European Commission

Joint Research Centre

International Bioeconomy Solutions Library

Guidelines for content submission

2026



International Bioeconomy Forum

Introduction

The **International Bioeconomy Solutions Library** (IBSoL) showcases real-world examples from around the globe that demonstrate how **bio-based innovations** can address environmental, economic and societal challenges. By making these solutions transparent and easy to explore, IBSoL enables decision-makers, researchers, businesses and citizens to **discover** existing solutions and how they might be **replicated** or adopted elsewhere.
The **online platform** is being developed under the auspices of the International Bioeconomy Forum (IBF).
The European Commission (EC), which currently co-chairs the IBF, is leading the development of IBSoL through the Directorate General of Research and Innovation (DG RTD) and the Joint Research Centre (JRC). The work is being technically carried out by the EC's Knowledge Centre for Bioeconomy operated by the JRC.

Our vision

A world in which sustainable bioeconomy solutions are visible, accessible and replicable across regions, industries and communities. The International Bioeconomy Solutions Library is founded on the belief that a wealth of bio-based solutions already exists around the world to address environmental, economic or social challenges. Sharing these solutions in a transparent and accessible way can help advance the bioeconomy and contribute to sustainable development. The library connects people with knowledge, examples and partners to inspire action and accelerate implementation. By increasing visibility and enabling learning across borders, the IBSoL aims to support the transition toward a more circular, competitive and bio-based future.

Through this library, users can:



Discover innovative bioeconomy solutions from around the world



Identify emerging trends, regional strengths and industrial clusters



Search for applications addressing specific challenges



Propose and give visibility to your own bioeconomy solutions



Foster international collaboration to build a sustainable and inclusive global bioeconomy

Why you should submit your solution:

- Showcase your solution globally on an international online platform supported by the European Commission and the International Bioeconomy Forum.
- Boost your credibility by joining a trusted collection of innovative, real-world bioeconomy solutions.
- Expand your network by reaching policymakers, researchers, businesses, civil society and potential collaborators from around the world.
- Amplify your impact by inspiring others to replicate and scale your solution, helping drive the transition to a more sustainable bioeconomy.

1. Defining a solution

The IBSoL is a **curated**, **structured digital library of bioeconomy solutions**. For the purposes of this library, a solution is a concrete, real-world initiative that contributes to advancing the bioeconomy by addressing a specific challenge. IBSoL applies the following working definition of bioeconomy:

> *Bioeconomy is the production, utilization, conservation, and regeneration of biological resources, including related knowledge, science, technology, and innovation, to provide sustainable solutions (information, products, processes and services) within and across all economic sectors and enable a transformation to a sustainable economy* (IACGB, 2018).

A **solution** for the purposes of IBSoL is:

- A **technical** (e.g. technology that uses biomass), **social** (e.g. a network connecting actors), or **environmental** (e.g. agroecology) approach;
- **Demonstrated** in a real-life setting;
- Aligned with the G20-**High Level Principles on Bioeconomy**;
- Providing identifiable conditions that enable the assessment of its potential **replication**.

Solutions may operate at **local**, **regional**, **national** or **global** scale. A solution may take the form of:

- A **technology** or **technical process**;
- A **business model** or **market mechanism**;
- A **social** or **organisational approach**;

The following types of content are **NOT** considered solutions for inclusion in IBSoL, as they are covered by other platforms or repositories:

- **Research papers** describing potential solutions which have not yet been tested and validated in practice. Research papers may be referenced as supporting material but are not considered stand-alone solutions.
- An **institution or organisation** is not considered a solution simply because it develops or supports bioeconomy activities. However, a specific initiative, network, platform or service run by that organisation may qualify if it is a concrete, implemented bioeconomy solution that meets the criteria.
- **Public policy documents** (e.g. bioeconomy strategies). Information on public policy documents is already available through the FAO Bioeconomy Strategies Dashboard. For IBSoL, submissions should focus on concrete examples demonstrating how policies have been implemented in practice and the results achieved.

The scenarios below provide illustrative, non-exhaustive examples of solutions that may fall within or outside the scope of IBSoL. Further examples are provided in Annexes 1 and 2.

Scenario 1 **You have a scientific paper**
You have a scientific paper about a possible bio-based solution. Do not submit the paper as the solution. Submit the project, pilot or demonstration where the solution was tested or applied.

Scenario 2 **You manage a funding programme**
You fund or support several bioeconomy projects. Do not submit the funding programme as the solution. Submit the specific project(s) funded by the programme.

