Interreg CENTRAL EUROPE

Co-funded by the European Union

GREENE 4.0

D.3.2.1 Greene 4.0 Innovation Contest Regulation

A.3.2. GREENE 4.0 Innovation Contest

Document Control Sheet

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Version	Date	Author/Editor /Reviewer	Contributors	Description/Comments
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D0.2	21.11.2024	Urszula Woźniak, Kacper Miodoński, (PP8)	Maja Susec, Sarah Vidmar (LP)	Document updated (draft)
D0.3	07.02.2025	Urszula Woźniak, Kacper Miodoński, Marcin Wilk	all partners	First insights presented during the online meeting revision by all partners
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D0_5	10.04.2025	External Advisory Board	Marko Močnik	Quality check by EAB and Quality Manager
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Due date of deliverable		16.04.2025		

Contents

A. Executive summary

A.1 Project overview

The GREENE 4.0 project aims at facilitating and supporting small and medium-sized enterprises (SMEs) in the manufacturing sector in the adoption and use of green production methods and digital technologies. Creating an Innovation Contest for solution providers is crucial in generating, testing, and piloting smart and green manufacturing value chain models across seven sectoral clusters. The goal of the Greene 4.0. Innovation Program is to pilot and test 7 solutions within 7 sectors on national level and EU level. The Greene Innovation Contest supports small and medium-sized enterprises (SMEs), startups and individuals offering innovative solutions in industrial digital transformation and the green economy. The Program aims to facilitate cooperation with manufacturing companies seeking modern technological solutions in these fields. The aim of the Greene 4.0. Innovation Program is to identify solution providers and their products that will most effectively contribute to initiating or expanding collaboration between them and Solution seekers in the field of digitalization and green transformation. Solution seekers were identified by project partners in the previous activities undertaken within A.3.1.

Activity A3.2 focuses on the collaboration between partners (PP8, LP, PP2, PP3, and PP7) to develop the Innovation Contest Regulation based on the Sectorial Terms of Reference (TORs) established under Activity A3.1.

D3.2.1. – A regulatory document establishing the general eligibility rules for potential participants and general guidelines summarizing the procedures for implementing the Innovation Contest in the project countries. Potential candidates can be located in any of the Central Europe region countries.

Innovation Contest Regulation works closely with D3.1.1 (Methodology for screening and selecting solution seekers), D.3.1.2 Selection Report and with D3.1.3 (Sectorial TORs) Terms of References document which will define the requirements and conditions that must be accomplished by solution providers or developers in order to match the needs of each sectorial cluster.

A.2 Scope of the document

This document/regulation establish the rules for the recruitment and participation of solution providers in the Greene 4.0 Innovation Programme, co-financed by the Interreg Central Europe Programme.

This document describes the innovation contest, application form, criteria and evaluation phase. Additionally, the document includes a detailed analysis of solution seekers needs from various regions involved in the project and conclusions that will influence further project actions.

A.3 Audience

The audience of this document includes the partners of the GREENE 4.0 project, including all parties involved in the implementation of Work Package 3 (WP3) and Task A3.2. This is an internal document prepared to summarize the results of the company selection process and to prepare for further actions. The document may also be used by the lead partner (LP) and supporting institutions to monitor progress and implement any necessary adjustments.

A.4 Change control

KPT/PP8 created this document, and it is subject to the standard project change control where PPs are requested to provide feedback on the stated definition or tools in writing to the deliverable responsible (in this case KPT/PP8) in a timely manner (within 8 working days after each edition).

B. Introduction

B.1 Project overall flow

The Central European manufacturing industry is facing significant disruptions. Global supply chains are increasingly unstable, and the green transition demands the development of more sustainable and smarter value chains. The GREENE 4.0 project aims to assist manufacturing companies in piloting innovative value chains. It also encourages the co-creation of new products and services through open innovation methods. To achieve this, the project connects businesses with educational institutions, research organizations, and policymakers.

GREENE 4.0 is divided into four work packages, each with a distinct goal:

WP1 focuses on identifying the needs and challenges of SMEs in adopting green technologies and mapping available enablers across different CE regions. The findings will inform the development of the UAM (Universal Adoption Model), which will guide companies in implementing new technologies and link them to tools identified in WP2.

WP2 works on creating solutions to address the identified challenges and connect them with existing innovations. The aim is to build a robust innovation ecosystem to help SMEs adopt sustainable practices. WP2 will also lay the foundation for the Transnational Open Knowledge Box, a repository of tools supporting innovation and capacity building.

WP3 consolidates data from WP1 and WP2 to develop three innovation programs that will test the Transnational Open Knowledge Box. The programs will ensure the results are transferable and will link seven sector-specific manufacturing clusters with solution providers to co-create sustainable supply chain models.

WP4 emphasizes policy learning and enhances the transferability of the project outcomes through a quadruple helix approach, engaging SMEs, solution providers (businesses and research organizations), and policymakers.

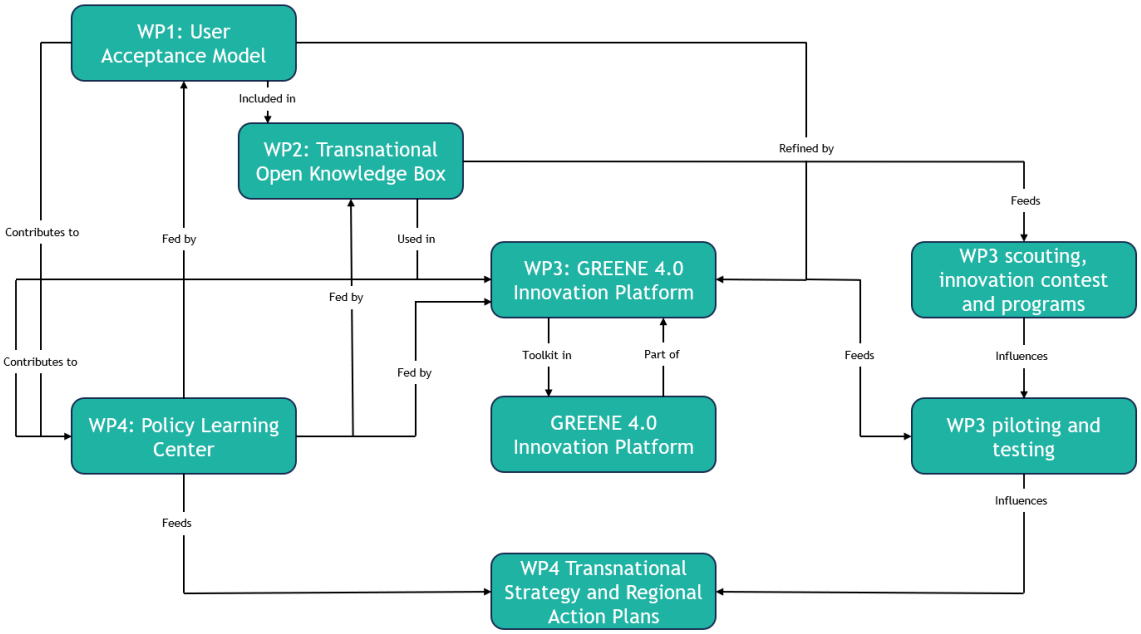


Figure 1: The project flow and the synergies and linkages between the WPs and their deliverables are shown in

B.2 Activity 3.2 and its place in WP3

Activity 3.2 (A3.1) within Work Package 3 (WP3) focuses on elaborating the Innovation Contest Regulation based on the Sectorial TORs developed under A.3.1. Activity A3.2 focuses on the collaboration between partners (PP8, LP, PP2, PP3, and PP7) to develop the Innovation Contest Regulation based on the Sectorial Terms of Reference (TORs) established under Activity A3.1.

This is the second step of WP3 aimed at recruiting solution providers from seven regions and match them with concrete solution seekers identified by partners within A.3.1. Under A3.1, project partners were tasked with identifying companies from various industrial sectors with specific needs for the development of innovative solutions in the context of digital and green transformation. Each partner was required to identify at least 10 companies in their region, evaluating them based on defined criteria, such as company size, industry sector, readiness to implement innovations, and technological needs. These companies were then assigned to seven sectoral clusters, enabling further collaboration with technology providers within WP3. A3.1 forms the foundation upon which the subsequent stages of WP3, such as creating innovation programs (A3.3) and piloting new solutions (A3.4), are built.

C.Methodology

C.1 Process description

The process under Activity A3.2 was coordinated by PP8 with the support of all project partners.

As the first step, an initial draft of the Innovation Contest Regulation was prepared to outline the main thematic areas.

On February 7th, 2025, KPT organized a virtual meeting with all project partners to establish seven sector-specific working groups responsible for developing the detailed requirements to be included in the final version of the Innovation Contest Regulation.

