

# How we verify what matters

Responsibly sourced cane sugar

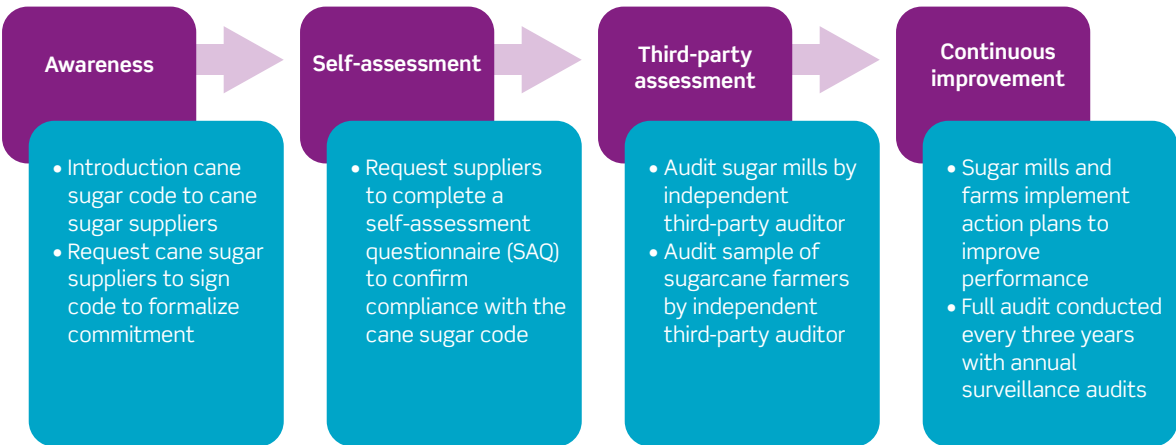


*At Corbion we preserve  
what matters*

**At Corbion, we exist to champion preservation in all its forms, preserving food and food production, health, and our planet. This isn't about maintaining the status quo; it's about finding new ways of operating in a changing environment. It's about empowering one another, and the world, to do more with less. Responsible sourcing and sustainable agriculture are critical to achieve our purpose as we rely on agriculture for our biobased raw materials.**

One of our key agricultural raw materials is cane sugar. Reflecting our corporate responsibility, we have launched our cane sugar code back in 2016. The code defines the specific requirements for the cultivation and production of sustainable cane sugar, based on the definitions for sustainable sugar cane and derived products as set out by Bonsucro. By introducing our code we stimulate the market to adopt sustainable and responsible practices whilst striving for continuous improvement. Since the launch in 2016, Corbion has introduced the code to all suppliers and since 2017, all suppliers in Thailand and Brazil have committed to implement its requirements. In 2018, audits were initiated (covering both the mills and the surrounding farming area) to verify actual compliance. Corbion committed to 100% verified responsible sourcing of cane sugar by 2025, either through purchasing Bonsucro certified sugar, or through 3<sup>rd</sup> party auditing of suppliers against the Corbion cane sugar code. In order to achieve this goal, we provide training and guidance to our suppliers. In line with our responsible sourcing targets Corbion has committed to the Science Based Targets initiative (SBTi) and made a pledge to reduce CO<sub>2</sub> emissions by 33% per ton of product by 2030 from a 2016 base year. In this context we will also validate GHG emission values throughout the cane sugar supply chain by an independent third party. This document explains the governance and auditing process that Corbion applies to meet its commitment to the responsible sourcing of sugar.

### Governance of the cane sugar code



## Responsibilities

The requirements defined in the cane sugar code apply to the sugar mill and their supplying area. It is the responsibility of the supplier to ensure compliance of its supply chain with the terms of the cane sugar code. This will also be audited and assessed on an annual basis by an independent third party.

## Requirements of the cane sugar code

The cane sugar code defines the requirements to which the suppliers need to commit and against which compliance is assessed in audits. Each requirement is translated into one or more verifiable and measurable assessment indicators.

## Types of indicators

### 1. Core indicators

- Need to be in compliance from the first year onwards
- Stricter procedures and follow up for closing non-compliances

### 2. Continuous improvement indicators

- A quota of these indicators needs to achieve compliance status. This quota is based on the local situation and is increased over time to ensure continuous improvement.
- More time for closure of non-compliances
- When continuous improvement indicators are mandatory according to local law and legislation, they are automatically part of the core indicators.

### 3. Recommendations

- Additionally, there will be indicators classified as recommendations that are observed and communicated by the auditor, not yet part of the required criteria, but might become more relevant in the future, once the market matures. Potential non-conformance with these indicators will only be raised as “observations”.



