

SUGARCANE AND CLIMATE ACTION

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Addressing the climate emergency by setting science-based targets in the sugarcane sector

To avoid catastrophic impacts from climate change, global warming needs to be kept below 1.5°C. According to the [Intergovernmental Panel on Climate Change \(IPCC\)](#), that means greenhouse gas emissions must nearly halve by 2030, and drop to net zero by 2050.

Every sector needs to play its part in this effort. Working with our members and partners, Bonsucro is leading the development of targets and tools that will help companies in the sugarcane sector to reduce their emissions in line with what's needed to maintain a stable climate.



What's the issue?

A growing number of companies have made commitments to net-zero emissions and to supporting the [Paris Agreement](#) on climate change. Many have set credible targets for reducing their greenhouse gas emissions following the guidance of the [Science Based Targets initiative \(SBTi\)](#), a partnership between CDP, the United Nations Global Compact, World Resources Institute and WWF.

The SBTi has recently launched its [Forest, Land and Agriculture \(FLAG\) guidance](#) to enable companies operating in land-intensive sectors like food, agriculture and forestry to set science-based standards. This fills an important gap, since deforestation and other land-related impacts account for [nearly a quarter of global greenhouse gas emissions](#), and represent a significant part of many businesses' climate footprint. Land-based sectors can also make a big contribution to tackling climate change by removing carbon dioxide from the atmosphere – for example by increasing the amount of carbon stored in the soil.

Within FLAG guidance the SBTi has developed mitigation pathways for various commodities, including beef, corn, soy, palm oil and timber, with the aim of reducing overall emissions in land-based

sectors by 35% between 2020 and 2030. At the moment, though, it has no plans to develop specific guidance for the sugarcane sector. So Bonsucro is stepping in.



Why us?

Bonsucro is the leading sustainability platform in the sugarcane sector, with a community of more than 280 members in more than 50 countries across the whole sugar supply chain. So we're well placed to lead sector-wide efforts to reduce emissions, support our members to meet their own climate targets, and lead the way to a net-zero, climate-resilient future for this vital crop.

Our members have already shown how to make big cuts in greenhouse gas emissions. On average, Bonsucro-certified mills and farms reduce their CO₂ emissions per kilo of sugar by 18% within five years. But we can go further: according to a study led by the University of Minnesota, adopting the Bonsucro standard globally has the potential to [halve greenhouse gas emissions from the sugarcane industry](#). And we're supporting other ways that sugarcane can contribute to a net-zero future, from using ethanol and biogas as biofuels to producing bioplastics and biomaterials [for the beauty sector](#) or using bagasse for packaging.



What are we proposing?

We want to lead the development of a FLAG mitigation pathway for the sugarcane sector to drive down emissions in line with science and the goals of the Paris Agreement. This involves calculating a baseline of current land-based emissions per kilo of sugarcane production, looking at projected future production, then setting ambitious but achievable targets for reducing these emissions over the coming years.

We'll develop shared, sector-wide methodologies and metrics for monitoring FLAG-related carbon emissions and removals. This will enable companies that operate within the sugarcane value chain to set science-based targets covering scope 1 (direct), scope 2 (indirect) and scope 3 (supply chain) emissions in sugarcane production up to the farm gate.

Following the same structure as SBTi's existing work in other sectors, we aim to produce guidance on setting science-based targets, and a tool to help companies do so. The tool will be available both as an Excel spreadsheet and embedded within the Bonsucro calculator. It will cover all sources of greenhouse gas emissions from sugarcane production, as well as carbon removals on sugarcane plantations and emissions savings from using sugarcane derivatives such as ethanol and biogas.



What happens next?

We aim to develop the mitigation pathway over the coming year with sustainability consultants Quantis, who've been involved in developing similar pathways in other sectors. They'll review the data and the science and consult with experts to come up with a draft pathway, guidance and tool. We'll fine-tune these by carrying out pilot testing and a public consultation, before finalising and launching them towards the end of 2023.

Once the tool is launched, all sugarcane producers and companies throughout the value chain will be able to use it to set and achieve comprehensive science-based targets.

We're really excited to be putting together this practical roadmap for the sugarcane sector to play its part in addressing the climate emergency – and we'd love you to get involved.

You can:



Sign up to the mailing list to receive updates about the project



Volunteer to pilot the tool



Share your support for a sector-wide approach with a public statement using our campaign toolkit, which we'll be sharing soon



Share your feedback during the public consultation.

To learn more about the project and the ways to get involved, visit bonsucro.com