During the meeting, a brainstorming session was held using the MIRO platform, focusing on the following key topics:

- Innovation Contest – experiences and expectations
- Innovation Contest Regulation – feedback on the draft document
- Innovation Expert Panel – member selection and involvement
- Presentation and brainstorming on the first draft of the application and evaluation forms
- Establishment of seven Working Groups, coordinated by LP, PP2, PP3, PP4, PP5, PP6, PP7, and PP8

Summary of the Working Groups and Their Coordinators:

Working Group 1 – Green and Sustainable Materials – coordinated by ICUK

Working Group 2 – Waste Reduction and Sustainable Technologies – coordinated by IMECH

Working Group 3 – Energy-Efficient Technologies – coordinated by MGFU

Working Group 4 – Renewable Energy Technologies – coordinated by BTZ

Working Group 5 – Data Analytics and AI – coordinated by FHK

Working Group 6 – Automation and Robotics – coordinated by KPT

Working Group 7 – Digitalisation and Connectivity – coordinated by PTP

Each working group was responsible for developing specific technical and thematic requirements within their area of expertise, which will be incorporated into the final Innovation Contest Regulation.

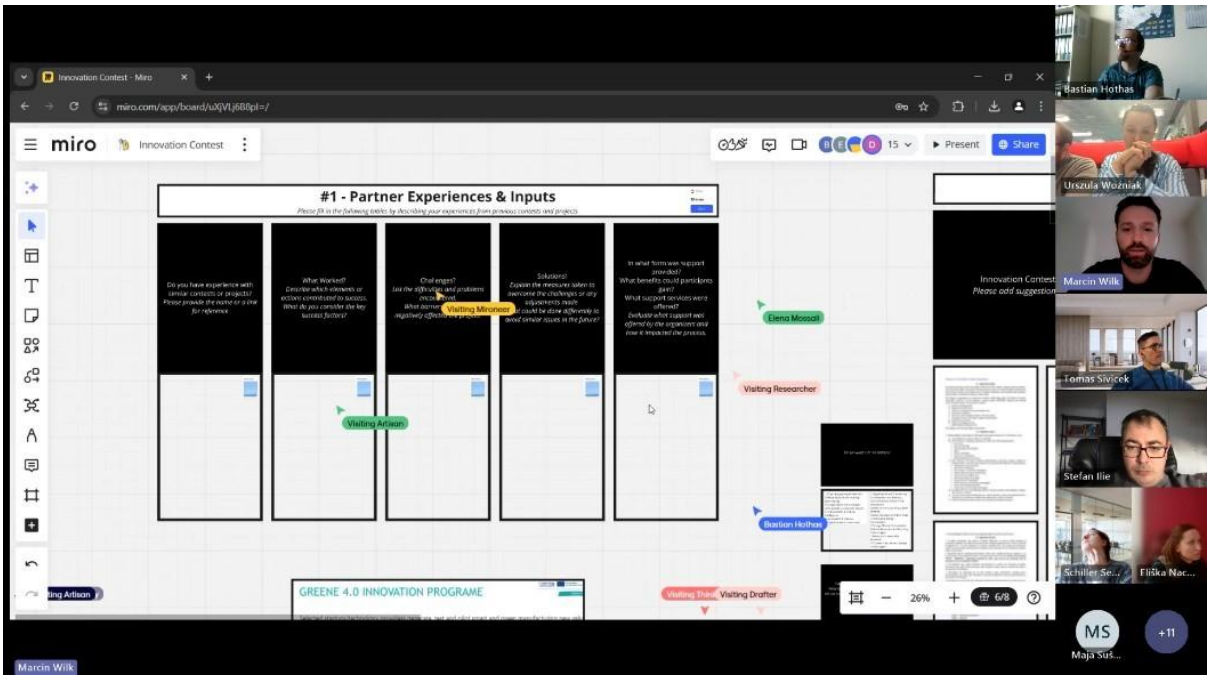
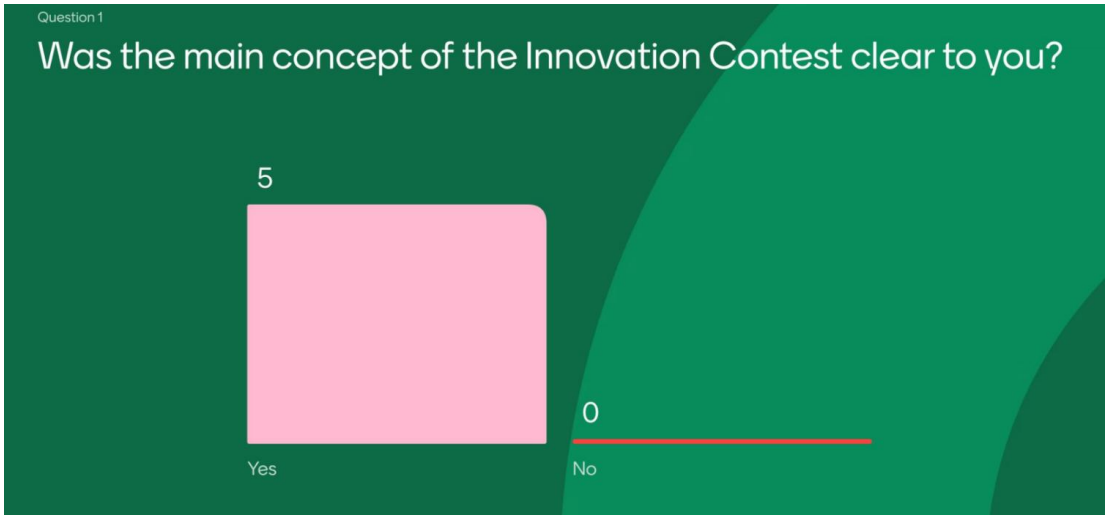
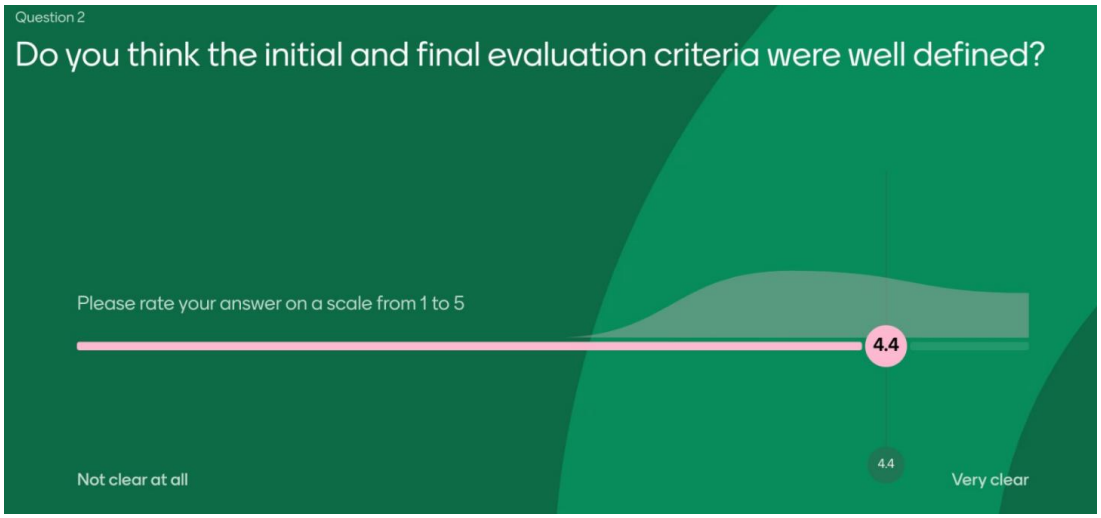


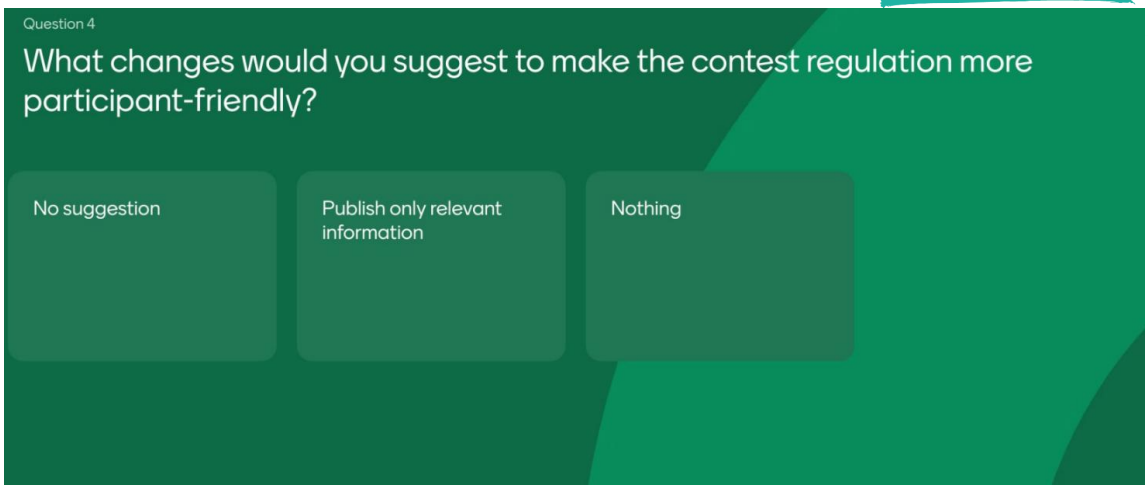
Photo no 1. Online meeting on 7th of February 2025

