To Our Stakeholders
Carbon Cycle
Carbon Storage
Carbon Record
Physical Climate Impacts
Appendix
Our 2021 Carbon and Climate Report provides our accounting methodology for measuring our carbon removals, storage, and Scope 1, Scope 2, and Scope 3 greenhouse gas emissions and complements our 2021 ESG Report. Overall, our 2021 carbon removals and storage, including all emissions, position us as carbon negative. Carbon and Climate teams within our businesses are developing greenhouse gas reduction initiatives, which position us to establish SBTi (Science Based Targets initiative) commitments once the GHG Land Sector and Removals protocol and new SBTi guidelines for Forest, Land, and Agriculture (FLAG) are finalized.

We recognize that climate change can present both risks and opportunities to our business. As part of the foundation for our TCFD (Task Force on Climate-Related Financial Disclosures) reporting, our 2021 Carbon and Climate Report also includes a climate scenario analysis that models potential physical impacts of temperature and precipitation changes on our timberlands.

We are well positioned to face the challenges of climate change and are committed to do our part.

“We are very pleased to be introducing our inaugural Carbon and Climate Report. Internal teams at PotlatchDeltic have identified a number of opportunities that will allow us to do our part to help address climate change. We look forward to making progress on these opportunities over the coming years.”

Eric J. Cremers  
President and Chief Executive Officer  
PotlatchDeltic

Anna Torma  
Vice President, Public Affairs and Chief ESG Officer  
PotlatchDeltic
CARBON CYCLE
Sustainably managed forests combat climate change through carbon removal, storage and cycling. Trees absorb atmospheric carbon dioxide through photosynthesis and store it in the branches, trunk, needles, and roots. Using wood products for building stores tree carbon and using biomass for energy retains carbon within a natural loop.
Active forest management enhances carbon removal from the atmosphere compared to unmanaged forests. As forests mature the rate of carbon sequestration slows, and natural tree mortality increases. Working forests are managed to maintain optimum tree density and spacing resulting in a vigorously growing forest that minimizes the risk of catastrophic losses. Unmanaged forests increase the chance of carbon losses from disturbances such as fire, insects, disease infestations, or decay.

Timber harvest initiates the forest products manufacturing process and long-term storage of forest carbon in wood products. In addition, reforestation after harvest restarts the process of sequestration and storage in the next tree growing cycle. At the time of harvest, 68% of the carbon in a typical sawtimber tree is transported to the mill and 32% remains on site and enters the mineral cycling process. The remaining material cannot be used in the production of forest products. This is a biogeochemical cycle where elements including carbon move through the soil, living organisms, air, and water.

The decomposition of treetops and roots and movement of tree carbon into the mineral cycle where it moves into the soil and atmosphere is a slow process. Twenty years after harvest in Idaho, approximately 35% of the carbon in tree parts that remained in the forest at the time of harvest is still held in tree biomass. Twenty years after harvest in the U.S. South, approximately 20% of the carbon is held in tree biomass.

Wood products manufacturing converts the logs into long-lived wood products, storing about 55% of the carbon in the wood and acting like a “carbon vault.” The residuals or byproducts produced during the lumber and wood panel manufacturing process are utilized to manufacture additional forest products or to produce biogenic energy. Newly planted trees grow and capture additional carbon. Once they grow to the end of a rotation, harvest occurs and conversion of the harvested logs to wood products begins the long-term carbon storage. Replanting re-starts the sequestration process. When multiple rotations (cycles of tree planting, growth and harvest) overlap carbon storage in wood products, the result is cumulative carbon storage that increases over time.

Forest management concentrates on the growth of harvestable crop trees for use in solid wood products, which maximizes the amount of forest carbon that is captured and stored in long-lived wood products. Harvesting mature trees and replanting increases the rate of carbon uptake, as well as generating wood for lumber and other wood products. Overall, forests, harvested wood products, and urban trees in the U.S. offset more than 11% of total GHG emissions annually.
CARBON STORAGE

The carbon that working forests remove from the atmosphere is stored in multiple ways. It can be stored in tree branches, stems, and roots, as well as in the soil. Once a tree is harvested, the wood products manufactured from it holds that carbon until it is replaced or decays. The trees we plant then grow, renewing the cycle and growing net carbon storage.

We have divided our forest carbon stocks into three pools that allow us to track our carbon inventory and to follow and account for stored carbon when timber is harvested. The three pools are: 1) merchantable portions of trees, 2) above ground non-merchantable portions of merchantable trees and pre-merchantable trees, and 3) below ground portions of all trees (excludes soil carbon).

At the end of 2021, our forests stored a total of 114 million metric tons of CO₂e in all three pools. Merchantable above ground portions accounted for 69 million metric tons of CO₂e, 26 million metric tons of CO₂e were in pre-merchantable above ground portions, and 19 million metric tons were in below ground portions of trees.

The carbon stored in forest soils accounts for approximately 56% of forest carbon stocks and is a major component of the contribution of forests as a natural climate solution. Soil carbon pools can be dynamic over long periods of time, but they do not flux in predictable, reportable ways like above ground carbon does in response to annual tree growth and harvest. The US Forest Service Forest Inventory and Analysis program is continuing to develop methods to accurately measure soil organic carbon (SOC) and include estimates in their reporting. Utilizing the most recent regional estimates of SOC measured to a depth of 100 cm, our Idaho soils are storing ~105 million metric tons CO₂e, our Gulf South soils are storing ~108 million metric tons CO₂e, and our ownership is storing ~53 million tons CO₂e in the understory and dead wood. For our ownership, the combined total tree carbon, soil carbon, and understory and dead wood is 380 million metric tons CO₂e and is a result of our lands being maintained in working forest conditions.

Our Existing Carbon Stored

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Estimated Proportion of Total Forest Carbon</th>
<th>Calculated to a Single Value (MTCO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Live Tree Carbon</td>
<td>All carbon stored above ground and below ground in live trees</td>
<td>30%</td>
<td>~ 114 Million</td>
</tr>
<tr>
<td>Soil Carbon</td>
<td>Carbon stored in soils</td>
<td>56%</td>
<td>~ 213 Million</td>
</tr>
<tr>
<td>Other</td>
<td>Understory, dead wood and litter</td>
<td>14%</td>
<td>~ 53 Million</td>
</tr>
</tbody>
</table>
Carbon from harvested wood remains in wood and paper products until the end of their use and eventual decay. The rate of decrease in storage is dependent on the specific product end use. Approximately 68% of total tree carbon in a sawlog-sized tree is transported to a sawmill and 55% of that amount is captured in solid wood products, such as lumber and plywood, as a long-lived carbon vault. The total tree carbon that is used for pulp and paper products has a shorter life span. Pulp and paper products have a rate of decay or release that is high initially as products are used, recycled, or disposed of, then the rate slows substantially after initial use because of the portion that is stored in landfills.

