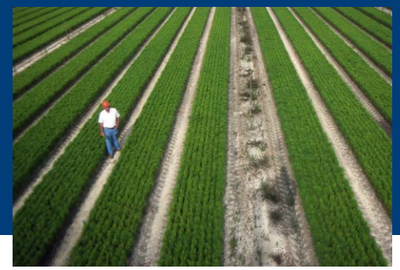
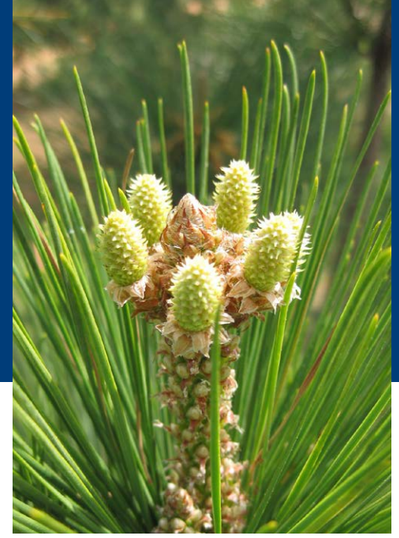
Rayonier
More than trees

Carbon Report

Issued August 2023

OVERVIEW





Rayonier grows and manages an abundant and renewable resource that provides many benefits to society: *trees*

This uniquely positions Rayonier (NYSE: RYN) to offer natural climate change solutions. The trees we manage not only remove more carbon than we emit in our operations, but even after harvesting, help to store carbon through the wood-based products others create from our trees.

In our Carbon Report, we provide a snapshot of the total accumulated carbon stored in our forests at year-end 2022, as well as estimates of the carbon sequestered by our forests, emitted in our operations, and removed and transferred to our customers through harvest activity over the course of 2022. With respect to carbon removed and transferred, we have further estimated the longer-term storage benefits associated with the conversion of trees into end-use forest products.

WITHIN THIS REPORT, WE DISCLOSE OUR ESTIMATE OF:

- **Total carbon stored by our portfolio as of December 31, 2022**
- **Carbon sequestered by our forests during 2022**
- **Carbon emissions associated with our business (Scope 1, 2, and 3)**
- **Carbon removed from our forests through 2022 harvest activity**
- **Projected carbon storage benefit of timber harvested and converted to forest products in 2022**
- **Carbon storage potential of forest products conversion over multiple harvest cycles**

CARBON STORED BY OUR PORTFOLIO

Forests play a critical role in the carbon cycle, using carbon not only for growth but storing it as well. When estimating the **carbon stored** in our forests, Rayonier includes overstory trees, understory vegetation, coarse woody debris, and forest floor, as well as the soil on our land.

The amount of carbon stored in Rayonier's trees varies considerably across the portfolio depending on species, growth conditions, and age.

Carbon Stored[1] in Rayonier Forests at year-end 2022
Metric Tons of CO_2 Equivalents

REGION	FOREST[2]	SOIL	TOTAL ECOSYSTEM
U.S.[3]	362,805,100	305,656,846	668,461,946
N.Z.[4]	54,552,194	53,832,717	108,384,911
TOTAL	417,357,294	359,489,563	776,846,857