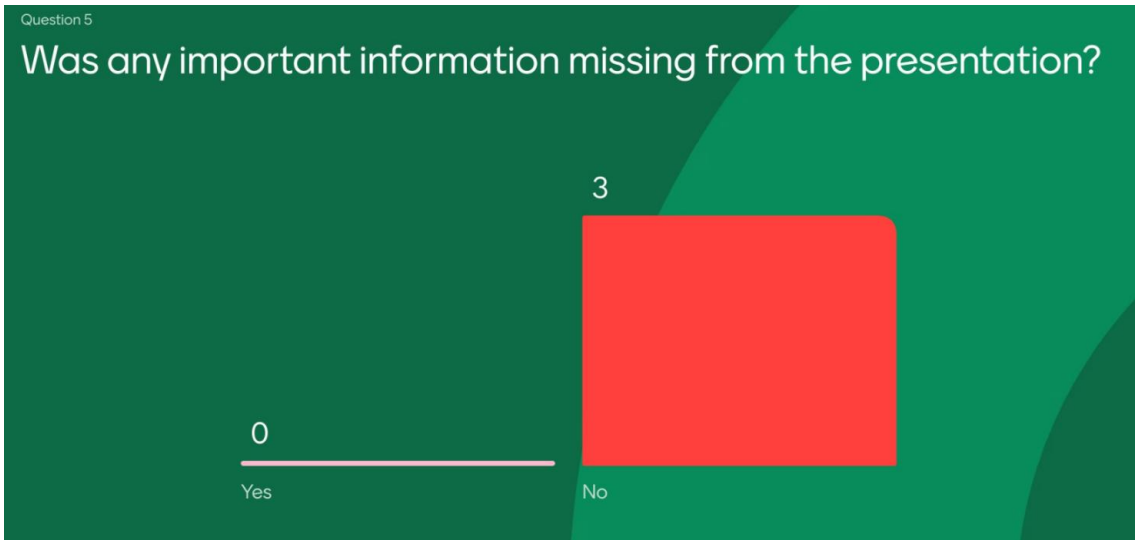
The report from the meeting held on February 7th, 2025, is attached as **Appendix No. 1** to this document.

LP, together with PP7 and PP8, developed the innovation call for proposal package which was reviewed by the EAB organized on 10.04.2025. During the meeting the Innovation Call package was presented and using the Mentimeter the feedback was collected. During the feedback session 6 questions were asked and the summary is presented below:





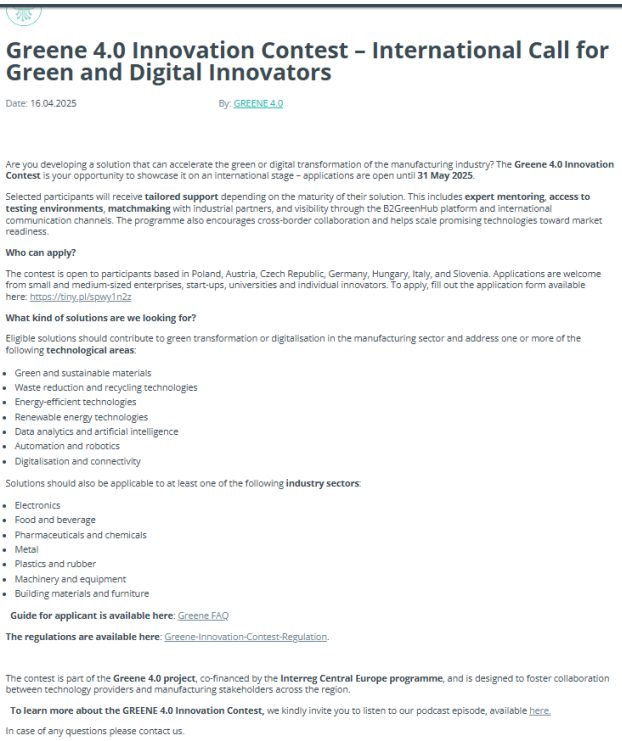




To summarize, the members of the EAB confirmed that they understand the Innovation Contest and find the overall process clear. The evaluation procedure was also considered easy to follow, as demonstrated by the high average feedback score of **4.8 out of 5**. Both the initial and final evaluation criteria were rated as clear and understandable, receiving a score of **4.4**.

Some members suggested that only the most relevant information should be published in order to avoid overwhelming solution providers with extensive documentation. Additionally, one member expressed interest in joining the Innovation Expert Panel and participating in the evaluation process, subject to receiving further information.

Based on the feedback received from the EAB, the final version of the Innovation Call package was completed and published on the project website on **April 16th, 2025**, as well as on the **Greene 4.0 LinkedIn** account (see screenshots below).



Greene 4.0 Innovation Contest – International Call for Green and Digital Innovators

Date: 16.04.2025 By: GREENE 4.0

Are you developing a solution that can accelerate the green or digital transformation of the manufacturing industry? The **Greene 4.0 Innovation Contest** is your opportunity to showcase it on an international stage – applications are open until **31 May 2025**.

Selected participants will receive **tailored support** depending on the maturity of their solution. This includes **expert mentoring**, **access to testing environments**, **matchmaking** with industrial partners, and visibility through the B2GreenHub platform and international communication channels. The programme also encourages cross-border collaboration and helps scale promising technologies toward market readiness.

Who can apply?

The contest is open to participants based in Poland, Austria, Czech Republic, Germany, Hungary, Italy, and Slovenia. Applications are welcome from small and medium-sized enterprises, start-ups, universities and individual innovators. To apply, fill out the application form available here: https://tiny.pl/spwy1n2z

What kind of solutions are we looking for?

Eligible solutions should contribute to green transformation or digitalisation in the manufacturing sector and address one or more of the following **technological areas**:

- Green and sustainable materials
- Waste reduction and recycling technologies
- Energy-efficient technologies
- Renewable energy technologies
- Data analytics and artificial intelligence
- Automation and robotics
- Digitalisation and connectivity

Solutions should also be applicable to at least one of the following **industry sectors**:

- Electronics
- Food and beverage
- Pharmaceuticals and chemicals
- Metal
- Plastics and rubber
- Machinery and equipment
- Building materials and furniture

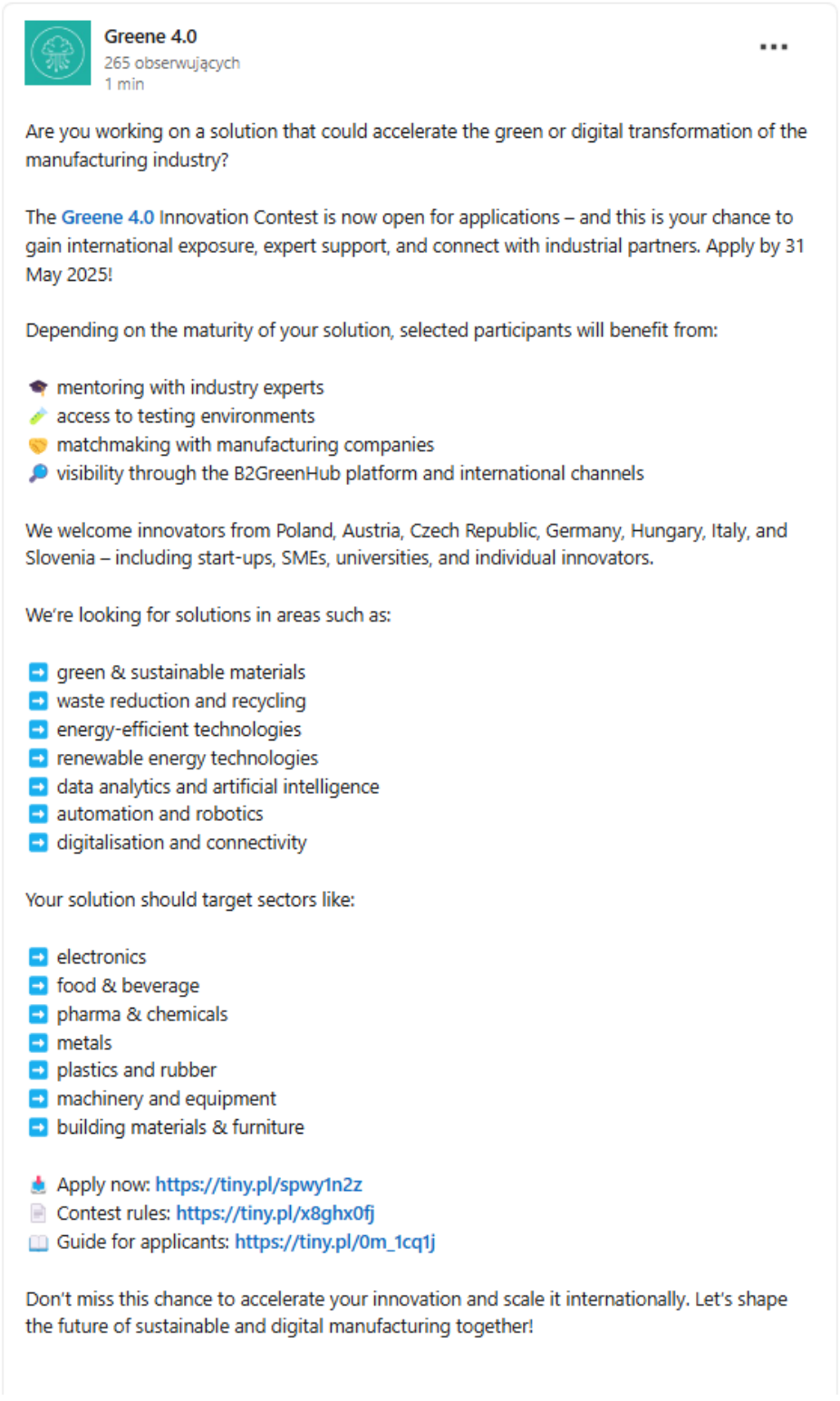
Guide for applicant is available here: Greene FAQ

