

Measuring what matters

Assessing Social Value at Corbion



*At Corbion we preserve
what matters*

At Corbion, we exist to champion preservation in all its forms, preserving food and food production, health, and our planet. For any company with such a core purpose, quantifying and minimizing the ways its business affects the environment and natural resources on which the world's future depends is essential. Our effort and investment in conducting Life Cycle Assessments and pursuing science-based targets toward that end has been substantial and ongoing. Our work to understand, through Social Value Assessments, how Corbion products impact the lives of workers, users, small-holders, and local communities also has been significant and uniquely challenging.

Preserving what matters

By 2030, we aim for 100% of Corbion products contributing to preserving food and food production and/or contributing to preserving health covered by Social Value Assessment (SVA).

ALIGNING OUR VALUES WITH OUR BUSINESS

Care – one of Corbion's four corporate values (*Collaboration, Care, Courage and Commitment*) – is reflected in our focus on ensuring that our business has a positive impact on people throughout our entire value chain. A number of programs have been established to put this focus into action, including our sustainable sourcing program, which uses a combination of policies and codes, self-assessments, risk assessments, and certifications to make sure we procure our raw materials responsibly and work with suppliers that share our values. Within our own operations, we strive to achieve a zero-incident culture, an aspiration reinforced by the Corbion Safety Excellence program and certifications such as ISO 45001 or OSHA (Occupational Safety and Health Administration). Corbion's *Care* value also extends to the products we manufacture, which is why we measure their impact on consumers and their contribution toward the [United Nations Sustainable Development Goals \(SDGs\)](#).

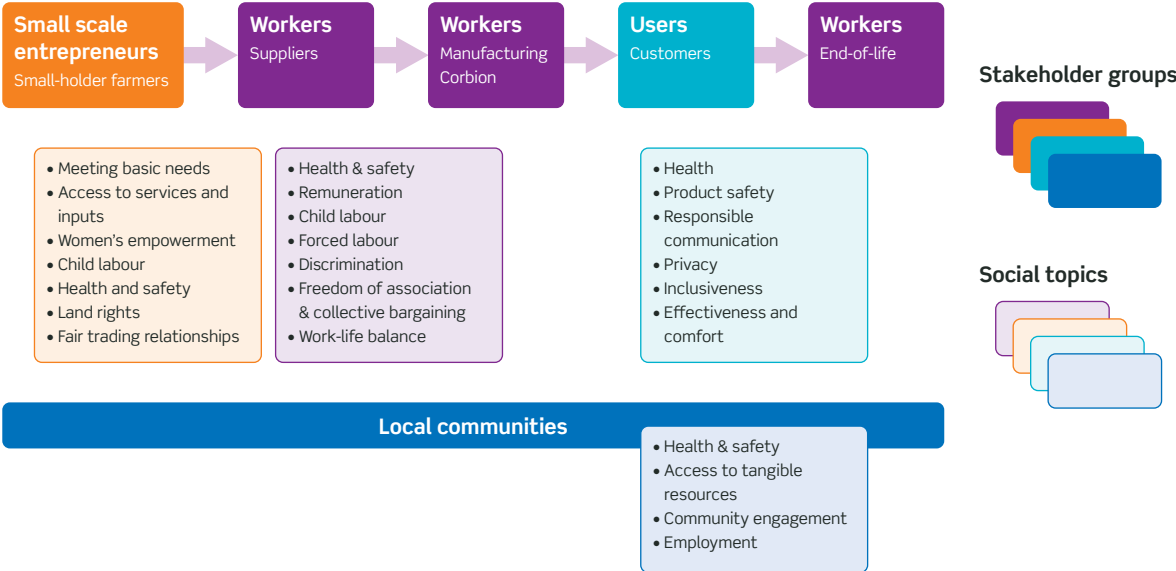
By 2030, we intend that 80% of our products will contribute to preserving food and food production, health, and/or the planet.

To support this ambition, by 2030, we intend to perform a social impact assessment for all products that contribute to preserving food and food production and/or preserving health. Corbion joined the [Social Value Initiative \(SVI\)](#)¹ to better understand how we could meet this target.