## Business ethics

Requirement	Indicator	Type	Applies to mill	Applies to farmers
Supplier complies with all applicable local laws and regulations	Laws and regulations of different principles are followed	Core indicator	X	X
Supplier refrains from any form of corruption. All business is conducted with integrity	All employees signed a code of conduct	Continuous improvement	X	
	The code of conduct entails a section on corruption and the procedure for when a case of corrupt behavior is detected	Continuous improvement	X	
	Risk of corruption has been evaluated	Recommendation	X	
All business transactions are completely recorded, and guarantee legal and fiscal compliance	The documents are recorded and held for the legal minimum required time	Core indicator	X	

## Human rights and labor conditions

Requirement	Indicator	Type	Applies to mill	Applies to farmers
Supplier does not use child labor	Minimum working age must not be below the age for completion of compulsory schooling and never below 15 years of age (or according to local laws, whichever affords greater protection)	Core indicator	X	X
	Children below 18 years of age are not involved in any type of hazardous work	Core indicator	X	X
	Children related to the farmer on a family farm (father, uncle etc.) between 13 and 15 are allowed to help with light work	Core indicator		X
	All children living at the farm or mill premises below the age for completion of compulsory schooling have access to education, until at least 15 years.	Recommendation	X	X
	The supplier checks Identity Documents at the start of the contract	Recommendation	X	X
Supplier does not use forced or compulsory labor	Forced or compulsory labor is absent, of which proof should be shown by at least two of below indicators	Core indicator	X	X
	Workers are not required to leave any financial deposits with the employer and are not bonded, threatened by or indebted to the employer	Continuous improvement	X	X
	Wages are being paid regularly (not withheld beyond the legal and agreed payment period) and workers are free to leave their employment at any time with reasonable notice	Continuous improvement	X	X

## Human rights and labor conditions

Requirement	Indicator	Type	Applies to mill	Applies to farmers
Supplier does not use forced or compulsory labor	Identity documents of workers are not retained by employer	Continuous improvement	X	X
	Wages are being paid directly from the employer to the individual worker	Continuous improvement	X	X
	Prisoners are not being employed	Recommendation	X	X
Supplier does not discriminate based on nationality, race, religion, gender, age, sexual orientation, disability etc.	There are no reports of discrimination of any sort	Core indicator	X	X
	There is no evidence that (potential) workers are given un-equal opportunities based on nationality, race, religion, gender, age, sexual orientation, disability etc.	Continuous improvement	X	X
	There is no physical, sexual or verbal abuse, harassment or threat	Continuous improvement	X	X
	Workers are being paid the same wage for the same work	Recommendation	X	X
Supplier respects the right of their employees to freedom of association and has an employee grievance process	Workers are free to join or form organizations and unions and to bargain collectively	Core indicator	X	X
	There is no discrimination against worker representatives nor any hindering of their function at the workplace	Continuous improvement	X	X
	Workers have access to a fair, transparent and anonymous grievance mechanism	Continuous improvement	X	X
	Workers are made aware of the grievance mechanism	Recommendation	X	X
Supplier complies with all relevant International Labor Organization (ILO) Standards	<p>The country ratified the relevant ILO conventions below:</p> <ul style="list-style-type: none"> <li>• C29 Forced Labor Convention, 1930</li> <li>• C87 Freedom of Association and Protection of the Right to Organize Convention, 1948</li> <li>• C98 Right to Organize and Collective Bargaining Convention, 1949</li> <li>• C100 Equal Remuneration Convention, 1951</li> <li>• C105 Abolition of Forced Labor Convention, 1957</li> <li>• C111 Discrimination (Employment and Occupation) Convention, 1958</li> <li>• C138 Minimum Age Convention, 1973</li> <li>• C182 Worst Forms of Child Labor Convention, 1999</li> </ul>	Core indicator	X	X

## Human rights and labor conditions

Requirement	Indicator	Type	Applies to mill	Applies to farmers
Supplier complies with all relevant International Labor Organization (ILO) Standards	The supplier operates according the ILO conventions the country has ratified	Core indicator	X	X
	In case there are conventions not ratified, the company is still operating in line with its essentials	Continuous improvement	X	X
Supplier provides safe and healthy working conditions for all employees	Main health and safety risks are assessed and measures for mitigation of risk are implemented	Core indicator	X	X
	Clean drinking water is being made accessible to all workers in sufficient amounts	Core indicator	X	X
	The employer takes all reasonable measures to prevent possible accidents, injuries or exposures to health risks and to act on these	Continuous improvement	X	X
	The staff is trained for health and safety at start and least every 5 years	Continuous improvement	X	X
	Every person applying crop protection agents (CPA) or other hazardous substances must be provided required personal protection equipment (PPE) and must have received adequate training. Persons below 18 years of age, pregnant or nursing women are not allowed to handle any of these substances	Continuous improvement		X
	The employer makes sure the field where CPA has been applied is only being entered after it is safe to do so again	Recommendation		X
	Provided housing is safe and sanitary	Recommendation	X	X
Supplier provides appropriate wages and working hours, according to applicable laws, for all employees	Every worker (including temporary, piece rate, seasonal and migrant workers) earns at least minimum wage according to local laws or applicable benchmark standards	Core indicator	X	X
	Legal benefits as given by local laws are provided to workers (e.g. benefits, holidays, leave etc.)	Core indicator	X	X
	Work hours are in accordance with local laws and do not, on a regular basis, exceed 48 hours per week, excluding overtime	Continuous improvement	X	X
	Overtime hours are voluntary and paid at a premium according to local laws	Continuous improvement	X	X