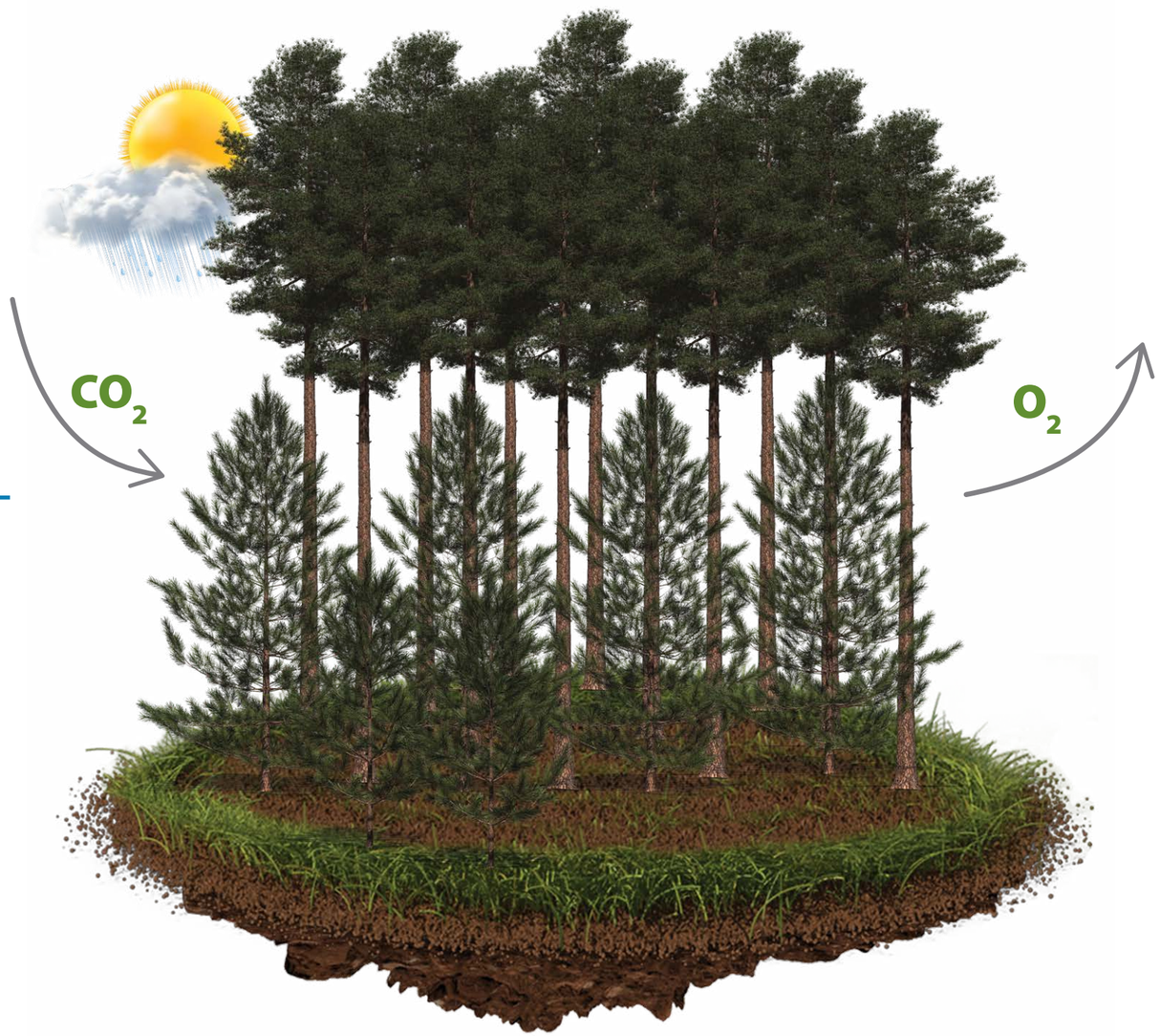
CARBON SEQUESTERED BY OUR FORESTS

Sustainably managed working forests provide many environmental benefits — including **carbon sequestration**. Through photosynthesis, trees absorb carbon dioxide (CO_2) and convert it to stems, branches, leaves/needles, and roots, while also emitting oxygen. Importantly, younger trees generally sequester carbon at a higher rate than mature trees.

CARBON SEQUESTERED[1] BY RAYONIER'S FORESTS DURING 2022

11,839,301 (U.S.)[3]
2,778,008 (N.Z.)[4]

