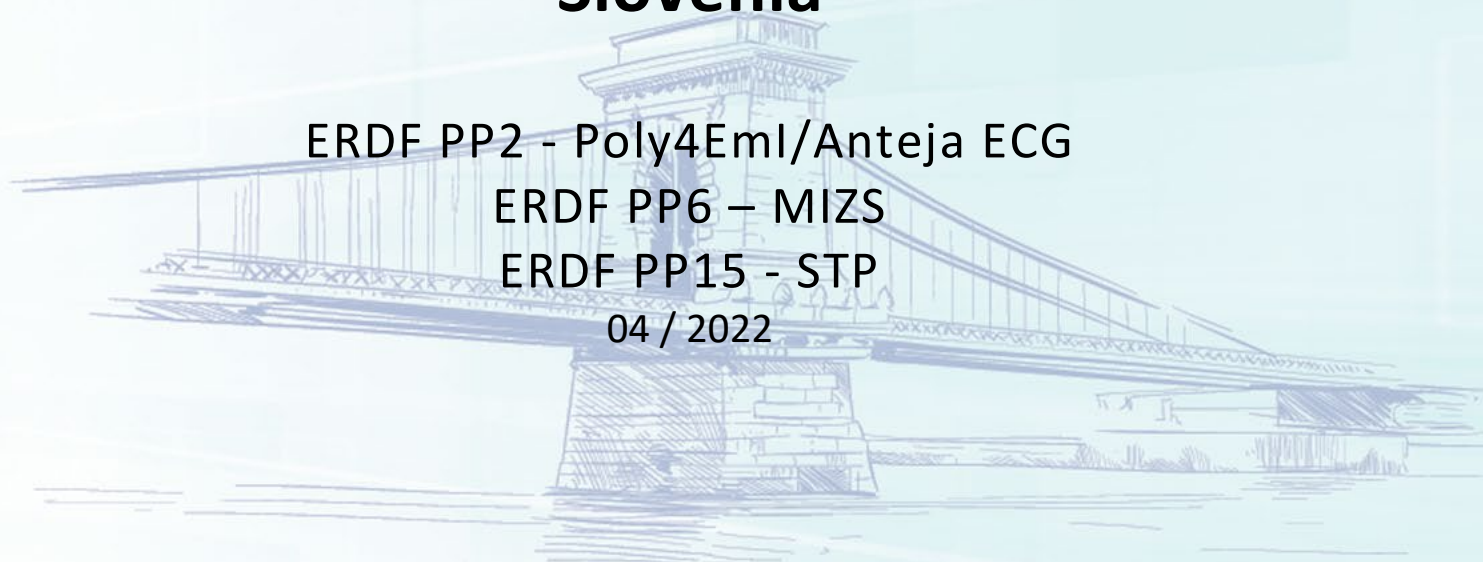
### **Slovenia**

ERDF PP2 - Poly4Eml/Anteja ECG

ERDF PP6 – MIZS

ERDF PP15 - STP

04 / 2022



### Project Information

Project Title: GoDanuBio - 'Participative Ecosystems for fostering the revitalization of rural-urban cooperation through governing Danube Circular Bioeconomy'

Project code: DTP3-471-4.1

Lead partner: BIOPRO Baden-Württemberg GmbH

Start of the project: 01/07/2020

Duration: 30 months

<http://www.interreg-danube.eu/approved-projects/godanubio>

### Deliverable Information

Author/-s: Poly4Eml/Anteja ECG, Ministry of Education, Science and Sport, Styrian Technology Park

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0.1	22/03/2022	Template for feedback reports on Co-Creation workshops	Biz-up	BIOPRO
0.2	20/04/2022	Feedback report on Co-creation workshop #1 in Slovenia	Poly4Eml/Anteja ECG, Ministry of Education, Science and Sport, Styrian Technology Park	Biz-up
Final	28/04/2022	Feedback report on Co-creation workshop #1 in Slovenia	Poly4Eml/Anteja ECG, Ministry of Education, Science and Sport, Styrian Technology Park	

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### *Disclaimer:*

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## 1. General information about the co-creation workshop

Date of the workshop	March 31, 2022
Topic of the workshop	Accelerating circular bio-economy in Slovenia with the use of digital tools
Format of the workshop	Online
Region/Address	Slovenia
Project partner(s) involved	Anteja ECG/Poly4Eml, Ministry of Education, Science and Sport, Styrian Technology Park
Guiding question/theme of the workshop	Current status and potential of digital tools to accelerate circular bio-economy in Slovenia
Number of participants	14
Type of participants (Target groups) <sup>1</sup> and name of institutions	<ul style="list-style-type: none"><li>- Chamber of Commerce/ Strategic Research and Innovation partnership for Sustainable Food Production (SRIP HRANA),</li><li>- Cluster manager (Wood cluster)</li><li>- Strategic Research and Innovation Partnership Circular Economy (SRIP Krožno Gospodarstvo)</li><li>- Companies (SMEs, large company),</li><li>- Association Climate KIC</li></ul>
Cooperation with experts (i.e. speakers, external moderators, politician...)	Cooperation with external moderator

## 2. Objective of the workshop

The main goal that drove the conception and implementation of the workshop was to enhance the culture of participative governance within the Danube macro-region and to contribute so far to Priority Area 10 (Institutional capacities and Cooperation) of the EUSDR. The workshop's topic addressed thematically mainly the issue of »Fostering the bio-economization of regions and municipalities«.

The workshop, therefore, focused on assessing the current status of the circular bio-economy in Slovenia and identifying opportunities for strengthening and accelerating it (with the help of digital tools).

The main objectives of the workshop were two-folded:

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<sup>1</sup> Please group the target groups according to the ones listed in page 42 of the Application Form

1. identifying existing examples of circular economy in Slovenia, and the current inclusion of companies from rural areas
2. assessing the implementation and perceived importance of digital tools for accelerating circular bio-economy in Slovenia.

