



30 September 2022



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## RoyOMartin Sustainability and Carbon Footprint Technical Report

Over the past year, I had the opportunity to work closely with RoyOMartin-Land and Timber Department (<https://royomartin.com/>) to develop the attached "Sustainability and Carbon Footprint Technical Report." Data were collected at a very fine level of granularity for all activities at many levels including all manufacturing facilities, company travel, harvesting, transportation from forests to mills, as well as forestry activities.

I am currently conducting a comparative data and content analysis of forest sector industry carbon accounting/sustainability reports.

Regards,  
Rich

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# SUSTAINABILITY AND CARBON FOOTPRINT

## TECHNICAL REPORT

**Submitted by Roy O Martin Land and Timber Department**

**Reviewed By Dr. Richard P. Vlosky, Ph.D.**

*Director, Louisiana Forest Products Development Center*

*LSU Crosby Land and Resources Endowed Professor of Forest Sector Business Development*



# SUMMARY <sup>7</sup>

In addition to being a leader in responsible forest-management practices of its 550,00 acres of highly-productive timberland, RoyOMartin and its subsidiaries currently operate three manufacturing facilities supported by nearly 1,250 employees: an oriented strand board plant in Oakdale, Louisiana; plywood and solid wood products plant in Chopin, Louisiana; and an oriented strand board plant in Corrigan, Texas, which is currently expanding by adding a second mill at the site.

This report will quantify the carbon footprints of our manufacturing and timberland operations. All data will be presented in metric tons of CO<sub>2</sub>-e for ease of understanding. CO<sub>2</sub>-e is a metric system measurement, expressed in metric tons, that is used to compare emissions from various greenhouse gases based on their global warming potential by converting amounts of other gases to the equivalent amount of CO<sub>2</sub>, thus simplifying and standardizing reporting.

This analysis includes both carbon emission sources and sequestration sinks to quantify the carbon footprint of the entire organization. We will not estimate the long-term storage benefits associated with the conversion of trees to end-use forest products. While this will lower a possible carbon sink, it has been determined to be inequitable to claim credit for a product out of the organization's direct control.

The report covers our manufacturing facilities, company travel, transportation, as well as forestry activities. It also makes future-looking statements to quantify the net carbon benefit from owning and managing timberland and wood-manufacturing facilities.

# MANUFACTURING FACILITIES

Our manufacturing facilities emit a limited amount of CO<sub>2</sub>-e. These emissions are from various point, non-point, electricity consumption, and logging sources.

These sources were calculated by the facility and then aggregated for this report.



# POINT SOURCE EMISSIONS

Current Average Tons of CO<sub>2</sub>-e Per Year

RoyOMartin facilities  
(combined) emit  
1,230,754.30 tons  
of CO<sub>2</sub>-e per year.

## Point Sources

- RTO
- TCO
- Kilns
- Thermal Systems
- Generators



# FACILITY NON-POINT SOURCE EMISSIONS <sup>3,5</sup>

Current average tons of CO<sub>2</sub>-e per year

RoyOMartin facilities emit  
**5,671.93 tons**  
of CO<sub>2</sub>-e per year.