When wood-based products are used in place of fossil fuel-intensive products like steel or concrete, there is a permanent benefit to our atmosphere. For example, researchers have found that the CO₂ intensity of lumber production is 50% less than steel and 25% less than that of cement. By building with wood, additional carbon is stored in everyday products and buildings. A wood house will store carbon until it decays or is replaced. If the wood house stands for 108 years, the forest will have regrown two to four cycles resulting in compounding carbon storage. When trees are sustainably harvested, wood continues to store carbon in the thousands of products we use every day, from paper products to lumber. Trees then regrow, repeating the cycle.

The continuing cycle of active forest management, including planting, growing, and harvesting, optimizes a forest’s ability to sequester and store carbon and improves resiliency, maintaining the ability to sequester carbon in the future. The life cycle of managed forests and the production of long-lasting wood products have a significant climate benefit, with relatively low emissions associated with the production of lumber. Over multiple cycles of wood products production and forest renewal, total carbon storage increases.

Forest products store carbon for an extended period spanning multiple harvest cycles, and the net impact is a continually increasing amount of carbon stored related to each acre of timberland. The graph below illustrates this cumulative increase in the storage of carbon in wood and paper products over 108 years (net of the storage loss as products reach the end of their lives). The graph assumes that a fixed set of timberlands are harvested in the base year and then four more times in the South and two more times in Idaho. This reflects our 27 year harvest cycle in the South and our 54 year harvest cycle in Idaho.

Forest products store carbon for an extended period and each year additional carbon from harvested trees is added to forest products storage. The net impact is a continually increasing amount of carbon storage in forest products. The graph below shows the accumulating amount of carbon storage with the addition of each successive year of harvest from our timberlands. The analysis includes the decay associated with the paper and wood products in use.

Accumulating Forest Product Carbon Storage from Our Annual Harvests
CARBON RECORD

The growing and harvesting of timber, the production of primary wood products such as lumber, and the use of sawmill residuals to manufacture secondary products create complex fiber flows into multiple end products.

We utilize a comprehensive carbon and greenhouse gas (GHG) accounting methodology that tracks removal of carbon from the atmosphere, storage in standing trees, storage in end products, and greenhouse gas emissions from forest management, harvesting, hauling, and manufacturing.

Our net annual atmospheric carbon removals include the growth and harvest on our timberlands and our share of the change in carbon in the standing stocks of trees on other landowners in the procurement basins from which our mills source logs. Carbon storage values include the products we manufacture, and products manufactured by others from our logs and mill residuals. Greenhouse gas emissions include our Scope 1 and 2 emissions as well as Scope 3 upstream and downstream emissions.

While established protocols exist for calculating greenhouse gases, there is currently no formal protocol for land sector removals. Our approach is consistent with the methodology used by some of our peers. The World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD) is currently finalizing a Greenhouse Gas Protocol - Land Sector and Removals. We plan to be part of the pilot group reviewing the protocol in the fall of 2022. Our removal results or methodology may need to be restated if the formal protocol varies in methodology. In addition, the Forest Inventory and Analysis program (FIA) is making several adjustments to carbon metrics this year, including a species-specific carbon percentage, which will cause our reported values to change.

Overall, our 2021 atmospheric carbon removals, product storage, and all emissions position us as carbon negative – meaning the carbon removed from the air by our trees and the carbon stored in wood products we manufacture or paper and forest products that others manufacture from our trees is greater than our total annual Scope 1-3 emissions.

Our 2021 Carbon Record
LAND-BASED REMOVALS

Scope 1 – Net Change in Our Timberland

The amount of carbon stored in our timberland changes over time. These changes occur due to tree growth, harvests, natural disasters, and other factors. Because harvest removes carbon from the land base (transitioning much of it into storage in wood products) and tree growth adds carbon to the land base, we are interested in understanding how the amount of carbon stored on our land varies over time. Because the “true” value fluctuates on a moment-to-moment basis, we quantify the net change by comparing the carbon storage in our forests at year-end to the beginning of the year.

To avoid conflating the effects of our management activities with the changes of our land-base, we compare carbon storage only on acreage we owned for the full calendar year. The use of this consistent spatial footprint for analysis means any acquisitions or divestitures that occurred during the year are omitted.

Keeping track of carbon storage in standing trees and carbon removals via tree growth is compatible with the way we keep track of our standing tree inventory and growth. As with any actively managed forests, a variety of changes can occur throughout the year that affect the standing amount of carbon. Some major activities that can alter the inventory in an area are harvests, growth, and updated stand inventory (newly collected data). The magnitude of the annual change associated with these activities is tracked.

The basis of our tree and carbon inventories has two major components, inventory cruising and growth modeling. Our extensive inventory cruising program involves ground-based sampling in our forests to get a tree-list for stands. Since stands are not sampled every year, our growth models estimate growth in the stands in the interim between samples. This allows us to have an up-to-date tree list for every stand in our ownership at the end of every year.

At year-end, we take these stand level tree lists and apply well-documented biomass estimators or species-specific moisture contents to calculate component-based carbon inventories for our land base. The difference between standing carbon at year-end compared to the beginning of the year is the net change for 2021.

In 2021, we calculated the net change in our forests (our Scope 1 timberlands value) for three carbon pools: 1) merchantable portions of trees, 2) above ground non-merchantable portions of merchantable trees and pre-merchantable trees, and 3) below ground portions of all trees (excludes soil carbon).

