Use of low-carbon building materials to transition to low-carbon construction

- Feedback & response -

November 5, 2025

Overview

This document outlines the feedback received during the public consultation period on version 0.95 of the GHG methodology for low-carbon building materials, detailing how the feedback was addressed and its impact on the methodology, culminating in version

Consultation period

The methodology has been opened up for public consultation on our website during the period March 28th - May 12th, 2025. Due to the limited amount of feedback received during the consultation period, Proba pro-actively contacted a diverse set of stakeholders during the months of August, September and October.

Consultation process steps

- The methodology draft document v0.9 was published for public consultation on https://proba.earth/public-consultation between 28 March 2025 and 12 May 2025.
- Proba has invited its stakeholders to provide feedback via LinkedIn messages, email, website publication and during meetings.
- Proba has processed the feedback from the public consultation into the v0.95 of the methodology. See the detailed “feedback and response from public consultation” section for more details.
- Proba used expert review rounds to strengthen this methodology as well.

- Due to the limited amount of feedback received during public consultation, Proba decided to proactively contact a diverse set of stakeholders, using our own network and the network of relevant partners (like Dealin.Green).
- Proba created questionnaires to support the feedback collection process. Questions were designed to get relevant feedback from the perspective of farmers and the building and construction sector.
- Stakeholder responses have been added to the “feedback from additional stakeholder consultation” section.
- The section after that explains the ways that Proba has processed this feedback into the methodology.

This feedback and response document will be published on the Proba website next to the methodology.

Feedback contributors

Proba has defined the following stakeholder types for public consultation and stakeholder consultation.

- Farmers or farmer representatives
- Academic reviewers
- NGOs
- Constructors of material
- Real estate and building companies
- Other stakeholders

The table below provides an overview of which stakeholders we approached and who has provided feedback.

Stakeholder type	*Organization*	*Contact channel*	*Contacted*	*Feedback received*
Farmer or farmer representative	Dealin.Green	Email, One on one meeting	4/28/2025	Yes
Farmer or farmer representative	Dealin.Green	Email, One on one meeting	4/28/2025	Yes
Academia	Students	Email	4/8/2025	Yes
Academia	Aeres University of Applied Sciences	Email, One on one meeting	8/10/2025	No
Farmer or farmer representative	Agrifirm	Email	to add	No
NGOs	Biobased Nederland	Website contact form	9/19/2025	No
NGOs	Dutch Green Building Council	Website contact form, One on one meeting	09/22/2025	Yes
Constructors of material	Isoleerbewust	Linked in message	9/19/2025	No
Real estate and building companies	BPD	One on one meeting	9/24/2025	No
Other	Rabobank	Email	9/15/2025	No
Farmer or farmer representative	Fiber Agro	Email	8/10/2025	Yes
Farmer or farmer representative	Terravesta	One on one meeting, Email	29-Sep	No
Farmer or farmer representative	Miscanthus Groep Schiphol	Email, Phone call	8/10/2025	No

Farmer or farmer representative	Mammoetgras Wereldwijd	Email	8/10/2025	No
Real estate and building companies	2planetzero	Email	8/10/2025	Yes
Other	Dealin.Green	Email, One on one meeting	8/10/2025	No
Constructors of material	Sam panels	Email	8/10/2025	Yes
Constructors of material	Biobuilders	Email	8/10/2025	Yes
Real estate and building companies	Dijkstra Draisma	Email	8/10/2025	No
Real estate and building companies	LOC (Oostenrijk)	Email	8/10/2025	No
Other	Rabobank Agri-Food	Phone call, Email	25-Sep	No
Farmer or farmer representative	ASR duurzaamheid	One on one meeting, Email	8/10/2025	Yes

Feedback and response from Public Consultation

The following feedback was provided during the public consultation period.