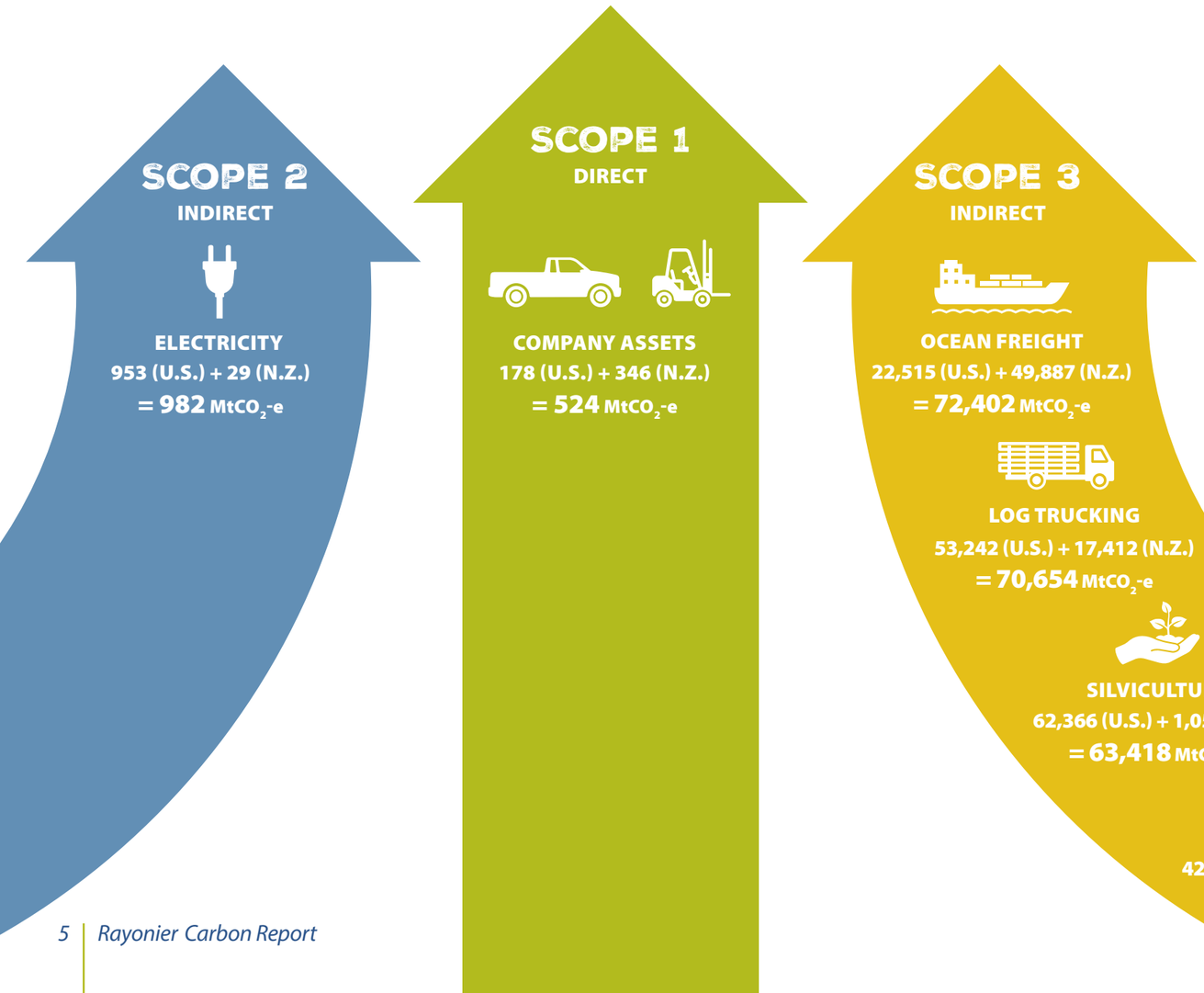
14,617,309 $MtCO_2$-e



For context, the 14.6 million metric tons of CO_2 equivalents sequestered by our forests in 2022 is comparable to the annual carbon emissions of approximately 1.1 million people[5] in the United States, or taking approximately 3.2 million vehicles[5] off the road annually.

EMISSIONS ASSOCIATED WITH OUR BUSINESS

CARBON EMITTED[6] BY RAYONIER IN 2022 » **192,536 (U.S.)** **94,064 (N.Z.)** = **286,600** $MtCO_2$-e



We have measured our impact on the environment by calculating the **emissions** associated with our corporate, forestry, and real estate-related operations during 2022.

We have estimated and broken down our emissions into **Scope 1** (direct emissions from company-owned and controlled resources), **Scope 2** (indirect emissions from electricity purchased), and **Scope 3** (indirect emissions in the value chain — i.e., harvest and transport of our logs, forest management, and business travel).