In 2021, tree growth on our timberlands removed approximately 6.6 million metric tons CO₂e from the atmosphere. On a net basis, following harvest and other inventory changes of nearly 6.2 million metric tons of CO₂e, the net flux in our forests was an increase of nearly 440,000 metric tons CO₂e. The net change resulted from an increase of 635,000 metric tons CO₂e in merchantable stems, a decrease of 251,000 in above ground non-merchantable portions of merchantable trees and pre-merchantable trees, and an increase in below ground portions of all trees of 55,000 (excludes soil carbon). The decrease of 251,000 in pre-merchantable occurred because more trees grew into merchantable stems than grew into pre-merchantable trees.
Scope 3 – Net Change in Forests of Our Sourcing Regions

Each of our mills has a geographic sourcing region. The carbon stored in forest pools in each of these sourcing regions changes or fluxes over time with the local timberlands of a region either acting as a sink or a source of atmospheric carbon. Carbon sinks absorb more carbon than they release, while carbon sources release more carbon than they absorb. While forests are typically carbon sinks, they can become carbon sources if disease and other disturbances cause forests to die and decay or due to land use changes.

The concept of accounting for carbon from non-owned forests where we source fiber is that a mill should also take “responsibility” for some of this annual flux in forest carbon. The proportion of the regional carbon flux attributed to a mill should be equal to the proportion of the total regional external harvest that a mill consumes.

For carbon accounting purposes, we consider the sourcing region for a mill to be the state in which the mill is located. The statewide net flux in above ground carbon is determined using the USDA GHG Emission Report. We use the estimated overall harvest in the state and calculate the land-based carbon flux associated with those harvests. We then determine our sourcing from the harvest in the state and establish our share of the land-based carbon flux associated with those harvests.

In 2021 we owned and operated mills in 4 states: Idaho, Arkansas, Minnesota, and Michigan. Note that a negative value indicates net uptake in atmospheric carbon so that Arkansas, Minnesota, and Michigan forests were a net sink of carbon, while Idaho forests were a net source. Our calculated combined contribution to the net change for these states was an atmospheric removal of carbon equal to approximately 1.6 million metric tons CO₂e.

Idaho forests have become a source of carbon emissions primarily because of declining forest carbon storage on public forest lands resulting from slow growing older stands of trees and tree mortality from insects, disease, and fire in unmanaged stands. The carbon stored in wood products from harvested trees is not included in the state sink / source calculations.

2021 Change In Our Sourcing Regions

<table>
<thead>
<tr>
<th>State</th>
<th>Net State Carbon Flux (MMTCO₂e)</th>
<th>Our % Sourcing</th>
<th>Our Share Carbon Flux (MMTCO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>(22.8)</td>
<td>5%</td>
<td>(1.0)</td>
</tr>
<tr>
<td>Idaho</td>
<td>6.8</td>
<td>6%</td>
<td>0.4</td>
</tr>
<tr>
<td>Michigan</td>
<td>(8.4)</td>
<td>6%</td>
<td>(0.5)</td>
</tr>
<tr>
<td>Minnesota</td>
<td>(8.6)</td>
<td>6%</td>
<td>(0.5)</td>
</tr>
<tr>
<td>Total</td>
<td>(1.6)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Calculating Change in Sourcing Regions

Net change in sourcing region = change in carbon stocks or growth-harvest-mortality

Percent of State Harvest Purchased by Our Mills

Our Share of State Carbon Flux

1.6 Million Metric Tons Removed
Scope 3: Stored in Wood Products We Manufacture

The trees grown on our timberlands are grown and harvested using sustainable long-term, five-year, and annual forest management plans. In 2021, about 27% of the logs we harvested, or approximately 1.5 million tons of sawlogs from our timberlands, were used in our wood products facilities. An additional 2.6 million tons of sawlogs were purchased by our mills from external sources. These logs were converted by our wood products facilities into lumber and industrial plywood.

These wood products store carbon by remaining in use, with slow reversals over their lifetime. The storage values were developed using decay curves for specific wood products that have been identified in the US Forest Service report, Quantifying Greenhouse Gas Fluxes in Agriculture and Forestry: Methods for Entity-Scale Inventory. Since the amount of carbon stored in a wood product decreases as the time since production increases, we use the average quantity of carbon stored over a 100-year period.

In 2021, PotlatchDeltic sold 1.0 billion board feet of lumber and 130 million square feet (3/8") of industrial and structural plywood. Using the GHG methodology described above, these wood products store an average of approximately 1.4 million metric tons CO₂e.

Calculating CO₂e Stored in Wood Products We Manufacture
Scope 3: Stored in Logs We Sell Externally

Some of the sawlogs harvested from our timberlands are sent to external customers to be converted to wood products such as lumber and plywood. In addition, wood from thinnings or the tops are often sent to external customers as the fiber for a wide range of end products including paper, packaging, and other uses.

Our carbon storage analysis for external log sales is based on the type of log sold. We track all log volumes harvested from our timberlands delineated by hardwood vs softwood and by pulpwood vs sawlog. We estimate the average carbon stored over 100-years in each log category sold using US Forest Service Quantifying Greenhouse Gas Fluxes in Agriculture and Forestry: Methods for Entity-Scale Inventory (Table 6-a-5 and Table 6-a-6). The publication provides 100-year average product storage by region and log category.

In 2021, our timberlands sold approximately 4.0 million tons of fiber externally to non-PotlatchDeltic owned mills. Approximately 54% of these external fiber sales consisted of sawlogs with 46% being pulpwood. Nearly all the logs were softwood, with less than 10% consisting of hardwoods. Using the GHG methodology described above, this stores an average of approximately 1.1 million metric tons CO₂e over the next 100 years.
**Scope 3: Stored in Wood Residuals We Sell**

When a log is prepared to be sawn at our mills, we maximize the value of each log and minimize residuals. At most mills, 3-D scanners and optimizers are used to automate the process. The full profile of the front and back of the log is scanned which creates a computerized image of each log. The optimizer then selects the cuts of the log and how the log should be oriented to maximize value and minimize waste. It determines the number of boards to be cut and maximizes the yield by following the curvature of the log. This process increases productivity and quality at the mill. Overall, about 55% of each log is processed into lumber, with the remaining wood residuals consisting of sawdust, chips, shavings, and bark. These by-products can be used internally to produce biogenic energy or sold externally to be converted into a wide range of other wood products, paper and packaging products, or other end uses. Essentially all the log is utilized.

In 2021, our wood products facilities utilized an average of 19% of the wood residuals they produced for fuel in their boilers to generate thermal energy in the form of steam and approximately 81% of the wood residuals generated were sold for a wide range of end uses. We estimate the average carbon stored in the wood residuals sold and we do not include the carbon stored in internally utilized wood residuals.