Facilitated by leading sustainability consultant PRé Sustainability, SVI is “a community of professionals striving to make a difference for workers, local communities, small-scale entrepreneurs, and users through knowledge exchange in an industry-driven initiative that combines scientific rigor with pragmatism.” Corbion's fellow partners in SVI include BASF, DSM, Fuji Oil Europe, Richemont, and LG Chemical. SVI offers guidance to companies and organizations in order to help them identify viable and credible ways to measure the social impact of the products and services they sell. The consensus-based SVA methodology, outlined in the [Handbook](#) published by SVI, was developed to help accomplish this objective.

¹ Formally named Roundtable for Product Social Metrics

The Handbook describes a standardized approach to assessing both the positive and negative social impacts of products and services on four stakeholder groups: workers, users, local communities, and small-scale entrepreneurs. These stakeholder groups include all people who may be directly or indirectly affected throughout a product's overall life cycle. Each group is associated with specific social topics, as defined in the [Social Topics Report](#) developed by SVI. The topics for each stakeholder group are shown in the figure below.



The Handbook also includes performance indicators that reflect any positive or negative impacts associated with the assessed products. The assessment uses a 5-point reference scale in scoring social performance:

- 2+** Best in class, continuous improvement
- 1+** Beyond generally acceptable situation, continuous improvement
- 0** Generally acceptable situation
- 1-** Unacceptable situation but improving
- 2-** Unacceptable situation, no improvement

SVI member companies initially performed case studies in order to better understand the methodology. Corbion assessed the social impact of two products from our meat extended shelf-life solutions portfolio. Further information about the study can be found [here](#). Learnings from these cases were used to inform improvements made in subsequent versions of the Handbook.

Next, Corbion endeavored to scale up the SVA to address social impacts at the portfolio level, developing a tailored approach to reducing the complexity of the assessments. This approach, leveraging standardized methodology and data sources, offered benefits in terms of greater efficiency, robustness, comparability, and credibility of the results obtained.

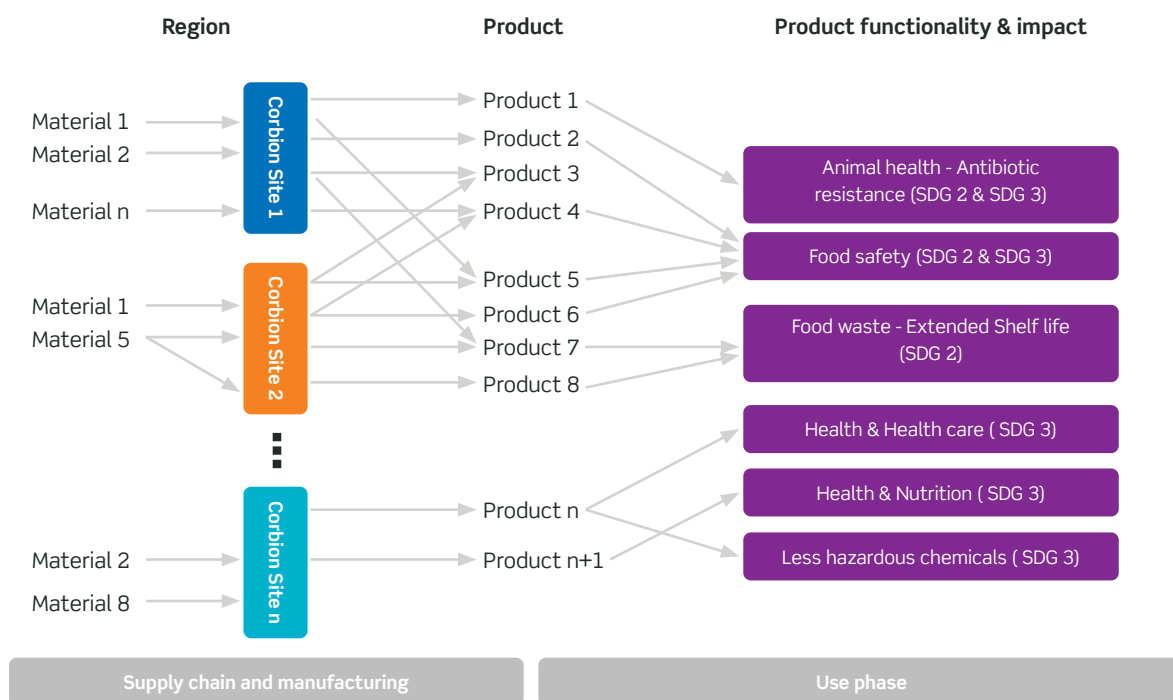
“Corbion’s portfolio approach provides a well-structured and practical way of applying the SVA methodology on a large amount of relatively similar products. Important methodological decisions are well explained. The guidance in the portfolio approach is clear and complete and describes a transparency and technically valid approach. In the future, the same approach can be applied to other products in the portfolio.”