5,047 tons



Diesel Consumption

414 tons



Gasoline Consumption

211 tons



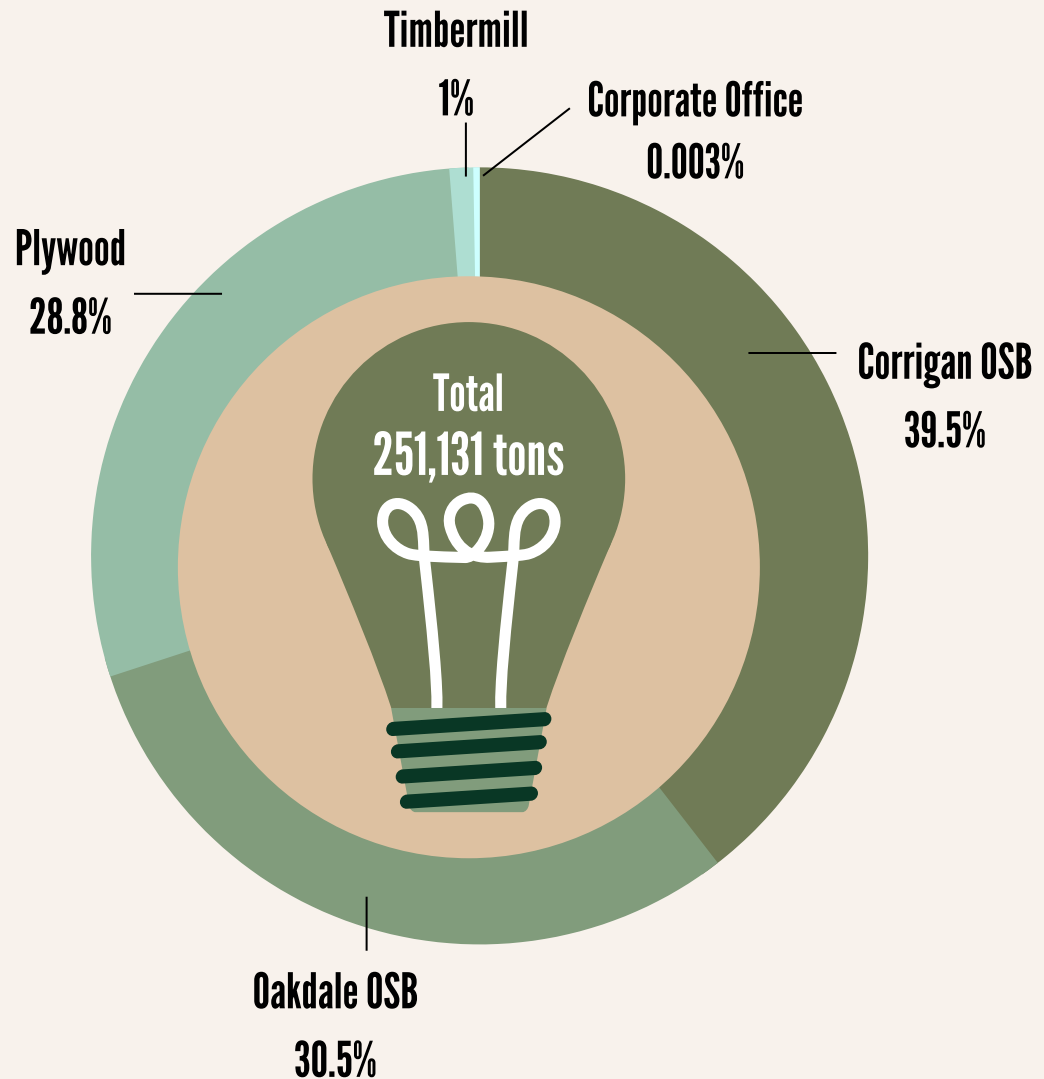
Propane Consumption



# ELECTRICITY USAGE EMISSIONS<sup>1</sup>

Current average tons of CO<sub>2</sub>-e per year

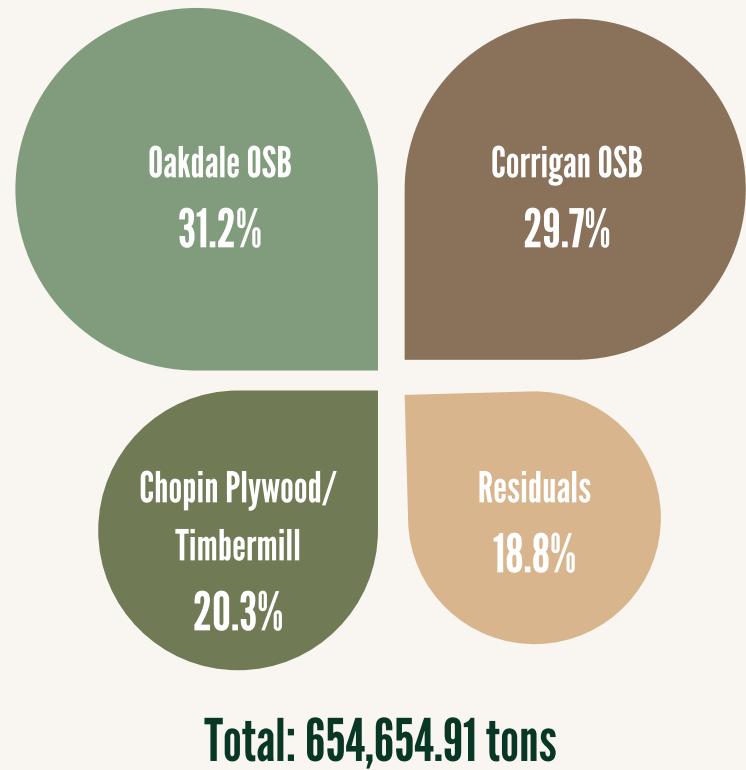
Current electricity usage per year was calculated and converted to CO<sub>2</sub>-e using calculations from the U.S. Environmental Protection Agency.