	Section	*Referenced Text*	*Feedback/comment*	*Response*
1	Page 9. 1.2 Interventions	Text: GHG emission reductions: Achieved by replacing high-emission materials with low-carbon alternatives, leading to lower GHG emissions throughout the product lifecycle	Comment: "Recycled or produced clean (with renewable energy, or hydrogen instead of coal...)"	In chapter *1.2 Interventions* we want to keep it generic. In the section *Eligible products*, we specify what type of building products are eligible and what kind of sources of energy should be used
2	Page 9. 1.2 Interventions	Text: Carbon removals: Realized through the use of biobased products that incorporate biogenic carbon, enabling long-term storage of carbon within the building products	Comment: Note: Products that are not entirely biobased but incorporate a proportion of biobased materials in their final composition are also eligible under this methodology. For example, biobased concrete, which integrates hempcrete (a mixture of hemp fibers and lime)	Yes, these types of products are eligible too. We added text for clarification purposes: "*Carbon removals: Realized through the use of biobased materials in the final low-carbon building product that incorporate biogenic carbon absorbed during biomass growth, enabling long-term storage of carbon within the building products.*" **Also in section 1.5.1. Eligible products** "*Products that are not entirely biobased but incorporate a proportion of biobased materials in their final composition are also considered eligible under this methodology (e.g. biobased concrete that integrates hemp fibers, hempcrete).*"
3	Page 10, 1.3. Standard Compliance	Text: ISO 140677: Focuses on the product carbon footprint (PCF)8, providing principles and guidelines for quantifying	Question: Is it mandatory to be ISO 14067 certified as a Project Developer?	No, it is good if you have this credentials

		and reporting GHG emissions….		
4	Page 12, 1.5.1 Eligible products	Text: Middle-cycle products (lifespan > 35 years)14: These products can demonstrate an extended lifespan. The CO2 that is stored in it is preserved for at least 35 years (e.g. insulation products, such as wall insulation, roof insulation, etc)	Question: Why is 35 years chosen? Is this from the CRCF?	Yes, the reference to 35 years is coming from CRCF expert group panel in October 2024
5	Page 13, 1.5.2 Not eligible products	Text: Regarding the cultivation area of the raw material (fiber/biomass crops) for biobased products:	Comment: I would suggest to add: Only non-invasive varieties	We added the recommendation: "*Invasive plant species: Regarding the biobased building materials, only non-invasive varieties of fiber/biomass crops are permitted for use in building products.*"
6	Page 14, 1.6.1 Offsetting Scenario	Text: Demonstrating the absence of regulations mandating the use of low-carbon building products.	Comment/Question: There are already regulations in place (NL/EU), how to deal with those? 1. Besluit Bouwwerken Leefomgeving - BBL (2021); MPG limit 0.8 2. NZEB/BENG; strick energy efficiency requirements, indirectly encouraging low-carbon materials 3. Omgevingswet (2024); Municipalities can set local CO2 or circularity requirements in zoning and permitting) 4. Circular Economy Program (2030); 50% reduction in use of primary raw materials 5. CPR (2026/2027); mandate carbon footprint data on product labels 6. EPBD (2025); likely to make CO2 emissions from materials part of future EU requirements for all new buildings	Given the global applicability of this methodology, it is not feasible to pre-define the regulatory context of every potential project location. Therefore, the responsibility for assessing regulatory additionality lies with the project developer at the regional or national level. However, we can include some of the regulations you shared with us as illustrative examples within the methodology. We will update the text in order to be more clear on this: "*Given the global applicability of this methodology, regulatory additionality must be assessed at the country or region level by the Project Developer. Each project must demonstrate that the use of low-carbon building products is not mandated or financially covered*

				by local, national, or regional regulations during the crediting period" *In cases where a regulation indirectly encourages the use of low-carbon products, crediting under this methodology should only be permitted if:* ● *The project intervention exceeds the minimum legal or regulatory performance requirement.* ● *The specific product used (e.g., bio-based insulation rather than mineral wool) is not explicitly required by the regulation."*
7	Page 14, 1.6.1 Offsetting Scenario	Text: For example, many countries, states, regions, or Economic zones have set GHG emission targets for the construction sector supported by directives and subsidies, or incorporated the sector into a compliance system (e.g., Milieu Kosten Indicator17 ,etc.), which classify some projects non-additional by default.	Comment: Give me an example of a project that meets all criteria.	There are cases where existing regulations address emission targets in general, but not specifically within the building sector or specifically for the use of low carbon building products or If the regulation promotes a certain level of GHG reduction, but the project delivers additional carbon removals, the impact can be seen as beyond-compliance. We will add text: "*If the regulation indirectly encourages low-carbon products (e.g., NZEB/BENG or future EPBD), crediting should only be allowed if:* ● *The intervention exceeds the minimum legal requirement.* ● *The specific product choice (e.g., bio-based insulation instead of conventional mineral wool) is not explicitly required.*"
8	Page 18, 1.10 Co-benefits	Text: Proba expects that every project that	Comment: Not clear if this is mandatory to implement	Based on the Proba standard "P*roba* ***encourages*** *projects that create a*