The regulations are available here: Greene-Innovation-Contest-Regulation.

The contest is part of the **Greene 4.0 project**, co-financed by the **Interreg Central Europe programme**, and is designed to foster collaboration between technology providers and manufacturing stakeholders across the region.

To learn more about the GREENE 4.0 Innovation Contest, we kindly invite you to listen to our podcast episode, available here.

In case of any questions please contact us.



Greene 4.0
265 obserwujących
1 min

Are you working on a solution that could accelerate the green or digital transformation of the manufacturing industry?

The Greene 4.0 Innovation Contest is now open for applications – and this is your chance to gain international exposure, expert support, and connect with industrial partners. Apply by 31 May 2025!

Depending on the maturity of your solution, selected participants will benefit from:

- mentoring with industry experts
- access to testing environments
- matchmaking with manufacturing companies
- visibility through the B2GreenHub platform and international channels

We welcome innovators from Poland, Austria, Czech Republic, Germany, Hungary, Italy, and Slovenia – including start-ups, SMEs, universities, and individual innovators.

We're looking for solutions in areas such as:

- green & sustainable materials
- waste reduction and recycling
- energy-efficient technologies
- renewable energy technologies
- data analytics and artificial intelligence
- automation and robotics
- digitalisation and connectivity

Your solution should target sectors like:

- electronics
- food & beverage
- pharma & chemicals
- metals
- plastics and rubber
- machinery and equipment
- building materials & furniture

Apply now: https://tiny.pl/spwy1n2z
Contest rules: https://tiny.pl/x8ghx0fj
Guide for applicants: https://tiny.pl/0m_1cq1j

Don't miss this chance to accelerate your innovation and scale it internationally. Let's shape the future of sustainable and digital manufacturing together!

As an additional communication activity, the Innovation Call may also be published on the websites and social media accounts of project partners, as well as on the websites of ASP institutions.As a final step, the Lead Partner (LP) will establish an **Innovation Expert Panel** consisting of:

- one representative from the LP,
- one representative from KPT,
- one representative from ASP,

- one member of the EAB, and
- one representative from the private equity sector.

This panel will be responsible for evaluating the submitted proposals. The selected proposals will then be published on the **B2GreenHub** platform.

D.Innovation Contest Regulation

This section provides the rules for the recruitment and participation of solution providers in the Greene 4.0 Innovation Programme, co-financed by the Interreg Central Europe Programme.

Greene 4.0 Innovation Contest Regulation

§ 1. Definitions

For the purpose of these regulations, the following definitions apply:

1. Technology Readiness Level (TRL) – a scale used to assess the maturity of a technology, ranging from basic research (TRL 1) to full deployment in an operational environment (TRL 9), as defined by the European Commission.
2. B2GreenHub platform – an interactive platform, available at b2greenhub.eu, which aims to facilitate contact between manufacturing companies and green and digital technology providers and accelerate the transformation of European industry towards sustainability.
3. Small and medium enterprises (SMEs) - enterprises which employ fewer than 250 persons and/or which have an annual turnover not exceeding 50 million euro, and/or an annual balance sheet total not exceeding 43 million euro.
4. Associated partners (ASPs) - key stakeholders of the project, whose involvement can improve the planning and development of project outputs and results. They can help to sustain and mainstream project results and generate multiplier and leverage effects.
5. Innovation Expert Panel – an impartial panel of experts to evaluate the proposals submitted by participants. Its members include: one representative from Pomurje Technology Park organization, one representative from Krakow Technology Park organization, one representative from ASP's, one member from the External Advisory Board, one private equity representative.
6. Solution - a technology, method of work organization, software, service or concept, the implementation of which directly benefits the manufacturing enterprise.

§ 2. General provisions

1. The Greene Innovation Contest (hereinafter referred to as the "Program") supports small and medium-sized enterprises (SMEs), startups and individuals offering innovative solutions in industrial digital transformation and the green economy.

2. The Program aims to facilitate cooperation with manufacturing companies seeking modern technological solutions in these fields.

3. The Program is organized by a consortium collaborating under the Greene 4.0 project (CE0100198), funded by the Interreg Central Europe Program (hereinafter referred to as "Organizer"). The consortium includes:

a. Pomurje Technology Park
b. Bautzen Innovation Centre
c. University of Applied Sciences FH Kufstein Tirol
d. University of Ljubljana
e. Univerzita Jana Evangelisty Purkyně v Ústí nad Labem
f. Innovation Centre of Usti Region (registered association)
g. Intellimech Consortium
h. Krakow Technology Park Ltd.
i. MGFÜ Közhasznú Nonprofit Ltd.

4. The Program runs from 01.07.2025 to 31.10.2025 and all stages are conducted entirely online.

§ 3. Eligibility criteria

1. Entities eligible to participate in the Program (hereinafter referred to as "Participants") must:
   a) be classified as a startup, SME, university, or an individual.
   b) offer solutions applicable in at least one of the following sectors:
      - Electronics
      - Food and beverage
      - Pharmaceutical and chemical
      - Metal
      - Plastics and rubber
      - Machinery and equipment
      - Building materials and furniture
   c) offer solutions in the fields of digital transformation or the green economy, suitable for implementation in manufacturing. Solutions can be offered that address the following areas:
      - Green & sustainable materials
      - Waste reduction & recycling technologies
      - Energy efficient technologies
      - Renewable energy technologies
      - Data analytics & artificial intelligence
      - Automation & robotics
      - Digitalisation & connectivity

      A list of preferred solutions is attached as Appendix no. 4.
   d) be registered in one of the following countries: Austria, Czech Republic, Germany, Hungary, Italy, Poland or Slovenia; in the case of individuals, citizenship is decisive.
   e) not have close personal relationships (e.g., family members or those with equivalent ties) or financial ties to consortium members that could create a conflict of interest.
   f) hold full intellectual property rights to the proposed technological solutions.
   g) submit a complete application form by 31.05.2025.
2. The technology readiness level (TRL) of the proposed solution must be at least 2 till 6.

§ 4. Application process

1. To apply, Participants must complete the MS Forms form, available at the link https://tiny.pl/spwy1n2z by 31.05.2025. A properly completed form must include the Participant's consent to personal data processing by the organizer and confirmation of full intellectual property rights to the solution.

2. The Organizer may request additional documentation to confirm the information provided. Participants must submit these documents within 3 working days; failure to comply may result in exclusion from the Program.

3. Participants are responsible for all costs related to their participation. Each Participant is required to designate at least one representative to participate in the Program.

4. Participants must ensure that all information submitted in their application is accurate and up-to-date. Providing incorrect or misleading information in the application may result in immediate disqualification from the contest.

5. Selected solutions will be published on B2GreenHub platform.

6. The number of participants is limited. The two entities from each region with the highest number of points will be admitted to the Program.

§ 5. Evaluation procedure

1. Applications will be evaluated by representatives of members of the consortium and Innovation Expert Panel in two stages:
   a) Stage 1 – Initial Assessment (evaluated by representatives of the consortium)
   b) Stage 2 – Final Assessment (evaluated by Innovation Expert Panel)

3. At the stage 1 (initial assessment), applications will be evaluated according to the criteria described in Appendix No. 2 to the Regulations. An application can receive a maximum of 12 points at this stage.

4. Participants whose applications score 5 or more points in Stage 1 will move on to Stage 2.

6. At the stage 2 (final assessment) applications will be evaluated according to the criteria described in Appendix No. 3 to the Regulations. The final evaluation is performed by Innovation Expert Panel. Each Panel member completes an evaluation form (Appendix No. 3) with a scoring system. The maximum number of points a participant can receive from a single panel member is 45 points.