Scenario 3 **You are a public authority**
You support the advancement of bioeconomy through funding, coordination, policy advice or stakeholder engagement. Do not submit the public authority institution itself as the solution. Submit the concrete project, pilot or activity that the authority supports.

Scenario 4 **You have a policy or strategy document**
You have a bioeconomy strategy, roadmap or policy document. Do not submit the policy or strategy as the solution. Submit practical, relevant example(s) from the implementation of the policy or strategy.

2. Selection criteria

Solutions must be submitted via the **submission tool** available on the IBSoL website. Once submitted, a proposed solution undergoes a **review** by the IBF editorial team, based on criteria developed and adopted by the IBF in July 2026. The review is carried out to verify that the proposal meets the essential eligibility criteria, falls within the intended scope of IBSoL, and is relevant and suitable for the IBSoL framework and objectives. To be eligible, a solution must meet the criteria collected in the following table.

Table 1. Eligibility Criteria for IBSoL inclusion and underlying rationale.

Criteria	Rationale
Identifiable responsible organisation	The organisation that develops, implements or manages the solution must be clearly identified to ensure transparency, traceability, and the possibility of follow-up enquiries.
Publicly verifiable information	At least one credible public source (for example, a website) must provide sufficient information to verify the solution's existence, characteristics and outcomes.
Comply with publishing rules	Submissions must comply with applicable *europa.eu* publishing rules and must not contain unlawful, misleading, purely promotional, or otherwise unsuitable content.
Submitted via the IBSoL Submission tool	This is essential because the submission tool is the only way to provide consent to the privacy statement, which is required for the editorial team to contact you.

Source: Own elaboration.

Relevance to IBSol scope

If all eligibility criteria are met, the solution is reviewed by the editorial team, to determine its relevance and suitability for inclusion in IBSoL, based on the following criteria:

Table 2. Relevance to IBSoL scope and underlying rationale.

Criteria	Rationale
Bioeconomy relevance	The solution must demonstrate a clear link to the bioeconomy as defined in the IBSoL working definition for bioeconomy and Annex 1. This delineation is important to assure the relevance of the included solutions. Working definition: *"Bioeconomy is the production, utilization, conservation, and regeneration of biological resources, including related knowledge, science, technology, and innovation, to provide sustainable solutions (information, products, processes and services) within and across all economic sectors and enable a transformation to a sustainable economy."* (IACGB, 2018).
Aligns with G20 High-Level Principles	Being situated within the bioeconomy is not sufficient; the solution must also demonstrate a positive impact that aligns with the G20 high-level principles on Bioeconomy.
Public-interest orientation	IBSoL is intended to showcase solutions that serve the public interest, with particular emphasis on publicly funded initiatives. Solutions developed under other funding and organisational schemes are also eligible where they align with the scope and objectives of IBSoL Final eligibility will be determined by the IBSoL Editorial Board.
Real-world setting	To qualify, a solution must have progressed beyond the conceptual stage and demonstrate some degree of real-world implementation (e.g. pilot, demonstration, commercial operation or deployment in practice). Purely conceptual ideas without operational testing, as well as plans that have not yet been implemented, are generally outside the scope of IBSoL.This focus ensures that IBSoL showcases tangible, operational experiences.
Replicability	Replicability is central to the mission of the IBSoL. The submission tool therefore requests information on: 1) Benefits; 2) Geographic context; 3) Technology Readiness Level (TRL); 4) Side effects and trade-offs; 5) Lessons learned; 6) Challenging factors. These elements allow the submitter to assess the replicability of a solution. Submissions lacking sufficient detail on these points may be excluded because their replicability cannot be adequately evaluated.