		utilizes this methodology, contributes to at least one or more UN Sustainable Development Goals20 next to number 13 (Climate Action), and expects that Project Developers will take these into account when preparing and designing a project.		*positive impact beyond climate benefits. A GHG Project can deliver more than just GHG Yield and contribute to many other areas, such as biodiversity, climate adaptation, water resources, social and health benefits, economic benefits, and more. The Project Developer will describe any co-benefits that the Project will realize or contribute to, beyond SDG 13 "Climate Action". The inventory and documentation can be done using the Sustainable Development Goals to indicate what impact areas the 21 projects are contributing to it.*"
9	Page 19, 2.1 Spatial boundaries	Text: However, the direct measurement, reporting, and verification (MRV) procedure is limited to the delivery/selling of the product to the constructor, at which point credits are issued.	Question: Does a 'pre-sale', contract base, meet these requirements?	Yes because then, there's enough proof for VVBs. The pre-sale contract should be signed by every party involved and the blueprints of the construction can be used for additional proof
10	Page 28, Equation 4 - Total GHG emissions reduction and removal	Text: The Project Developer should identify any such potential reversal risks and then include them as part of the POD in the form of a Buffer Pool.	Question: In order to meet a certain standard in the market, can Proba give guidelines on how to calculate the buffer pool %?	The buffer pool will be decided during the development of POD. Based on Proba standard: "*For each GHG Project, the standard contribution to the Buffer Pool is set to **10%**. Proba will assess the various risks (environmental, regulatory, project implementation) that may lead to premature reversal or lack of Permanence of each project.*"
11	Page 31, 4.2 Reporting	Text: Monitoring reports must include the following:	Comment: In terms of biobased materials, I would suggest adding proof of non-invasive species. If not, this could harm the surrounding area.	We added it in the section *4.2 reporting "For biobased materials, evidence must be provided to confirm that only non-invasive species are cultivated and used. This is necessary to prevent potential ecological harm to surrounding areas due to the introduction of invasive species.*"

12	Page 31, 4.3 Verification		Question: Can this be the same body? Or does the validation and verification need to be conducted by separate companies?	It **can** be the same body. According to the Proba standard: “ISO 14064-3 doesn’t specifically state that the same auditor from a VVB can’t perform both Project Validation and Project Verification… Proba requires the VVB to appoint different auditors for Validation and Verification.”
13	Public consultation comment by Miguel Matos Reurings en Bram Westerlaken via email		Dear Proba, I have just gone through your ‘GHG Methodology Use of low-carbon building materials to transition to low-carbon construction’ The document was certainly clear to us. As an additional suggestion, you could think about including a quality assurance plan in accordance with the WKB(Wet kwaliteitsborging), to ensure the quality of the completed buildings. Other than that, I have no comments on the document; it aligns with what we have read and heard so far, and it definitely appears to be a well-founded, transparent methodology. If there are any more parts that you’d like us to look at, feel free to contact us again!	We added in the Monitoring table of section *4.1 Monitoring i*n the usage stage the text: “*Finally, project developer should provide a quality assurance report and highlight the quality expectation of the construction”*

Feedback from additional stakeholder consultation

The following additional feedback was provided to our questionnaire. In the response column the implications (if any) for the methodology can be found.

Questions for farmers, project developers, or agricultural cooperatives			
Background: On-farm activities and inputs (such as harvesting, irrigation, logging, or the use of fuel, fertilizers, and pesticides) are essential for calculating upstream emissions.			
Question 1: Do you currently keep records of your main activities and the use of inputs (e.g., fuel, fertilizers, pesticides)?			
Company name	Stakeholder type	Feedback/Answer	Response
ASR duurzaamheid	Farmer or farmer representative	Yes	These answers indicate that the required information for upstream emission calculations is readily available within existing management systems. However, the formats may vary. No changes are required. The methodology already assumes that such data are available from standard farm management or compliance systems.
Fiber agro	Farmer or farmer representative	Yes, this is recorded. We are also required to account for this annually for legislation and target setting.	
Biobuilders	Manufacturer/Distributor of building products	Farmers producing for BioBuilder keep such records. The format or structure is unknown but flexible to complete.	
Agrifirm	Farmer or farmer representative	Yes	
Question 2: How detailed are these records?			
ASR duurzaamheid	Farmer or farmer representative	Accurate so that I comply with regulations and have insight into my consumption.	This feedback confirms that the methodology's data requirements for upstream emission calculations are realistic and compatible with current farm practices. No changes are required.
Fiber agro	Farmer or farmer representative	The records are accurate to the kilogram at the farm level. This applies to, among other things: fertilisers and pesticides, also at the plot level.	

