



The Built by Nature Challenge

From forest to frame: strengthening consensus on the climate impacts of the bio-based construction value chain

A value chain approach to climate impact

Bio-based construction materials from sustainably managed forests can be a powerful climate-mitigation solution due to the low carbon emissions associated with their harvesting, engineering and use. When replacing carbon-intensive materials such as conventional steel and concrete, they help to greatly reduce the carbon footprint of construction. This is known as the substitution effect, serving as a well-established case for scaling-up bio-based materials.

To further accelerate their adoption, a wider appreciation of two other climate-mitigating effects is also needed: the carbon storage effect of bio-based materials, and the carbon sequestration (or sink) effect of the ecosystem from which they are sourced. In addition, the impact of sourcing bio-based materials on other ecosystem services provided by forests such as biodiversity reserve, or on its resilience to climate change, need to be taken into account, as they also play a key role in the climate mitigation.

Models, methods and frameworks to calculate the carbon storage and sequestration effects of bio-based materials value chains are beginning to gain traction in practice and policy, and much needed discussions related to the assumptions underpinning their calculations are increasingly taking place. Some of these methods, such as the [3S Framework](#), attempt to calculate the full carbon benefit across the value chain, including sink, storage, and substitution effects.

Yet very little information on climate impact, or on the impact of forest management practices on the biodiversity or climate resilience of the forest is made visible throughout the bio-based material value chain. This lack of visibility slows down the optimisation of the forest-to-frame value chain.

Accelerating the uptake of biobased materials in the built environment requires clear insight into its benefits and new models for distributing them across the value chain. Articulating new solutions and scaling existing ones that can overcome this barrier calls for new coalitions to come together.

The Challenge

Built by Nature's Challenge aims to stimulate the field to come together in responding to a collective challenge. It targets issues that are complex and around which the conversation is fragmented or siloed. The issue has long-term implications, meaning it is likely overshadowed by more pressing matters.

By putting out a Challenge, Built by Nature aims to:

- Stimulate new coalitions around the issue at stake.
- Challenge the status quo, or fast forward specific elements of the issue to try and unlock collective benefits and push the conversation to the next step.

This BbN Challenge focuses on the theme of carbon impact, more specifically on **how to make carbon and wider ecosystem benefits of forests more visible, understandable and integrated throughout bio-based construction value chains.**

It will run between the 15th of November 2022 and 5th of April 2023, and is budgeted at €350,000. This amount allows to fund a range of 3 - 5 grants ranging €70,000 to €120,000 each. Implementation of the winning grants will begin earliest in Q2 2023 and last up to 12 months.

We invite organisations working in or with the forest-to-construction value chain in Europe to respond to the BbN Challenge. The application process is designed to connect initiatives to each other, encourage cross-learning and maximise collaboration between applicants.

In addition to funding, winning applicants will join a cohort of 3 to 5 organisations working on the issue simultaneously, and have the opportunity to interact with the wider Built by Nature grantee community and network of frontrunners. Winning initiatives will be circulated throughout the network and their results amplified prominently in Built by Nature's communication channels.

The goal

The goal of this BbN Challenge is to **strengthen consensus** among organisations along the bio-based construction value chain around how climate impacts are considered, measured, and communicated when they make decisions.

Emerging frameworks, models and tools show that reliable value-chain climate impact measurement from forest to frame is possible. The next step is to ensure that the assumptions behind these frameworks are widely embraced by the industry, and that the data coming out of those models and tools is understandable and flows well along the value chain.

To achieve this, there is a need to increase the **transparency** around the impact of different decisions made in the value chain. For example, understanding how different forestry management practices on the collective benefits that forests provide, such as carbon sequestration, biodiversity preservation, and ecosystem resilience.

This will in turn enable better decision-making within the construction industry and the policy-makers shaping the demand for bio-based materials in construction, reduce the disconnect between forestry and construction industries and lead to a stronger case for bio-based materials in construction.