In 2021, our wood products facilities sold approximately 1.5 million metric tons of wood residuals. The end use products from these residuals store an average of approximately 200,000 metric tons CO₂e over the next 100 years.

**Calculating CO₂e Stored in Products From Wood Residuals We Sell**

![Diagram showing the process of converting wood residuals into CO₂e stored products.](image)
GREENHOUSE GAS EMISSIONS

Scope 1 Emissions: Direct Emissions from our Operations

Scope 1 emissions are greenhouse gas (GHG) emissions that are emitted directly from our activities in our timberlands, our wood products facilities, and real estate operations. These emissions are emitted from stationary sources and associated control devices (boilers, kilns, dryers, and a regenerative catalytic oxidizer (RCO)), mobile sources (fork trucks, log yard equipment, company-owned vehicles), long-term storage of wood residuals at our mills, and the methane (CH₄) and nitrous oxide (N₂O) emissions from biomass combustion.

To consistently calculate Scope 1 emissions, we use the National Council for Air and Stream Improvement (NCASI) tool. This approach is consistent with methodology and emission factors consistent with guidance from the International Panel on Climate Change, and it reflects widely accepted protocols such as the Greenhouse Gas Protocol. This tool calculates CO₂, CH₄, and N₂O emissions from wood products manufacturing facilities and their ancillary operations. Scope 1 emissions from our timberlands and real estate segments are also calculated with this methodology.

The calculations involve the following:

- For each site, we use our purchasing records and standardized emission factors to calculate CO₂-equivalent (CO₂e) emissions resulting from fossil fuels usage.
- For each site, we use our steam production records to calculate biomass usage and subsequent biogenic CO₂ emissions (excluded from Scope 1) and remaining CO₂e emissions (CH₄, N₂O).
- For sites with long-term residuals storage, we calculate the quantity of residuals onsite, use a methane generation rate, and apply a standardized Global Warming Potential (GWP) to estimate CO₂e emissions.

Our consolidated 2021 Scope 1 emissions were approximately 35,000 metric tons CO₂e with 31% from stationary sources, 28% from mobile sources, and 23% from long-term storage of wood residuals. The remaining 18% is from non-biogenic emissions from biomass combustion.

Over 99% of our Scope 1 emissions are from our wood products facilities with less than 0.1% from timberlands and real estate. Within wood products Scope 1 emissions, our Gwinn, Michigan wood products facility accounts for 36% of GHG emissions with higher emissions the result of the use of natural gas to fire a boiler and a direct-fired kiln. Our facility at St. Maries, Idaho has higher GHG emissions as a result of long-term wood residuals storage and the RCO for pollution control.

Emissions generated from biogenic carbon include energy fueled by the use of wood residuals at our wood products facilities. These emissions in 2021 were 500,000 metric tons CO₂e and were not included in our GHG direct Scope 1 emissions. Biogenic CO₂ emissions can be considered carbon-neutral given the residual wood used for energy has a net sequestration benefit as areas harvested are replanted and the CO₂ absorption cycle is renewed as the forests grow. These biogenic emissions are also not additive to the carbon released into the atmosphere because they are considered part of the natural carbon cycle and as a result, they are preferable to the alternative use of fossil fuels.
Scope 2 Emissions: Indirect Emissions from Electricity Providers

Scope 2 emissions are GHG emissions associated with the production of the grid electricity used at our facilities and offices. For the electricity used onsite, there are emissions offsite associated with the production of that electricity. These emissions vary depending on the method of production of the electricity, with fossil fuels having high emission factors and renewable sources having low emission factors (although not necessarily zero emissions). Emission factors for electricity production vary by region and source of the grid electricity. Although these emissions are indirect, the user has some control over the amount of electricity used.

There are two methods for calculating Scope 2 emissions. The GHG Protocol Scope 2 Guidance defines both methods. A location-based method reflects the average emissions intensity of grids on which energy consumption occurs (using grid-average emissions factor data). A market-based method reflects emissions from electricity that companies have purposefully chosen. This method would include any type of contract with a utility and can include renewable energy credits (RECs) or other energy attribute certificates.

To calculate the emissions associated with our electricity usage, we use the same NCASI tool as used in Scope 1, which follows the GHG Protocol. We calculate Scope 2 emissions in both location-based and market-based formats. Location-based Scope 2 emissions are calculated with state-specific emission factors, while market-based Scope 2 emissions are calculated with utility-specific emission factors. The calculations involve the following:

- For each site, we collect electricity purchasing records and consolidate electricity usage by site.
- For location-based Scope 2 emissions, we apply a state-specific GHG emissions factor from the Environmental Protection Agency (EPA) Emissions & Generation Resource Integrated Database (eGRID) for each site. Emissions are calculated for CO₂, CH₄, and N₂O emissions, which are then adjusted to CO₂e with standardized GWPs.
- For market-based Scope 2 emissions, we apply a utility-specific emissions factor from the utility serving each site. Emissions are calculated for CO₂, CH₄, and N₂O emissions, which are then adjusted to CO₂e with standardized GWPs.

Our consolidated location-based Scope 2 GHG emissions were approximately 53,000 metric tons of CO₂e in 2021, using the most up to date utility-specific emission factors from EPA's e-GRID. Our market-based Scope 2 emissions were 44,000 metric tons of CO₂e in 2021, using the most up to date utility-specific emission factors from our electricity providers.

While our location-based Scope 2 emissions show a higher emissions quantity, the market-based approach is a more precise approach since it is using the emission factors with our specific electricity providers. Our market-based Scope 2 emissions results in a lower emissions calculation, because our electricity provider in Arkansas has a much lower emission rate for electricity production than the Arkansas state average emission rate. We have three facilities in Arkansas, so this results in a lower market-based Scope 2 emissions calculation.
**Scope 3 Emissions: Indirect Emissions from Value Chain**

Scope 3 emissions, or indirect emissions, are the GHG emissions associated with our upstream and downstream value chain. These emissions are divided into 15 categories. These categories represent a wide array of emissions ranging from products and services that are paid for, to assets leased to other entities.

To consistently calculate Scope 3 emissions, we used the NCASI Scope 3 Screening Tool. This tool calculates Scope 3 emissions with an estimated 80% accuracy. Using fiber flows, we use the Screening Tool to calculate emissions for categories 1 (Purchased Goods and Services), 3 (Fuel-Energy-Related Activities), 4 (Upstream Transportation), 9 (Downstream Transportation), 10 (Processing of Sold Products), and 12 (End-of-Life for Sold Products) for Scope 3 emissions.

