

Enabling transition towards circular and systemic BIOeconomy model regions by a Regions-to-Regions approach

Report on design of the interregional exchange instrument

Deliverable 3.1

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BIO2REG in a nutshell

A circular bioeconomy is essential for achieving the EU's sustainability goals. However, the implementation of a regional bioeconomy is fraught with challenges. Bioeconomy model regions offer a systemic approach to the transition to sustainable development, based on circular economy concepts. The EU-funded BIO2REG project aims to help greenhouse gas-intensive economies unlock their circular bioeconomy potential by becoming bioeconomy model regions.

The project will promote regional networking, interregional exchange and cooperation, and provide regional stakeholders with a conceptual framework for regionalisation into bioeconomy model regions. This includes mapping best practices in a circular and sustainable bioeconomy, assessing bioeconomy potential, providing mentoring and training, forming transition alliances and making policy recommendations. The project adopts a multi-stakeholder approach, developing tools and guidelines in collaboration with regional stakeholders and engaging with regions through guided exchanges on the ground.

Find out more:

Website: <https://bio2reg.eu>

LinkedIn: <https://www.linkedin.com/company/bio2reg>

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1 Summary

This report outlines the design, aim, target group, eligible entities, timeline, application process, evaluation, and implementation structure of the BIO2REG interregional exchange instrument developed and implemented in Work Package 3. The exchange is designed to support regions with greenhouse gas (GHG)-intensive economies in transitioning toward a sustainable, circular bioeconomy. Through guided peer-to-peer exchanges and mentoring by BIO2REG experts, participating regions will co-develop tailored transition roadmaps.

2 Supporting regional bioeconomy transformation: The aim of the exchange

The exchange aims to bring together regions at different stages of the transition to a bioeconomy, including emerging, developing and mature bioeconomy model regions (see Chapter 7 in [BIO2REG Deliverable 1.1](#) “BIO2REG regionalization concept for circular and systemic bioeconomy model regions”). GHG-intensive regions such as those reliant on coal, intensive agriculture, fisheries or forestry-based industries (e.g. pulp and paper production) will benefit from direct interaction with more advanced peers. Guided by BIO2REG expertise, each participating region will:

- Set clear learning goals
- Co-create tailored roadmaps for regional bioeconomy transition
- Work with tools and mentoring support tailored to their regional context and challenges