## Human rights and labor conditions

Requirement	Indicator	Type	Applies to mill	Applies to farmers
Supplier provides contracts or equivalent documents to all employees	If required by local law, employer and worker have entered into a written contract and a copy is provided to the worker	Core indicator	X	X
	Workers are aware of the content of their contract (written or orally) and are informed about their legal rights	Continuous improvement	X	X
	Terms and conditions of the contracts do not contravene local laws	Continuous improvement	X	X

## Environment

Requirement	Indicator	Type	Applies to mill	Applies to farmers
Supplier operates in an environmentally responsible manner	The key environmental issues are covered by an appropriate and implemented environmental impact and management plan (EIMP)	Core indicator	X	
	Dissolved oxygen in receiving water streams is above 2.5 ppm	Continuous improvement	X	
Supplier strives for continuous improvement of their environmental performance by minimizing the use of raw materials, energy and water, the emission of greenhouse gases (GHG) and the production of waste	The total net primary energy use does not exceed 3000 kJ/kg product; the primary energy use per ton of sugar cane does not exceed 300 MJ/t; Improvement can be observed in re-assessments	Continuous improvement	X	
	Energy used for transportation of sugar cane does not exceed 50 MJ/t; Improvement can be observed in re-assessments	Continuous improvement	X	
	Consumed kg of water per kg of product does not exceed 130 (Farm) and 20 (Mill for sugar only); Improvement can be observed in re-assessments	Continuous improvement	X	X
	Net GHG emissions of sugar cane do not exceed 40 kg CO <sub>2</sub> eq/t sugar cane; Improvement can be observed in re-assessments	Continuous improvement		X
	Net GHG emissions of sugar do not exceed 0,4 t CO <sub>2</sub> eq/t sugar; Improvement can be observed in re-assessments	Continuous improvement	X	
	There is adequate storage and disposal of fuel, batteries, tires, lubricants, sewage and other waste	Recommendation	X	X
	There are facilities to prevent spills of oil and other pollutants	Recommendation	X	X
	There is a waste management plan	Recommendation	X	X

## Product quality and safety

Requirement	Indicator	Type	Applies to mill	Applies to farmers
All products and services meet the quality and safety criteria specified	Supplier is approved by Corbion quality department	Core indicator	X	

## Intellectual property

Requirement	Indicator	Type	Applies to mill	Applies to farmers
Supplier protects all confidential information provided by Corbion and its respective business partners	Contracts and other documents with internal data (hardcopy and digital data) are only accessible by the authorized personnel	Continuous improvement	X	

## Land rights

Requirement	Indicator	Type	Applies to mill	Applies to farmers
Supplier can demonstrate clear title to land and water in accordance with national practice and law	Supplier can demonstrate the ownership of the land or the clear title to use it	Continuous improvement		X
	Supplier can demonstrate the right to the water used	Continuous improvement		X
For greenfield expansion or new sugar cane projects, to ensure transparent, consultative and participatory processes that address cumulative and induced effects via an environmental and social impact assessment (ESIA) is required	Percentage of greenfield expansion or new sugar cane project covered by ESIA. ESIA has been carried out by qualified staff (internal or external) and has been taken into consideration	Core indicator		X

## Biodiversity

Requirement	Indicator	Type	Applies to mill	Applies to farmers
Supplier ensures no cultivation of sugar cane on areas defined internationally or nationally as legally protected, high biodiversity value, high carbon stock or peatlands after the cut-off date of 1 January 2008	Supplier can prove to not have planted in any of these areas after 1 January 2008	Core indicator		X
In Thailand: supplier ensures no cultivation of sugar cane in areas that have been officially designated as "National Park" by the Thai Department of National Parks, Wildlife and Plant Conservation	Supplier can prove to not have planted in any of these areas	Core indicator		X