Agrifirm	Farmer or farmer representative	Depends on the input. For all inputs are invoices, except manure (probably they have some documentation/less detailed) It will be difficult to find information regarding the amount they used per ha	
Question 3: Do you collect the data in a structured manner (e.g., via a spreadsheet or similar format) so that it can be easily shared with an auditor?			
ASR duurzaamheid	Farmer or farmer representative	Yes	The responses show that while most stakeholders can readily provide verifiable data, some farms may still rely on semi-structured sources such as invoices. No changes are required.
Fiber agro	Farmer or farmer representative	Are recorded in management information systems	
Agrifirm	Farmer or farmer representative	PDFs with the invoices	
Background: To calculate carbon sequestration and greenhouse gas reductions, we need to know the total amount of biomass that reaches the manufacturer. This can be expressed in volume, fresh weight, or oven-dry weight.			
Question 4: How do you measure or record the total amount of biomass you sell to the manufacturer (e.g., weighing at harvest, weigh scale for freight, volume estimation)? Or if you are new to this crop: how do you plan to measure and record this?			
ASR duurzaamheid	Farmer or farmer representative	N/A	This feedback confirms that the data required for quantifying emission reductions and carbon sequestration are already available and traceable through existing commercial documentation. No changes are required.
Fiber agro	Farmer or farmer representative	The sales volume is expected to be weighed per delivery (per truck/tractor over the weighbridge).	
Biobuilders	Manufacturer/Distributor of building products	Mass is determined during transport (weighbridge) and during production through load cells in the production process	
Agrifirm	Farmer or farmer representative	The manufacturer will weigh the total harvested biomass, depending if it is dry or fresh. Most of the times is dried on the field (10-15% moisture)	
Question 5: At what stage are the measurements taken? (e.g., on the farm, during storage, or after delivery)			

ASR duurzaamheid	Farmer or farmer representative	weighing freight upon departure	This approach ensures traceability and accuracy, as weights are verified at transfer points (e.g., farmer location or manufacturer intake). No changes are required.
Fiber agro	Farmer or farmer representative	Upon delivery to the buyer or at all levels for our own management information.	
Agrifirm	Farmer or farmer representative	Mainly in the manufacturer storage area (this will happen for sure)	
Question 6: Do you receive an official ticket or document stating the measured weight?			
ASR duurzaamheid	Farmer or farmer representative	Yes	These payment documents ensure transparency and verifiability in biomass transfer reporting. No changes are required.
Fiber agro	Farmer or farmer representative	Yes	
Agrifirm	Farmer or farmer representative	Manufacturer will pay per tone of raw material (proof of payment per tone)	
Background: Losses between harvest and sellable biomass (such as drying loss, chipping waste, or quality rejections) affect the carbon sequestration calculation.			
Question 7: Do you record information on harvest or processing losses before sale (e.g., percentages, weights, or quality checks)			
ASR duurzaamheid	Farmer or farmer representative	No	It is recognised that information on harvest and processing losses is currently limited or estimated rather than directly measured. This is a common challenge, particularly where losses are small, variable, or occur before formal weighing. The feedback confirms that while loss data are not systematically recorded, they can often be inferred from processing records or through conservative assumptions. The methodology is specifying: “Where direct measurements of harvest or
Fiber agro	Farmer or farmer representative	No	
Agrifirm	Farmer or farmer representative	They use assumptions	
Biobuilders	Manufacturer/Distributor of building products	Harvest losses are not tracked by BioBuilder. Processing losses and rejections can be recorded or reprocessed back into production.	