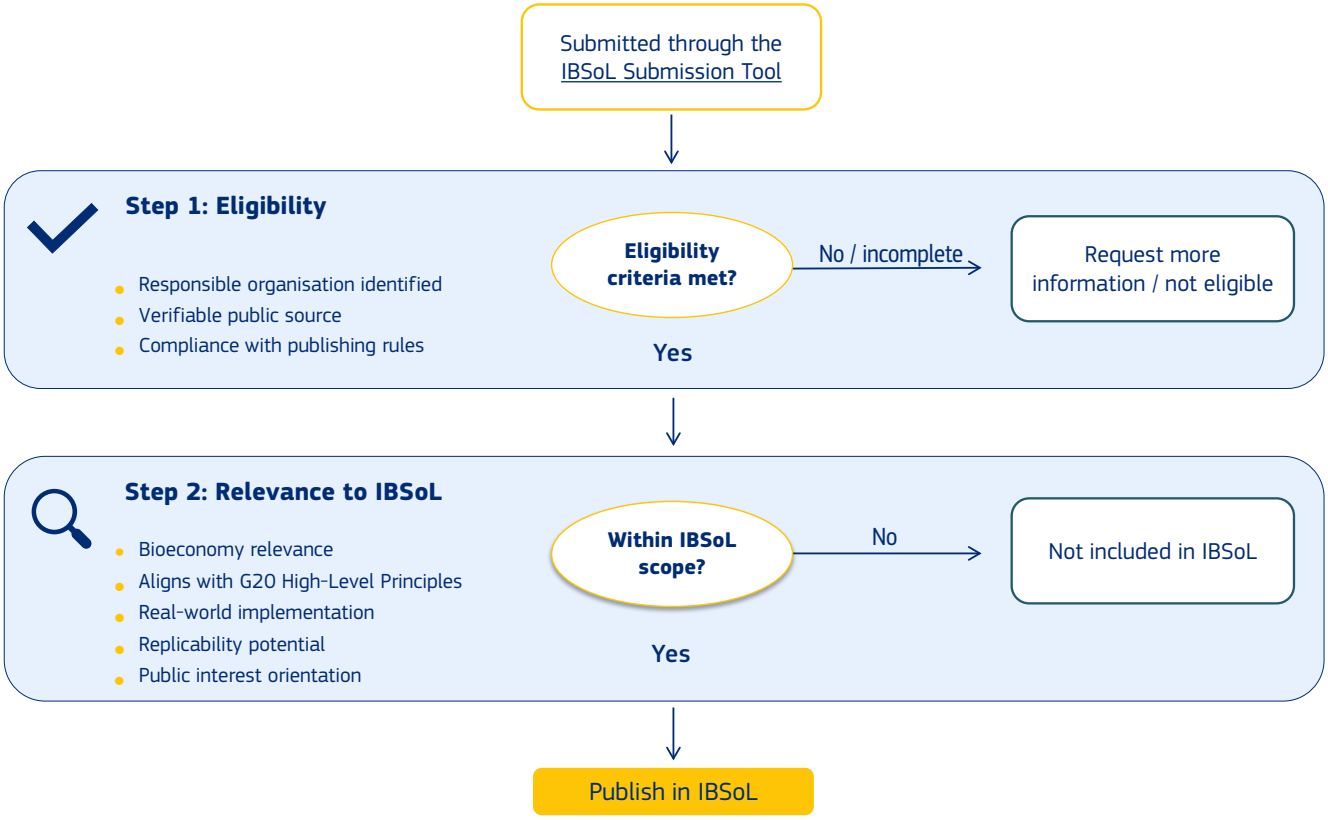
Source: Own elaboration.

3. Selection process

To be included in IBSoL, a solution must be submitted through the IBSoL Submission Tool.
Once a submission is received, as a first step the editorial team carries out an initial **eligibility check** for inclusion in IBSoL. If additional information is needed, or if certain aspects of the submission require clarification, the submitter may be contacted to ensure that the submission is checked on the basis of complete and accurate information.
At this stage the editorial team may also introduce minor amendments to the submission, such as correcting typographical errors or assigning it to a different category. In a second step, submissions that meet all eligibility criteria are reviewed in greater detail to determine their relevance for inclusion in the library. It is important to note this should in no way be understood as a form of evaluation, certification, ranking or endorsement of the solution or the organisation behind it. The purpose is purely to check whether the solution meets the IBSoL requirements.

Once the review has been completed, the submitter will be notified of the outcome. If the solution is selected, it is published in the library and made available to the community. This two-stage process is illustrated in Figure 1.

Figure 1. IBSoL process for the selection of solutions.



Source: Own elaboration.

4. Publication in IBSoL

By submitting a solution through the submission tool, the submitter accepts that it will be published on the IBSoL website. The selected entries will remain in the library for 5 years; at the end of this period the submitter receives a notification inviting to update and resubmit the solution, otherwise the entry is deleted. This policy is intended to keep the library up-to-date.
If the submitter wishes to modify or delete the solution before the five year expiry, they may do so by contacting the IBSoL editorial team via JRC-IBSOL@ec.europa.eu.