We have included the Scope 3 emissions we believe are most relevant to our business and can be calculated based on the information available to us.

CARBON REMOVED THROUGH HARVEST ACTIVITY

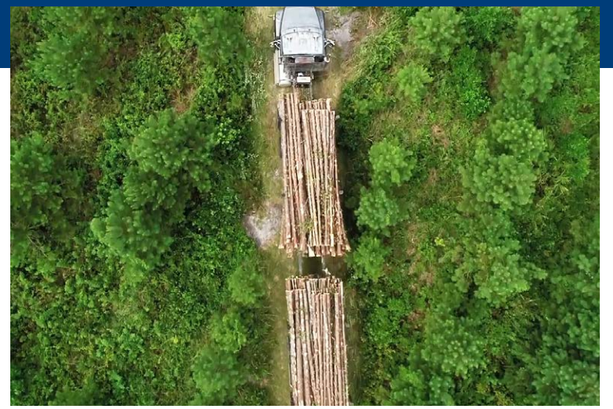
When we **harvest** our trees, we remove a portion of the carbon contained in our forests, which is subsequently transferred to a variety of forest products. After our trees are harvested, we then replant our forests and start the process of growing trees and sequestering carbon all over again.

CARBON REMOVED[7] THROUGH RAYONIER'S 2022 HARVEST ACTIVITY

7,650,990 (U.S.)[8]
1,738,302 (N.Z.)[9]

9,389,292 $MtCO_2$-e

Our estimates are based on Rayonier's actual harvest volume for the year and will fluctuate year-to-year depending on several factors, including the age and species of the trees harvested.



CARBON STORAGE BEYOND OUR FORESTS

The carbon storage benefits of Rayonier's forests continue even after trees are harvested, as carbon can remain sequestered for several decades within the end-use **forest products** produced from such trees, including lumber, plywood, and paper.

After trees are harvested, the cycle begins again — new trees are planted, absorbing carbon at a faster rate than the mature trees that they replaced — all while the harvested timber continues to store carbon within end-use forest products.

PROJECTED CARBON STORAGE BENEFIT OF HARVESTED TIMBER

We have estimated our 2022 harvest volumes by product and destination. This analysis shows the carbon that remains stored in end-use forest products well after the timber has left our forests.

Importantly, life cycle assessment studies have demonstrated the additional benefit of carbon storage in wood-based building products — fewer greenhouse gas emissions (in construction and in use) as compared to other building materials, such as concrete and steel.