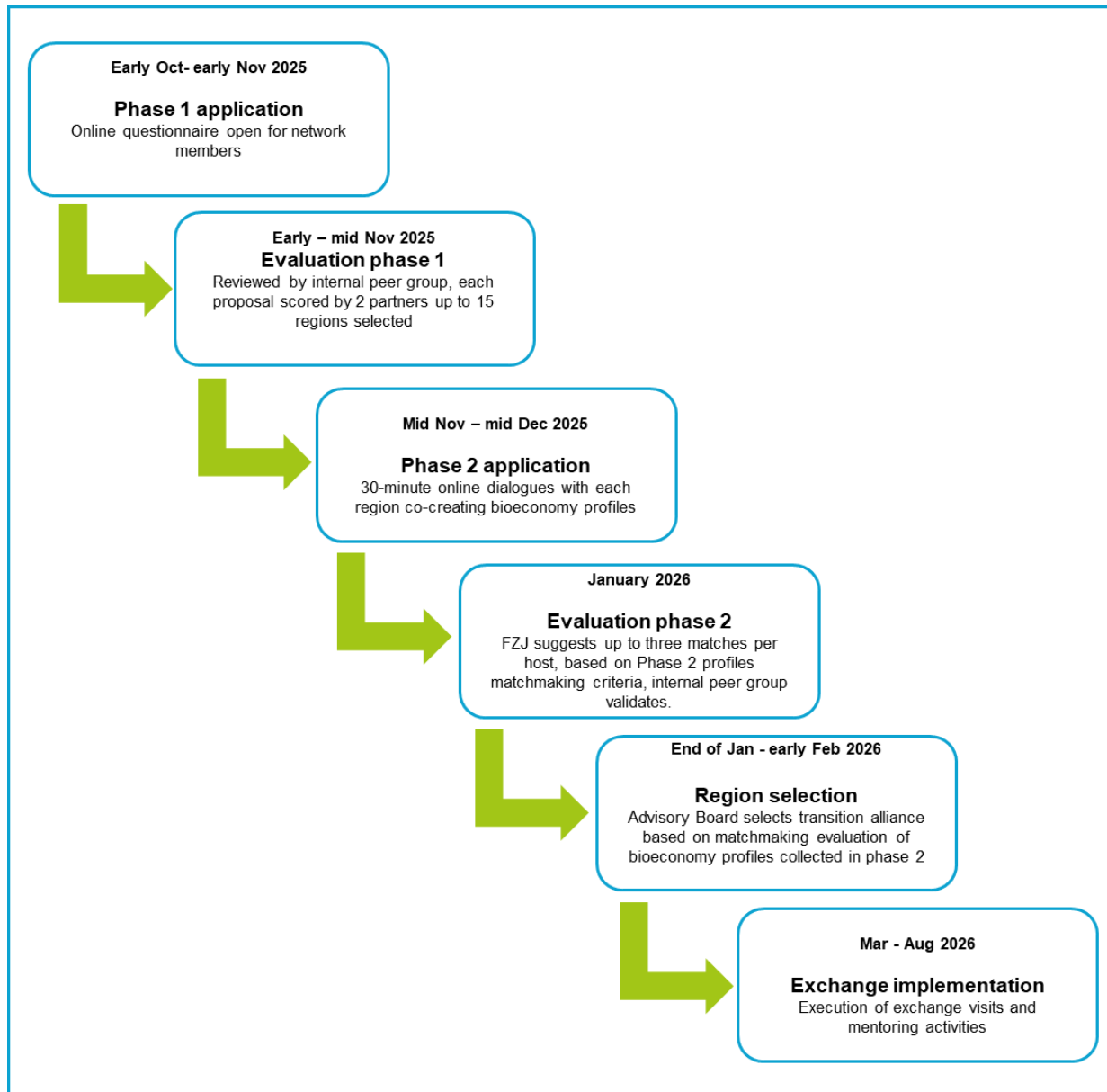
Travel funding of up to €900 per person is available for up to three participants from three distinct organisations per region.

3 Who can join and what are the requirements?

Eligibility and application requirements

- Stakeholders from GHG-intensive European regions (e.g., coal mining, intensive agriculture, fisheries, or forestry-based industries such as pulp and paper etc.) as well as stakeholders from sectors that can act as carbon sinks (e.g. forestry). This includes representatives from regional authorities, public agencies, research institutions, innovation hubs, farmer associations, industry and SMEs or other actors relevant in the regional bioeconomy transition.
- Stakeholders from regions with already developed and demonstrated bioeconomy strategies and solutions, including infrastructures, and those with mature regional bioeconomy action plans, strong cross-sectoral collaboration (e.g. between research, business and policymakers) and bioeconomy demonstration sites.
- Individuals must be registered members of the BIO2REG network and the template for registrations will only be accessible there.
- Preference will be given to institutional regional applicants (authorities, agencies, etc.).
- Involvement of at least two stakeholders from two different organisations.

4 When will things happen?



5 How will applications be evaluated?

5.1 Operational setup

- **FZJ serves as the main contact point** and provides support throughout the application process.
- **Phase 1: FZJ coordinates pre-selection** based on the online questionnaire and applies a transparent evaluation scheme. Each application is independently reviewed by two members of the internal peer group (FZJ, BIOC, KVC, RISE, MATIS, HSE, BHCZ, BIC). Up to 15 eligible regions are selected. In case potential conflict of interests arise, an additional partner will be asked to evaluate the application.
- **Phase 2: FZJ conducts 30-minute online dialogues** with selected regions to co-develop and validate bioeconomy profiles.
- **Final Selection:** January 2026.