- Mark Goedkoop, Rosan Harmens (PRé Sustainability)

PERFORMING A SOCIAL VALUE ASSESSMENT AT CORBION

SVAs, as conducted by Corbion, are aligned with the Handbook, with specific elements added to the methodology, namely:

1. Assessment of each Corbion manufacturing site and supply chain
2. Assessment for the use phase for product groups, based on functionality, market application, and impact for our customers and end consumers.



Corbion manufacturing sites work in conjunction with a regional procurement department. The same supply chain is often shared by multiple final products at a given manufacturing site. For this reason the value chain assessment is performed for all suppliers to each site. The assessment of the use phase is aligned with a product’s market application and functionality. Unique aspects of our approach include:

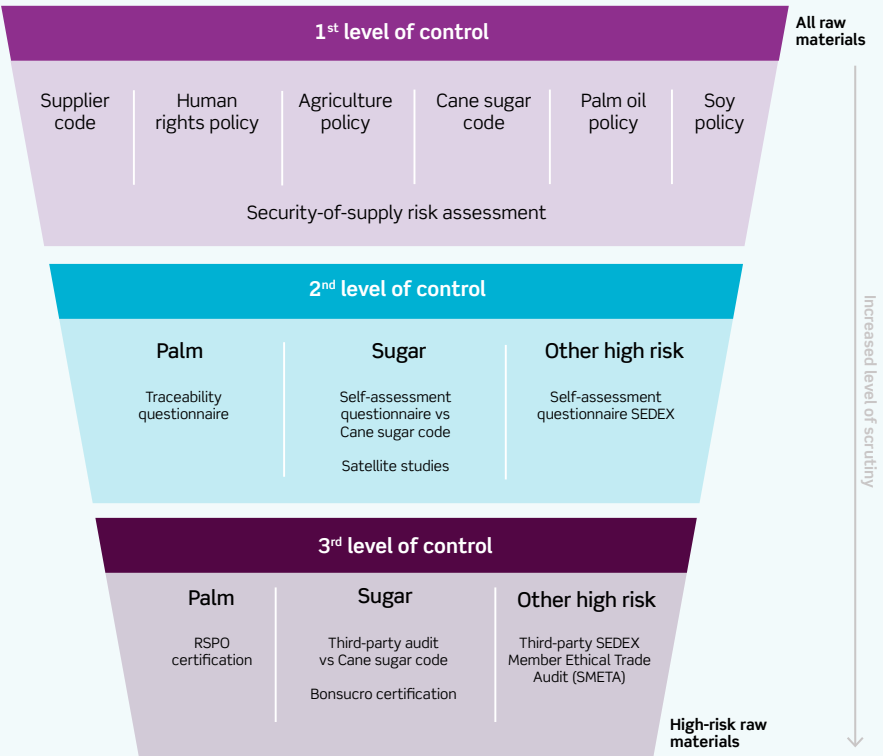
- Structured data collection with preferential use of verified data sources already available in the company. The data collection for the value chain is aligned with Corbion’s program for responsible sourcing.
- Guidance on how to use the results of the impact assessment to improve the consistency and transparency of the SVA.