			processing losses are unavailable, project developers may apply conservative default factors or assumptions supported by literature, field studies, or manufacturer data. Where possible, processing loss data (e.g., rejections, drying loss) should be documented and used to refine project-specific estimates over time.”
Question 8: Does the manufacturer provide feedback or information on how much material is accepted or rejected?			
ASR duurzaamheid	Farmer or farmer representative	Yes	This practice provides a valuable basis for validating loss rates and improving the accuracy of biomass accounting. However, the feedback also highlights that such information is not yet systematically reported across all supply chains. Changes in the methodology are included in the previous questions' response (see above).
Fiber agro	Farmer or farmer representative	No experience with this yet myself, but I see it with colleagues. Detailed consultation takes place on quality and rejection, with settlement occurring in terms of quality and quantity	
Agrifirm	Farmer or farmer representative	They use assumptions	
Background: Relationships and documentation between farmers and manufacturers.			
Question 9: Who are your regular customers (e.g., board material producer)?			
ASR duurzaamheid	Farmer or farmer representative	N/A	The feedback confirms that most biomass sales occur between producers and processors or manufacturers, depending on the crop and market structure. This aligns with the supply chain assumptions in the methodology, which define the manufacturer as the receiving point for quantifying biomass transfer and emissions. No changes are required.
Fiber agro	Farmer or farmer representative	This depends on the crop and the customer. For Paulownia, for example, we expect to sell to a processor who makes a semi-finished product. Miscanthus could also be sold to a processor who ultimately makes a final product from the crop.	
Agrifirm	Farmer or farmer representative	Retailer or manufacturer (depends on the crop). For miscanthus probably is the manufacturer, but for a straw there will be a middle man (processor)	

Question 10: What documents do you issue upon sale (e.g., invoice, delivery note, batch ID)?			
ASR duurzaamheid	Farmer or farmer representative	Delivery note	Stakeholders confirm that sales are documented through formal delivery and invoicing processes, which include weight and quality details. This documentation provides sufficient traceability for verification of biomass quantities delivered to manufacturers and supports consistency with chain-of-custody and MRV requirements. In the methodology in the MRV section, under “Proof required for project intervention,” it is listed that for production and manufacturing records, delivery notes, invoices, and weighbridge tickets can be used as acceptable forms of documentation.
Fiber agro	Farmer or farmer representative	We have not sold any products yet, only purchased material. My expectation is that we will receive an overview per delivery (freight) from the customer of the delivered crop (qualitatively and quantitatively), which will then be linked to the invoice	
Agrifirm	Farmer or farmer representative	The buyer will provide the weigh and the documentation with details about the crop	
Question 11: What documents do you receive from the manufacturer (your buyer) upon receipt of the biomass (e.g., purchase order, receipt confirmation, acceptance report, quality or moisture results)?			
ASR duurzaamheid	Farmer or farmer representative	N/A	The feedback confirms that upon delivery, manufacturers will issue documentation such as acceptance reports or delivery confirmations including quantitative and qualitative data. No changes are required.
Fiber agro	Farmer or farmer representative	Has not taken place yet.	
Agrifirm	Farmer or farmer representative	The manufacturer will provide the total amount of raw material with some information regarding the losses (depends)	
Question 12: Do you maintain batch or plot IDs that track the biomass to the buyer? What identifiers are on your delivery documents?			
ASR duurzaamheid	Farmer or farmer representative	N/A	The responses show that while batch or plot-level tracking is not yet standard across all producers, such systems could be readily integrated into existing delivery documentation (e.g., through invoice or
Fiber agro	Farmer or farmer representative	Has not taken place yet.	