Types of solutions

We invite organisations who are working on greater transparency of climate impacts along the biobased construction value chain to submit their initiatives to the BbN Challenge. New initiatives are also welcome to apply, but will be required to have carried out field engagement, demand mapping and have a scalable plan for implementation.

Based on market and expert engagement, we think that greater transparency around the climate impact (from forest to frame) of timber construction products can be achieved through:

- Strengthening the **traceability** of timber products, to allow for an easier comparison of products based on their carbon footprint and wider ecosystem impacts and support claims verification.
- Enabling decision-makers in the construction industry (such as developers, designers, investors, asset-owners) to better **visualise** and **understand** the impact of different forestry management practices on carbon sequestration, biodiversity preservation and climate resilience and how that influences the carbon footprint and climate impact of the bio-based products they use.

We expect solutions to fit in one of the three categories below:

1. **Human - data-driven communications & storytelling:** initiatives aiming to highlight the relationship between forest and bio-based construction and the ways in which they interact, including case studies and examples based on detailed project data and value chain studies.
2. **Legal - certification and verification** initiatives aiming to improve the traceability of climate impacts from forest to frame and making it visible, understandable and easily transferable.
3. **Tech - systems-integration** initiatives aiming to facilitate the flow of data from forestry to manufacture to construction by supporting the integration between the technological systems used by forestry, sawmills and manufacturers' and those used by designers, developers, investors in the construction industry.

We expect successful initiatives to:

- Clearly articulate how they respond to the BbN Challenge, including the reasoning behind it.

- Demonstrate demand for the solution proposed. We need to clearly see that the initiative will fill a gap and that the field is eager to adopt it.
- Demonstrate buy-in from the field through co-funding of at least 25% of the total project cost. This does not need to be secured at the onset, but will have to be by the final submission in April (see process and timeline in following section)
- Demonstrate scalability. Initiatives and solutions need to identify their end-goal and have a vision for scaling-up and achieving it post project.
- Have a roadmap for implementation, inclusive of testing.
- Actively bridge the gap between the forestry, product manufacturing and construction sectors, for example by forming a consortium including organisations working in different parts of the value chain.
- Showcase resilience and remain valuable even if setbacks cause the initiative to not reach its initial objectives.

How to apply?

Application Process

- **Step 1: Submit your solution by the 20th of January 2023, 23:59.** Do so by filling out the dedicated [application form](#). This form is short and you do not need to have it all figured out. The goal is for us to know about you and your solution, and identify potential pairings with other applicants.
- **Step 2: Scoring and Pairing.** We will score the applications based on a pre-defined criteria. We will draft a shortlist with the highest scoring applications, and will explore potential team pairings if relevant. We encourage collaboration, but you will be free to choose whether you would like to merge your project with another applicant or continue on your own.
- **Step 3: Proposal Development.** This will be led by you, using our proposal template and with our steer and advice. We will start with a proposal workshop, and aim for at least two rounds of iteration and feedback. *Please note that in parallel to proposal development, we will carry out due diligence on every applicant, which will require you to share documents including financial reports and legal registration of your organisation among others, and to provide reference contacts. These documents will be kept confidential.*
- **Step 4: Submit your proposal by the 5th of April 2023, 23:59.** Do so by sending the filled-in proposal template to our team by email.
- **Step 5: Final Assessment.** Your proposal will be assessed by our Investment Committee and our Board, which will decide on the winning proposals.
- **Step 6: Announcement and Implementation:** If your proposal is approved, it will be announced by our team as one of the winning proposals, and will move on to implementation.

