Notes from the Still

Three years after producing our first bottle, I am proud to share a comprehensive Sustainability Report for the Copal Tree Distillery, producers of Copalli Rum. Since we started planning this brand, we have been constantly reviewing and quantifying how sustainability truly serves the brand, our community and our consumers. Equipped with this knowledge, we look toward our future growth with confidence.

Copal Tree Distillery was founded with low impact principles from day one. The necessity of efficient operations and circular inputs are a nod to the remoteness of our location in Southern Belize, where the Distillery sits among 12,000 acres of pristine rainforest rolling from the mountains to the Caribbean sea. Because we built our facility from the ground up, we had the opportunity to incorporate sustainability into its design and address multiple areas of impact at the same time. We know that the quality of our rum is only as good as the sugar cane and cacao that we locally source, so a lot of time and energy is devoted to doing that the right way.

Our commitment to craft also comes through in our distillation process. For example, we prioritize a reduced milling technique, as well as a lower yield per pound of sugar cane, in favor of a richer more complex taste profile. This commitment drives our growth. Looking ahead, we will continue to incorporate sustainability into everything we do, because we understand its importance to not only a well-crafted rum, but also to our community, our consumers and our future.

This sustainability and impact report serves as our baseline. It is what we measure from as we continue to grow together with the landscape that supports us. Join us on this journey.

Ed Tiedge  
President and Master Distiller  
Copal Tree Distillery

Note: Copalli Rum is made exclusively at the Copal Tree Distillery in Belize. The Distillery in turn is supplied exclusively by the adjacent Copal Tree Farm. Both entities are referenced in this document.
Impact at a Glance

Certified Organic sugar cane

Boiler powered by 100% renewable biomass

100,000 gallons of rainwater collected

Proudly supporting 12,000 acres of preserved rainforest

Employees earn more than 3 times the Belizean national average
One of the distinguishing factors of the Copal Tree Distillery is its highly unique location. Our production site has served as a sugar cane production and distillery site for more than a century. In the mid 1800s, settlers cultivated the area in response to the high global demand for sugar. They used this crop to also make a rum product – Rocky Run Rum – which was produced until the 1970s.

As natural as the Copal Tree Distillery appears within the history and scenery of Southern Belize, the location, layout and operation was quite intentional. In 2005, the property was purchased by Todd Robinson, who had a vision for a pioneering eco lodge that embodied a farm-to-table agritourism spirit while conserving the surrounding rainforest. The name of the lodge, as it is today, is Copal Tree Lodge. Ten years later, in 2015, construction began on Copal Tree Distillery.

Unlike many distilleries that were built decades ago, Copal Tree was built from day one to have as little impact as possible in its operation and resource use. It was also intentional to integrate the Distillery and Lodge as an economic outlet for the regional Belizean community. By paying more than three times the average salary in the country, Copal Tree Distillery directly contributes to the well being of its workers and their families so that deforestation for cultivation or illegal fishing are not necessary.

Built on a site where the mountains of Southern Belize spill into the reef of the Caribbean Sea, the cultivation and production of Copalli Rum is integrated wholly into the landscape.
Emissions Data

Copal Tree Distillery’s direct emissions, shown here as Scope 1 & 2, quantify the emissions related to the on-site burning of fuels and materials as well as purchased electricity. Our direct emissions are significantly lower than most other distilleries due to our circular principles and new operational design.

The majority of Copal Tree Distillery’s emissions come from our purchased products and transportation, mainly owing to the weight of the glass bottle and the length of travel for export. This is calculated in Scope 3 emissions as indirect emissions, and are quite typical of the spirit industry.

In addition to Scope 1, 2 & 3, we have calculated our biogenic emissions, which are not classified here. These are natural sources of volatile organic compounds from the growth of sugar cane. We calculated this because we produce a single estate rum. However, because this is not industry standard comparison, it is not included in the overall emissions analysis.

* Emissions Data not included: product end of life, new construction related emissions.

Calculated using the GHG Protocol Corporate Accounting and Reporting Standard with tools and data from, California Air Resource Board, USDOE Energy Information Administration, and US EPA Corporate Climate Leadership Program.
What’s in a Bottle

Packaging is a significant contributor to our overall impact. In combination with our production processes, Copal Tree Distillery produces less than half of the industry average of Carbon Emissions per bottle. We also intentionally decided not to use any secondary packaging, such as gift boxes or specialty inserts.

Copalli Rum - 1.42 KG CO2e PER bottle

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Industry Average - 2.97 KG CO2e PER bottle

*Industry Average Calculation from Beverage Industry Environmental Roundtable. Both calculations are based on direct emissions only (Scope 1 & 2)
Energy

Highlights:

• By not burning sugar cane in the fields, The Copal Tree Farm does not contribute to particulate pollution, which results in direct air quality benefits.

• Our refrigeration system is powered by steam, which requires less electricity and produces fewer emissions than typical systems.