Biobuilders	Manufacturer/Distributor of building products	Distinguish between a farmer producing for BioBuilder on their own site and farmers in the region supplying material. In practice, this varies between own harvest, farmer-to-farmer transport (both using tractors without CMR), or truck transport with CMR. The producing farmer must maintain complete input administration for their production.	batch identifiers). Manufacturers already require some form of input traceability, particularly for material quality control, which can be leveraged for carbon project monitoring. In the methodology in the MRV section under "Proof required for project intervention," it is added: "Traceability documentation linking each biomass delivery to its source (e.g. batch ID, plot ID, invoice number, or delivery note reference)"
Agrifirm	Farmer or farmer representative	NO, maybe they can create a batch number if they are involved in a carbon project, maybe an invoice ID	
Background: CRCs (Carbon Removal Certificates) are issued when harvested biomass is sold to the manufacturer; we need to confirm when the proof of sale is generated.			
Question 13: At what point do you issue invoices (upon delivery, after weighing, monthly batch invoicing)?			
ASR duurzaamheid	Farmer or farmer representative	upon delivery	The feedback confirms that invoicing generally occurs at or immediately after delivery, following confirmation of measured weight and quality. This aligns with the methodology's definition of the crediting event. For clarification, in the methodology under the section 5.1 it is added : "Invoices or equivalent proof of sale must be issued once the biomass delivery has been verified for weight and quality, as this marks the crediting event for CRC issuance."
Fiber agro	Farmer or farmer representative	I expect after delivery and determination of quality and quantity.	
Biobuilders	Manufacturer/Distributor of building products	Distinguish between a farmer producing for BioBuilder on their own site and farmers in the region supplying material. In practice, this varies between own harvest, farmer-to-farmer transport (both using tractors without CMR), or truck transport with CMR. The producing farmer must maintain complete input administration for their production	
Agrifirm	Farmer or farmer representative	Invoice after delivery (they sell once per year in most of the cases)	
Question 14: How easy would it be for you to provide this sales documentation to a validator years later?			
ASR duurzaamheid	Farmer or farmer representative	no problem	The feedback confirms that stakeholders can retain and provide documentation, such

Fiber agro	Farmer or farmer representative	No problem.	as delivery notes and invoices, even years later. This indicates that existing business practices already support long-term traceability and verification needs. No changes are required.
Agrifirm	Farmer or farmer representative	If the farmer has kept it, it will be easy. If you are involved as a farmer in this carbon projects you must keep record	
Question 15: How long do you typically keep sales and delivery records (e.g., 2, 5, 10 years)? 10 years			
ASR duurzaamheid	Farmer or farmer representative	10 years	The feedback confirms that farmers already retain documentation for at least 10 years, which aligns with standard legal and fiscal requirements. No changes are required.
Fiber agro	Farmer or farmer representative	Minimum 10 years, which is required for the tax authorities.	
Agrifirm	Farmer or farmer representative	depends	
Background: The methodology requires an assessment of permanence and risk.			
Question 16: How confident are you that the biomass supply can be maintained year after year (e.g., crop rotation, climate/weather risks)?			
ASR duurzaamheid	Farmer or farmer representative	Reasonably certain	The feedback confirms that stakeholders have confidence in maintaining stable biomass supply through perennial cultivation and structured contracting. No changes are required.
Fiber agro	Farmer or farmer representative	I cultivate perennial crops, so the annual supply is stable.	
Biobuilders	Manufacturer/Distributor of building products	Supply should be directly contracted with farmers; this is subject to the described harvest risks. Backup supply should be arranged in other regions/countries to ensure continuity	
Question 17: What are the main risks in your supply chain (drought, pests, storage capacity, machinery)?			

ASR duurzaamheid	Farmer or farmer representative	Drought	The feedback confirms that weather and climate variability represent the main risks affecting biomass production and delivery. These insights align with the methodology's current framing of permanence and risk assessment, which includes climatic and agronomic factors. No changes are required.
Fiber agro	Farmer or farmer representative	As a grower of Miscanthus and Paulownia, my risks in delivery (quality and quantity) are related to weather conditions (moisture supply). In the event of storm/fire damage, the impact can be significant.	
Background: Projects must also contribute to the SDGs (Sustainable Development Goals) beyond climate goals (section 1.10).			
Question 18: What benefits do you see in producing biomass for building materials (additional income, soil health, crop diversification, rural employment)?			
ASR duurzaamheid	Farmer or farmer representative	Diversification	The feedback confirms that such projects generate significant co-benefits beyond GHG mitigation—particularly in supporting climate resilience, soil regeneration, economic diversification, and sustainable construction practices. No changes are required. A reference to the relevant SDG contributions is already included in the methodology, as described in the supporting document available at https://edepot.wur.nl/640116
Fiber agro	Farmer or farmer representative	Climate (13): By cultivating perennial crops (good for the soil) that manage water and nutrients very effectively and store large amounts of carbon. Sustainable Cities and Communities (11): By using natural (circular) building materials. Good Health and Well-being (3): By integrating natural building materials into homes. Decent Work (8): By deploying capital (land, money, labour) more responsibly in a new sustainable chain. Life on Land (15): By contributing to the cultivation of crops that promote healthy soils, improve water quality (also SDG14) and thus improve ecosystem services, water, and biodiversity. Partnerships (17): Is necessary to build the chain (from land to building).	
Biobuilders	Manufacturer/Distributor of building products	BioBuilder has not yet specified this; it is unclear how it should be demonstrated. There are opportunities for SDGs 9–11–15–17.	