The SVA framework at Corbion comprises five steps, based on guidance outlined in the Handbook provided by the Social Value Initiative. These steps are described in greater detail in the paragraphs that follow.



DATA SOURCES RELATED TO CORBION'S SUPPLY CHAIN

Corbion's responsible sourcing program uses a variety of data sources to assess risks associated with the procurement of raw materials. Our annual security of supply risk assessment uses RepRisk to assess supplier risk. The platform uses its own unique methodology and artificial intelligence to analyze the Environmental Social and Governance (ESG) risk of a supplier company, and scores each of our suppliers based on their ESG performance. Corbion also uses the Supplier Ethical Data Exchange (SEDEX), specifically, the SEDEX Members Ethical Trade Audit (SMETA). This third-party social audit helps us monitor supplier performance for health and safety, human rights, and other social issues. For our verified responsibly sourced sugar program, we rely on a combination of supplier self-assessment questionnaires and on-site audits. Data collected from each of these sources provides key inputs to our SVA, and is complemented with additional data sources when needed.



1. OBJECTIVES, GOAL AND SCOPE

Several key activities outlined in the Handbook help determine the goals and scope of social value assessments at Corbion, including: the delineation of product life-cycle stages; the definition of initial system boundaries; and the exploration of potential positive impacts associated with the product. This work produces two significant outputs:

1. An understanding of the product system, the assumptions about its use and end of life, and functional unit.
2. A list of process of value chain actors that require further investigation during the hotspot identification phase.

As mentioned previously, products that have the potential to impact the preservation of food and food production and/or health are in scope for Corbion's SVA. To implement our approach systematically, we look at products made one Corbion manufacturing site at a time. This allows us to define system boundaries for a specific region, including what stakeholder groups are relevant to the study, as well as potential data collection needs. As minimum requirement, our SVAs cover the following stakeholder groups: workers, users, and local communities. SVAs for our product portfolios focus on key life-cycle stages: supply chain, manufacturing, and use.

Assessment of our supply chain centers on Tier 1 suppliers with the intention of including Tier 2 and beyond. Data regarding our Tier 2 suppliers often can be difficult to obtain due to limited availability. However, when this data can be acquired through our Tier 1 suppliers, Tier 2 data is included in the scope of the assessment. Such is the case, for example, in our sugar supply chain, where data concerning farmers is collected via our Tier 1 suppliers in accordance with the Bonsucro certification and Corbion's own [program for responsibly sourcing sugar cane](#).

Because Corbion is a B2B ingredient supplier, our user assessments include both the manufacturers purchasing and using our ingredients to make end products (Corbion customers) and the consumers of those end products.

Corbion products contributing to the preservation of food and food production and/or health are primarily consumed by humans or animals through food, feed, or medical applications, so the end-of-life stage is not considered. Exceptions include products for market applications in chemicals or home and personal care. For example, our Sanilac® is a lactic acid-based disinfectant used in home and industrial cleaning applications that is less toxic and more biodegradable than conventional alternatives.

2. MATERIALITY ASSESSMENT

The purpose of the materiality assessment is to identify relevant social topics to ensure that the SVA encompasses those topics. Corbion performed a materiality assessment as part of its SVA approach, providing specific guidance regarding material social topics to be covered for the value chain and the use phase. This materiality assessment uses as starting point the material topics identified in the [Corbion materiality matrix 2020](#). These topics were associated with existing Corbion policies and statements and were linked to social topics in the Handbook, as shown in the table below.

