

Zero Deforestation

The success of the Forest Reserves Protection and Biodiversity Monitoring Programs is due to the zero deforestation and forest preservation policy adopted by Grupo Agropalma in the year of 2001.

It was during 2001 that the company had conducted the final deforestation activities on its lands, properly licensed and authorized by the competent environmental authority. The policy of banning deforestation and establishing new plantations only in areas already degraded by human activity has been adopted since then.

In 2021, according to guidelines from the Zoological Society of London (ZSL), Grupo Agropalma has undertaken the commitment of zero conversion of any Natural Ecosystem, including primary ecosystems, regenerated natural ecosystems, managed natural ecosystems and partially degraded natural ecosystems that still have a relevant ecological function and are liable to natural or assisted regeneration.

NEW PLANTATIONS

Agropalma establishes new plantations according to the following criteria, which are applied to our own plantations, family farm plantations and integrated producers in partnership with the Company:

- Conduct a socioenvironmental impact study, which includes assessment of high conservation value (HCV) areas before planting. The HCV assessment is done by a professional accredited by the HCV Network's Accreditation Licensing Scheme.
- The area to be planted is not, (or was not) covered by native vegetation, even secondary forests, since November 2005.
- The area to be planted does not have any high conservation value.
- The area to be planted has no peaty or organic soils or any other type of soil considered unsuitable for planting oil palm.
- New plantings carried out in partnership with family farmers or integrated producers shall be established only after they provide their free, prior and informed consent.

Since November 2013, when the POIG Letter was published and introduced the concept of evaluation of High Carbon Stock (HCS), Agropalma has not established any new plantations. The few new plantations by integrated producers were implemented in areas with non-native vegetation, predominantly pastures, so that no HCS assessment was necessary.

Complementing the efforts to ensure zero deforestation, Grupo Agropalma has a robust fire detection and firefighting system. The company has trained firefighters, equipment, tools, vehicles and heavy machinery used in firefighting. In addition to the local visual identification of fire outbreaks, Agropalma also has an alert service provided by RSPO and WRI (Fire Watch).

Whenever a fire outbreak is identified, the Emergency Action plan (EAP) is triggered and the company allocates the required resources to put it out. Moreover, the company occasionally carries out awareness raising campaigns on the importance of fire prevention.

The analysis of our data history reveals that very few fires affect Agropalma. They mostly start outside the farms and always occur in the second semester, during hotter and drier months. The chart below features the fire management information of 2020.

Alert date	Amount of outbreaks	Inside farm areas or in the region?	Confirmed?	Action performed / Outcome
07/17/2020	1	External	Yes	Situation follow-up. The neighbor controlled the fire before Agropalma was impacted.
08/30/2020	1	Internal	No	A team was sent to the location to check but found no fire outbreaks.
10/14/2020	1	External	Yes	The fire outbreak occurred in the neighboring area, but the fire did not spread to Agropalma's area.
10/29/2020	1	Internal	No	A team was sent to the location to check but the fire outbreak was not found.
10/30/2020	1	External	Yes	Situation follow-up The neighbor controlled the fire before Agropalma was impacted.
12/12/2020	1	External	Yes	The fire outbreak occurred in the neighboring area, but the fire did not spread to Agropalma's area.

Greenhouse gas management

After 4 years of evaluations, Agropalma has identified two main sources of greenhouse gases (GHG): the historic transformation of land usage and the effluent treatment systems of 5 extracting industries, which generate methane gas. Considering that the historic change of land usage cannot be managed, the most effective option for the Group to reduce GHG emissions is to work on the effluent treatment systems, which are responsible for more than 70% of operational emissions. This way, we honor our commitment to the elimination of methane emissions of said effluents, through our action plan shown below.

As per images on this page, the installation of new effluent lagoons in PARAPALMA and AGROPALMA industries have already been concluded. It should also be mentioned that the CPA industry is relatively small and methane elimination technologies are being identified and evaluated. In 2025, if no economically viable technologies are available for methane elimination in this factory, the Company shall maintain its commitment of seeking out and adopting an alternative after identification/development.

Action	Deadline
Install new set of effluent treatment lagoons adapted for future installation of methane gas capture and burning/usage system, in PARAPALMA and AGROPALMA industries.	2015
Install new set of effluent treatment lagoons adapted for future installation of methane gas capture and burning/usage system, in CRAI/AGROPAR and AMAPALMA industries.	2022
Install new methane gas capture and burning/usage system, in PARAPALMA and AGROPALMA industries.	2023
Install new methane gas capture and burning/usage system, in CRAI/AGROPAR and AMAPALMA industries.	2023
Install methane elimination technology in CPA industry.	2025

Regarding GHG emissions generated in farm operations, the main source is the historic change in land usage, which represented 522,996.19 tonnes of CO₂ in 2020. Fuel consumption and application of fertilizers are also contributors, but at a much lower rate (10-50 times less). In order to ensure GHG emissions are managed in this phase, Grupo Agropalma is committed to ensuring its plantations (in addition to plantations from all cluster providers) are in compliance with the zero-deforestation policy, do not plant on organic soils (peat) at any depth, apply agriculturally suitable dosages of fertilizers and maintain tractors and trucks used for harvesting and transportation of CFF in good condition, in order to avoid unnecessary increases in fuel consumption.

As per recorded in our sustainability reports, Agropalma has calculated and reported the balance of greenhouse gas emissions since 2013. As observed in the graph below, results

vary greatly each year. The main causes of this variation are changes in the calculation tool provided by RSPO (RSPO, GHG Calculator), the changes in productivity caused by weather variations and replanting.

Our goal is to reach a neutral emissions balance, which has already been achieved when considering the forest reserves as carbon absorbers. However, regardless of the performance of forest reserves, we keep striving for reduction of emissions, through optimization of fuel consumption, optimization of fertilizer application and, mainly, implementation of methane capture systems from effluents.