Agrifirm	Farmer or farmer representative	Extra income, crop diversification, it becomes profitable for farmers to grow biomass crops	
Question 19: Do you expect challenges with local communities (land rights, land use conflicts, cultural acceptance)?			
ASR duurzaamheid	Farmer or farmer representative	limited	The feedback confirms that community-level risks are low and that local stakeholders are generally supportive of biomass cultivation for building materials. This aligns with the methodology's expectation that such projects generate positive local impacts, particularly in rural areas. No changes are needed.
Fiber agro	Farmer or farmer representative	To date, the challenges lie in the fact that the crop is new, with governments being the biggest challenge. Citizens and landowners are often very enthusiastic.	
Agrifirm	Farmer or farmer representative	NO	
Questions for building material producers and construction companies			
Practical expertise: The methodology asks for a formal contract in which the builder commits to using the specified quantities, invoices and delivery notes that reference the project ID, a confirmation after delivery that the products were not returned or reused			
Question 20: Will contractors and suppliers be able to provide the PCF/LCA (e.g., EPDs), lifespan data, and contracts that the methodology requires?			
SAM Group B.V	Manufacturer of building products	In my view, the responsibility for the entire administration should lie with the builder. From my perspective, it is not possible to verify whether a fibre goes to interior construction or to the builder. For them, it's simply a matter of project registration, from which they know what has been used.	We recognize that developing EPDs and PCFs can be resource-intensive, especially for emerging materials and start-ups. Therefore, Section 3.1 of the methodology already permits the use of data from recognized national or regional databases (e.g., CAALA in Germany, MPD in the Netherlands) as alternative verified sources No changes are required.
Biobuilders	Manufacturer/Distributor of building products	Contracts with clients should be feasible, but referencing specific construction projects will not always be possible	
Agrifirm	Farmer or farmer representative	○ a formal contract committing the constructor to use the specified quantities	

		■ It is imperative. Sometimes the constructors order and they don't want it ○ invoices and delivery notes that reference the project identifier ■ Yes they use these type of documents ○ a post-delivery confirmation that the products were not returned or reallocated. ■ Yes, the builder should sign and indicate how much of the product he used	
BPD	Area developer	The market is still new, making LCAs expensive to set up. For start-ups, creating EPDs is particularly costly. This is why the Milieu database will never be fully complete. In Germany, the CAALA database is used and considered useful.	
DGBC	National civil society organization	We are not there yet. In the Netherlands you need MPD. It exists for design but not for execution.	
Market perspective			
Question 21: How do you view the scaling up of biobased/recycled materials in your projects? What are the obstacles?			
SAM Group B.V	Manufacturer of building products	Demand is steadily growing. The main obstacle at this point is the price. Building materials are a typical example where the economy of scale is crucial. This is also why, within the LVVN focus groups, I argued that the unprofitable top financing should be allocated to the producers. After all, if the price is temporarily reduced at the production level, the construction sector will increase its uptake, and we can guarantee more sales for the farmers. During this temporary phase, we can scale up and grow towards a larger-scale, permanent situation together.	Thank you for the valuable insights highlighting both the positive market trajectory and the main barriers to scaling biobased and recycled materials. No changes are required