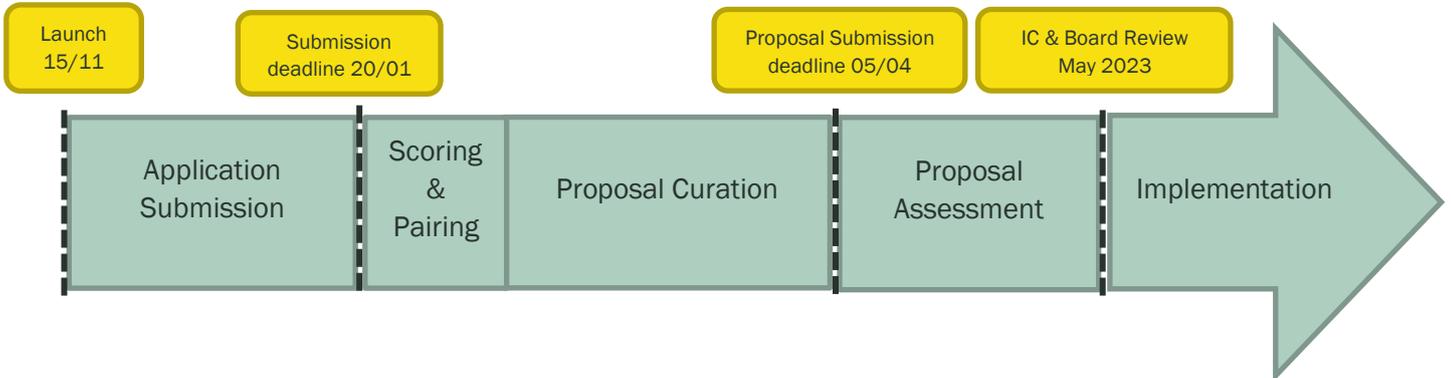
Application Requirements

- **Public Good Purpose:** Proposals must clearly be aimed at the public good and may not be directed towards profit-making. Outputs of the selected initiatives will be made available to the field and the wider public free of charge.
- **Applicants:** Individual organisations or consortia may apply. Every applying organisation needs to be legally registered. It is preferred that the main applicant is a not-for-profit organisation. For-profit organisations can apply but are recommended to do so in consortium with a not-for-profit organisation as lead applicant. If applying individually, for-profits will have to undergo a lengthier due diligence process to demonstrate compliance with the public good requirement described above.
- **Amount:** funding request must range between 50.000 and 120.000 EUR and may be part of a larger initiative or programme.
- **Co-funding:** Proposals that are able to secure 25% of co-funding or more will be prioritised. In-kind co-funding is accepted, but direct co-funding is preferred. The co-funding consideration applies from step 3 onwards (once an application has passed the first assessment is being developed into a proposal).
- **Duration:** The preferred duration for an initiative is between 6 and 12 months.
- **Start date:** The earliest start date for implementation of selected proposals is 1st of June 2023.
- **Geographical scope:** Solutions put forward must be directly applicable to at least one country in Europe. Member states of the European Union, the UK, Norway and Switzerland are in scope.
- **Regional knowledge:** Proposals must come from organisations that have a base and a history of working in the focus region or country.

Tips for applicants:

- **Be realistic.** We want to get a sense of your ambition and long term goals, but prefer nimble, actionable proposals over overly ambitious multi-year initiatives. This proposal can be a first step towards an end-solution, or a next step to an existing initiative that has a potential to scale. If the overall journey and vision is compelling, your proposal will score high.
- **Collaborate.** One of our biggest challenge is the fragmentation of efforts in the bio-based construction industry and across the value chain. We will favour teams that showcase innovative collaboration and actively contribute to bridge the gap between forestry and construction.
- **Ask questions.** Feel free to reach out to us at fund@builtbn.org with any questions.

Application Timeline



About Built by Nature

Built by Nature is a network and grant-making fund – backed by philanthropic funding - with a mission to accelerate the timber building transformation and a vision for a built environment that works in unison with nature. BbN supports the built environment sector’s pioneering developers, architects and engineers, asset owners and managers, investors and insurers, city leaders, academics, researchers, non-profits and policymakers in their journey to decarbonise our built environment and protect our natural capital. Our Fund makes grants to the teams and solutions that can increase the uptake of sustainable timber and improve its climate impact, overcoming the most challenging barriers.