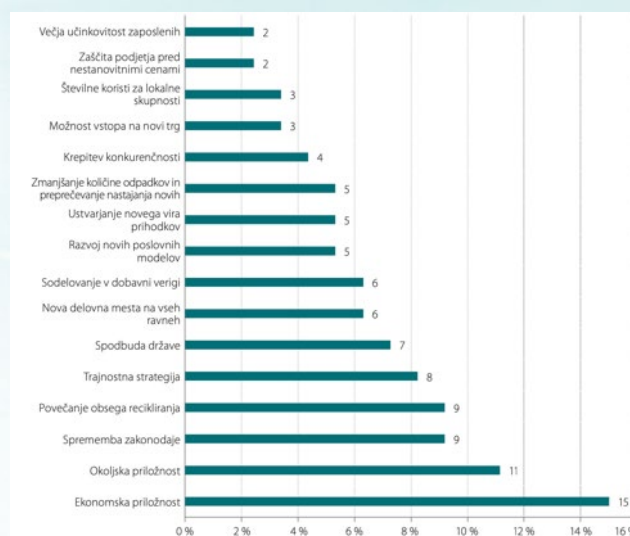
### 3. Initial situation of your region

The topic of accelerating the circular bio-economy has been gaining importance in recent years. The Covid-19 pandemic exposed vulnerabilities in the production and supply chains in the EU. Companies need to make their value chains more resilient and sustainable, and this is the case in Slovenia, too.

The situation has worsened again due to the war in Ukraine and consequently broken supply chains. Companies are more interested in finding new alternatives to assure smooth operations in the short run, and also reshoring closer to home. Various studies imply that re-organizing value chains becomes imperative to make them more resilient in the long run.

In addition, different regulations (e.g., Green Deal, Supply chain due diligence, and Corporate Sustainability Reporting Directive CSDR) put additional pressure on companies, in particular, larger ones to make their value chains more transparent and sustainable.

A circular bio-economy can offer several solutions to these problems, and brings also economic opportunities for companies.

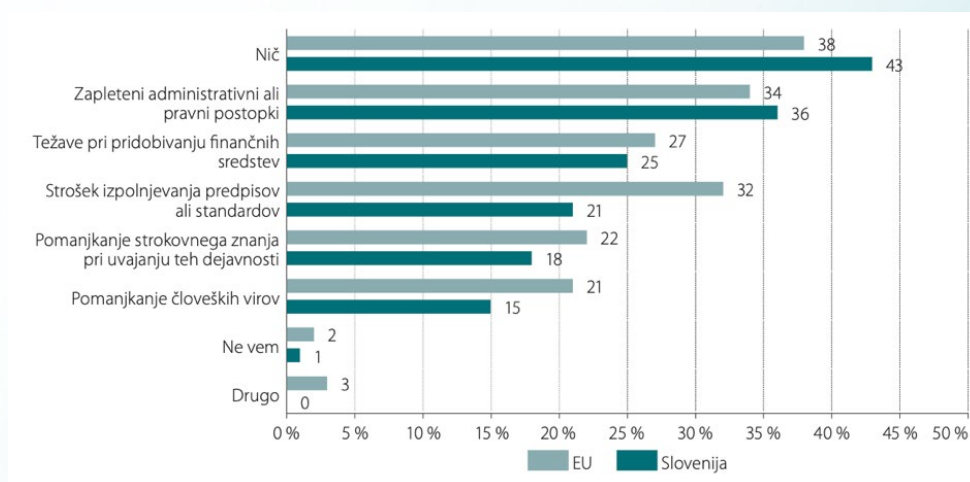


*Motivation factors for getting involved in bioeconomy projects<sup>2</sup>*

However, companies find also obstacles when trying to enter the circular bio-economy. The study Slovenian Companies and Circular Economy conducted by the Faculty of Economics and Business, University of Maribor showed that Slovenian companies face more obstacles in the area of administrative and legal procedures than an average EU company.

<sup>2</sup> Source: <http://ipmmp.um.si/wp-content/uploads/2018/02/SPO2017-monografija.pdf>





### *Barriers to the circular bioeconomy transition in Slovenia<sup>3</sup>*

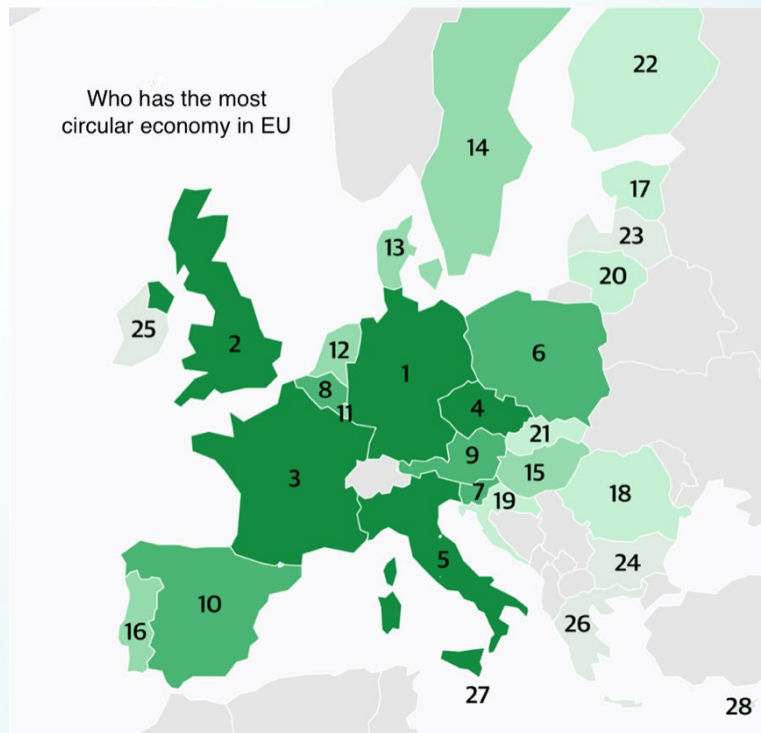
Currently, companies report that they lack the overview of potential partners into potential partners – suppliers or buyers of biobased inputs. This is also a case with production residuals. Residuals of one company/value chain could represent valuable input for the other companies or value chains, but these links are often missing. Consequently, a lot of available resources in Slovenia are not appropriately used and do not contribute to lowering the extremely high percentage of newly extracted biomass (90 %).