Material theme from Corbion materiality matrix	Corbion definition in materiality assessment	Examples of relevant Corbion documents ²	Social topic in Handbook from SVI	SVA Stakeholder group
Safe and healthy working environment	Provide a safe and healthy working environment for all employees, contractors and visitors, and promote a safety culture in the supply chain.	Corbion EHS policy	Occupational health and safety	Workers
			Health and safety	Small scale entrepreneurs
Innovation for safe, healthy, and sustainable food production	Corbion's food ingredient solutions support the sustainable production of safe, healthy, and affordable food and prevention of food waste along the value chain.	Measuring what matters	Health and safety Affordability	Users
Sustainable procurement	To ensure high-quality materials and security of supply, Corbion aims to manage social and environmental risks within its supply chain in a responsible and ethical way.	Supplier code Sugar cane policy and verification manual ' How do we verify what matters? ' Certifications, such as RSPO, Bonsucro Corbion statements on: Human rights , palm oil , conflict minerals , soy etc.	All topics	Workers
			Child labor Land rights Health and safety	Small scale entrepreneurs
			All topics	Local communities
Product quality and safety	Corbion delivers products that are safe, consistently meeting specifications and delivering expected performance.	Global Quality policy	Health and safety	Users
Responsible business	By conducting business in a responsible fashion, actively enforcing an ethical, anti-corruption culture, Corbion is a trustworthy partner.	Code of business conduct	All topics	Workers
			Responsible communication	Users

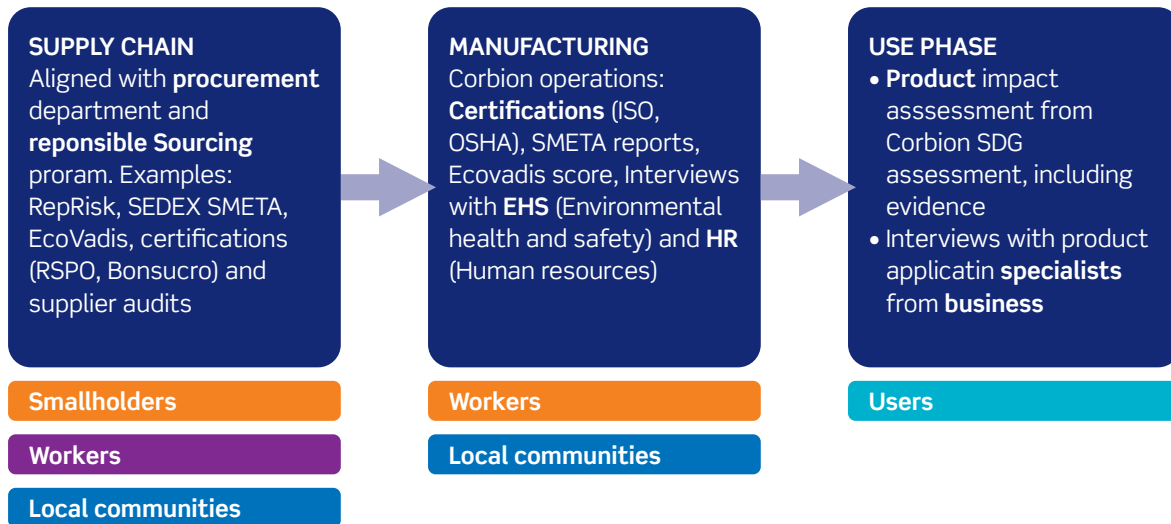
The materiality assessment performed to identify social topics included in the SVA determined that all social topics relevant to the stakeholder groups (workers, small-scale entrepreneurs, and local communities) are to be included in Corbion studies. For users, topics concerning accessibility and privacy are excluded because these are sufficiently covered by corporate policies, given the nature of Corbion products and/or their use in a B2B context. Because Corbion ingredients are sold in the B2B segment, two types of users are considered:

1. **Direct users or professional users** (manufacturing companies using Corbion ingredients) – Relevant social topics are *Health & Safety*, *Effectiveness & Comfort* and *Responsible Communication*. The social topic *Affordability* is not considered applicable when the user is a company.
2. **End users** (consumers purchasing final products that include Corbion ingredients) – Applicable topics include *Health & Safety*, *Affordability* and *Effectiveness & Comfort*.