2022 Harvest Activity: Projected Carbon Stored in End-Use Forest Products Over Time[10]

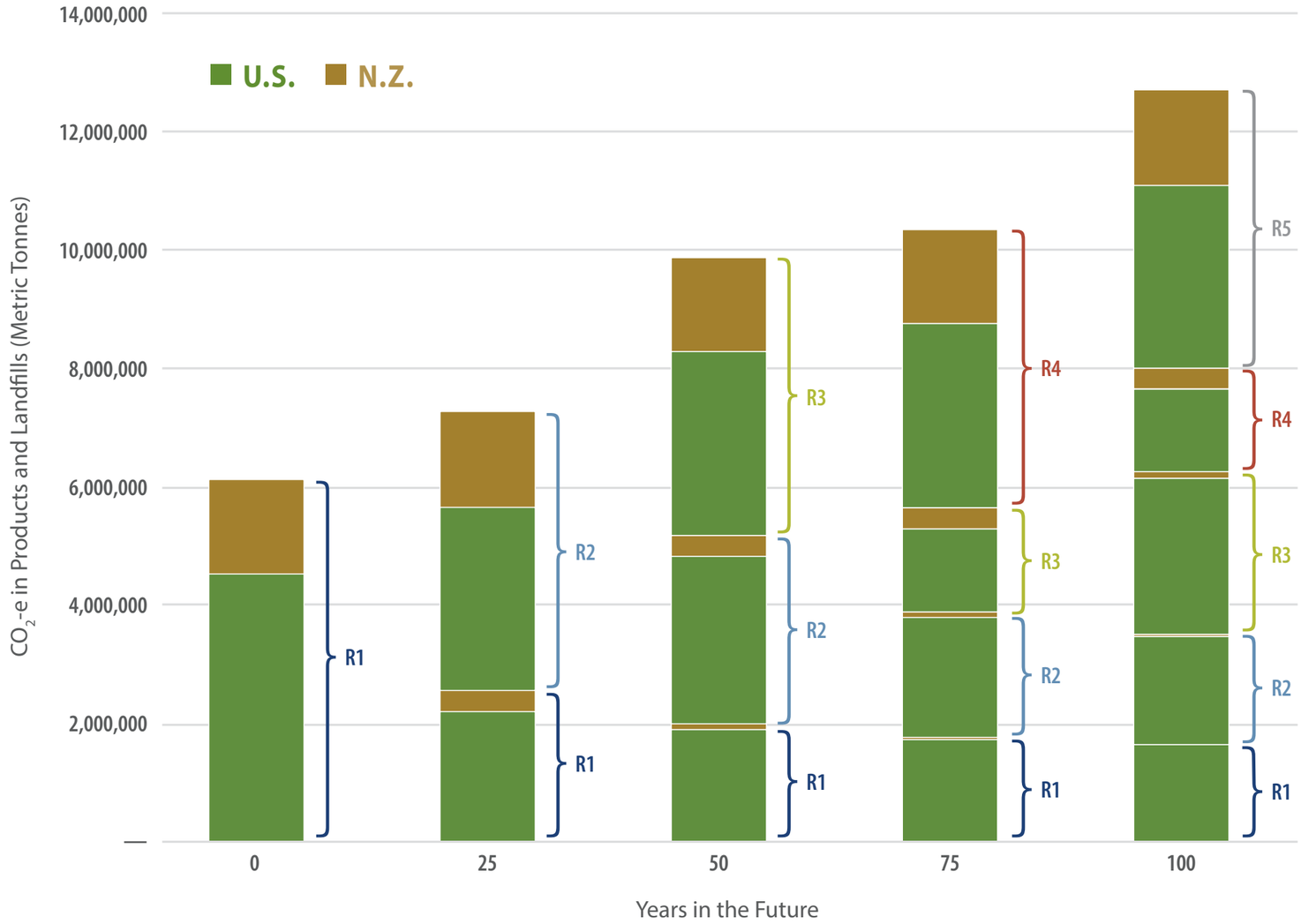
Metric Tons of CO_2 Equivalents

REGION	PRODUCT DESTINATION	CARBON REMOVED IN HARVEST	HARVEST CONVERTED TO PRODUCT[11]	YEARS IN THE FUTURE					
				5	10	25	50	75	100
U.S.	DOMESTIC[12]	7,386,343	4,400,640	3,375,514	2,787,433	2,198,193	1,882,851	1,733,653	1,646,699
U.S.	EXPORT[13]	264,646	243,475	125,585	69,912	19,229	4,350	1,447	537
N.Z.	DOMESTIC[14]	717,046	430,228	378,868	333,640	227,850	120,670	63,907	33,845
N.Z.	EXPORT[13]	1,021,256	931,538	644,858	407,187	102,514	10,290	1,033	104
TOTAL		9,389,291	6,005,881	4,524,825	3,598,172	2,547,786	2,018,161	1,800,040	1,681,185

CARBON STORAGE OVER MULTIPLE HARVEST CYCLES

The forest products derived from our timber can store carbon for an extended period of time — and over multiple harvest cycles, the net impact is an increase in the amount of carbon stored. The adjacent chart illustrates the positive impact actively managed working forests have on carbon storage over a 100-year time frame encompassing multiple rotations.

Carbon storage is estimated based on the half-life of the products produced from our timber as determined by the Intergovernmental Panel on Climate Change (IPCC). The difference in the estimated carbon storage benefits associated with the timber harvested from New Zealand and the United States is largely attributable to the half-life of end-use products in the different markets.



The adjacent chart assumes a 25-year rotation ("R") for southern pine in the U.S. and for radiata pine in New Zealand, and a 50-year rotation for southern hardwoods and Pacific Northwest species.