Biobuilders	Manufacturer/Distributor of building products	We do not execute projects ourselves but produce and supply building materials. Scaling currently occurs mainly through coordinated programs and covenants via Building Balance, NABB, etc	
Agrifirm	Farmer or farmer representative	The builder has to make sure that he used the product and that he is the owner of the credits or he is paying for the CO2	
BPD	Area developer	It remains hard for large projects due to financial barriers and product availability. Especially recycled materials are difficult to source because of the lack of LCA data.	
DGBC	National civil society organization	Lobby for biobased material. The Metropole region of Amsterdam is stimulating it. Lots of talk, not much execution yet. Biobased is just replacement	
Credibility			
Question 22: Does the methodology's approach regarding data, sustainability, and risk align with how projects in your network are actually designed and executed?			
SAM Group B.V	Manufacturer of building products	I would prefer an approach based on the Cradle to Grave principle. We can continue to recirculate our products, but this is currently not valued in the calculation models. By applying this method, producers are also made directly responsible for the use of their products after the initial application.	The methodology already applies a practical Cradle-to-Grave approach, consistent with ISO 14067, ISO14064, and EN 15804 by estimating use-phase and end-of-life impacts through standardized scenario-based modeling rather than direct quantification. This ensures completeness and comparability while keeping data collection feasible for project developers.
BPD	Area developer	Currently it is not that transparent. The biobased initiative by Rabobank is more transparent. Check building balance. They try to set up this chain. They try to form contracts between producers and manufacturers	
Product scope			
Question 23: Are the eligible product categories broad enough? Should certain product groups be prioritized (e.g., insulation, concrete alternatives, wood)?			
Agrifirm	Farmer or farmer representative	It's broad enough. (think about Cladding)	Thank you for the feedback.

DGBC	National civil society organization	The focus should be mainly insulation and concrete substitutes	No changes are required.
Communication			
Question 24: How should the results be presented to residents, municipalities, or investors?			
SAM Group B.V	Manufacturer of building products	There should be a standard as a prerequisite before construction is permitted. In other words, if you do not meet the CO_2 standard, you should not be granted a building permit.	Thank you for the feedback. No changes are required.
Agrifirm	Farmer or farmer representative	We need people that are willing to pay for the CO2	
BPD	Area developer	Focus should be on CO_2 reduction rather than insetting/offsetting through credits. It is difficult to sell the concept to residents. Municipalities generally don't have high standards or expectations for CO_2-focused projects. CO_2 reduction is mainly interesting for investors	
CRC and ERC			
Question 25: Is the distinction between Carbon Removal Certificates (CRCs) and Emission Reduction Certificates (ERCs) clear, especially regarding the different moments of issuance and the impact that must be included for each to prevent double counting?			
SAM Group B.V	Manufacturer of building products	The distinction is clear; however, as mentioned, I would include the Cradle to Grave principle.	Thank you for the feedback. The methodology's structure is developed that way that prevents overlap between removal and reduction claims while maintaining verifiability. The emphasis on the manufacturing/production is given in the methodology by emphasizing the stage A3 of the lifecycle. No changes are required.
Biobuilders	Manufacturer/Distributor of building products	There is heavy emphasis on agriculture and construction but less on the processing/production phase	
Agrifirm	Farmer or farmer representative	Yes it is clear	

DGBC	National civil society organization	Reluctant on emission reduction certificates	
Timeline between harvest and start of construction			
Question 26: We want to establish a clear and workable maximum period between the issuance of ERCs and the start of construction, so that product substitution occurs in a timely manner and the carbon benefit remains linked to actual activity. In the current draft version of PM.0003, this window is set at 24 months. Is this timeframe adequate?			
Biobuilders	Manufacturer/Distributor of building products	Harvest and construction start are completely separate. There are storage, processing/production, and storage stages in between.	The comments confirm that there are multiple stages between biomass harvest and construction use, and that flexibility is needed while ensuring traceability and timely crediting. The methodology is updated. The Section 1.4 Applicability is updated: "*the construction project must start within a maximum of 36 months from the date of certificate issuance.*"
Agrifirm	Farmer or farmer representative	3 years maximum (maybe introduce a range)	
BPD	Area developer	Hard to provide input on the 24-month timeline. Building companies should be able to say something about this. We discussed the sequence of activities: First, the provisional assessment of the construction is developed. Then the building products are ordered. Finally, the constructor starts building.	
General feedback			
Fiber agro	Raw material producer	With this methodology, it appears that the focus is only on carbon in the output (of the crop) and not on the sequestration which also takes place during cultivation in the soil.	The comment regarding soil organic carbon (SOC) is noted. SOC dynamics are outside the scope of this methodology, which focuses specifically on carbon removals and GHG reductions associated with low-carbon building materials. It will be considered for future versions The reference from BPD is appreciated and confirms the methodology's potential applicability in real estate and construction
BPD	Area developer	BPD suggested the methodology might be relevant for the BPD Woningfonds.	

			financing contexts such as the BPD Woningfonds.