Annexes

Annex 1. Illustrative examples of bioeconomy solutions within the scope of IBSoL

The examples below are illustrative. They are intended to help submitters understand the types of practical bioeconomy solutions that IBSoL seeks to include. The examples illustrate that IBSoL may cover a range of bioeconomy solution types, including technical, social and environmental. The examples are illustrative only and do not refer to specific countries, organisations or funding programmes.

Example 1: A combined solution with technical, social and environmental elements

Many bioeconomy solutions combine several dimensions. For example, a project may use local organic waste to produce compost or biogas, while also involving communities, creating new skills, improving waste management and reducing environmental impacts. Such combined solutions may also be relevant for IBSoL.

Example 2: A social or organisational solution connecting actors

A project creates a cooperation model, service, platform, training approach or local partnership that helps different actors make better use of biological resources. For example, it may connect biomass producers with companies, support rural value chains, strengthen local skills or enable community-based bioeconomy activities.

Example 3: A technical solution using biomass residues

A project develops a bio-based product, material or ingredient from crop residues, forestry by-products, industrial bio-waste or other biomass side streams. For example, residues may be processed into packaging, chemicals, construction materials, textiles, food or feed ingredients, or other bio-based products.

Example 4: A technical solution using biological processes

A project applies biotechnology, microbiome-based tools, enzymes, fermentation or other biological processes to produce, improve or monitor bio-based products or systems. This could support food and feed production, soil health, plant or animal health, industrial processes, bio-based ingredients or circularity.

Example 5: An environmental solution supporting sustainable production

A project applies bio-based or nature-based practices to improve environmental performance in agriculture, forestry, aquaculture or industrial value chains. This could include biofertilisers, biopesticides, soil improvers, ecosystem-based practices, nutrient recycling or approaches that reduce environmental pressures.

Example 6: An environmental solution improving biomass use

A project reduces biomass losses or improves the use of biological resources through better collection, sorting, processing, reuse or recycling of organic materials. This could include agricultural residues, forestry side streams, food waste, green waste, manure, wastewater sludge or industrial bio-waste.

Annex 2. Illustrative examples of solutions outside the scope of IBSoL

This annex provides examples of solutions that would typically fall outside the scope of the bioeconomy. The purpose is to support a consistent selection process and help clarify the boundaries of the library. Solutions may fall outside the scope when they contribute to environmental sustainability or climate goals but do not rely on biological resources or biomass-based value chains. The below list is non-exhaustive and is intended to make the selection process more transparent.

Renewable Energy Systems
- Solar energy deployment (photovoltaics, solar thermal)
- Wind energy farms (onshore/offshore)
- Geothermal energy systems
- Hydropower optimization projects

Energy efficiency and building decarbonization
- Reducing energy demand rather than using biological resources:
- Building insulation retrofitting programs
- Smart energy management systems for homes and cities
- Efficient heating/cooling systems (heat pumps, district heating optimization)
- Passive building design projects

Circular Economy (non-biological material loops)
- Plastic recycling systems and chemical recycling of polymers
- Recycling of clothes
- Metal recovery from industrial waste or e-waste
- Electronics refurbishment and reuse platforms
- Industrial material recovery systems (steel, aluminium, rare earths)

Pollution control and remediation (non-biological methods)
- Air pollution monitoring networks and filtration technologies
- Soil remediation using chemical or physical treatments (e.g., heavy metal extrac-tion)
- Water purification technologies (reverse osmosis, advanced filtration)
- Industrial emission scrubbing systems

Climate change mitigation (industrial/technological)
- Carbon capture and storage (CCS) in geological formations
- Green hydrogen production via electrolysis
- Industrial electrification and fossil-fuel substitution projects

Sustainable transport and mobility systems
- Electric vehicle infrastructure (charging networks)
- Public transport optimization systems
- Cycling infrastructure planning
- Urban mobility data platforms and traffic reduction systems

Water infrastructure and management
- Desalination plants
- Smart water grid monitoring systems
- Wastewater treatment using advanced chemical/physical processes (not biologi-cal treatment)

Digital environmental systems (data-driven only)
- Satellite-based climate monitoring
- Environmental sensors and IoT pollution tracking
- AI-based climate modelling and prediction tools

References

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Get in touch

This document is intended to provide essential information on the submission of bioeconomy solutions for inclusion in the IBSoL library and to clarify the review process carried out by the editorial team to select solutions for inclusion in the online Library.

For any additional queries or feedback, interested readers are encouraged to contact us by sending an email to: JRC-IBSOL@ec.europa.eu.

International Bioeconomy Solutions Library

https://knowledge-for-policy.ec.europa.eu/visualisation/ibsol

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Science for policy

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