Excluding our real estate business, the calculations involve the following:

- We consolidate all accounting records for log sales from our Timberlands business.
- We consolidate all accounting records for our Wood Products business for log purchases, primary product (lumber, plywood) shipments, and secondary product (wood residuals) shipments.
- We convert all fiber data to dry metric tons.
- We input fiber flow data into the NCASI Screening Tool.
  - Wood Products business log purchases.
  - Wood Products business primary and secondary product sales.
  - Timberlands business log sales.
- We apply appropriate custom emission factors for bark and planer shavings, matching the sawdust default emissions factor for categories 1, 9, 10, and 12.
- We input Scope 1 CO₂e emissions to calculate upstream processing and distribution emissions for fuels.
- We input Scope 2 CO₂e emissions to calculate transmission and distribution losses of electricity.

We utilized a consultant to calculate the Scope 3 indirect emissions associated with our Real Estate business. The methodology used was consistent with the WRI/WBSCD GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard, and the GHG Protocol Technical Guidance for Calculating Scope 3 Emissions (v1.0). Three categories were determined to be relevant: Category 1: Purchased Goods and Services, Category 2: Emissions from Capital Goods, and Category 13: Downstream Leased Assets. Total 2021 real estate Scope 3 GHG emissions were 5,100 metric tons CO₂e.

Company-wide consolidated 2021 Scope 3 emissions were approximately 2,500,000 metric tons of CO₂e. Category 1: Purchased Goods and Services makes up 8% of Scope 3 emissions and includes emissions from professional services, telecommunications services, and wood fiber. Category 3: Fuel-Energy-Related Activities makes up 1% of Scope 3 emissions and includes energy losses from transportation and distribution of purchased energy in Scope 2, and any other utility or fuel information not covered by Scope 1 or Scope 2. Category 4: Upstream Transportation and Category 9: Downstream Transportation result in 3% and 6% of our calculated Scope 3 emissions, respectively. Category 10: Processing of Sold Products includes emissions from our sold logs and sold residuals that are processed in our customers’ mills and represents 39% of our Scope 3 emissions. Category 12: End-of-Life of Sold Products is the emissions from the recycling, landfilling, and disposal of our sold products and is 43% of our Scope 3 emissions. Other Scope 3 categories result in insignificant amounts of Scope 3 emissions. Overall, upstream emissions (including harvesting, hauling, and purchased materials and services) accounted for 12% of our Scope 3 emissions.
The rationale for not including the remaining categories is described below:

**Category 2: Capital Goods.** Scope 3 emissions associated with the purchase of capital goods has not been recognized as being a significant source of emissions in our industry. A general review of emissions associated with the purchase of capital goods supports this assumption at this time.

**Category 5: Waste Generated in Operations.** The majority of materials that could become waste from our operations are wood residuals which are either utilized for energy production (via biomass boilers) or used for other products by our downstream customers. Emissions from biomass combustion are a renewable source of energy and get reported as biogenic emissions. Emissions from materials to downstream customers get calculated in category 10 of our Scope 3 inventory. We do have some long-term storage of woody debris onsite, which is reported as part of our Scope 1 emissions. The relatively small amount of waste sent offsite to landfills (4,800 metric tons in 2021) did not represent a material amount of Scope 3 emissions.

**Category 6: Business Travel.** We reviewed emissions from business travel utilizing travel expenses from our accounting data. The analysis included air travel, hotels, rental car mileage, and mileage reimbursement (for mileage driven in private vehicles for business purposes). This did not result in a significant amount of Scope 3 emissions.

**Category 7: Employee Commuting.** We estimated our employees’ commuting using typical commuting habits from Census Bureau data and used EPA emission factors to calculate these emissions, which were approximately 3,000 MT CO₂e.

**Category 8: Upstream Leased Assets.** Although we lease mobile equipment for use at our mills, the fuel used in that equipment is captured in Scope 1 emissions.

**Category 11: Use of Sold Products.** No emissions result from the use or operation of our sold products. Separately, we account for carbon stored in our wood products as part of our removals.

**Category 13: Downstream Leased Assets.** We lease our land for recreation, and we lease some mineral rights. Recreation does not account for a significant quantity of emissions, and a preliminary quantification of mineral rights activity showed that it is an insignificant amount of Scope 3 emissions.

**Category 14: Franchises.** This category does not apply to us since we do not operate franchises.

**Category 15: Investments.** This category does not apply to us.
PHYSICAL CLIMATE IMPACTS

Climate modeling of our timberland projects that physical climate changes in temperature and precipitation will be compatible with the commercial species we grow. In addition, numerous research studies find that increased atmospheric CO₂ concentrations are favorable for tree growth and will result in productivity gains in the Gulf South.

OVERVIEW

PotlatchDeltic’s timberland climate analysis evaluates the potential physical impacts that changes in atmospheric CO₂, temperature, and precipitation could have on our timberlands under various greenhouse gas (GHG) scenarios. We have evaluated potential physical impacts on two regions: 1) our Idaho timberlands; and 2) our Gulf South timberlands (Arkansas, Louisiana, Mississippi, and Alabama). The analysis was conducted utilizing guidance from the Task Force on Climate-related Financial Disclosures (TCFD) and using the National Council for Air and Stream Improvement (NCASI) Climate Projection Analysis Tool (NCASI Climate Tool).

The analysis is based on the Intergovernmental Panel on Climate Change (IPCC) scenarios called Representative Concentration Pathways (RCP). An RCP represents a prescribed pathway for anthropogenic (human caused) GHG emissions and land use change and serves as the basis for modeling the resulting atmospheric CO₂ equivalent concentration. Concentrations project the resulting radiative forcing or additional warming that could occur in the lower atmosphere under a given emission pathway.