7. The final score in stage 2 is calculated by averaging individual panel scores. The result of the operation is given to one decimal place.

8. Result from stage 2 is added to the points awarded to the application at stage 1. The maximum possible score is 57 points.

9. The two entities from each region with the highest number of points will be admitted to the Program

10. All decisions by the Innovation Expert Panel are final and non-appealable.

§ 5. Granting support

1. In the Greene 4.0 Innovation Program, applicants whose product, service, or process solutions can potentially be applied to the identified needs, challenges, or supply chain of the Technology Recipient may participate.

2. The aim of the Greene 4.0. Innovation Program is to identify solution providers and their products that will most effectively contribute to initiating or expanding collaboration between them and Solution seekers in the field of digitalization and green transformation.
The goal of the Greene 4.0. Innovation Program is to pilot and test 7 solutions within 7 sectors:

- 1st on national level
- 2nd on EU level

The description outlines the structure for the Greene 4.0 Innovation Program with three key stages:

1. Proof of Concept Programme: focusing on validating and testing early-stage ideas to assess their feasibility
2. Minimal Viable Product (MVP) Programme: aimed at developing a working prototype to demonstrate core functionalities and gather user feedback
3. Investment and Market Readiness Programme: designed to prepare innovations for market entry and attract potential investors by enhancing business models and scalability

3. Forms of support for companies and/or individuals selected in the competition may include, but are not limited to:

- access to matchmaking services;
- consulting services;
- access to the ecosystem of companies;
- participation in workshops designed for start-ups;
- mentoring;
- testing;
- networking.

§ 6. Data protection

1. The co-administrators of personal data are the partners of the Greene 4.0 project:
   a) Pomurje Technology Park
   b) Bautzen Innovation Centre
   c) University of Applied Sciences FH Kufstein Tirol
   d) University of Ljubljana
   e) Univerzita Jana Evangelisty Purkyně v Ústí nad Labem
   f) Innovation Centre of Usti Region (registered association)
   g) Intellimech Consortium
   h) Krakow Technology Park Ltd.
   i) MGFÜ Közhasznú Nonprofit Ltd.
2. The co-administrators have designated the contact point at the Krakow Technology Park headquarters: ul. Podole 60, 30-394 Krakow, Poland, e-mail address: biuro@kpt.krakow.pl.

3. The co-administrators have designated the Data Protection Officer (DPO) at Kraków Technology Park for data protection collaboration, whom you can contact via email: iod@kpt.krakow.pl.

4. The personal data of contest participants will be processed for the following purposes:
   a) to conclude and perform the contract by accepting the provisions of these regulations (legal basis: Article 6(1)(b), (f) GDPR),
   b) to establish necessary contact, inform participants about the course of the contest and its results, as well as carry out informational and promotional activities related to the contest (legal basis: Article 6(1)(f) GDPR),
   c) to fulfill tax, accounting, archival, and other legal obligations of the administrator (legal basis: Article 6(1)(c) GDPR),
   d) to send marketing information related to the activities of the co-administrators – including based on the consent given (legal basis: Article 6(1)(a) GDPR),
   e) to publish participants' images in connection with promotional and informational activities regarding the contest (legal basis: Article 6(1)(a) GDPR).
5. Providing personal data is voluntary, but necessary to participate in the contest.

6. The recipients of personal data will only be entities authorized under applicable law.

7. Personal data may be transferred to entities processing it on behalf of the administrator, such as IT service providers, entities providing legal and advisory services – these entities process the data solely under an agreement with one of the co-administrators.

8. Personal data will be processed for the duration of the contest and then:
   a) for archival, tax, and accounting purposes – for a period of 5 years after the completion of the collaboration,
   b) for the purposes of establishing or pursuing claims or defending against claims – for a period of 3 years and in case of ongoing proceedings, until the final resolution and until the expiration of claims,
   c) until consent is withdrawn – in the case of marketing messages.
9. In connection with the processing of personal data, you have the right to:
   a) access the content of your personal data,
   b) obtain a copy of your personal data,
   c) rectify your personal data,
   d) request the deletion or restriction of the processing of your personal data,
   e) object to the processing of your personal data,
   f) withdraw consent at any time,

in the cases and under the conditions specified in the GDPR. The above rights can be exercised by contacting the co-administrators or the Data Protection Officer.

10. You have the right to lodge a complaint with the President of the Personal Data Protection Office if it is justified that your personal data is being processed by the co-administrators in violation of the GDPR.

11. Your personal data will not be processed in the form of profiling.

§ 7. Final provisions

1. By submitting an application, Participants agree to all terms and conditions set forth in these Regulations. The Organizer reserves the right to amend the Regulations, cancel the contest, or end the Program early.

2. The Organizer and members of the Panel are not liable for any damages resulting from the disclosure of information about the submitted solution to third parties. For matters not covered by these Regulations, the Organizer's decisions are binding. The Organizer holds the right to interpret these Regulations.

3. In all matters not covered by the above regulations, the decision belongs to the Organizer.

List of Annexes

Appendix No. 1 – Application form

Appendix No. 2 – Initial criteria for evaluating applications

Appendix No. 3 – Evaluation Form for final assessment

Appendix No. 4 – Areas of green and digital technologies covered by the Greene 4.0 Innovation program

Appendix No. 1 – Application form

Section 1: Applicant information

Please provide accurate details about the individual or entity submitting the application.

1. **Applicant name:** _____

2. **Organization name:** _____

3. Organization type: [ ] Start-up [ ] SME [ ] University [ ] Individual

4. Position of contact person (e.g., CEO, Manager, Specialist): _____

5. Full address - street, city, postal code, country:

6. E-mail:

7. Phone number:

8. Webpage:

Section 2: Proposed innovation details

This section focuses on collecting detailed information about your proposed solution. Indicate whether your innovation is categorized as "Green Technology" or "Digital Technology" and provide a clear description of its purpose and potential impact.

9. Category: [ ] Green Technology [ ] Digital Technology

10. Sector the solution is designed for:

[ ] electronics

[ ] food and beverage

[ ] pharmaceutical and chemical

[ ] metal

[ ] plastics and rubber

[ ] machinery and equipment

[ ] building materials and furniture

11. Field of application:

[ ] Green and sustainable materials

[ ] Waste reduction and recycling technologies

[ ] Energy-efficient technologies

[ ] Renewable energy technologies

[ ] Data analytics and artificial intelligence

[ ] Automation and robotics

[ ] Digitalization and connectivity

12. Technology Readiness Level (Select TRL):

[ ] 2 - technology concept formulated

[ ] 3 - experimental proof of concept

[ ] 4 - technology validated in lab

[ ] 5 - technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)

[ ] 6 - technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)

13. What concrete technological challenge does your solution address? Please reply using a maximum of 1200 characters:

_____
_____
__

14. What new technology, application, or business model does this solution include? Please reply using a maximum of 1200 characters.

_____
_____
__

15. Describe the benefits to businesses, such as increased revenue, productivity, or new market opportunities. Please reply using a maximum of 1200 characters:

_____
_____
__

16. How does this solution contribute to the green/digital transition? Please reply using a maximum of 1200 characters:

_____

_____

__

17. Are you ready to implement the solution outside of your country?

[] Yes

[] No

18. Please indicate which of the listed countries you are considering:

[] Slovenia

[] Germany

[] Czech Republic

[] Hungary

[] Italy

[] Austria

[] Poland

19. Has this innovation been implemented? Implementation status: Has this innovation been implemented? (Yes/No)

20 Please provide an example of a successful implementation, including location. Please reply using a maximum of 1200 characters.

_____

_____

__

21 Target audience/market for the solution

_____

_____

__

22. How easily can this solution be integrated into existing manufacturing processes and systems? Can it be customized to specific manufacturing requirements? Please reply using a maximum of 1200 characters.

_____

_____

__

23. Please add case studies or testimonials. Please reply using a maximum of 1200 characters.

_____

_____

__

24. Please add link to video about solution or technical documentation (optional).

_____

_____

__

Section 3: ROI and cost considerations

Insert insights into return on investment and associated costs.

25. Return on Investment (ROI) for manufacturing companies – please provide a sample ROI calculation based on a typical implementation scenario

_____
_____
__

26. Key Performance indicators - please reply using a maximum of 1200 characters.

_____
_____
__

27. Estimated implementation costs - provide costs in Euros and describe the scope of a typical implementation; specify how implementation costs change with scale. Please reply using a maximum of 1200 characters.

_____
_____
__

28. Ongoing Maintenance Expenses:

_____
_____
__

Section 4: Additional information

Optional information for further engagement.

29. Additional information about the solution, at your discretion.

_____
_____
__

Section 5: Consent for Data Processing and Intellectual Property Rights Declaration

30. Acknowledgement of the Greene 4.0 Innovation Contest rules

[] I hereby declare that I have read and understood the Greene 4.0 Innovation Contest Regulation and accept all of its terms and conditions.