# PRODUCT SEQUESTRATION <sup>2</sup>

## Current average tons of CO<sub>2</sub>-e per year

RoyOMartin facilities turn raw materials into finished goods and residual goods used for other purposes. RoyOMartin calculated annual carbon sequestered in all products. We are reporting this as a one-time credit, our analysis does not take credit for the long-term effects of the carbon sequestration since these goods no longer are the property of RoyOMartin or its affiliates and are out of our direct control. Total sequestration in panel products and residuals total is **654,654.91 tons** of CO<sub>2</sub>-e.







# LOGGING ACTIVITY EMISSIONS <sup>3,8</sup>

## Current average tons of CO<sub>2</sub>-e per year

Emissions from logging operations to supply each facility with raw materials were calculated based on industrial average logging distances and attributes reported in Timber Mart South. The reported emissions include both logging on company property in support of our facilities as well as independent suppliers who provide the facility's raw material needs. The data was split into two segments, on and off-road emissions.



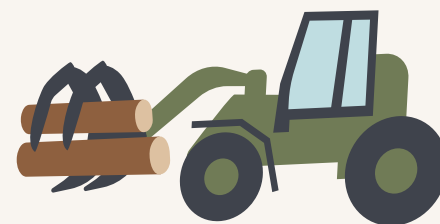
On-Road:  
**13,051.99**

*On-road portions are the carbon footprint of the log truck's one-way travel to the mill.*

Off-Road:

**34,711.97**

*Off-road emissions include cutting, skidding, and loading equipment.*

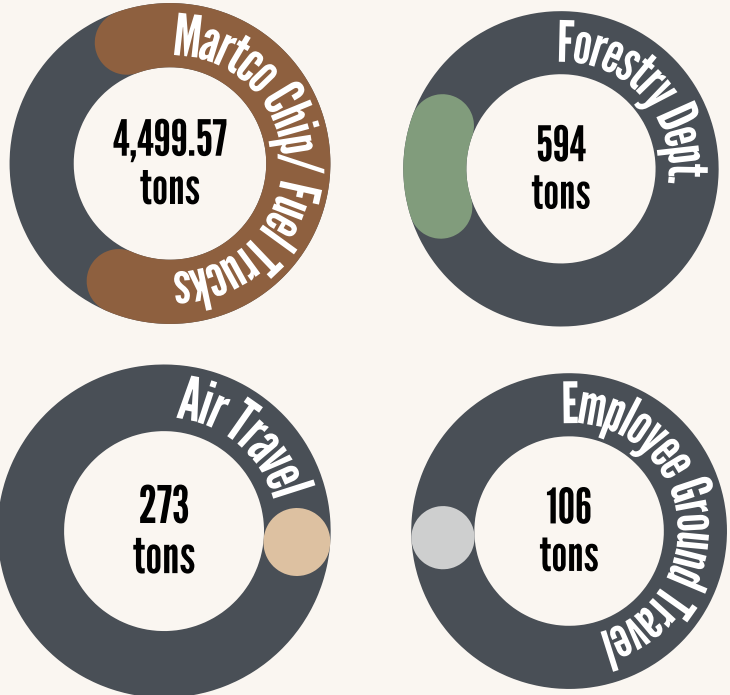


**Total: 47,763.96**

# TRAVEL AND TRANSPORTATION <sup>3,9</sup>

Each year, RoyOMartin employees travel for business purposes. Our land and timber staff alone travel more than 1 million miles per year. This travel emits CO<sub>2</sub>-e. RoyOMartin also operates a fleet of semi-trucks for the transportation of residuals. The graph illustrates these carbon emissions by source that total **3,212.74** tons of CO<sub>2</sub>-e per year.