- **FZJ will propose up to three matching regions per hosting region, which will be again validated by the BIO2REG internal peer group. The Advisory Board validates and confirms the final selection** based on peer group recommendations.

5.2 Eligibility criteria

- A registered BIO2REG network member.
- At least two representatives from different regional institutions.
- Travel funds for maximum three can be disbursed for up to 900 € per person.

Must be a European GHG-intensive region according to the understanding of BIO2REG (coal mining, intensive agriculture, fisheries, forestry-based industries such as pulp and paper, peat etc.), as well as from sectors that can act as carbon sinks (e.g., forestry).

All participating regions must be willing to engage in an English-led exchange. In case of language barriers among individual delegation members, internal translation support by and within the delegation should be ensured.

5.3 Phase 1: Online questionnaire and evaluation criteria

Each application will be assessed using a transparent scoring system from 0 to 1 for each criterion, where 1 indicates the criterion is fully met. Scores will be based on written responses and, when applicable, supporting documents or references. Up to 15 regions will be selected and a pre-selection will be conducted by FZJ followed by a validation through the internal peer group (see Chapter 5.1).

The following details are already available for the applicants via the network registration:

- Country of residence
- Organisation type
- Role in the organisation
- Familiarity with the bioeconomy concept
- Interest in developing bioeconomy activities
- Relevant bio-based sectors in the region
- Most important development challenges in the region
- Awareness of existing bioeconomy-related activities or strategies
- Expectations from participation in the BIO2REG network

Each region will be scored from 0 to 1 across these six criteria, producing a maximum compatibility score of six.

Evaluation criteria	Question	Scoring scale
Regional challenge severity	What is the main transformation challenge your region faces related to GHG-intensive sectors? 2-3 sentences	1.0 = Clear, urgent transition need described (e.g. high GHG-intensity, structural transition in progress) 0.5 = Moderate need or partially justified 0 = No clear challenge or weak justification
Institutional affiliation and continuity potential	List 2–3 representatives with name, organisation and role, participating in the exchange:	1.0 = Application from at least one institution which is permanently established (e.g. regional authority, development agency)

Evaluation criteria	Question	Scoring scale
	Individual 1: Name, organisation name, organisation type (see above), role Individual 2: Name, organisation name, organisation type (see above), role Individual 3: Name, organisation name, organisation type (see above), role	0.5 = Applicants linked to permanently established institution, but unclear mandate or capacity 0 = No institutional affiliation
Motivation and regional impact	Why does your region want to join the exchange, and what impact do you expect? 4-5 sentences	1.0 = Strong motivation with clearly described regional impact 0.5 = General motivation with some reference to impact 0 = Vague motivation and weak regional relevance
Networking level within the region	How does your region's stakeholder collaborate on bioeconomy topics? Who is involved (e.g. local government, businesses, research institutions, civil society)? 2-3 sentences	1.0 = Well-connected with multiple relevant bioeconomy stakeholders in the regional innovation ecosystem 0.5 = Some existing bioeconomy collaboration described 0 = No evidence of collaboration or isolated actor
Bioeconomy enabling conditions	Are there regional hubs, programmes or coordinated efforts to support bioeconomy transition? (2–3 sentences)	1.0 = Strong enabling structures 0.5 = Some initiatives 0 = None or fragmented
Contribution to the exchange	What kind of expertise or experience can your delegation contribute to the exchange? (e.g. sustainable farming practices, regional policy design, community engagement, scaling technologies, bioeconomy education, etc.)	1.0 = Clearly described and relevant expertise 0.5 = General experience mentioned 0 = No relevant contribution identified
Priority for the 2-3 BioFairNet project regions		Automatically prioritised; 2–3 slots are reserved as described in BIO2REG's DoA. These applicants must still fulfil all other requirements and fill out the questionnaire.
Willingness to host or visit another region + preferred region	Please indicate whether your region is interested in hosting another delegation, visiting a host region, or both.	- Hosting another region - Visiting another region - Open to both Preferred region (if any) Optional, not scored but tracked as basis for matchmaking.
Indication of a possible		No exclusion, but it is ensured that if there is a risk of conflicts of interest,

Evaluation criteria	Question	Scoring scale
conflict of interest (e.g. if there is cooperation with BIO2REG project partners)		the relevant partners are excluded, e.g. from the evaluation process, or an additional person takes over the evaluation.

