ZERO DEFORESTATION AND CLIMATE CHANGE
(UPDATED IN SEP 2022)

Zero Deforestation

Our palm oil estates are in Northern Brazil in the Amazonian Para state. Our total land covers 107,000 hectares, with approx. 39,000 hectares planted with oil palm—4,087 hectares of which are organic, with a further 3,966 hectares being converted. Just over 3,200 hectares are used for infrastructures, such as mills, roads, and housing. The remainder—approximately 64,000 hectares—is a protected forest reserve that we manage and enhance.

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

Therefore, the total area of illegal or non-compliant deforestation and/or conversion recorded over the company's full operational area is zero since the commitment cut-off date, not only for Agropalma plantation but also to its suppliers - family farmers and integrated outgrowers members of RSPO program.

In 2021, according to guidelines from the Zoological Society of London (ZSL), Agropalma Group 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.

In addition, Agropalma commits to restore ecosystems and their values to their prior condition and/or provide suitable compensation to restore these values in the case of deforestation or conversion within the company's own operations and family farmers and integrated outgrowers members of RSPO program. However, since we have no areas for restoration based on the current data, must be crucial to follow the criteria established for new plantations as described below.

**New Plantation**

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, Agropalma Group 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 and 2021:
<table>
<thead>
<tr>
<th>Alert date</th>
<th>Amount of outbreaks</th>
<th>Areas inside farm or in the region?</th>
<th>Confirmed</th>
<th>Action performed/ Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>17/jul/20</td>
<td>1</td>
<td>external</td>
<td>yes</td>
<td>Situation follow-up. The neighbor controlled the fire before Agropalma was impacted.</td>
</tr>
<tr>
<td>30/ago/20</td>
<td>1</td>
<td>internal</td>
<td>no</td>
<td>A team was sent to the location to check, but found no fire outbreaks.</td>
</tr>
<tr>
<td>14/out/20</td>
<td>1</td>
<td>external</td>
<td>yes</td>
<td>The fire outbreak occurred in the neighboring area, but the fire did not spread to Agropalma’s area.</td>
</tr>
<tr>
<td>29/out/20</td>
<td>1</td>
<td>internal</td>
<td>no</td>
<td>A team was sent to the location to check but the fire outbreak was not found.</td>
</tr>
<tr>
<td>30/out/20</td>
<td>1</td>
<td>external</td>
<td>yes</td>
<td>Situation follow-up. The neighbor controlled the fire before Agropalma was impacted.</td>
</tr>
<tr>
<td>12/dez/20</td>
<td>1</td>
<td>external</td>
<td>yes</td>
<td>The fire outbreak occurred in the neighboring area, but the fire did not spread to Agropalma’s area.</td>
</tr>
<tr>
<td>08/fev/21</td>
<td>1</td>
<td>external</td>
<td>yes</td>
<td>Situation follow-up. The neighbor controlled the fire before Agropalma was impacted.</td>
</tr>
<tr>
<td>12/set/21</td>
<td>1</td>
<td>internal</td>
<td>no</td>
<td>A team was sent to the location to check but the fire outbreak was not found.</td>
</tr>
</tbody>
</table>
Greenhouse gas management

Our carbon footprint is measured using the RSPO PalmGHG Calculator, including total land use change emissions. The Calculator reports on two indicators: one that offsets the carbon sequestration resulting from our 64,000 hectares of conservation area and one that excludes conservation areas. Including Agropalma’s conservation areas allows us to understand the real impact of our entire operations and highlights the importance of forests in mitigating climate change. However, we also want to measure our progress and impact against other companies in the palm oil sector, including some that do not consider conservation areas in their calculations.

![MT CO2eq per MT output 2017–2021 Including conservation area sequestration](image1)

![MT CO2eq per MT output 2017–2021 Excluding conservation area sequestration](image2)

Around 32% of our gross emissions come from manageable sources such as palm oil mill effluent (POME) and diesel for transport and mill use. POME is by far the most significant source and an area that we are targeting for emission reductions. The latest effluent treatment was incorporated into the design of our new mill, ensuring that POME emissions will be vastly reduced when we complete the methane capture system. We had intended to install similar systems in a further three of our six mills by
2021 and to cover the ponds to enable methane capture for electricity generation at these mills by 2023. We hope to complete effluent treatment and methane capture for all six mills by 2025.

Once emissions from historical land conversions have been resolved, we still need to ensure that future developments by our external fruit suppliers or us do not result in further emissions. In addition to our no peat policy, we have also committed to preventing future developments on land with high carbon stock, such as primary or regenerating forests.

Regarding GHG emissions generated in farm operations, the main source is the historic change in land usage, which represented 474,663 tonnes of CO2 in 2021. 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, Agropalma Group 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.

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 and fertilizer application and, mainly, implementation technologies for the effluents, such as methane capture systems and more recently, the compost system design that will contribute to give a more sustainable destination to the effluents generated. In that matter, important to share also that the installation of new effluent lagoons in PARAPALMA and AGROPALMA industries have already been concluded. The CPA industry is relatively small and methane elimination technologies are being identified and evaluated.