Current average tons of CO<sub>2</sub>-e per year





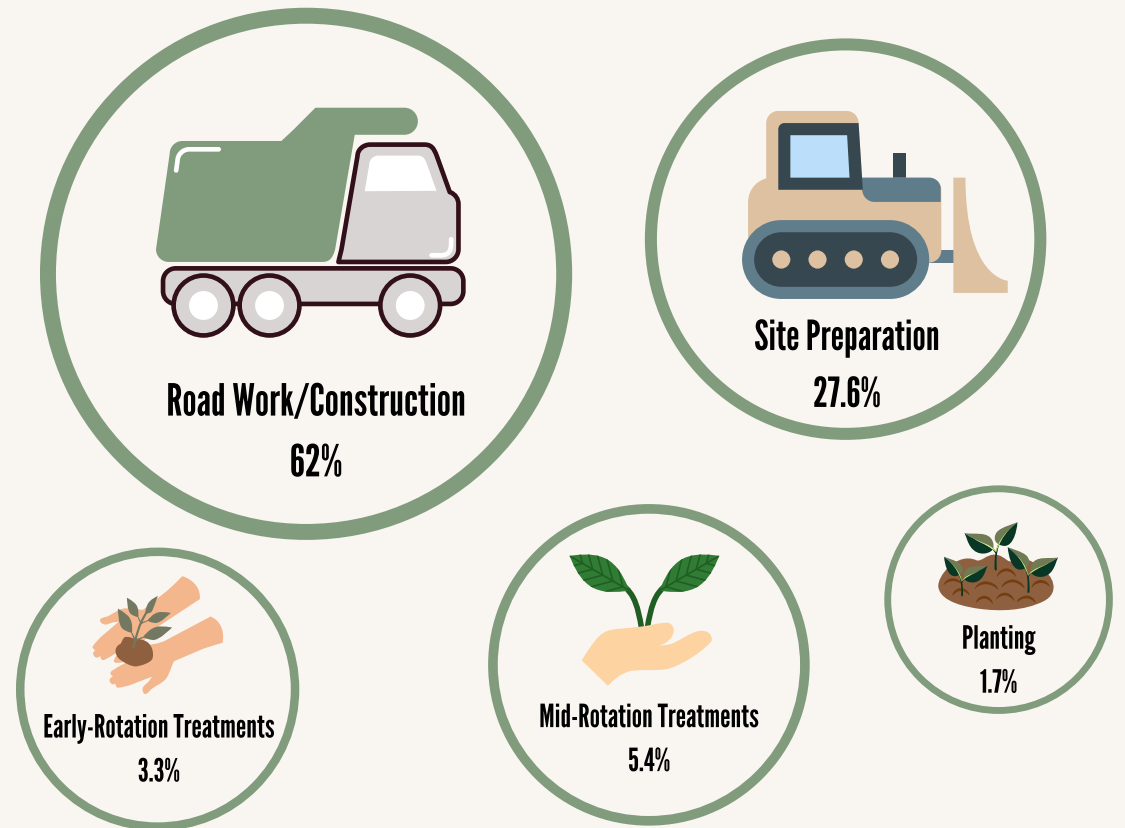
# FORESTRY ACTIVITIES <sup>3,1,6</sup>

Total Silvicultural Emissions: 1,614.85 tons

## Current Emissions

RoyOMartin manages approximately 550,000 acres of timberland. Silvicultural activities are conducted on this property using equipment and aircraft. These activities include planting, site preparation, burning, road construction and maintenance, as well as aerial operations. These operations release CO<sub>2</sub>.

The graph details the tons of CO<sub>2</sub>-e released by source.