5.4 Phase 2: Online dialogue

The aim of Phase 2 is to gain a deeper understanding of each region's context by co-creating an initial bioeconomy profile through a 30-minute online dialogue with up to 15 preselected regions. This profile will help to match the regions and the individual exchange plan, mentoring and training activities. FZJ will record minutes of the dialogue and share them afterwards with the regions for a feedback round to validate the bioeconomy profile.

Guiding questions for the dialogue:

- What are your region's goals and motivations for participating in this exchange? (relate to the answer given in the phase 1 questionnaire)
- What are the biggest challenges your region is facing?
- Are there specific topics or areas your region would like to explore more deeply during the exchange?
- What GHG-intensive sectors are prominent in your region? (relate to answer given in network application)?
- Does your region have a bioeconomy strategy and/or action plan? If not, are there plans or related initiatives?
- Does your region operate any hubs, programmes, coordinating centres or institutional support centres focused on the bioeconomy or sustainability?
- Which stakeholders are actively involved or could be interested in the bioeconomy transition? (e.g. authorities, companies, universities, relate to answer given in phase 1 application)
- Are there innovation activities about regional bio-based value chains or emerging business models already in place?
- Do you have any research infrastructure or living labs in your region to foster bioeconomy solutions?
- How is your region addressing social sustainability or citizen engagement related to bioeconomy activities?
- Are there education, training or skills programmes supporting the bioeconomy transition?
- Are any bioeconomy-related activities currently financed or supported, and how?

5.5 Regional pairing and matchmaking

Based on the bioeconomy profiles of phase 2 dialogues, up to five regional alliances each consisting of two regions will be formed. The matchmaking process will be based on e.g. compatibility, learning potential and complementarity, using the bioeconomy profiles developed during phase 2 as basis for evaluation.

Matchmaking process overview

Start with hosting regions

- For each identified host region, 2–3 best suitable visiting regions will be pre-selected by FZJ using a matrix to evaluate the compatibility.
- Focus evaluation will be based on matchmaking criteria (see below).

- After the pre-selection of FZJ, the internal peer group (see Chapter 5.1) will validate the pairing proposals.

Adding additional hosts (if needed)

If fewer than five alliances are formed based on the willingness of regions to host, BIO2REG partners (e.g. FZJ) or other BIO2REG partners may step in as additional hosts, or further hosts will be actively recruited and selected.

Matchmaking criteria

Each region pair will be scored from 0 to 1 across these eight criteria producing a maximum compatibility score of eight. This scoring will support a transparent matchmaking process.

Matchmaking criteria	Scoring scale
Similar challenges	1.0 = Strong overlap in challenges 0.5 = Partial overlap in challenges 0 = No visible overlap in challenges
Thematic interests	1.0 = Strong matches in thematic interest 0.5 = Partial overlaps in thematic interests 0 = No shared thematic interests identified
Expertise fit (based on expressed contribution)	1.0 = Complementary expertise (e.g., sustainable farming practices, policy, education, business models) 0.5 = Partly complementary expertise 0 = No complementary expertise
Different maturity levels	1.0 = One region is clearly more advanced than the other (learning opportunity) 0.5 = Moderate difference and some opportunity for exchange 0 = Both regions at similar level
Stakeholder type fit	1.0 = Both regions involve similar stakeholder types (e.g., regional government, business, research, civil society) 0.5 = Some overlap in stakeholder types 0 = Different or unclear stakeholder types involved
Stakeholder readiness and diversity	1.0 = Both regions have diverse and active stakeholder ecosystems 0.5 = One region has partial involvement 0 = Low or no diverse stakeholder involvement in both regions
Bioeconomy enabling conditions	1.0 = Clear support structures (similar regional hubs, programmes or coordinated efforts to support bioeconomy transition) 0.5 = Some enabling elements exist 0 = No relevant structures or programmes
Geographic/cultural fit	1.0 = Geographic proximity or established prior collaboration 0.5 = Some similarities or manageable differences 0 = Significant cultural barriers possible