² <http://www.corbion.com/about-corbion/sustainability/statements-codes-and-policies>

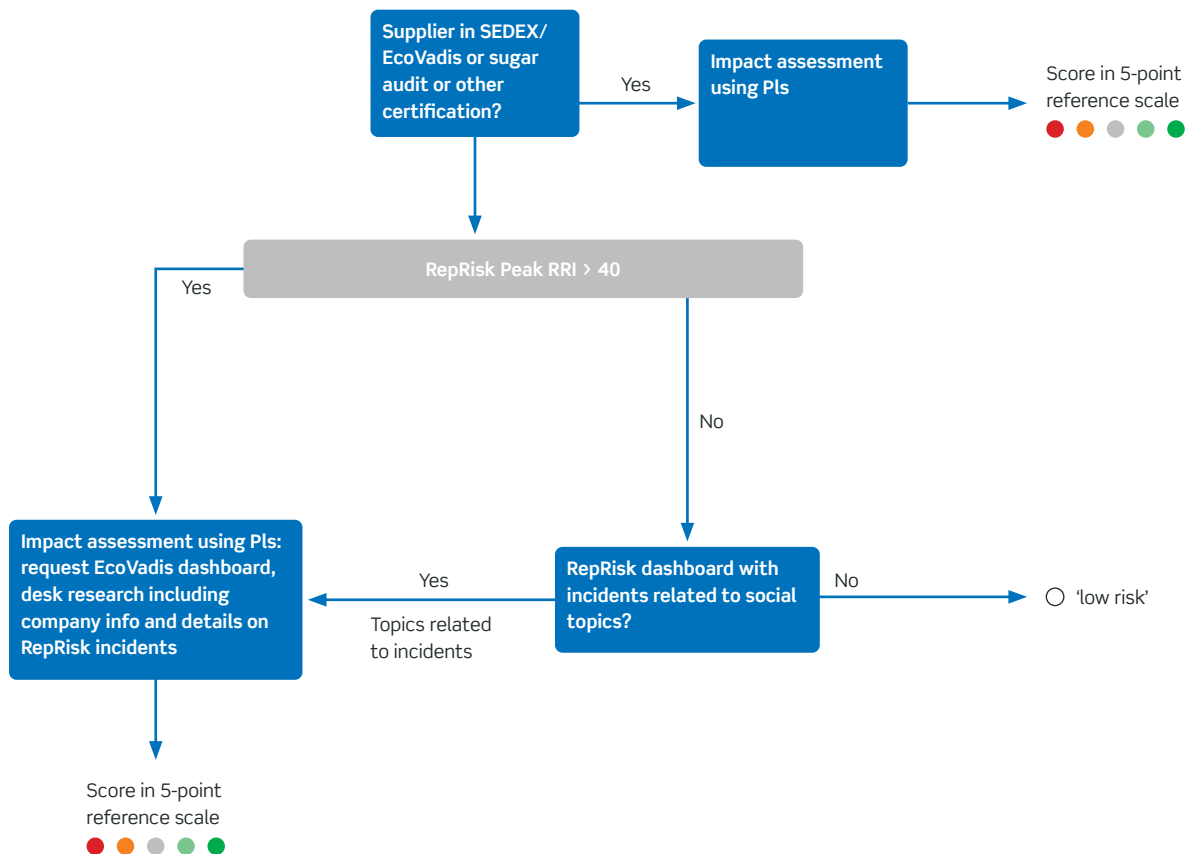
3. DATA COLLECTION

A variety of data sources are used to assess different actors within the value chain. To increase the efficiency in data collection, information available through various departments within Corbion is re-used, with preference given to data sources verified by external parties or based on scientific evidence.



Workers

For workers in the supply chain, the hotspot identification and impact assessment steps are merged using a hierarchy for data collection. This approach leverages high-quality data accessible to Corbion through our responsible sourcing program.



The **first step** prescribed by the methodology involves checking to see if an evaluation of the supplier is available in the form of a recent [SEDEX SMETA](#) (SEDEX Members Ethical Trade Audit) or [EcoVadis](#) report, whether the supplier is covered by any relevant sustainability certifications (such as [Bonsucro](#), [RSPO](#), etc.) Or, in the case of cane sugar suppliers, has undergone a sugar audit based on the [Corbion Sugar Cane Code](#). If any such audits, reports and/or certifications are available, then all material topics are scored using the previously mentioned 5-point reference scale (impact assessment).