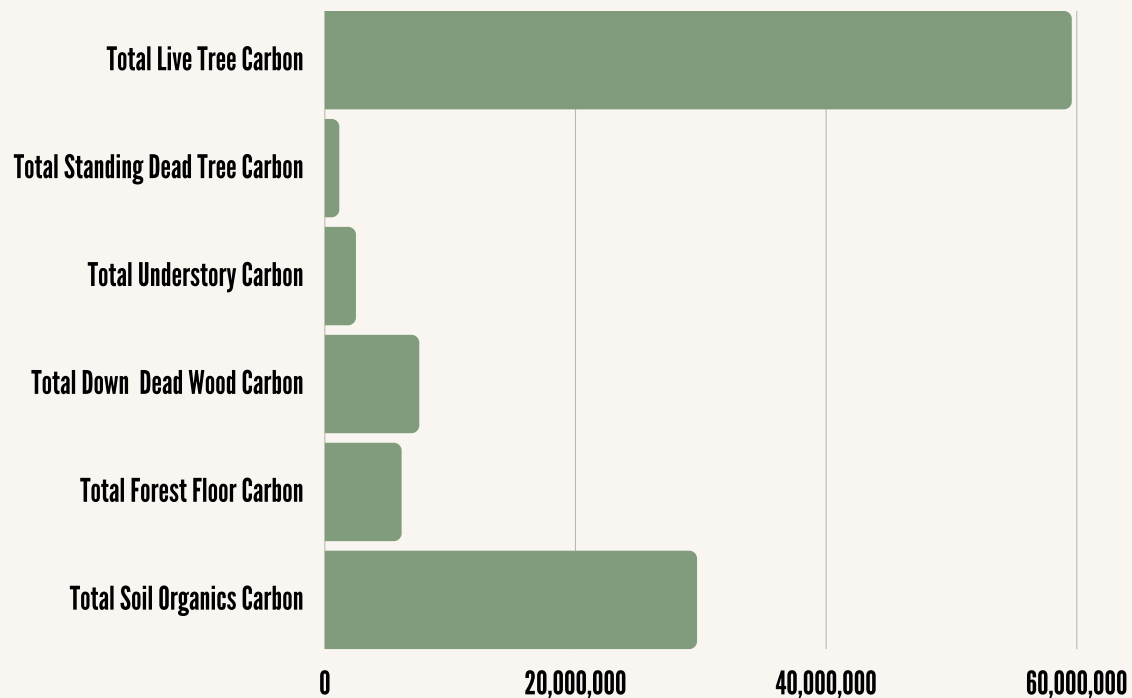


# SEQUESTRATION ACTIVITIES<sup>4, 10</sup>

RoyOMartin manages approximately 550,000 acres of timberland. On this acreage, we sequester carbon through natural cycles. Carbon sequestered per acre depends on timber size and species, as well as stand aspects like understory and soil type.

Currently, Martin Timberlands management sequesters **106,335,761.17** tons of CO<sub>2</sub>-e on its forestlands. The graph below highlights specific forest attributes converted to CO<sub>2</sub>-e per year.

## Current Tons of CO<sub>2</sub>-e





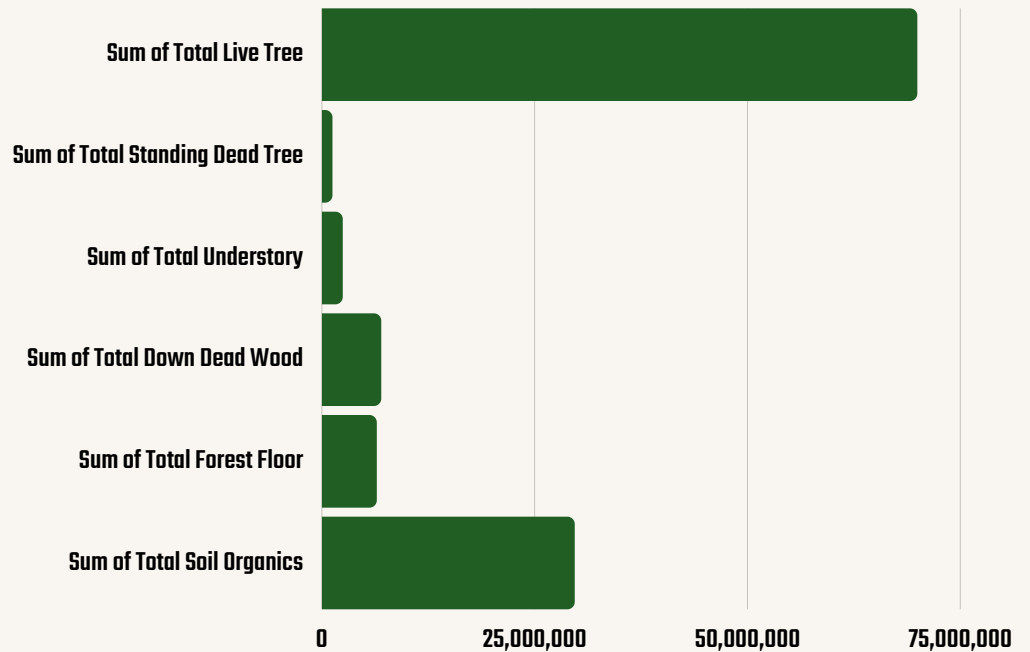
# FORESTRY ACTIVITIES <sup>4, 10</sup>

## Sequestration

Each year, our forests grow and sequester more carbon. Throughout the next 5 years, Martin-managed timberlands will sequester an additional **10,141,709.43** tons of CO<sub>2</sub>-e in our forestlands. This growth is incremental and is adjusted for sustainable removals planned during the period.



