

What can we do for your company?

The EUDR (European Union Deforestation Regulation) obliges operating and trading companies of coffee, cocoa and soy (among other products) to demonstrate that their products are deforestation free, don't know how to ensure that your company complies with this regulation? Let's talk!

In Coolx we combine expertise in physics, biotechnology, artificial intelligence, remote sensing, finance, product development and business.

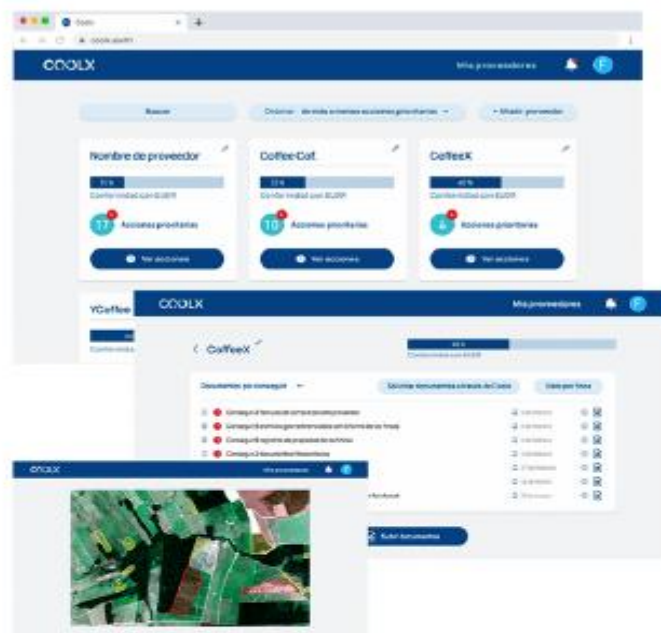
For companies that have to comply with EUDR we offer:

- 1 Support for any questions about the EUDR .
- 2 Supply chain analysis: status of your suppliers with respect to EUDR, information collecting and documentation review.
- 3 Deforestation analysis: of your suppliers plots.
- 4 Storage and management of EUDR-relevant data.

All this centralized on our software platform.

We are currently collaborating with companies that want to lead sustainability in their sectors and position their products as deforestation-free.

EUDR Platform made by coffee and cocoa companies



- ✓ **Know how the EUDR applies to your company**
And how to communicate it internally and externally
- ✓ **Carry out the actions to comply**
All this through a guided plan
- ✓ **Securing their supply chains**
Analyzing them socially and environmentally
- ✓ **Collecting all the necessary EUDR information**
To avoid any issues with EUDR

4 steps

These steps have been followed by other companies to address this challenge



Evaluation

Through questionnaires for the company and its suppliers.



Action

By an action plan based on the previous information.



Compilation

Of all documents in a guided way and reviewed by Coolx.



Analyzed

They know their supply chains in detail and are ready for it.

Software to analyze the supply chains of EUDR-complying companies

to ensure deforestation-free products

by combining satellite technology and AI.

Technology

After a long time of searching and analyzing maps that provide accurate and good resolution data of forest cover in December 2020 (EUDR deforestation cut-off date) to perform the deforestation analysis, the poor quality of these maps made us decide that the best way to obtain good results adapted to the definitions of the regulation (article 2 of the EUDR) was to create our own AI model.

With the help of the European Space Agency and other technology partners, we have developed an AI model that uses Sentinel-1 and Sentinel-2 imagery (multispectral data and radar data) to generate a land cover map for each of the plots to be analyzed. Thanks to the historical images of ESA's Copernicus program, we can make a comparison between the land cover map generated for December 2020 and another map generated for December 2023 (image 1). This comparison results in a deforestation map showing the areas where deforestation has occurred within the plot in that time interval (image 2).

Because we use Sentinel satellite images, the deforestation maps we generate have a 10 m resolution.

Our technology development plans include the option of adding analyses using other satellites that would result in deforestation maps with a higher resolution (on the order of 1 m).

Land Cover analysis

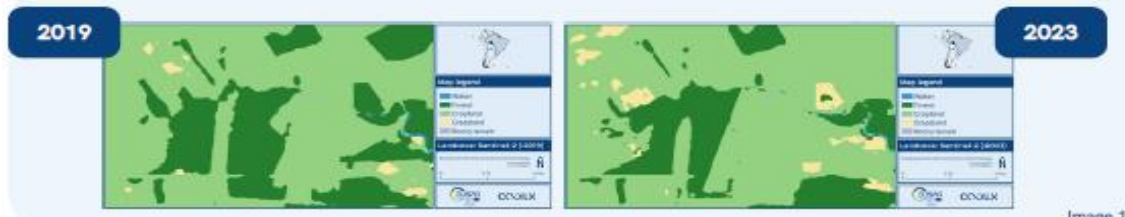


Image 1

Coffee deforestation analysis (2019 - 2023)



Deforestation
28,9 %

Deforested area
196,4 ha

Forest -> Coffee
146,92 ha

Image 2

Partners

We count on the support of our strategic partners, in technology we highlight three of them:

- **The European Space Agency (ESA):** Coolx has been selected for its environmental approach by the prestigious ESA BIC program of the European Space Agency. This program provides our company with grants for technology and product development, supports us in European internationalization, provides us with the best satellite images and gives us the distinctive seal of being selected by them.
- **European Union Space Program Agency (EUSPA):** Coolx has participated in two European projects with the EUSPA and the European Coffee Federation to develop solutions at European level to enable the coffee sector to meet the challenge of the EUDR. Coolx has been selected to participate in larger projects together with EUSPA and ECF during the first quarter of 2024.
- **Google for startups:** from mid-2023 Coolx is part of Google's program for startups that contribute to achieving the Sustainable Development Goals (SDGs). Through this program we have the technological resources of Google and mentoring and guidance from experts in key technologies for us such as Artificial Intelligence.