FOOTNOTES AND SOURCES

(1) Carbon stored and sequestered is calculated based on 2.4 million acres in the U.S. and 417,000 acres in New Zealand. Calculations based on hardwood and softwood forest types by age class for each of our regions: U.S. South, U.S. Pacific Northwest, and New Zealand. Our New Zealand calculations reflect a fully consolidated estimate, although Rayonier owns only a 77% interest in this entity.

(2) Represents overstory trees, understory vegetation, coarse woody debris, and forest floor.

(3) U.S. carbon stored and sequestered is calculated using carbon yield tables (metric tons of carbon/hectare) developed by the USDA Forest Service in "*Methods for Calculating Forest Ecosystem and Harvested Carbon with Standard Estimates for Forest Types of the United States—GTR NE-343*."

(4) New Zealand carbon stored and sequestered is calculated using regional Carbon Tables for pre-1990 forest land (CO_2 –e/ha) developed by the N.Z. Ministry for Primary Industries and used as the basis of calculating carbon sequestration and emission liabilities under N.Z.'s Emission Trading Scheme. Estimates include both productive and non-productive areas. Estimates of carbon in non-productive areas are derived through the application of the methodology outlined in N.W.H. Mason, F.E. Carswell, J.McC. Overton, C.M. Briggs and G.M.J. Hall, February 2012. "*Estimation of current and potential carbon stocks and Kyoto-compliant carbon gain on conservation land*." Department of Conservation Te Papa Awawhai.

(5) U.S. per capita CO_2 emissions calculated based on 2020 estimate provided by the World Bank. Vehicle CO_2 emissions calculated based on conversion provided by the EPA.

(6) Carbon emissions reflect the CO_2 emitted from company assets (Scope 1 Direct), purchased electricity and heating from our owned or leased corporate, resource unit, and forest research facilities (Scope 2 Indirect), and CO_2 emitted within our value chain, including real estate activities, harvest machinery, road construction and maintenance, log trucking, ocean freight, silviculture (site preparation, planting, weed control, fertilization, and pre-commercial thinning), and business travel and commuting miles (Scope 3 Indirect). Emissions are calculated using spend-based, average-based, or fuel-based methods depending on data availability, and CO_2 emissions factors are applied from the EPA Emissions Factor Hub.

(7) Carbon removed in harvested timber is calculated based on Rayonier's 2022 harvest volumes in each of our regions: U.S. South, U.S. Pacific Northwest, and New Zealand, as reported in our 2022 Form 10-K.

(8) Carbon removed in U.S. harvested timber is calculated based on conversion of harvest volume green weight to oven dry weight using data in the U.S. Forest publication "*Specific Gravity and Other Properties of Wood and Bark for 156 Tree Species Found in North America – RN NRS-38*." Carbon content of oven dry wood is calculated using the IPCC default percentage (50%) for oven dry product weight to carbon weight.

(9) Carbon removed in New Zealand harvested timber is based on the methodology reported by Manley and Evison (2017) in "*Quantifying the carbon in harvested wood products from logs exported from New Zealand*."

(10) Carbon stored in harvested forest products is calculated based on Rayonier's harvest volumes within each of our regions: U.S. South, U.S. Pacific Northwest, and New Zealand, then sorted by product type and destination with half-life assumptions.

(11) Calculated to assume decay of carbon once converted into various forest products.

(12) Carbon stored in U.S. harvested forest products for domestic use, including carbon stored in landfills, is calculated based on the USDA Forest Service publication "*Methods for Calculating Forest Ecosystem and Harvested Carbon with Standard Estimates for Forest Types of the United States—GTR NE-343*."

(13) Carbon stored in U.S. and New Zealand harvested forest products for export use is based on the half-life of forest products from logs exported to China, India, and Korea as reported by Manley and Evison (2017) in "*Quantifying the carbon in harvested wood products from logs exported from New Zealand*."

(14) Carbon stored in New Zealand harvested forest products for domestic use is based on the IPCC harvested forest products categories and half-life methodology as outlined by Wakelin et al (2020) "*Estimating New Zealand's harvested wood products carbon stocks and stock changes*."