In the **second step**, the risk associated with a supplier is assessed using the company's Peak [RepRisk](#) Index (RRI) score. RepRisk is a web-based tool used to determine a company's Environmental, Social and Governance (ESG) risk exposure. The Peak RRI is "equal to the highest level of the RRI over the last two years" – a proxy for overall reputational exposure related to ESG and business conduct risk.

In conducting SVAs, Corbion takes a conservative approach, considering companies with a Peak RRI > 40 to be potentially high risk.³ For these companies, an impact assessment (5-point reference scale) is performed for all material social topics.

In the **third step**, for companies with a Peak RRI < 40, an additional check is performed using RepRisk issues dashboard, covering incidents from the last 4 years. The RepRisk issues dashboard depicts incidents linked to a company in connection with the following social topics: forced labor, child labor, freedom of association and collective bargaining, occupational health and safety issues, poor employment conditions, and discrimination in employment.

Small-scale entrepreneurs

The Handbook describes this stakeholder group as people supplying to markets from which larger companies can source. The SVA is performed to gauge what a company does to support the livelihoods of small-scale entrepreneurs in their value chain. At Corbion, small-scale entrepreneurs are generally smallholder farmers. While we do source agricultural commodities, we do not source directly from farmers. Depending on the commodity, farmers are usually Tier 2 suppliers or higher, so the assessment of this stakeholder group is based on information provided by our Tier 1 suppliers.

The definition of a smallholder farmer varies by country and agro-ecological zone. In general, smallholders are farmers who operate under structural constraints such as sub-optimal access to resources, technology, and markets. Corbion will have the opportunity to assess small-scale entrepreneurs for the first time in 2022, as we continue implementation of our portfolio approach. The SVA will be conducted on Corbion's cane sugar value chain in Thailand using existing cane sugar audits and other data sources (i.e., SEDEX SMETA reports and Bonsucro certification information) to complete the assessment.

³ RepRisk considers scores > 50 to signal "high risk exposure"



Local communities

Local communities are defined as “people living in the surroundings of any one of the life-cycle stages of a given product impacted by the company’s activities.” The assessment of impacts on local communities is based on information from relevant certification schemes (e.g., Bonsucro and RSPO), Corbion Sugar Cane Code verification, RepRisk and interviews with Corbion EHS and HR representatives.

Users

The complexity of assessing impact on users of a product can be reduced by performing the assessment at the product group level. Product groups are defined based on product functionality and market application, taking into consideration both Corbion’s direct customers and the consumers of their end products. Data collected to assess impacts to these stakeholders may include supporting documents providing evidence regarding performance, such as scientific publications, R&D studies by external laboratories, internal test results, customer feedback, examples of commercial applications, certifications and patents. Data also may be collected using questionnaires, or through interviews with business development staff, application specialists and marketing representatives from relevant business units. In addition, our product SVAs are aligned with the Corbion SDG assessment entitled [“Measuring what matters SDG Assessment.”](#)

4. IMPACT ASSESSMENT

Corbion’s SVA framework uses performance indicators for each stakeholder group and social topic as outlined in the [Social Topics report](#), as well as a 5-point reference scale. The social topic reference scales are intended for use following the hotspot identification phase. If the hotspot identification exercise does not reveal potential negative hotspots related to the social topic, we start the assessment from the 0 level and check whether it is potentially a +1 or a +2 level. Note that only one of the performance indicators on each level needs to be checked as “true” to achieve the corresponding score level. The example below illustrates how discrimination is assessed, resulting in a score of zero.

Example of scoring for workers, social topic discrimination:

	Definition of the scale level	Performance Indicators	Evidence /Score
+2	The company or facility has a management system in place that actively promotes non-discrimination in its organization and the entire supply chain. The commitments, performance, progress and effectiveness of programs are reported publicly. The top management of the company or facility have publicly recognized non-discrimination as a key priority.	<ul style="list-style-type: none"> Investments and participation in public and private initiatives and NGOs that effectively deal with the issue. Statements from credible authorities' organizations such as NGOs and unions. 	Only checked if +1 level is achieved
+1	The company or facility has a management system in place that actively promotes non-discrimination in its organization, its subcontractors and its Tier 1 suppliers, for instance by at least two of the following: <ol style="list-style-type: none"> Trainings/education programs and events to raise awareness Employee committees to address certain issues Speak-Up Line Commitments from Tier 1 suppliers 	<ul style="list-style-type: none"> Public statements by the company, workers or unions Description of the management system objectives and timeline 	Absence of public statements related to promotion of non-discrimination and absence of management systems
0	The company or facility has a management system in place to enforce the non-discrimination policy in its company.	<ul style="list-style-type: none"> Wage slips or wage records of workers confirm equal pay for work of equal value. Established grievance mechanisms for workers to report a complaint or raise concerns about any actions that violate non-discrimination policy. 	SEDEX SMETA show no evidence of discrimination Score: 0
-1	Incidents of discrimination have been discovered, the company or facility has established a corrective action plan with a clear timeline for completion.	<ul style="list-style-type: none"> While the company is in an area or sector where this situation often occurs according to statistics, there is evidence that the company has started to address the situation with a clearly defined timeline. The number of complaints, lawsuits and other signals have been significantly reduced during the last 3 years. 	No incidents found
-2	Incidents are reported revealing that discrimination frequently occurs or is part of the company's culture and procedures.	<ul style="list-style-type: none"> Complaints, lawsuits and other indications that may signal issues Absence of positive information while the company is in an area where this situation often occurs according to statistics. 	Only checked if incidents were found at -1 level

5. OUR RESULTS

The Corbion SVA framework provides a comprehensive yet pragmatic approach, as it was applied in 2021 to Corbion products manufactured in Blair, Nebraska (U.S.) that contribute to SDGs 2 and 3. The study covered the supply chain, manufacturing and use phases, providing a deeper understanding of the potential risks in the value chain, and complementing Corbion's work to ensure [responsible sourcing](#) practices.

One intended outcome of the SVA framework at Corbion is to improve the transparency and credibility of claims regarding contributions by our products to SDGs 2 and 3 by:

1. Assessing social impacts in the supply chain, including local communities, to ensure the absence of negative social impacts
2. Further substantiating the positive contribution of products/product submarket groups in the social topics linked to the SDG sub-impact category by evaluating the use phase on a 5-point scale.

The additional benefit of our site-specific approach is that we actually access the value chain of all products manufactured by each site, not just those contributing to SDG 2 and 3. This opens up future opportunities to further integrate the supply chain SVA with Corbion's responsible sourcing program.

When a supplier receives a score of “-2” or “unacceptable situation, no improvement” in connection with any social topic related to workers, local communities or small-scale entrepreneurs, Corbion considers it a high-risk supplier. A score of “-2” regarding a social topic triggers the development of a corrective action plan, including an implementation timeline, by the Procurement department in collaboration with the supplier. The supplier is then reassessed on the relevant topic(s) according to the agreed timeline. Until the reassessment has been completed, the score changes to “-1.” Upon completion of the reassessment:

- If the reassessment indicates that the situation has improved, the supplier retains the score of “-1.”
- If the supplier does not sufficiently implement the corrective action plan within the agreed timeline, or the reassessment shows that the situation has not improved to the degree requested, the supplier's score is downgraded to “-2.”

Corbion engages with suppliers scoring “-1” (unacceptable situation but improving) in any social topics to improve their performance to “0” (generally accepted situation).

WHAT'S NEXT?

Corbion continuously strives to improve the completeness, robustness, and efficiency of its social value assessments through better data sources and improved efforts to include all relevant stakeholders and social topics in our value chain. In 2022, we are assessing our value chain and products produced in Thailand, and we will continue to apply the methodology described here to assess our product portfolio in pursuit of our 2030 targets.

Measuring the social value of our products contributes to our readiness to meet upcoming reporting requirements associated with the EU social taxonomy and due diligence. In addition, Corbion's approach to scaling up SVA will enable us to more effectively steer the composition of our product portfolio toward a sustainable future. Those interested in learning about these two applications of our assessment capabilities can find more detailed information in these SVI white papers:

