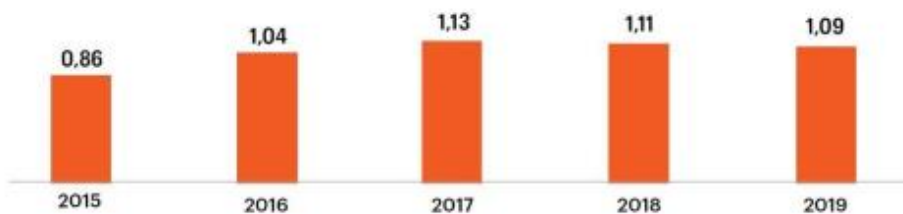


Water Resources

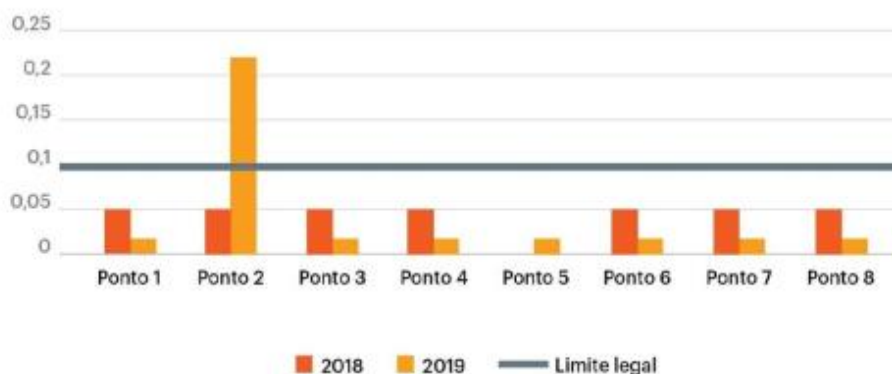
Among the various environmental aspects that are important to Agropalma, water resources management deserves special attention. We are committed to optimizing water consumption and ensuring water quality. We use slightly over one cubic meter of water per metric ton of CFF processed in our factories. These numbers remain stable. In 2015, water usage was slightly less, but we had to reduce use of recycled water after discovering that it could influence 3-MPCD and other contaminant levels that could potentially affect product quality. In addition, due to the lower production of CFF and the new extraction industry, facilities are not operating at full capacity. Because the same amount of water volume is required to operate our industries, the water proportion for CFF has increased.

Use of water per CFF tonne processed (m³):



Regarding effluents of extraction industries, we are committed with the best and cost-effective use and minimizing risk of contamination in water streams. For this reason, we use 100% of treated effluents as liquid fertilizers in our plantations, in other words, we have completely halted effluent releases from our extraction industries into bodies of water. Moreover, as recorded in our sustainability reports, we have monitored phosphor and nitrogen levels in 8 carefully chosen water streams. This monitoring aims at verifying if our plantations and extraction industries are causing any damage to water quality. In this case, the goal is to address the legal limits of 3.7 mg/L for nitrogen and 1.0 mg/L for phosphor. Below the analytical results for 2018 and 2019 are featured.

Phosphor in Agropalma plantation water courses (mg/l):



Nitrogen in Agropalma plantation water courses (mg/l):



In 2018, all nitrogen and phosphor values were below legal limits, as had happened in previous years. In 2019, results of Point 2 had exceeded the threshold for both parameters. It was not possible to identify a clear-cut cause for high N and P levels, and considering that no dead fish were found and all other results were in line with expected low levels of N and P, it was concluded that the increase in levels at this specific point might be due to decomposing animal or plant wastes in the water at the time of sample collection. Nevertheless, monitoring of this waterway was continued with weekly measurements, and no signs of abnormality were recorded.

Still aiming at preventing negative impacts to water resources, Agropalma manages pests, diseases and naturally growing vegetation preferably through non-chemical methods, such as: biological control, traps, mechanical eradication and mechanized hoeing, among others. The only pesticide used is Glyphosate, for control of naturally grown vegetation.

The use of pesticides is monitored by tracking toxicity per hectare instead of volumes. This allows observation of any changes from year to year and follow up on performance compared to our peers in the industry, regardless of changes in formulation or the type of pesticide used. Volumes used vary according to the planting cycle, since younger palm trees require more frequent applications. It is possible to assign the resulting increase to the replanting that has taken place over the last five years.