31. Confirmation of the veracity of data and ownership of intellectual property rights

[] I confirm all the information contained in the form is true and the person filling out the form takes full responsibility for it.

32. I consent to the processing of my personal data by Krakow Technology Park Ltd. for the purpose of receiving marketing information about the company's activities, including support offers, information about industry and technology events, and projects carried out by KPT, to the email address I have provided. I acknowledge that consent is voluntary and can be withdrawn at any time.

[] Yes

[] No

In accordance with Article 6(1)(a) of the GDPR, I consent to the placement and distribution by co-administrators of personal data of photos and audiovisual materials containing my image, including publication on social media. I also acknowledge that my image will be used exclusively for promotional and informational purposes related to the Administrator's activities. Consent is voluntary and can be withdrawn at any time

[] Yes

[] No

Appendix No. 2 – Initial criteria for evaluating applications

No.	Criterion name	Criterion description	Scoring legend	Number of points
1	Type of organization	The organisation is classified as a startup, SME, university, or an individual	Yes/No 0 – no 1-yes	
2	Location	Located in Partners countries	Yes/No 0 – no 1-yes	
3	Maturity of the solution	The degree of development of the solution according to the TRL scale is a minimum of 2 and maximum TRL 6.	yes/No 0 – no 1 – yes	
4	Fit to the at least one of the sector	offer solutions applicable in at least one of the following sectors: • Electronics • Food and Beverage • Pharmaceutical and Chemical • Metal • Plastics and Rubber • Machinery and Equipment • Building Materials and Furniture	Yes/No 0 – no 1 – yes	
5.	Fit to the at least one of the field of application	Field of application: • Green and sustainable materials	Yes/No 0 – no 1 – yes	

		• Waste reduction and recycling technologies • Energy-efficient technologies • Renewable energy technologies • Data analytics and artificial intelligence • Automation and robotics • Digitalization and connectivity		
6	Innovation of the solution	Innovation of the solution stands out from currently available solutions	0 – solution offers no new, innovative ideas 1 – solution offers few new ideas and features that will distinguish it from the competition 2 – product offers numerous new, unique ideas that will significantly distinguish it from the competition	
7	Benefits received by business	Value of the solution to the business, positive impact on production capacity, productivity, revenue growth	0 - the solution does not bring tangible benefits to the business 1 - the solution brings moderate benefits in one or more areas 2 - the solution brings significant benefits in one or more areas	
8	Ease of implementation	Ease of deployment of the solution, ability to integrate with existing solutions and processes, adaptability to user needs, existing implementations	0 - the solution is characterized by very low flexibility and ability to implement; high implementation costs, low expected return on investment 1 - solution is characterized by moderate flexibility AND implementation capability; medium expected return on investment 2 - solution is characterized by high implementation capability, high expected return on investment 3 - solution is characterized by high implementation capability, high expected growth from investment, solution has already been successfully implemented	

Appendix No. 3 – Evaluation form for final assessment

Section 1: General Information

Applicant organization Name: _____

Reviewer Name: _____

Section 2: Evaluation Criteria

Rate each criterion on a scale from 1 (Poor) to 5 (Excellent). Provide comments as necessary.

1. **Innovation originality and uniqueness:**

   Score: _____

   Comments: _____

2. Alignment with green transition goals:

   Score: _____

   Comments: _____

3. Feasibility of implementation:

   Score: _____

   Comments: _____

4. Scalability and potential for broader adoption:

   Score: _____

   Comments: _____

5. Impact demonstrated in use cases or testimonials:

   Score: _____

   Comments: _____

6. Business impact (e.g., profitability, market expansion):

   Score: _____

   Comments: _____

7. Clarity of target market and audience:

   Score: _____

   Comments: _____

8. Cost-Effectiveness:

   Score: _____

   Comments: _____

9. Estimated ROI or key performance indicators:

   Score: _____

   Comments: _____

Section 3: Summary and Recommendation

Provide an overall evaluation and recommendations for the submission.

Overall Score: _____/45

1. **Strengths:** _____
2. **Weaknesses:** _____

Recommendation: _____

Appendix No. 4 – Areas of green and digital technologies covered by the Greene 4.0 Innovation program

1. Green and sustainable materials

- Expansion of recycled and renewable material use across production and packaging including recycled wood, metals (e.g. aluminium, copper, steel), bio-based plastics, and industrial by-products to reduce reliance on virgin resources and minimize environmental impact.
- Adoption of sustainable material innovations in product design such as lightweight composites, modular structures, lignin-based adhesives, and materials facilitating remanufacturing, reuse, and recyclability.
- Development and substitution of eco-friendly packaging solutions including compostable bioplastics, cellulose-based films, and green chemistry alternatives to replace single-use plastics and reduce packaging-related emissions.
- Collaboration with certified suppliers and material traceability systems to ensure sourcing transparency and compliance with environmental standards, especially for green steel and other low-carbon materials.

2. Waste reduction and sustainable technologies

- Development of technologies for circular use of materials, including reuse, remanufacturing, and recycling encompassing solutions for diverse waste streams such as wood, paper, food, textiles, polymers (including composites and thermosets), and post-consumer or industrial containers, with emphasis on high-value recovery and material reintegration.
- Advancement of selective recycling and recovery methods for complex and critical materials including grinding, sorting, and recognition technologies, as well as certified systems for safe re-entry into the market—particularly for CRMs, drug packaging, and durable plastics.
- Optimization of production processes to reduce waste generation at source targeting decreased material loss across sectors such as manufacturing, construction, and food and beverage, supported by process innovation and energy efficiency improvements.
- Implementation of waste valorization practices and secondary raw material utilization promoting the conversion of by-products and residues (e.g., wood scraps, paper dust) into new inputs like pellets, panels, or acoustic materials, instead of incineration or disposal.
- Upskilling and knowledge dissemination on sustainable waste management solutions addressing competence gaps through training, awareness programs, and capacity-building to support implementation of circular strategies and reduction of resource consumption.

3. Energy efficient technologies

- Optimization of industrial processes to reduce energy consumption across production, storage, and thermal systems including process redesign, modernization of equipment, and targeted improvements for high-temperature and energy-intensive operations.
- Integration of smart energy management systems and real-time monitoring tools leveraging ERP/MES platforms, sensors, and analytics to track and optimize energy use dynamically and improve operational efficiency.
- Implementation of automation, predictive maintenance, and digital twins to identify energy-saving opportunities supporting proactive interventions, minimizing downtime, and improving system-wide energy performance.
- Deployment of energy-efficient heating, cooling, and auxiliary systems tailored to sector-specific needs involving solutions like intelligent thermal regulation, low-energy HVAC, and high-efficiency combustion alternatives.
- Alignment with regulatory requirements through customized energy optimization strategies ensuring compliance while enhancing competitiveness and sustainability in evolving energy policy environments.

4. Renewable energy technologies

- Integration of renewable energy sources into industrial processes and infrastructure including electrification, hydrogen-based systems, solar thermal applications, and biogas production from organic waste, with emphasis on technical feasibility, cost-efficiency, and process compatibility.
- Development of materials, components, and systems tailored to renewable energy applications supporting the growth of the sector through innovations in structural materials, electronics, and services designed to enhance energy generation, storage, and utilization.
- Valorization of waste streams for on-site renewable energy production enabling the conversion of wood residues, spoiled food, and industrial by-products into usable energy carriers such as biofuels, heat, or electricity.
- Optimization of industrial energy use in alignment with renewable energy availability including smart scheduling, adaptive process control, and machinery upgrades that respond to renewable energy supply fluctuations and support cost-effective load balancing.
- Implementation of carbon-negative and low-emission technologies based on renewable energy covering carbon capture, substitution of natural gas in thermal processes, and other strategies for reducing lifecycle emissions while maintaining operational efficiency.
- Improvement of market access and financial viability for renewable energy solutions addressing the need for stable funding mechanisms, competitive pricing, and reliable supply infrastructure to support the widespread adoption of renewables in the manufacturing sector.

5. Data analytics and artificial intelligence

- Deployment of AI and analytics tools to improve operational efficiency, resource use, and process control supporting smarter, data-driven management of production, logistics, and energy systems, with emphasis on waste reduction, performance optimization, and continuous improvement.
- Integration of predictive and prescriptive analytics for maintenance, quality, and capacity planning enabling real-time insights into machinery conditions, production forecasts, and customer demand to enhance uptime, accuracy, and responsiveness.
- Development of cross-functional systems for end-to-end traceability and compliance ensuring consistency, transparency, and optimization in highly regulated or complex environments through unified data platforms and automated monitoring.
- Implementation of intelligent decision-support systems across the value chain facilitating better forecasting, defect detection, reuse strategies, and workflow automation from procurement to delivery.
- Interoperability and automation of digital ecosystems for scalable insights integrating ERP, MES, IoT, and AI systems to generate unified, actionable intelligence that drives efficiency across organizational levels.

6. Automation and robotics

- Integration of advanced robotics and automation to improve productivity, precision, and process efficiency including the automation of manufacturing steps, logistics, inspection, and sorting to reduce manual workload, mitigate labor shortages, and enhance consistency.
- Application of AI in robotics for intelligent control, quality assurance, and system programming supporting self-optimizing production lines, smart defect detection, and collaborative robotics (cobots) for flexible and adaptive task execution.
- Digitalization of industrial and organizational workflows through automated systems covering the automation of administrative, operational, and support functions to improve coordination, reduce errors, and accelerate throughput.
- Deployment of automation solutions for maintenance, monitoring, and infrastructure diagnostics enabling predictive maintenance, remote diagnostics, and early detection of structural or operational issues in industrial and built environments.
- Development of traceability and control systems for dynamic environments including construction, warehousing, and logistics settings where real-time tracking and automation help optimize resource allocation and reduce waste.

7. Digitalisation and connectivity

- Comprehensive digitalization of production, monitoring, and quality control systems including integration of MES, ERP, and computer-aided platforms to enable real-time control, traceability, and performance optimization across the manufacturing process.

- Implementation of intelligent digital tools for knowledge management, customer engagement, and operational decision-making leveraging AI, generative algorithms, and automated systems to preserve company expertise, enhance customer experience, and support data-driven strategies.
- Modernization of digital infrastructure and interoperability between systems replacing legacy tools (e.g., spreadsheets) with scalable digital solutions, enabling seamless data flow, remote operations, and advanced performance tracking.
- Development and adoption of product traceability systems and digital documentation including digital product passports, logistics tracking tools, and document workflow optimization to improve transparency, compliance, and delivery efficiency.
- Promotion of digital training environments and workforce upskilling supporting employee development and adaptability through online learning platforms, simulation tools, and interactive training integrated with operational systems.

E. Summary

E.1 Next steps

To further support applicants during the submission phase, a separate document – the Guide for Applicants – was prepared as Deliverable D.3.2.2. This guide is a concise and well-structured document addressing frequently asked questions that applicants may have during the application process.

The Innovation Call will remain open until May 31st, 2025. Following the closure of the call, an assessment process will be conducted, and selected solution providers will be invited to participate in the next phase of the project. In this upcoming stage, project partners will be responsible for developing the "Greene Innovation Programme." The aim of this activity is to implement three innovation programs focused on piloting and testing the Transnational Open Knowledge Box — a solution designed to facilitate the matching and co-creation of selected innovations submitted through the Innovation Contest. In practical terms, the Transnational Open Knowledge Box will be tested and applied within these three innovation programs to support the development of the following pilot value chains:

- One pilot value chain between manufacturing sectorial clusters and solution developers from the same country
- One pilot value chain between manufacturing sectorial clusters and solution developers from across the Central European (CE) region

F. Appendix

F.1 The report from the meeting held on February 7th, 2025

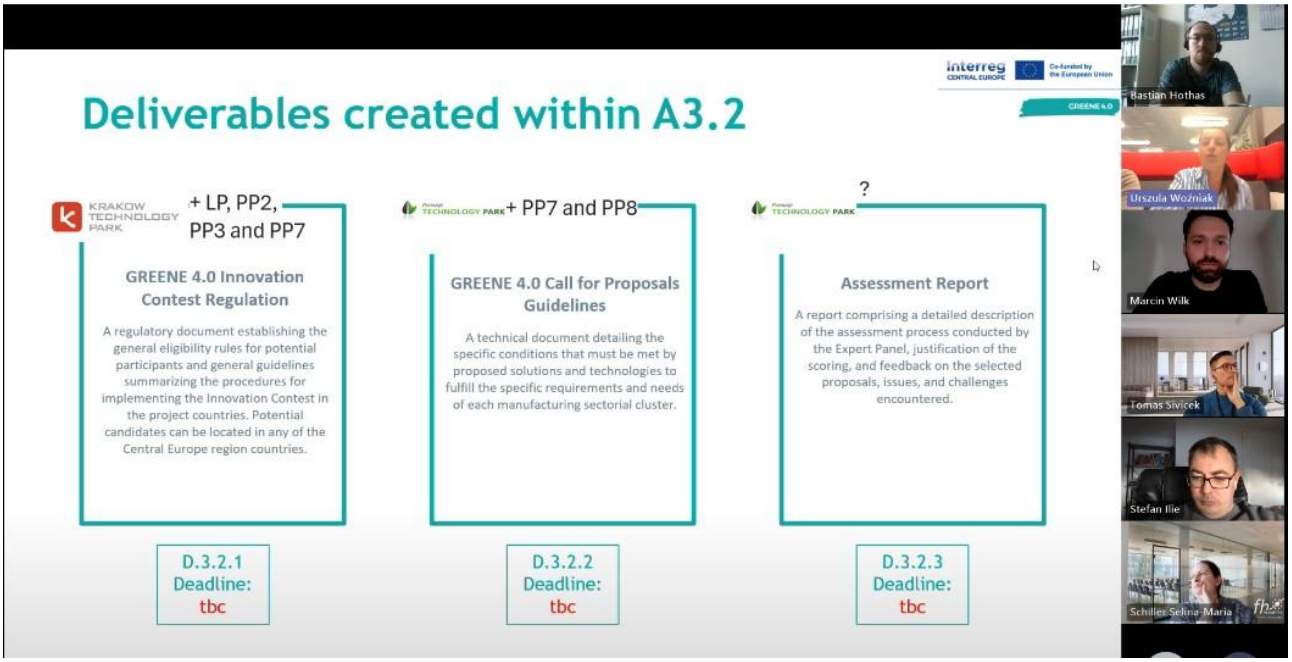
Virtual meeting to establish 7 sectorial working groups: A3.2 Innovation Contest Regulation