Following TCFD guidance, we evaluated four RCPs or sets of potential future scenarios, including a highly unlikely, high consequence scenario: RCP 2.6, RCP 4.5, RCP 6.0, and RCP 8.5. The RCP 2.6 pathway assumes rapid reductions in emissions with broad global participation and would result in about 1.5°C to 2°C of warming by 2100 relative to pre-industrial levels. Warming occurs by decade 2040-2049 and no additional warming occurs through 2100. RCP 4.5 assumes emissions peak around 2080 and then remain level through 2100 with global temperature projected to rise 2.5°C to 3°C by 2100 relative to pre-industrial levels. RCP 6.0 stabilizes warming by 2100 by reducing GHG emissions and applying new technologies and would result in about 3°C to 3.5°C of warming by 2100 relative to pre-industrial levels with the higher warming occurring from 2060 to 2100. RCP 8.5 assumes little effort to reduce emissions resulting in a failure to curb radiative forcing by 2100 and would result in about 5°C rise in global temperature by 2100 relative to pre-industrial temperatures. We are including RCP 8.5 as a highly unlikely high consequence scenario since the probability of this scenario is broadly considered unplausible given the global climate policies and reduction initiatives already implemented.

The NCASI Climate Projection Analysis Tool (CPAT) utilizes spatially downscaled climate model projections from the Coupled Model Intercomparison Project (CMIP-5) dataset for the period 2000-2099 for the four RCP scenarios. The model projections include temperature and precipitation impacts to 2100 for our two identified regions and enable the evaluation of climate boundaries for our primary tree species in each region. In addition, we address the general biological response for timberlands arising from higher CO₂ levels in the atmosphere. It is important to note that confidence in climate model output is greatest for global and continental-scale results. Downscaled models, currently, cannot reliably replicate climate histories at local to regional scales. This means that model outputs for any region may not be representative of actual future conditions.

IPCC Representative Concentration Pathways
Timberland Productivity Impacts
Higher atmospheric CO₂ concentration and atmospheric nitrogen deposition can lead to multiple effects from CO₂ enrichment resulting in productivity gains for timberlands. In response to elevated CO₂, trees use water more efficiently, which increases growth efficiency and reduces water loss.

The likelihood of increased productivity on managed loblolly pine over the coming decades could lead to increased carbon storage and changes in silvicultural practices including shorter rotations. It is important to note that the growth response appears to vary under different ambient CO₂ concentrations.

One study evaluated the impact of changing climate (RCP 8.5 and RCP 4.5) and of higher ambient CO₂ levels of loblolly pine growth with results suggesting that ambient CO₂ enrichment would likely be a more important driver of increased productivity than climate impacts. The productivity response noted in the study using growth and yield modeling demonstrated a median-level productivity benefit for CO₂ alone in 2040-2059 of 19.7% (+/-8.3%) for RCP 8.5 and 13.2% (+/-6.5%) for RCP 4.5. A second study revealed average productivity gains for loblolly pine of +30% by 2055 under an RCP 8.5 scenario. The studies did not include potential changes from fire, insects, or pests which could have either a positive or negative effect. Positive effects can result from increased ability of vigorously growing trees to defend against insect attacks or from higher CO₂ inhibiting pests or pathogens.
Idaho Region Scenario Analysis
PotlatchDeltic is the largest private landowner in Idaho with approximately 626,000 acres of timberland in northern Idaho. Our average site index on the PotlatchDeltic Idaho timberlands is considerably higher than the average Inland Northwest due to better soils with a volcanic ash base, higher precipitation, and an ideal elevation. The higher site index results in more rapid growth and shorter rotations resulting in higher annual harvests, lower stand establishment costs due to better seedling survival on good sites, higher stocking at final harvest which reduces logging costs, and more valuable species mix. Species we grow include Douglas-fir, western larch, western red cedar, grand fir, ponderosa pine, Engelmann spruce, and lodgepole pine. Third-party nurseries grow Idaho seedlings, with 70% of the seeds being sourced from our Cherrylane Seed Orchard. The seed orchard is used to increase seed production of the highest performing trees for planting on our Idaho timberlands through breeding and selection. We select the species that is best suited to the site-specific location and elevation for replanting.

Idaho Timberland Ownership

Temperature projections for our northern Idaho region were modeled using CPAT under the four RCPs. Using RCP 2.6, downscaled temperature projections for the region reveal a temperature increase of about 0.5°C from the 2020’s to the 2040’s with no additional increase through the rest of the century. RCP 4.5 shows a temperature increase of approximately 0.7°C from the 2020’s to the 2040’s with an additional increase of roughly 1.0°C expected through the rest of the century. Similarly, RCP 6.0 shows a temperature increase of about 0.6°C from the 2020’s to the 2040’s with an additional increase of approximately 2.0°C through the rest of the century. RCP 8.5 shows a steady increase of roughly 4.4°C between the 2020’s and the end of the century.

Average Annual Temperature (°C) for 2020’s and RCP Projections, 1980 - 2099

Precipitation projections for northern Idaho using CPAT do not vary meaningfully by RCP and all four pathways project a very gradual increase of 5-15% from 2020 to 2100. Increases tend to be greater at higher elevations on the northern portion of our ownership and lower on the southern, low-elevation lands.

Average Precipitation (mm/day) for 2020’s and RCP Projections, 1980 - 2099
Douglas-fir Climate Boundary and Productivity Assessment

Douglas-fir accounts for approximately 60% of the seedlings planted on our Idaho timberlands. The species grows best in full sun or partial shade and prefers acidic or neutral soil that is well drained. It is moderately drought resistant and less prone to insects and disease than other coniferous species. Downscaled RCP 2.6, 4.5 and 6.0 projections for northern Idaho indicate annual climatic conditions are projected to be well suited for growth and productivity through the 2060 decade, which provides a full growing cycle, and through 2100.

The CPAT climate boundary analysis for Douglas-fir illustrates that the projected range of temperature and precipitation will be suitable for its growth under all RCP scenarios through 2100. In addition, the current range of Douglas-fir in the US extends into Colorado, Arizona and New Mexico suggesting that it can survive in conditions found at latitudes well south of Idaho.

Climate Boundary for Douglas-fir with Projected Climate Means by RCP for 2090 - 2099

The analysis for Douglas-fir productivity arising from a combination of temperature and precipitation under various RCP scenarios in 2090-2099 illustrates that conditions remain favorable for Douglas-fir and loss of productivity is not projected.