However, there are some good examples of circular bio-economy projects in Slovenia. One of the expected results of the workshop was to present these case studies that could not only help achieve sustainable wellbeing in harmony with nature but also identify new opportunities for overcoming the problems brought by the broken supply chain due to the current global situation.

In general, Slovenia is not one of the countries with the highest circular economy, though it ranks quite high among some of the evaluated criteria – namely regarding the share of goods traded that are recyclable raw material (2<sup>nd</sup>), municipal recycling (3<sup>rd</sup>), material reuse rate (13<sup>th</sup>), and waste management (15<sup>th</sup>).<sup>4</sup>

<sup>3</sup> Source: <http://ipmmp.um.si/wp-content/uploads/2018/02/SPO2017-monografija.pdf>

<sup>4</sup> Source: <https://www.politico.eu/article/ranking-how-eu-countries-do-with-the-circular-economy/>



*Ranking – which countries have the most bioeconomy (EU-28)<sup>5</sup>*

#### 4. Methods used within the workshop

Before designing and organizing the workshop, explorative interviews were conducted with potential participants and speakers to identify the most relevant ones and agree on the topics and cases to be presented in the workshop.

The workshop was prepared in several steps:

- Before the workshop:
  - preparation of invitation
  - workshop guidelines
  - and speakers' presentations
- During the workshop:
  - Presentation of participants
  - Objectives presentation
  - Presentation of selected cases
  - Moderated discussion for the idea and knowledge transfer (by an external moderator familiar with the topic).

The workshop was organized online to enable easier participation of stakeholders from different parts of Slovenia.

<sup>5</sup> Source: <https://www.politico.eu/article/ranking-how-eu-countries-do-with-the-circular-economy/>

The approach proved to be very suitable for achieving the workshop's objectives. The cases represented a good starting point and stimuli for fruitful participation and discussion, as well as next steps and initiatives definition.

The method is recommended for further usage. The conducted workshop was scheduled for two hours. In the future, an additional half an hour would be valuable to enable even more intense discussion.

## 5. Lessons learned for next upcoming workshops

The main lessons learned from the workshop are:

- The planning stage is extremely important for the workshop's success.
- Individual interviews before the workshop contribute to a better selection of participants, the practical cases, and a more focused discussion.
- The online workshop enables easier participation of stakeholders from different parts of the country and assures higher willingness to participate.
- Presenting real cases – examples of good practices – is a valuable stimulus for encouraging constructive discussion, and can also help common understanding of the topic discussed.

## 6. What did the local or/and regional administration and the citizens expect from the process of participative governance?

The participants were very satisfied with the workshop – it met, or even exceeded their expectations. The presented case studies were very interesting for the majority of the workshop's participants as they were not familiar with them. They were also surprised that such good examples of circular bio-economy did not receive more media attention.

## 7. Outcome of the co-creation workshops

The main outcomes of the workshops were as follows:

- Identified **good practices of circular bio-economy in Slovenia** (i.e., Koto, Paradajz, Panvita Group, Algen)
- Identified **barriers to accelerating circular bio-economy in Slovenia** – on two levels – in the business environment and on companies'-level

### **Business environment**

- Extensive focus on research and technology and not on new value chains creation
- Lack of circular (bio)economy strategy/policy – currently in the planning stage
- Very strict regulation (e.g., in agriculture) / lack of regulations (e.g., for dealing with residuals, stimulating companies to engage in circular bio-economy)
- Lack of infrastructure for the full circularity of resources (e.g., currently the only area that is functioning is communal waste management, smaller companies will need more support in terms of infrastructure, because they are too small to organize it themselves)



- Lack of cross-sectoral cooperation
- Lack of inter-ministerial cooperation
- Silos mentality
- Lack of initiatives for mobilizing companies in this area
- Lack of initiatives/public tenders supporting the transition/inclusion of micro and small companies into circular bio-economy
- Lack of suitable technologies (e.g., for mass production and competitive prices)
- Too little transfer of good practices, lack of public communication about successful circular bio-economy cases and good practices
- The landscape of companies in Slovenia
  - a lot of small players (including small farmers in rural environments) who often lack development-orientation
  - lack of big players who are capable of moving towards circular bioeconomy in this direction (e.g., interested in innovation, willing to pay)

#### **Company-level**

- Lack of need for circular bio-economy – e.g., lack of market requirements for circular bio-economy
  - Lack of knowledge and low awareness about the potential of circular bio-economy for strengthening a company's competitiveness and creating a competitive advantage (which is, for example, already the case in Austria)
  - Lack of sustainability orientation (sustainable thinking needs to be integrated into the way assets are managed and the way products and services are provided – sustainability needs to be everyone's business)
  - The unwillingness of companies to implement new technologies (often connected with their narrow view on the needed investment and not on the lifetime costs and savings)
  - Lack of human resources to deal with circular bio-economy
  - Lack of time to deal with these issues, especially among micro and smaller companies (struggling to survive)
  - Non-competitiveness of prices of products created with a circular bio-economy (e.g., biofuels vs. conventional ones)
- Identified **opportunities for accelerating circular bio-economy with the help of digital tools** – on two levels – on policy- and company-level

#### **Policy-level**

The participants agreed that digital tools can help to accelerate the development of circular bio-economy practices, especially since they can:

- provide the overview of the actors and value chains (e.g., needs and resources in the region) for creating policy direction,
- provide databases, which can enable academic research,
- enable cross-sectoral and cross-regional cooperation,
- close (regional) loops,
- contribute to reducing emissions and environmental footprint.