• More than 2 million pounds of biomass were used in 2020-2021 to run boiler systems.
Around the Distillery & Farm

Sugar cane is juiced within two hours of harvest

A sugar cane stalk regrows 6 times from one plant

Dried sugar cane fiber (bagasse) and deadfall is used to heat our boiler system

The sugar cane fields are weeded by hand
Organic Agriculture

Regenerative agricultural practices are conceptually simple: support the land to do what it is meant to do.

The 3,000-acre Copal Tree Farm is the first certified organic farm in Belize. The sugar cane is fertilized using only leftover boiler ash, chicken manure, and vinasse (a production by-product), avoiding the use of any pesticides, herbicides and fertilizers. Weed control is intentionally done by hand, and the fields are not burned before or after harvest. This allows nutrients to remain beneath the soil, and increases water retention and insect biodiversity. By not burning the fields, a common industry practice, the Farm avoids significant amounts of particulate emissions. Rather, the plants are allowed to regenerate for the next harvest season, increasing their ability to store carbon deeper into the soil.

Being organic is good news for biodiversity. Copal Tree Farm has the privilege of seeing these benefits extend throughout the food chain. Because the Farm produces an environment that doesn’t impact food sources for small mammals, larger mammals, like jaguars and monkeys thrive, alongside a stunningly diverse population of birds. Regenerative practices promote bio-diversity in this way, simply by allowing natural systems to exist.
In sync with the temperate rainforest that surrounds the Distillery, we tap into the temporal water cycle for production. We use a roof cistern system to collect rainwater and store it in large tanks. With more than 160 inches of rain per year, rainy season in Southern Belize provides ample opportunity for capturing canopy water. We collect about 100,000 gallons of rainwater annually. This is the only water used in proofing.

On the other end of production, the by-product of distillation is a substance called vinasse – which is rich in nitrogen and is a useful crop fertilizer. The vinasse is captured and stored in large tanks until the right time in the growing season for fertilization. With a growing number of acres in production at the Distillery, this organic and renewable fertilizer source is essential in that it replenishes not only the water but also the nutrients back to the fields.
Waste

Because resources can be difficult and expensive to import, the Copal Tree Farm is incentivized to use what they have to the fullest extent. They are able to grow what is needed year round, and reuse materials whenever possible. The approach adopted by the management teams at the Distillery and the Farm are designed to have minimal impact on the surrounding rainforest.

Highlights:
• Less than 50 gallons of garbage generated per week.
• Most office and cafeteria waste is composted.
• No plastic used in tasting room at Distillery.
From the beginning, we starting out working hand in hand with the community, not against them. We engaged with locals about the best way to support the regional economy and community, and incorporate that into our giving and decision making. Together with the Copal Tree Lodge, the Distillery and Farm are the largest non-governmental employers in Southern Belize, creating a lasting legacy in the region for sustainable agri-tourism.

Our community giving is dynamic and ever changing. We are able to support PGTV, a regionally owned and operated news source that provided critical information to the area during the pandemic. Their health-focused PSAs were fast and far reaching, and with their assistance, the Copal Tree Distillery and Lodge was able to donate more than $5,000 worth of hand sanitizer to schools and government offices in the Toledo District.

Additional work from PGTV helps to educate about all kinds of environmental issues the region faces, including laws and regulations around fire and crop burning, and the ban of gillnets in fishing, while supporting educational opportunities for District youth.

Copal Tree Distillery is also active in promoting and protecting the Belizean culture and has supported local musical artists and performers, including the Leela Vernon Memorial Museum and Kriol Kulcha House which showcases memorabilia representing more than 400 years of Kriol Culture.
Every year, the Battle of the Drums Competition and Show is a large drumming exhibition and event in the region. The Garifuna people, descendants of the Carib Indians who settled in Belize in the early 1800s, use drumming, song and dance to share stories about their heritage and culture. During the show, competitors perform with five different types of drumming and dancing that continues for many hours and is enjoyed by all the community. This is the culminating event for a non-profit that is wholly focused on preserving and promoting Garifuna culture.

The Copal Tree Distillery proudly supports this competition and show, which has become a local and international tourist attraction. It is a significant driver for economic activity in the Punta Gorda community, and we are proud to support such an important event for both heritage and economic opportunity in the region.
Built on organic agriculture practices, circular water methods, lower than industry standard emissions per bottle, renewable biomass powered boiler, zero refrigerant cooling system, zero particulate pollution, and as the largest non-governmental employer in Southern Belize, we have a lot to be proud of. The same spirit that got us here drives us to continue maintaining our high standards of production and operation, constantly seeking what else we can do to reduce our impact.

In particular, we are exploring both the use of recycled glass content in and the design of our bottle, and sourcing our integrated marketing materials. We are also working within the constraints of the logistics industry to find alternative solutions for reducing transportation emissions. We are also enthusiastically investigating the feasibility of producing renewable solar energy on-site.

While we have a strong foundation in sustainability, the biggest task we see ahead of us is the maintenance of these principles as we grow. Our priority will always be to have the smallest impact on the environment and the largest impact on the community. As we look forward to our future, we see these two principles as inseparable from our operations.
THANK YOU