Productivity Range for Douglas-fir with Projected Climate Means by RCP for 2090 - 2099
Western Red Cedar Climate Boundary and Productivity Assessment

Western red cedar accounts for approximately 12% of our Idaho inventory. This high value species grows best in shady, cool, moist habitats and can be found along streams or in mixed stands on slopes. The species is drought sensitive and prefers moist, acid, well-drained soils. Downscaled RCP 2.6, 4.5 and 6.0 projections for northern Idaho indicate annual climatic conditions are projected to be well suited for growth and productivity through the 2060 decade, which provides a full growing cycle, and through 2100.

The CPAT climate boundary analysis for western red cedar illustrates that the projected range of temperature and precipitation will be suitable for its growth under all RCP scenarios through 2100. The projections for the higher warming scenarios suggest that western red cedar may be less suited to lower elevations with a south or west aspect.

The analysis for western red cedar productivity arising from a combination of temperature and precipitation under various RCP scenarios in 2090-2099 illustrates that RCP 2.6, RCP 4.5, and RCP 6.0 suggest productivity may increase at higher elevations and remain constant over the remainder of the ownership. The highly unlikely RCP 8.5 demonstrates some lower elevation sites may become less productive for western red cedar.

Productivity Range for Western Red Cedar with Projected Climate Means by RCP for 2090 - 2099

[Diagram showing productivity range for western red cedar with projected climate means by RCP for 2090-2099]
Gulf South Scenario Analysis
PotlatchDeltic owns nearly 1.2 million acres in the Gulf South region. We own nearly 950,000 acres of timberland in Arkansas, 118,000 acres in Mississippi, approximately 87,000 acres in Alabama, and 30,000 acres in Louisiana. We mainly grow southern yellow pine with a mix of red oak, white oak, and other hardwoods in bottomlands. Pine seedlings are purchased from third-party nurseries and benefit from generations of selective breeding to promote growth and favorable form characteristics as well as increased resistance to insects and disease.

Gulf South Timberland Ownership

Temperature projections for our Gulf South region were modeled using CPAT under the four RCPs. Using RCP 2.6, downscaled temperature projections for the region reveal a temperature increase of about 0.3°C from the 2020’s to the 2040’s with no additional increase through the rest of the century. RCP 4.5 shows a temperature increase of approximately 0.6°C from the 2020’s to the 2040’s with an additional increase of roughly 0.8°C expected through the rest of the century. Similarly, RCP 6.0 shows a temperature increase of about 0.5°C from the 2020’s to the 2040’s with an additional increase of approximately 1.8°C through the rest of the century. RCP 8.5 shows a steady increase of roughly 3.9°C between the 2020’s and the end of the century.

Average Annual Temperature (°C) for 2020’s and Projections, 1980 - 2099

Precipitation projections for our Gulf South region do not vary by RCP and none of the pathways project a change in annual precipitation from 2020 to 2100.

Average Precipitation (mm/day) for 2020’s and Projections, 1980 - 2099
Loblolly Pine Boundary and Productivity Assessment

Loblolly Pine accounts for approximately 70% of our Gulf South forest inventory. The species grows best in full sun or partial shade and prefers acidic soil. It is moderately drought resistant. Downscaled RCP 2.6, 4.5, 6.0, and 8.5 projections for the region indicate annual climatic conditions are projected to be well suited for growth and productivity through the 2040-2049 decade, which provides a full growing cycle.

The CPAT climate boundary analysis for loblolly pine illustrates that the projected range of temperature and precipitation will be suitable for its growth under RCP scenarios 2.6, 4.5, and 6.0 through 2100. The unlikely RCP 8.5 scenario is inconclusive as no loblolly currently exists in those conditions. If there is a greater risk for the species to be out of boundary, we would note this timeframe is three rotations of loblolly pine and breeding for climate-adapted characteristics could likely offset climate impacts.

Climate Boundary for Loblolly Pine with Projected Climate Means by RCP for 2090 - 2099

The analysis for loblolly pine productivity arising from a combination of temperature and precipitation under various RCP scenarios in 2090-2099 illustrates that RCP 2.6, RCP 4.5, and RCP 6.0 suggest no significant change in productivity. The unlikely RCP 8.5 scenario is inconclusive as no loblolly currently exists in those conditions.

Productivity Range for Loblolly Pine with Projected Climate Means by RCP for 2090 - 2099
OUR CONCLUSIONS

Climate Boundaries and Productivity

Projections of future greenhouse gas concentrations and localized climatic conditions have many variables. The ability to integrate the variables at meaningful scales to predict forest growth is subject to substantial ranges of error that encompass the entire range of the projected outcomes. Our initial analysis of regional physical climate changes and the potential for positive and negative impacts has revealed as many or more upside impacts to tree growth and productivity as downside risks or losses. Overall, increased CO₂ concentrations coupled with gradual warming and largely unchanged precipitation patterns are supportive of productive forests.

Downscaled RCP 2.6 and 6.0 projections for northern Idaho indicate annual climatic conditions will be well suited for commercial species’ growth and productivity through the 2100 decade.

Long term changes in climatic conditions in Idaho are likely to be more variable than in the Gulf South and growth rates for different tree species may increase or decrease. Elevation, aspect, and soil characteristics are all likely to interact with long term climate changes to determine net growth rate changes.

Higher elevations in Idaho are projected to warm relatively more than lower elevations and cause rising snowlines. This may improve higher elevation growth rates by lengthening the growing season and increasing the number of growing degree days. Lower elevation sites in Idaho with south and west facing slopes located on the western fringe of our Idaho timberlands may have a risk of increasing water stress.

Increased frequency, duration, or intensity of droughts in Idaho may increase wildfire risk and increase variability in annual planting success and could result in increased casualty losses or higher forest management expenses.

In the Gulf South, climate boundaries and climate productivity ranges were examined for loblolly pine, which is a valuable commercial species in the region. Downscaled RCP 4.5 and 6.0 projections for the Gulf South reveal general climatic conditions will be well suited for loblolly pine growth and productivity. The two productivity studies we reference show that the northern portion of the loblolly range will benefit the most and the southern fringe will eventually become less favorable. The improvement in the northern portion of the range is observed from the east to the west.