## Company-level

The participants found the following advantages and opportunities for companies using digital tools:

- Short-term perspective:
    - assuring smooth operations (in case of broken supply chains) by quickly finding new suppliers or buyers
    - assuring quality and safety
  - Longer-term perspective:
    - value chain mapping and optimization
      - more effective use of resources (bio-based and non-bio-based ones), including review and optimization of logistics (e.g., is it economically justified to transport the resource)
      - costs optimization in general
      - environmental footprint optimization
    - possibility to create new, cyclical value chains (potentially also outside the current industry)
    - better value chain transparency
    - improved overall competitiveness and a more circular orientation
    - less negative impact on the environment
- Identified **barriers for accelerating circular bio-economy with the help of digital tools**
- Lack of human resources and knowledge to implement and use the available tools (in particular in smaller companies, which do not have human resources or designated employees for such activities – They would need an external consultant who can bring the relevant skills into the company)
  - Lack of provided value (e.g., low quality of provided contact, their unresponsiveness)
  - Service is needed, not only the tool (e.g., to identify potential partners, to understand possible new value creation)

Outcome:	Name:	Stakeholder involved:	Expected duration:	Field of action (bioeconomy in general /rural development/urban rural cooperation)
Initiative	Follow-up discussions / workshops	VCG.ai, Wood Cluster, Chamber of Commerce and Climate KIC	ongoing	bioeconomy in general (how and where to implement VCG to facilitate bioeconomy)

## **8. Innovation potential for your region**

The participants agreed that digital tools such as VCG can contribute extensively to accelerating bioeconomy practices in Slovenia. There are already several good examples, but there is a lack of transfer of good practice and lack of public communication about successful circular bio-economy cases and good practices. Besides, the innovation potential in Slovenia is at a very high level, however, the obstacles can be mainly find in regulatory framework, lack of infrastructure and finances.

Nevertheless, the participants agreed that the topic is of their highest interest, so they agreed on the following activities:

- to establish direct contacts between workshops participants,
- to organize additional workshops to continue discussions about identified issues and to invite additional stakeholders (e.g. policy makers) to the discussions.

## **9. Strengths and weaknesses of the process of participative governance**

The main challenge we had to face was getting the attendance. Namely, the invitees are mostly reluctant to participate in such workshops, not seeing enough benefit for them. However, we managed to attract the ones that saw the real potential of the VCG to help them in their ongoing efforts towards circular bioeconomy. Presenting a concrete digital solution/tool at the workshop was of great importance.

## **10. Do you plan to use the process of participative governance also in the future?**

One of the initiatives mentioned at the workshop by the Climate KIC Orchestrator was also to involve the policy level into discussions on how to take advantage of the existing digital tools, such as VCG. This will be done as a follow-up activity.

We are planning another two co-creation workshops which will involve other target groups/stakeholders (e.g. public bodies). Therefore, more details on this topic will follow after their implementation.

## **11. Identified opportunities for rural development in your region**

The findings on this topic will be presented after implementation of all three workshops.

## Annexes

### A. Agenda of the co-creation workshop



Vabilo na delavnico

**Pospeševanje prehoda na krožno biogospodarstvo v Sloveniji z uporabo digitalnih orodij**

31. marec 2022, 10.00 – 12.00, virtualno

ZOOM POVEZAVA:  
<https://zoom.us/j/97229595261?pwd=bVlNem9ib0VhZkZlSaE1eTVhRFZ6UT09>  
Meeting ID: 972 2959 5261  
Passcode: 267464

Program dogodka	
UVOD	
10:00 – 10:05	Otvoritev in pozdravni nagovor
10:05 – 10:15	Predstavitve konteksta – od politik k praksi podjetij (Mateja Dermastia, Antea ECG)
KROŽNO BIOGOSPODARSTVO V SLOVENIJI	
10:15 – 10:40	Predstavitve primerov krožnega biogospodarstva z vidika podjetij (izzivi, rešitve in digitalna orodja): <ul style="list-style-type: none"><li>GZS/SRIP Hrana (Nina Barbara Križnik, Samostojna svetovalka)</li><li>Algen d.o.o. (dr. Maja Berden Zrimec, Raziskovalka)</li><li>Oracle d.o.o. (Nino Novinec, Cloud Platform Customers Representative)</li></ul>
10:40 – 11:15	Moderirana diskusija in vprašanja iz občinstva
DIGITALNA ORODJA	
11:15 – 11:25	Predstavitve digitalnega orodja "Value Chain Generator" (VCG) kot rešitve za ustvarjanje novih krožnih verig vrednosti in identifikacijo novih poslovnih priložnosti (Jon Goriup Dermastia, Antea ECG)
11:25 – 12:00	Moderirana diskusija z udeleženci: Digitalna orodja, VCG za pospeševanje krožnih verig vrednosti v praksah podjetij
ZAKLJUČEK IN NASLEDNJI KORAKI	



### B. Invitation to the workshop

Vaša udeležba na delavnici "Pospeševanje prehoda na krožno biogospodarstvo v Sloveniji z uporabo digitalnih orodij", 31.3.2022 ob 10. uri [\(External\)](#) [Antea/VCG/delavnica X](#)

 **Mateja Novak**  
to Mateja, Mateja, me, Martina

Spoštovani,

Zahvaljujemo se vam za potrjevanje udeležbe na delavnici, ki jo organiziramo v okviru projekta GoDanuBio na temo **Pospeševanje prehoda na krožno biogospodarstvo v Sloveniji z uporabo digitalnih orodij** in bo potekala v četrek, 31.3.2022, z začetkom ob 10 uri.

V prilogi vam polijam končno verzijo programa delavnice, ki bo potekala virtualno, na naslednji Zoom povezavi:  
<https://zoom.us/j/97229595261?pwd=bVlNem9ib0VhZkZlSaE1eTVhRFZ6UT09>  
Meeting ID: 972 2959 5261  
Passcode: 267464



Vabljani in se veselimo srečanja!

Lep pozdrav,  
**Mateja Novak**



**Mateja Novak**  
Project Manager  
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LinkedIn  
[www.anteja-ecg.com/](http://www.anteja-ecg.com/)

## C. Guidelines/Moderation notes



### Pospesjevanje prehoda na krožno biogospodarstvo v Sloveniji z uporabo digitalnih orodij

Opomnik za delavnico, verzija 3 | 3. 2022




Zoom-Povezava: <https://zoom.us/j/97229595261?pwd=bVNmSm9kbVZkX3p4eUk1YVpRZjZuT099>  
Meeting ID: 972 2959 5261  
Passcode: 26746



**UVOD 15' ~ 10:00-10:15**

- **Otvoritev & pozdravni nagovor 10:00-10:05**
  - > Delavnica poteka v okviru projekta GoDanuBio – cilj projekta je ustvariti participativni ekosistem, ki bo okrepil sodelovanje med podeželjem in mesti Podonavja s pomočjo krožnega biogospodarstva. Projekt je bil odobren in je 85-% sofinanciran v okviru razpisa "Interreg Danube Transnational Programme".
  - > Družimo se predstavniki SRIPov in predstavniki podjetij
  - > Pogovarjali se bomo o:
    - 1. del: o krožnem biogospodarstvu v Sloveniji – trije prispevki + diskusija
    - 2. del: digitalna orodja – predstavitev orodja VCG + diskusija o vlogi digitalnih orodij za pospeševanje prehoda na krožno biogospodarstvo v Sloveniji
  - > Predstavitev pravil
    - ni pravih in napačnih odgovorov
    - delavnica poteka do 12., spreminjanje časa – če se bo diskusija razvila in če boste imeli še čas, lahko tudi malo podaljšamo
    - govorimo posamezno
  - > Strinjamo se s snemanjem – za namene priprave poročila + slika za v poročilo
- Mateja Dermastia, direktorica Anteje ECG, ki je partner projekta: **Predstavitev konteksta – od politik k praksi podjetij 10:05-10:15**

**KROŽNO BIOGOSPODARSTVO V SLOVENIJI 60' ~ 10:15-11:15**

- Trije govorniki bodo v tem sklopu podali izhodišni vpogled s perspektive podjetij, sledila bo diskusija vseh sodelujočih
- **Nina Barbara Kržnik**, samostojna svetovalka, SRIP Hrana 10:15-10:25
- **Dr. Maja Berden Zrimsec**, raziskovalka, center za alge tehnologije Algen 10:25-10:35
- **Nino Novinec**, Cloud Platform Customer Representative, Oracle 10:35-10:45
- **DISKUSIJA O STANJU KROŽNEGA BIOGOSPODARSTVA V SLOVENIJI 10:45-11:15**
- Kateri so glavni izzivi v Sloveniji na področju pospeševanja prehoda na krožno biogospodarstvo?
  - > Kakšne so razlike med različnimi velikostmi podjetij in različnimi dejavnostmi?
  - > Razlike med urbani in ruralnimi področji, priložnosti za razvoj podeželja
- Sta Covid-19 in vojna v Ukrajini situacijo kaj spremenila? Kako? Zakaj?
- Koliko se pri vzpostavljanju krožnega biogospodarstva oz. pri iskanju dobaviteljev, poslovnih partnerjev, kupcev že uporabljajo digitalna orodja? Katera? S kakšnim namenom?
  - > Če omenijo matchmaking orodja: Kakšne so izkušnje z njimi? Kako kakovostne 'zadetke' dajejo? Primeri slabih/dobrih praks?





- Kako pomembna so oz. bodo po vašem digitalna orodja za pospeševanje prehoda na krožno biogospodarstvo (v Sloveniji)?
  - Kaj so njihove glavne prednosti in pomanjkljivosti?
  - Kako lahko digitalna orodja prispevajo k vključevanju oz. razvoju podeželja?




**DIGITALNA ORODJA 40' ~ 11:15-11:55**

- Jon Gorup, UWAZI Tech: **Predstavitev digitalnega orodja VCG 11:15-11:25**
- **DISKUSIJA O UPORABNOSTI VCG/DIGITALNIH ORODJI ZA POSPEŠEVANJE KROŽNEGA BIOGOSPODARSTVA 11:25-11:55**
- V čem vidite njegove glavne prednosti?
- Vidite tudi kakšne slabosti orodja? Se vam pojavljajo tudi kakšna vprašanja?
- Kako unikaten oz. drugačen se vam zdi VCG?
  - Če ni unikaten: Poznate katera druga podobna orodja? Katera? Kaj nudijo? V čem se vam zdijo boljša/slabša od VCG? V čem je drugačen od 'matchmaking' orodij/ponudnikov?
  - Če je unikaten: Kaj je njegova glavna prednost? V čem se najbolj razlikuje od morebitnih podobnih orodij?
- **Za koga** bi bilo orodje uporabno v Sloveniji? Zakaj? PO POTREBI POMAGAJ: ZA PODJETJA, ZA 'CLUSTRE', REGIONALNE AGENCije...
  - Če jih naštejejo več, za vsako ciljno skupino preveri: V čem je vrednost VCG-ja zanjo?
  - Kdo bi bili prvi uporabniki?
  - Če ni spontano omenjeno: Kako zanimivo bi bilo orodje za SRIP-e? Zakaj da/ne? Kako bi ga uporabljali? V čem bi lahko bila dodana vrednost za SRIP in/ali njegove člane? Zakaj?
  - V čem vidite glavne ovire za implementacijo?
  - Na kakšen način bi se vam zdelo najbolje seznanjati potencialne uporabnike z orodjem VCG?

**ZAKLJUČEK IN NASLEDNJI KORAKI 5' ~ 11:55-12:00**

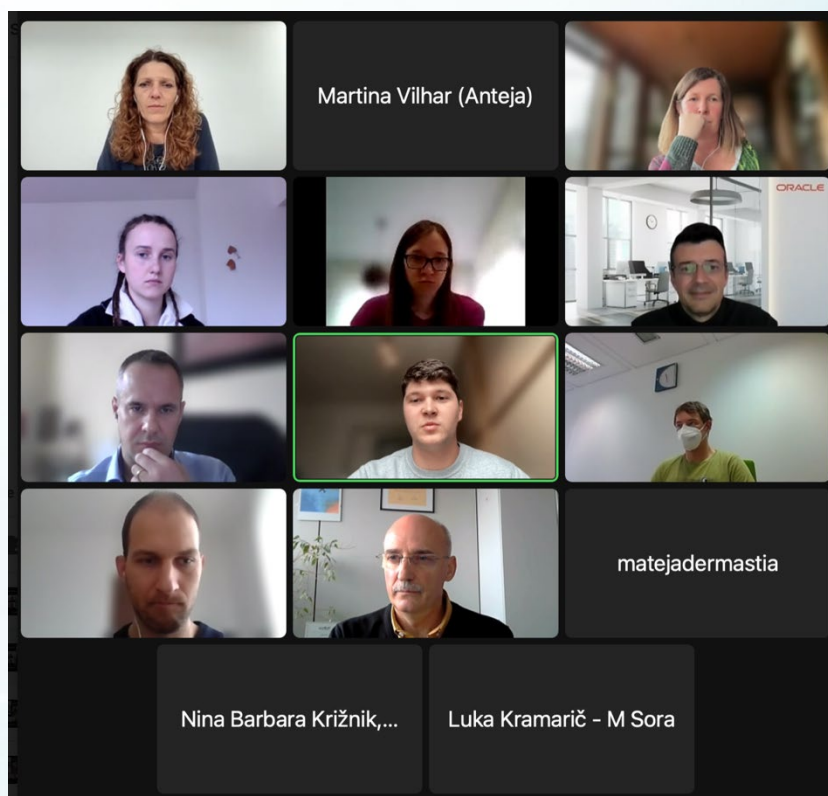
- Mateja Dermastia: **sklepna misel**
- Dogovor glede smiselnih nadaljnjih korakov na tem področju – identifikacija interesentov za aktivno ukvarjanje s to tematiko.

Najlepša hvala vsem za sodelovanje ☺





## D. Pictures from the workshop



### Agenda

UVOD	
10:00 – 10:05	Otvoritev in pozdravni nagovor
10:05 – 10:15	Predstavitve konteksta – od politik k praksi podjetij (Mateja Dermastia, Anteja ECG)
KROŽNO BIOGOSPODARSTVO V SLOVENIJI	
10:15 – 10:40	Predstavitve primerov krožnega biogospodarstva z vidika podjetij (izzivi, rešitve in orodja): <ul style="list-style-type: none"> <li>GZS/SRIP Hrana (Nina Barbara Križnik, Samostojna svetovalka)</li> <li>Algen d.o.o. (dr. Maja Berden Zrimec, Raziskovalka)</li> <li>Oracle d.o.o. (Nino Novinec, Cloud Platform Customers Representative)</li> </ul>
10:40 – 11:15	Moderirana diskusija in vprašanja iz občinstva
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11:25 – 12:00	Moderirana diskusija z udeleženci: Digitalna orodja, VCG za pospeševanje krožnih verig vrednosti v praksah podjetij
ZAKLJUČEK in NADALJNI KORAKI	

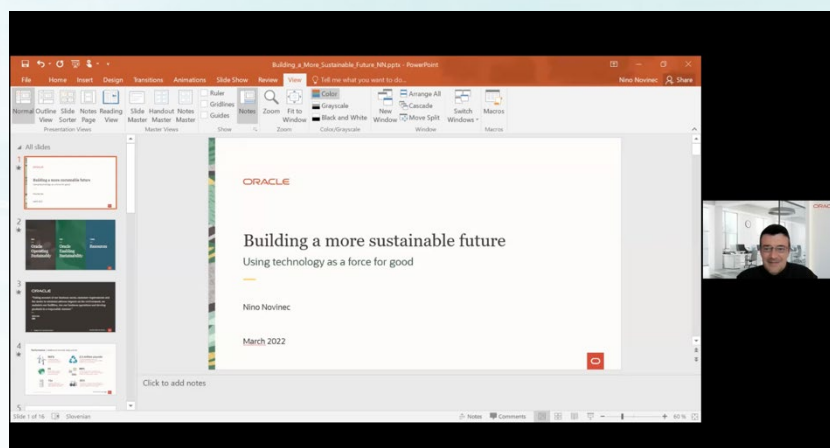
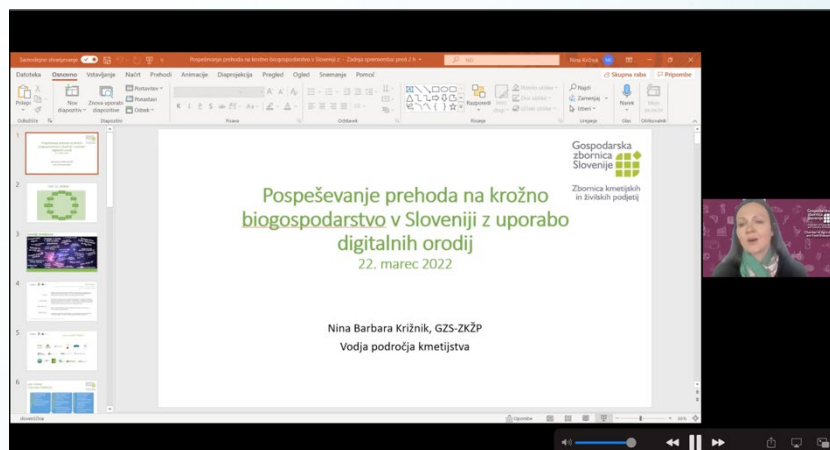
### Anteja

Value chains

Circular economy

Digital solutions

Project co-funded by European Union funds (ERDF, IPA)

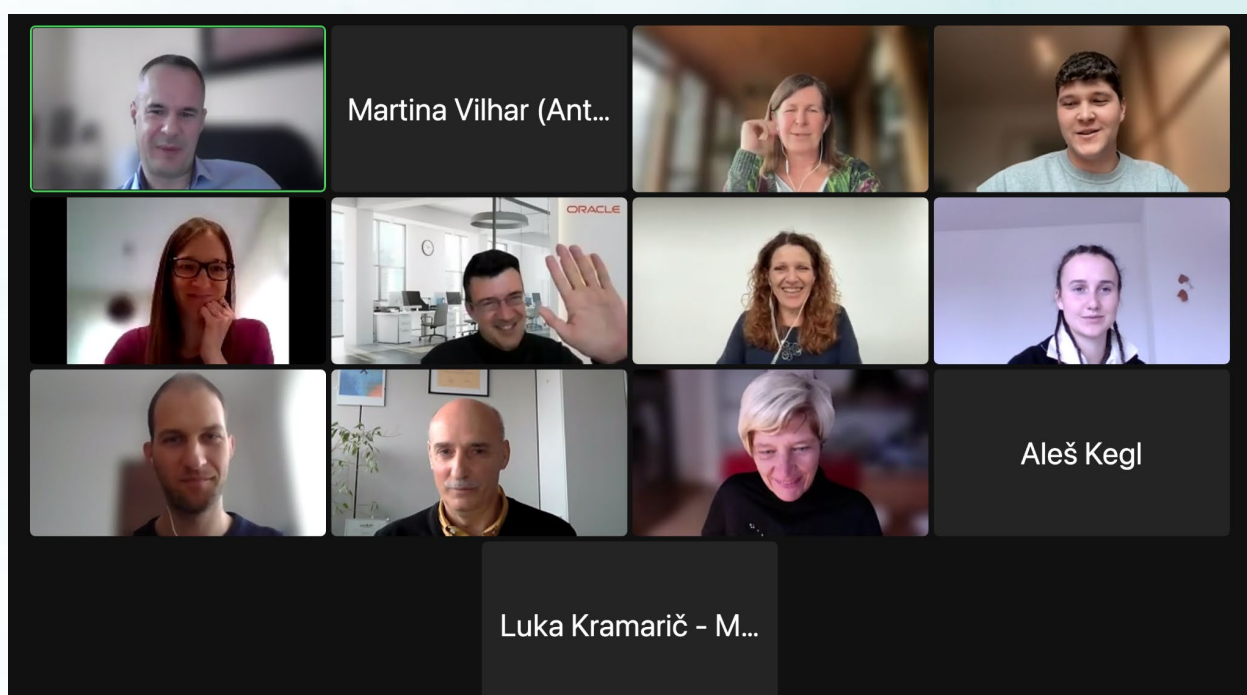


## E. Press releases of the workshop (in Slovenian)



### Spletna delavnica: Pospeševanje prehoda na krožno biogospodarstvo v Sloveniji z uporabo digitalnih orodij

(Ljubljana, 31.3.2022)



V okviru projekta Interreg GoDanubio smo 31.3.2022 organizirali dveurno spletno delavnico z naslovom “Pospeševanje prehoda na krožno biogospodarstvo v Sloveniji z uporabo digitalnih orodij”. Spletno delavnico se je udeležilo 14 udeležencev, ki so dobili dragocen vpogled v teme krožnega biogospodarstva in razumevanje, kako lahko z digitalnimi orodji pospešimo njegov razvoj v Sloveniji.

Dogodek je bil razdeljen na tri ključne dele:

1. trije govorniki so predstavili krožne biogospodarske projekte in izzive v svojih podjetjih oz. organizacijah
2. predstavitev digitalnega orodja Value Chain Generator

### 3. diskusija o digitalnih orodjih za ustvarjanje novih krožnih verig vrednosti.

Ga. Mateja Dermastia, direktorica Anteje ECG, je v začetnem nagovoru predstavila širši kontekst dogodka, in sicer o priložnostih in izzivih krožnega biogospodarstva v Sloveniji in v Evropi. Poudarila je, da je Slovenija del podonavske makroregije, ki nas lahko podpre v prizadevanjih za zagon krožnega biogospodarstva.

Sledile so predstavitve treh predstavnikov podjetij oz. organizacij, ki delujejo na slovenskem trgu, in ki se ukvarjajo s krožnim biogospodarstvom. Podjetja so predstavila svoje biogospodarske projekte in izpostavila nekatere ovire, s katerimi se soočajo.

Ga. Nina Barbara Križnik, Vodja področja kmetijstva pri Gospodarski zbornici Slovenije in Zbornici kmetijskih in živilskih podjetij nam je predstavila dobre primere krožnega biogospodarstva iz slovenske kmetijske in živilsko-predelovalne industrije. Poudarila je, da se pri Zbornici zavedajo, da lahko nove tehnologije rešujejo mnogotere težave pri prehodu na krožno biogospodarstvo, kot so npr. zagotavljanje konkurenčnosti kmetijskih podjetij, učinkovita raba virov in energije, upravljanje varnosti in kakovost, nadzor zdravstvenega varstva, optimizacija procesov itd.

Dr. Maja Berden Zrimec, raziskovalka na podjetju Algen d.o.o., nam je predstavila izjemno uporabnost alg v različnih industrijah in njihovo primernost za uporabo v krožnih sistemih.

G. Nino Novinec, predstavnik Cloud Platform Customers s podjetja Oracle nam je predstavil njihove trajnostne ter krožne projekte. Oracle v Sloveniji pomaga slovenskim tehnološkim podjetjem pri razvoju digitalnih orodij za pospeševanje prehoda na krožno biogospodarstvo.

Predstavitvam podjetij je sledila kratka moderirana diskusija, kjer so udeleženci našli glavne izzive za prehod na krožno biogospodarstvo v Sloveniji, med drugim:

- nizka ozaveščenost podjetij o priložnostih krožnega biogospodarstva za konkurenčno prednost podjetij,
- manjkajoče medsektorsko povezovanje,
- manjkajoča infrastruktura za popolno krožnost surovin,
- mala podjetja nimajo kapacitet, da bi se s tem dodatno ukvarjala,
- ustvariti bi bilo potrebno pravo okolje za razvoj biogospodarstva,
- ustvariti bi bilo potrebno nove, krožne verige vrednosti.



Nato je g. Jon Goriup Dermastia predstavil digitalno orodje Value Chain Generator, ki je bil zasnovan leta 2021 v okviru projekta Interreg AlpLinkBioEco, razvila pa sta ga Antėja ECG in švicarski inštitut Institute of Complex Systems, School of Engineering and Architecture of Fribourg (HES-SO//FR HEIA-FR). Value Chain Generator je software rešitev, ki ustvarja nove krožne verige vrednosti in identificira nove poslovne priložnosti. Naslavlja tudi nekatere izmed izzivov, ki so jih izpostavili udeleženci delavnice.

Sledila je razprava o koristi takšnih digitalnih orodjih za slovensko biogospodarstvo in udeleženci so se strinjali, da so glavne dodane vrednosti takšnega orodja naslednje:

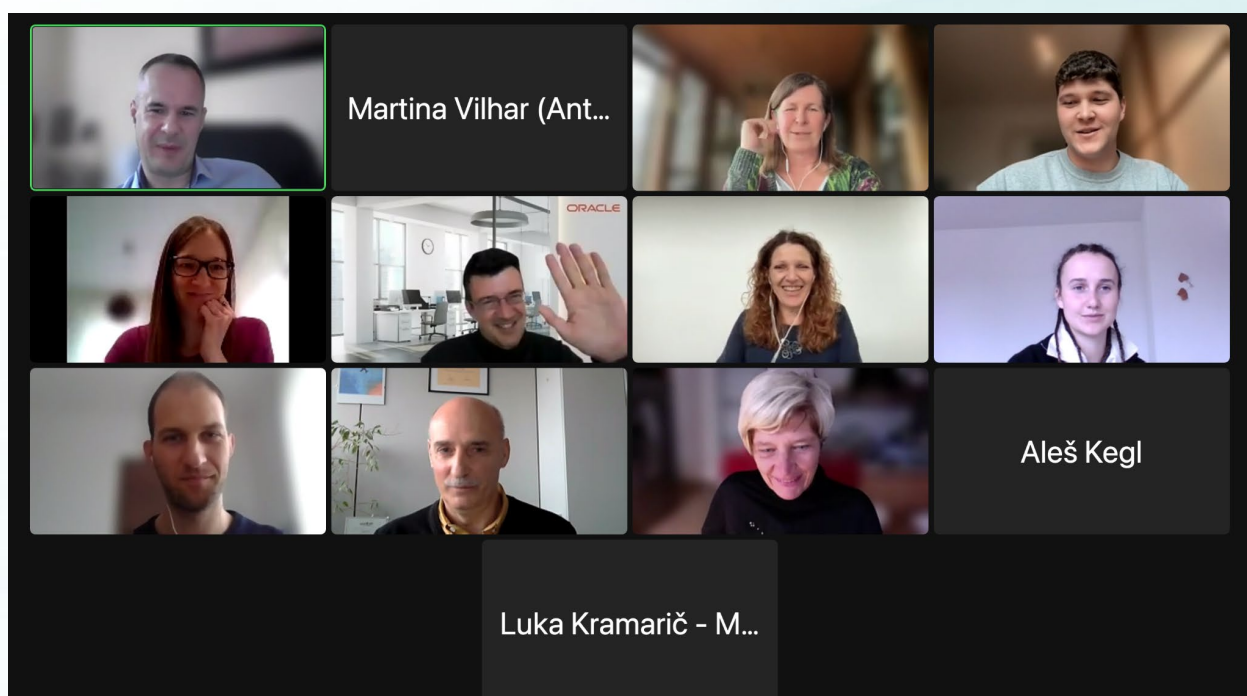
- poleg podjetjem lahko Value Chain Generator koristi tudi ustvarjalcem politik,
- poišče nove kupce in dobavitelje,
- povezuje različne sektorje med seboj,
- podjetja lahko razpolagajo z novimi podatki in novim znanjem,
- orodje združuje kakovostne in odzivne kontakte podjetij.

Na koncu srečanja je ga. Mateja Dermastia predstavila nadaljnje korake za pospešitev prehoda v krožno biogospodarstvo in izrazila možnost za ponovitev te delavnice v prihodnjih mesecih.



## F. Press releases of the workshop (in English)

### Online workshop: Accelerating the transition to circular bioeconomy in Slovenia using digital tools (Ljubljana, 31.3.2022)



On the 31st of March 2022 we held an online workshop "Accelerating the transition to a circular bioeconomy in Slovenia using digital tools". The workshop was organised within the framework of the [Interreg GoDanubio project](#). 14 participants gained valuable insights into the topics of the circular bioeconomy and an understanding of how digital tools can be used to accelerate its development in Slovenia.

The event was divided into three key parts:

1. three speakers presented their circular bioeconomy projects and challenges in their companies or organisations
2. a presentation of the Value Chain Generator digital tool
3. a discussion on digital tools for creating new circular value chains.

Ms. Mateja Dermastia, Director of Anteja ECG, gave an opening speech to introduce the broader context of the event, particularly the opportunities and challenges of the circular bioeconomy in Slovenia and Europe. She emphasized that the Danube macro-region can support Slovenia in its efforts to develop a circular bioeconomy.

After that, three representatives of companies and organisations, operating in Slovenia, presented their bioeconomy projects and highlighted some of the barriers they face.

Ms. Nina Barbara Križnik, Head of Agriculture at the Chamber of Commerce and Industry of Slovenia and the Chamber of Agricultural and Food Enterprises, presented best circular practices of the Slovenian agricultural and food processing industry. She highlighted the fact that new technologies can solve many problems and enhance the transition to a circular bioeconomy, such as ensuring the competitiveness of agricultural enterprises, efficient use of resources and energy, safety and quality management, health care control, process optimisation, etc.

Dr. Maja Berden Zrimec, researcher at Algen d.o.o., presented the outstanding applicability of algae in various industries and their suitability in circular systems.

Mr. Nino Novinec, Oracle's Cloud Platform Customers representative, presented Oracle's sustainability and circular projects. Oracle Slovenia helps Slovenian technology companies to develop digital tools in order to accelerate the transition to a circular bioeconomy.

These presentations were followed by a short moderated discussion where participants listed the main challenges for the transition to a circular bioeconomy in Slovenia, among others:

- low awareness about the competitive advantage if companies engage in the circular bioeconomy
- lack of cross-sectoral integration
- lack of infrastructure for the full circularity of raw materials
- small businesses lack the capacity to engage in the circular bioeconomy
- lack of a stimulating environment for the development of the bioeconomy
- lack of new, circular value chains.

Mr. Jon Goriup Dermastia presented the digital tool Value Chain Generator, which was designed in 2021 within the framework of the project [Interreg AlplinkBioEco](#) and developed by Anteja ECG and the Swiss Institute of Complex Systems, School of Engineering and Architecture of Fribourg (HES-SO//FR HEIA-FR). Value Chain Generator is a software solution that creates new circular value chains and identifies new business opportunities. It also addresses some of the challenges raised by the workshop participants.

A discussion followed on the benefits of such digital tools for the Slovenian bioeconomy and participants agreed that the main added values of such a tool are:

- in addition to businesses, the Value Chain Generator can benefit policy makers
- finding new customers and suppliers
- linking different sectors to each other
- availability of new data and new knowledge to companies
- compiling high quality and responsive companies' contacts.

At the end of the event, Ms. Mateja Dermastia presented the next steps to accelerate the transition to a circular bioeconomy and expressed the possibility of repeating this workshop in the coming months.

**G. Recording of the workshop** – was provided to WP C Lead electronically