## Biodiversity

Requirement	Indicator	Type	Applies to mill	Applies to farmers
In Thailand: supplier ensures no cultivation of GM sugar cane and full compliance with the Thai Ministerial Notification B.E.2543, from the Thai Ministry of Agriculture that specifically prohibits the import and commercial production of any genetically modified crop	Supplier can prove to not cultivate any GM sugar cane and full compliance with the mentioned laws	Core indicator		X
In Brazil: supplier ensures no cultivation of sugar cane in the Amazon, Pantanal and Upper Paraguay Basin Biomes	Supplier can prove not to source from or cultivate in any of these regions	Core indicator		X

## Good agricultural practices

Requirement	Indicator	Type	Applies to mill	Applies to farmers
Supplier manages key environmental issues through an appropriate and implemented environmental impact and management plan, aimed at minimizing negative impacts and managing the natural resources. The plan should address the following issues: biodiversity, ecosystem services, soil, water, air, climate change, use of agrochemicals, use of artificial fertilizers, cane burning and noise	It is ensured that burning restrictions have been followed	Continuous improvement		X
	Fertilizers and crop protection agents are securely stored in a dry and locked area and according to the local laws	Continuous improvement		X
	Ratio of fertilizer N and P applied (expressed in eq. phosphate) is in line with the recommend ratio by an agriculture technician or agronomist based on soil or leaf analysis	Continuous improvement		X
	Records of fertilizer application are available	Continuous improvement		X
	If vinasse is applied, it needs to be stored correctly and applied on the sugar cane crop according to the local laws and recommendations by professionals based on leaf and soil analysis. Vinasse disposal in water stream is not allowed	Recommendation		X
Supplier does not use banned agrochemicals. Supplier minimizes air, soil and water contamination through the use of agrochemicals. Supplier prioritizes biological pest control, aiming to minimize the use of agrochemicals	Banned agrochemicals are not used	Core indicator		X
	Agrochemicals applied per hectare per year are below 5 kg active ingredient / ha/year	Core indicator		X
	Integrated pest management (IPM) is developed and implemented. The type and quantity of agrochemicals are recommended by professionals based on the IPM results	Continuous improvement		X

## Good agricultural practices

Requirement	Indicator	Type	Applies to mill	Applies to farmers
Supplier does not use banned agrochemicals. Supplier minimizes air, soil and water contamination through the use of agrochemicals. Supplier prioritizes biological pest control, aiming to minimize the use of agrochemicals	Records from IPM information are kept	Continuous improvement		X
	A minimum distance of 3m to riverbanks etc. is observed, unless local law requires larger distances	Recommendation		X
	Original and genuine agrochemical products, which comply with local registration requirements, must be used to prevent risks for farmers, consumers and the environment	Continuous improvement		X
	Records to agrochemicals application are kept	Continuous improvement		X
	The use of biological pest-control is prioritized	Recommendation		X
	Records of weather conditions during application are kept	Recommendation		X
Supplier implements measures to dispose of empty pesticide and herbicide packaging, adopting appropriate procedures for cleaning rigid containers, as well as storage and final disposal, in accordance with the prevailing legislation, and provides adequate training for the employees involved	Empty containers are pierced and triple rinsed before disposal	Continuous improvement		X
	Empty (rinsed and pierced) containers are properly disposed off and the records are kept	Continuous improvement		X
	All employees that work directly and indirectly with agrochemical have training for handling, disposal, PPE use, and application. The training records are kept	Recommendation		X
Supplier maintains a soil conservation plan that addresses soil degradation, erosion and biodiversity	There is a soil conservation plan implemented that covers soil degradation, erosion and biodiversity	Continuous improvement		X
	The ground covered by tops or leaves after harvest should be at least 30%	Continuous improvement		X
	The percentage of soil surface (area under cane) mechanically tilled per year does not exceed 20%	Continuous improvement		X
	Fields with samples showing analyses within acceptable limits for pH exceeds 80%	Continuous improvement		X
Supplier maintains a water conservation plan aimed at maximizing water use efficiency and minimizing water quality impacts from wastewater discharges, erosion and nutrient/ agrochemical runoff. The plan should also contain targets for reducing water consumption per ton of sugar cane processed	Plan can be provided, is implemented and addresses all the relevant aspects	Continuous improvement		X
	For irrigated cane, water is used efficiently. The farmer needs to have a irrigation methodology with the calculation and the records available	Continuous improvement		X
	Quality of water for irrigation is monitored	Recommendation		X

### Good agricultural practices

Requirement	Indicator	Type	Applies to mill	Applies to farmers
Supplier prioritizes the development of sugar cane production in regions that do not require irrigation	Supplier is able to provide proof of prioritization of sugar cane production based on minimizing irrigation	Continuous improvement		X