If the ranking results for region pairs are the same for one hosting region, the region with a higher Phase 1 evaluation score will be prioritised in the evaluation presented to the Advisory Board, which will make the final selection.

5.6 Final selection of up to five regional alliances

Based on the matchmaking results and evaluation of bioeconomy profiles developed during Phase 2 up to five regional alliances consisting of two regions will be confirmed by the BIO2REG Advisory Board. FZJ will prepare matchmaking proposals with a validation of the internal peer group (see Chapter 5.1). The Advisory Board will review and decide on the final selection of matching regions considering both quantitative scores and qualitative insights.

Following the final decision:

- Applicants will be informed about the selection results by FZJ.
- An adopted timeline for the exchanges and mentoring activities will be agreed with each alliance.
- Each alliance will sign a Memorandum of Understanding to formalise their collaboration.

6 How will the exchanges look like?

The BIO2REG interregional exchanges are designed to be hands-on, collaborative and designed to regional needs. Each participating pair - composed of a visiting region and a hosting region - will engage in a pre-structured exchange and mentoring supported by BIO2REG consortium partners.

Core exchange components

On-site visits: Stakeholders from visiting regions will explore practical examples of bioeconomy implementation in the host region. This includes field visits, demonstration sites and interactive discussions with regional actors.

Online mentoring sessions (3 × 90 minutes per alliance)

Mentoring is led by FZJ and supported by BIO2REG partners (KVC, RISE, MATIS, HSE, BHCZ, BIC, PU) and designed to the needs of each alliance:

1. Pre-visit mentoring

- Co-design agenda, key topics and methods (e.g. business model canvas, scenario planning)
- Identify suitable visiting sites and regional actors
- Prepare regions to engage with BIO2REG transition guides and assessment tools

2. During the visit

- Apply engagement tools to develop a first draft of the regional transition roadmap
- Facilitate learning through role playing, scenario planning and peer discussion
- Receive input from experts and host mentors on implementation examples

3. Post-visit mentoring

- Refine the roadmap and action plan
- Integrate feedback and lessons learned
- Discuss next steps, funding needs and support options

Support tools

BIO2REG will provide a predefined support plan for each region, including:

- Access to BIO2REG transition guides, such as:
 - Applicant's bioeconomy profiles co-developed in application phase 2 (see Chapter 5).
 - Multi-Criteria Assessment (MCA) tool (Deliverable 1.3).
 - Best practices for regional transitions to bioeconomy model regions (Deliverable 1.4).
- The bioeconomy profile will be expanded by using the MCA guide to better define bioeconomy potential and regional transition priorities.

- Participating regions will receive corresponding feedback to help improve their individually developed transition roadmap and prioritisation of transition measures.
- The transition alliances between two regions will also present outcomes in two webinars organised sharing lessons with the wider BIO2REG network.

Expected outcomes

- A region-specific transition roadmap which is co-developed and refined throughout the exchange.
- A short exchange report addressing pre-defined topics, which can also be used for the impact evaluation and follow-up (see Deliverable 7.4).

Possible exchange topics

The following topics are exemplary themes that may guide the content of the exchanges. They reflect the core competencies of the BIO2REG consortium and regional priorities collected during the network events held between March and May 2025 (Task 2.3). Additional topics may be identified and integrated during the application phase depending on regional interest and needs.

- Best practices and success cases in bioeconomy model regions
- Stakeholder, community engagement and collaboration
- Funding models and economic aspects
- Circular, bio-based value chains and business models
- Policy and governance implementation
- Living labs and research infrastructure
- Education, skills development and training
- Regional conditions, barriers, and enabling frameworks

7 Which support materials and tools will be available?

To make it easy to participate, BIO2REG provides:

- A step-by-step application guide
- A template for the regional bioeconomy profile and the questionnaire of the phase 2 application online dialogue
- One-on-one support from FZJ's contact office during the application process and in preparation, during and after the exchange
- Memorandum of Understanding template

Which BIO2REG outputs will be of particular interest for the exchange?

- Regionalisation concept (Deliverable 1.1)
- Multi-Criteria Assessment (MCA) tools (Deliverable 1.3)
- Best practices for regional transitions to bioeconomy model regions (Deliverable 1.4)

8 How will the co-developed transition roadmap look like?

Each participating region will complete the exchange process with a tailored transition roadmap that translates exchange experiences, mentoring inputs and regional priorities into an actionable To-do list. While the content and structure can vary depending on the region's maturity, focus and ambitions, all roadmaps will follow a shared, flexible framework that allows comparability, strategic clarity and implementation planning. The following chapter lists exemplary core components of a possible roadmap.

Regional transition challenges

A short summary of key GHG-intensive sectors, structural barriers and drivers for transformation.

Regional focus and goals

Description of the region's priorities, examples could range from governance and stakeholder co-ordination to sector-specific themes such as sustainable, innovative agriculture or forestry, waste valorisation or industrial transformation processes.

Targeted activities

A list will be set up defining short-term actions (within 1 year) and mid-term actions (1-3 years), containing responsible actors, collaborating stakeholders and existing opportunities to activate new regional actors in the bioeconomy transition.

Funding and resource mobilisation

A list will be made with possible regional, national or EU funding instruments, possible timelines for applications, matchmaking events will be identified as well as possible partners needed for applying to the funding.

Stakeholder/community engagement, activation formats and knowledge transfer on bioeconomy

Proposals may include stakeholder dialogues, innovation workshops or community-building events designed to support implementation, foster trust and strengthen a regional network that recognizes the potential of the bioeconomy transition and builds long-term commitment.

Follow-up and cooperation plans

These could contain, e.g. suggested bilateral or multilateral plan and dialogue between regions of the same alliance or optional cross-alliance formats for shared themes or with the BIO2REG consortium members. Furthermore, presentations in BIO2REG network webinars are foreseen.

Key recommendations and lessons learned

Key recommendations will be summarised, open questions and inspirations from the exchange will be identified.

9 Next steps: Template development and promotion

FZJ supported by BIOC will develop website application templates and evaluation forms to ensure a user-friendly, transparent application process (Task 3.2). The call for the exchange will be launched early October 2025 and actively promoted through the BIO2REG network, partners' communication channels and targeted outreach to interested regions. Promotional activities will include visibility at events such as the European Week of Regions and Cities between 13-15 October 2025 in Brussels, where FZJ will participate. Additional outreach is planned via a pitch at the Bioeconomy Regions Summit in Brussels (23 October 2025 and through external networks such as the Rural Bioeconomy Alliance to connect with regions facing similar transition challenges.

10 How was this exchange instrument developed?

The exchange instrument was shaped through a co-creation process that involved consortium partners and regional stakeholders. The initial concept was presented and discussed at the BIO2REG full consortium meeting on 25 February 2025 and refined based on feedback from regional stakeholders during network events held between March and May 2025 (Task 2.3). These consultations confirmed a strong interest in participating in such an exchange possibility, while also highlighting common barriers such as e.g. limited staff capacity, funding and travel constraints, bureaucratic hurdles and the need for clear information and a low threshold application process. In response, the application process was designed to be easy, accessible and supportive, prioritising step-by-step guidance, a user-friendly digital format and personalised assistance. Hosting a region was seen as particularly attractive when supported by clear guidance and opportunities for long-term visibility and impact. The draft design of the instrument was reviewed internally and shared with the Advisory Board to collect feedback.