## Estimated Sequestered CO<sub>2</sub>-e in Tons after 5 Years

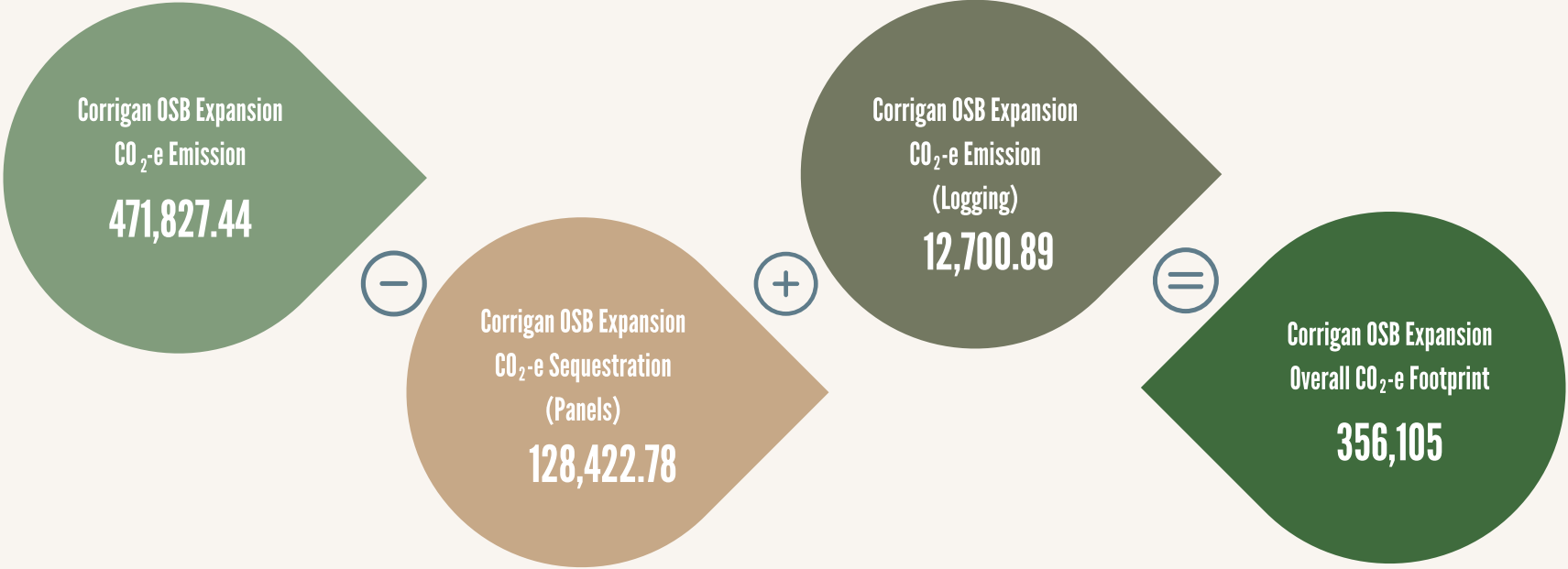


**2,028,341.89** CO<sub>2</sub>-e Tons Per Year (Average)



# CORRIGAN OSB, L.L.C. EXPANSION <sup>3, 5, 8, 2</sup>

RoyOMartin is currently in the process of expanding its OSB manufacturing facility in Corrigan, Texas. This process will increase the carbon footprint of the company, but also increase the sequestration per year in panels. The table outlines the additional carbon footprint of the expansion.



# TOTAL CARBON FOOTPRINT

1, 2, 3, 4, 5, 6, 7, 8, 9, 10

RoyOMartin facilities and operations both emit and sequester CO<sub>2</sub>-e. The table shows yearly averages broken out by category.

Based on this analysis, RoyOMartin has a net positive CO<sub>2</sub>-e sequestration rate per year and sequesters more CO<sub>2</sub>-e than it emits.

Annual tons of CO <sub>2</sub> -e	Sources and Sinks
(5,472.71)	Company Travel and Transportation Emission
(484,528.33)	Corrigan Expansion Emission
(251,131.00)	Electricity Usage Emission
(1,614.85)	Forestry Emission
(47,763.56)	Logging Emission
(1,236,426.23)	Mill Emissions
128,422.78	Corrigan Expansion Mill Sequestration
2,028,341.89	Forest Carbon Sequestration
654,654.91	Mill Sequestration

**784,482.49 Tons of CO<sub>2</sub>-e Per Year**



# PUBLISHED LITERATURE AND SOURCE DATA

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