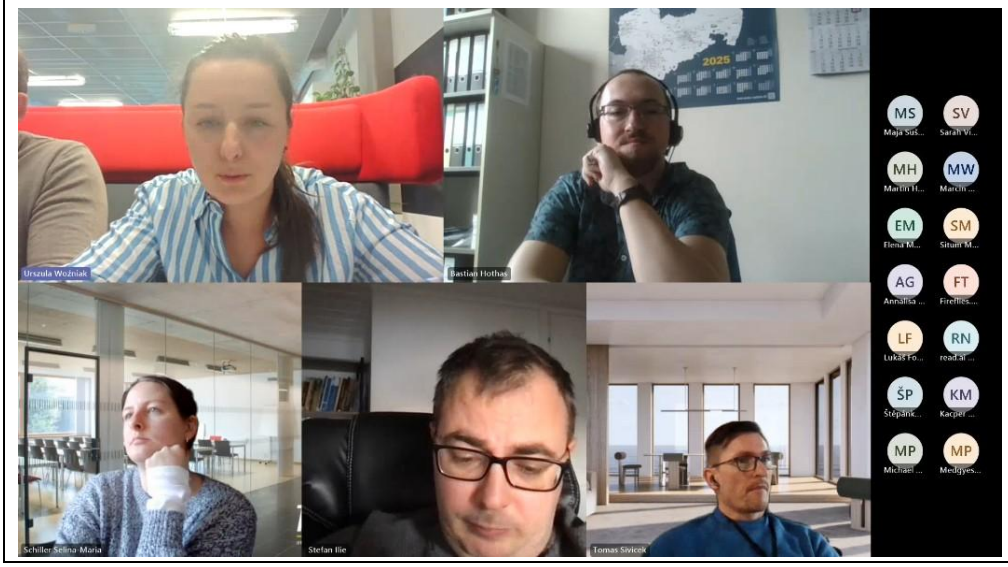
7.02.2025

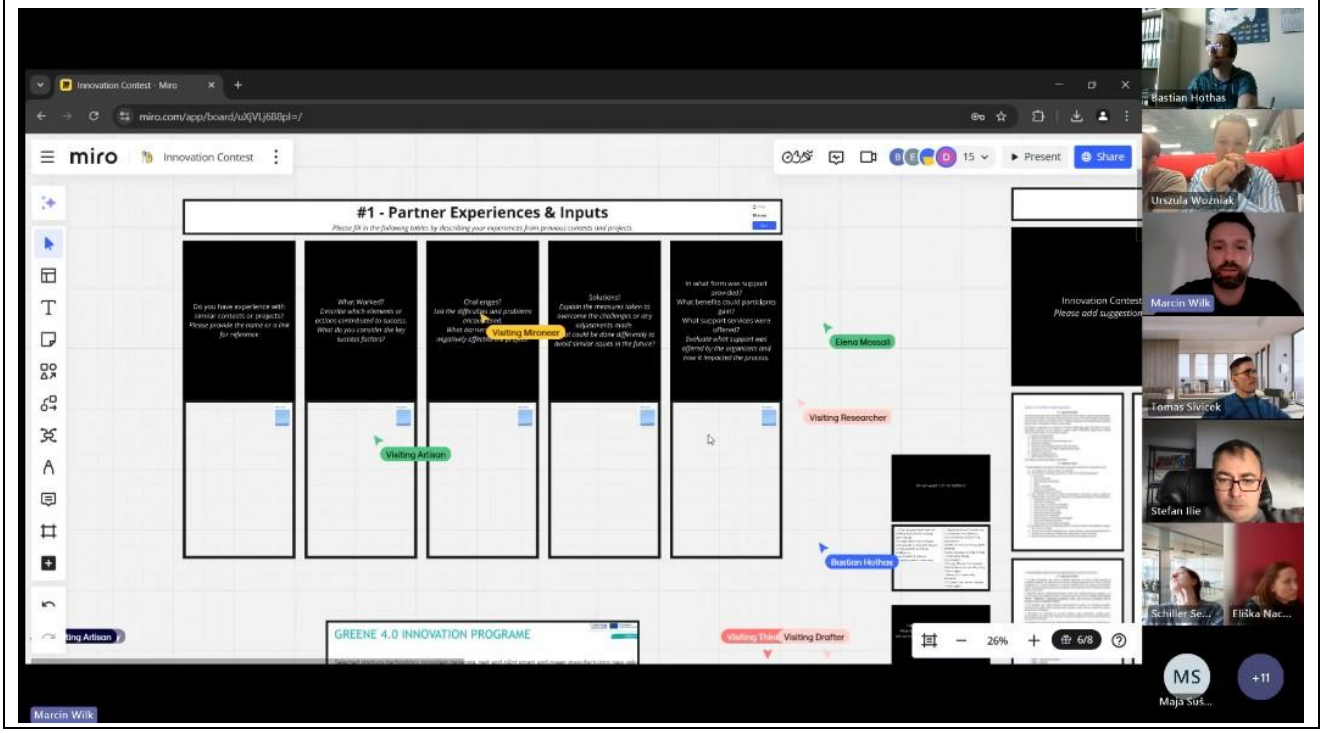
Parter:	PP8 – Krakow Technology Park
Contact Person:	Urszula Woźniak, uwozniak@kpt.krakow.pl
Title of Event	Virtual meeting to establish 7 sectorial working groups: A3.2 Innovation Contest Regulation
Date:	7.02.2025
Venue:	Online MS Teams
Language:	English
Type of Event	Workshop, active participation, internal event
No. of Attendees	20

Summary of the event (max 500 characters)
The meeting started with a presentation of Activity A3.2. Then, the draft version of the " Innovation Contest Regulation" document was presented, transitioning to the SharePoint platform, where participants could review its details. After this section, a link to the MIRO board was shared, allowing participants to engage in the first exercise. The board was introduced, along with its objectives and tasks. Participants analyzed and discussed their experiences with projects and competitions, addressing questions about effective solutions, encountered challenges, and forms of support they received. Next, participants moved on to the second exercise, which focused on gathering feedback and suggestions for the "Contest Regulation" document on MIRO board. Partners provided their input, while KTP team moderated the session and managed the time. Following the exercises, the next steps in the process were presented, along with discussion panel of experts evaluating the applications. Subsequently, the application form was presented, and participants were invited to assess it. To conclude, the concept of establishing seven working groups was discussed, and participants were invited to complete a task in MIRO. The meeting ended with an overview of the next steps and planned activities. MIRO: https://miro.com/app/board/uXjVLj6B8pl=/?share_link_id=943524639346

Photos / Screenshots







Online attendance sheet

Tytuł spotkania	Virtual meeting A3.2 Innovation Contest Regulation						
Liczba uczestniczących	22						
Godzina rozpoczęcia	2/07/25, 12:55:53 PM						
Godzina zakończenia	2/07/25, 2:35:05 PM						
Czas trwania spotkania	1 godz. 39 min 11 s						
Średni czas uczestnictwa	1 godz. 17 min 29 s						
2. Uczestnicy							
Imię i nazwisko	Pierwsze dołączenie	Ostatnie wyjście	Czas udziału w spotkan	Adres e-mail	Identyfikat	Rola	
Urszula Woźniak	2/07/25, 12:55:54 PM	2/07/25, 2:32:34 PM	1 godz. 36 min 40 s	uwozniak@kpt.krakow	uwozniak@	Organizator	
Marcin Wilk	2/07/25, 12:56:17 PM	2/07/25, 2:32:51 PM	1 godz. 36 min 34 s	mwilk@kpt.krakow.pl	mwilk@kp	Osoba prowadząca	
Kacper Miodoński	2/07/25, 12:56:34 PM	2/07/25, 2:32:42 PM	1 godz. 36 min 7 s	kmiodonski@kpt.krako	kmiodonsk	Osoba prowadząca	
Bastian Hothas (Zewnętrzny)	2/07/25, 1:00:26 PM	2/07/25, 2:32:18 PM	1 godz. 31 min 51 s	hothas@tgz-bautzen.d	hothas@tg	Osoba prowadząca	
Martin Holý (Zewnętrzny)	2/07/25, 1:00:26 PM	2/07/25, 2:32:21 PM	1 godz. 31 min 54 s	holy@icuk.cz	holy@icuk	Osoba prowadząca	
read.ai meeting notes (Niezweryfikowany)	2/07/25, 1:00:26 PM	2/07/25, 2:33:22 PM	1 godz. 32 min 55 s			Osoba prowadząca	
Fireflies.ai Notetaker Tomáš (Niezweryfikowany)	2/07/25, 1:00:27 PM	2/07/25, 2:35:05 PM	1 godz. 34 min 37 s			Osoba prowadząca	
Annalisa Giavarini (Zewnętrzny)	2/07/25, 1:00:30 PM	2/07/25, 2:32:25 PM	1 godz. 31 min 55 s	annalisa.giavarini@inte	annalisa.gi	Osoba prowadząca	
Štěpánka Portz (Zewnętrzny)	2/07/25, 1:00:35 PM	2/07/25, 2:32:24 PM	1 godz. 31 min 49 s	portz@icuk.cz	portz@icu	Osoba prowadząca	
Schiller Selina-Maria (Zewnętrzny)	2/07/25, 1:01:09 PM	2/07/25, 2:32:17 PM	1 godz. 31 min 7 s	selina.schiller@fh-kufst	selina.schi	Osoba prowadząca	
Sarah Vidmar (Zewnętrzny)	2/07/25, 1:01:14 PM	2/07/25, 2:32:16 PM	1 godz. 31 min 1 s	sarah@p-tech.si	sarah@p-t	Osoba prowadząca	
Stefan Ilie (Zewnętrzny)	2/07/25, 1:01:26 PM	2/07/25, 2:32:19 PM	1 godz. 30 min 53 s	catalin.ilie@scintellink.	catalin.ilie	Osoba prowadząca	
Michael Paduch | TGZ Bautzen (Niezweryfikowany)	2/07/25, 1:01:28 PM	2/07/25, 1:03:15 PM	1 min 46 s			Osoba prowadząca	
Lukáš Foltýn (Zewnętrzny)	2/07/25, 1:01:58 PM	2/07/25, 2:32:25 PM	1 godz. 30 min 27 s	foltyn@icuk.cz	foltyn@icu	Osoba prowadząca	
Tomas Sivicek	2/07/25, 1:01:59 PM	2/07/25, 2:32:17 PM	1 godz. 30 min 17 s	tomas.sivicek@ujep.cz	tomas.sivi	Osoba prowadząca	
Eliška Nacházelová (UJEP) (Niezweryfikowany)	2/07/25, 1:02:20 PM	2/07/25, 1:18:31 PM	16 min 10 s			Osoba prowadząca	
Elena Mossali (Zewnętrzny)	2/07/25, 1:02:40 PM	2/07/25, 2:32:17 PM	1 godz. 29 min 37 s	elena.mossali@intellim	elena.mos	Osoba prowadząca	
Michael Paduch (Zewnętrzny)	2/07/25, 1:05:06 PM	2/07/25, 2:32:38 PM	1 godz. 27 min 32 s	paduch@tgz-bautzen.d	paduch@t	Osoba prowadząca	
Maja Sušec (Zewnętrzny)	2/07/25, 1:07:28 PM	2/07/25, 2:32:16 PM	1 godz. 24 min 48 s	maja@p-tech.si	maja@p-t	Osoba prowadząca	
Medgyesi Péter (Zewnętrzny)	2/07/25, 1:08:47 PM	2/07/25, 2:32:18 PM	1 godz. 23 min 30 s	medgyesi.peter@mgfu.	medgyesi.p	Osoba prowadząca	
Eliška Nacházelová (UJEP) (Niezweryfikowany)	2/07/25, 1:18:50 PM	2/07/25, 1:30:26 PM	11 min 35 s			Osoba prowadząca	
Situm Mario (Zewnętrzny)	2/07/25, 2:00:52 PM	2/07/25, 2:32:18 PM	31 min 26 s	Mario.Situm@fh-kufste	Mario.Situ	Osoba prowadząca	