We also note that there is currently a lack of alignment between actuals and projections for the Gulf South. EPA data also shows that the Gulf South is not warming like other areas of the country and world. Winters have gotten warmer, and summers have cooled, and it has gotten wetter with both factors demonstrating long term trends.
Wildfire Risk

Wildfires can occur because of lightning or human causes. While human causes are the source of over 87% of total fires, lightning accounts for over 54% of total acres burned. The U.S. West has seen an increase in fire size and frequency, driven by drought, high levels of federal or non-working forest ownership, and more remote acreage. The CPAT projections we examined for our Idaho timberlands showed increasing precipitation coupled with modest temperature increases for RCP’s 6.0 and lower and are not suggestive of drought or fire regimes shifting from historical ranges. In addition, unlike many other western regions, we have not experienced increased frequency or severity of fires on our lands in northern Idaho. We will continue to evaluate wildfire risk in Idaho as additional climate tools become available.

In the Gulf South, the CPAT projections we examined do not suggest increased wildfire risk. In addition, we note that ownership patterns and accessibility in the region typically enable a wildfire control response that limits fire extent.

Wildfire behavior can be influenced by weather, amount of readily combustible fuels, lack of moisture, and topography, and when the conditions are right, can increase fire severity and damage to the environment. The strongest mitigation tool for wildfire risk is to reduce the amount of fuel that is readily available in the understory, midstory, and overstory through thinning, prescribed fire, maintained fuel breaks, and strategically placed landscape-level fuels treatments. These timberland management treatments have also been proven to improve forest health and biodiversity benefits. In addition, a forest with age-class diversity changes the fuels and provides natural landscape breaks through younger stands.

Unmanaged lands typically have overstocked forests that provide significant ladder fuels, increasing the threat of crown fires. Ladder fuels provide continuous vertical fuels for the fire to climb from the forest floor to the canopy and become a crown fire. Insect and disease damage is also more prevalent in overcrowded forests, increasing readily combustible fuels. Crown fires are extremely challenging to stop using direct firefighting efforts and control is often accomplished through breaking fuel availability in the predicted path of the fire. This can mean the difference between a fire burning tens of thousands of acres in unmanaged timberland, compared to hundreds of acres in managed or working timberland.

Efforts are underway to improve the forest health in unmanaged lands. Good Neighbor Authority enables federal land managers to enter into agreements with state governments to implement projects focused around restoring or improving overall forest health through treatments that target reducing hazardous fuels. Idaho Shared Stewardship establishes a policy for shared management by federal land managers with states, tribes, and other landowners to manage fire risk through a set of shared priorities. In addition, it calls for coordination among federal, state, tribal and local assets for wildfire prevention, suppression, and post-wildfire restoration, and for action to be taken to remove hazardous fuels and increase active management. Working forest owners are also engaging in policy solutions with an eye toward improving interagency coordination and alignment around wildfire suppression, including decisions about initial attack, fire management, and the use of specific firefighting strategies.

In Idaho, we have implemented heightened measures to prevent fires, minimize damage from fires and to protect our timberlands from loss. In 2021, approximately 1,000 acres of our timberlands in Idaho and 500 acres in the U.S. South were impacted by wildfire. Overall, the state of Idaho had 1,332 fires in 2021 which impacted 439,660 acres of public and private land. In our four southern states of Alabama, Arkansas, Louisiana, and Mississippi, there were a total of 2,847 fires that burned a combined 70,398 acres.
Insect and Disease Risk

Increased risks from insect and disease primarily result from overcrowded, decadent forest conditions and the chance of severe outbreaks are significantly increased by drought and moisture stress. We examined weather trend data (actuals) and model projections to attempt to determine if drought stress is likely to increase in the future. Downscaled projections of localized seasonal climate conditions and specifically the amount and seasonality of precipitation are not reliably available. Our regional projections of annual climate conditions under RCP 6.0 and lower show increasing precipitation in Idaho and static precipitation in the South and are not suggestive of increasing droughts. Drought trends reported by the US Environmental Protection Agency (EPA) reveal that droughts have not increased over historical levels in northern Idaho and droughts have decreased in the Gulf South.

We minimize insect and disease risks by actively managing forests to maintain their health and vigor. Vigorous stands of trees are resilient to attacks - virtually every major forest health epidemic has been caused by large extents of forests that were in poor health because of being overstocked and/or decadent.

Forest vigor and resilience is maintained through planning and implementation of forest management activities which include planting locally adapted species that are selectively bred to thrive in the location they are planted, judiciously controlling stocking density to ensure full site occupancy without becoming overstocked, maintaining optimum stocking levels as trees grow, controlling competing vegetation, utilizing harvest patterns to avoid large extents of single age classes, and actively monitoring insect, disease, and animal damage levels. Maintaining forest health through preventive measures is by far the most practical strategy to minimize losses from insects and disease and it is uncommon for us to need to use insecticides, fungicides or other direct insect and disease control measures.

Our utilization of locally adapted species that are selectively bred for site suitability, growth, and disease resistance is critically important to maintaining tree vigor throughout a 25- to 50-year growth period. The tree improvement programs that produce the families (genetic selections within each species) that we deploy on our timberlands all use regionally adapted seed sources and evaluate the progeny in the climate, weather, and pest environments where the families will be deployed. For instance, there are families of loblolly pine that are very resistant to a fungal disease, called fusiform rust, which causes cankers. The cankers can severely damage log quality and increase the likelihood of stem breakage during high winds. We plant seedlings with proven genetic resistance in areas where fusiform rust is known to be prevalent, and the incidence of the disease has been dramatically reduced.

The seedlings we plant are the result of selective breeding programs and we do not use genetically modified planting stock, nor do we plant non-native species. The number and spacing of seedlings we plant on each acre is based on local site conditions so that the site will be fully occupied. The site preparation and planting method utilized are based on our foresters’ experience and they adjust in response to local conditions and based on the success rate of prior plantings. Herbicides are used during the forest regeneration phase to control competing vegetation, which allows seedlings to establish quickly and reduces susceptibility to loss from pests or drought. As trees grow and fewer are required to fully occupy a site, we reduce their density through thinning using both precommercial and commercial thinning methods. This density control significantly lowers the risk of loss to insects and disease and distinguishes actively managed private working forests from less actively managed forests.

We plan harvest unit size and distribution so that we do not have large extents of same-age forests immediately adjacent to each other. The risk of loss from insects and diseases tends to increase as forest stands get older and site occupancy levels are maximized, so having a mix of age classes significantly limits the spread of pests.

Throughout our timberland management initiatives, we monitor for pests, and we actively participate in external pest monitoring programs to determine the most appropriate management actions to minimize risks of loss and to maintain resilient forests.
FOOTNOTES


5. Forest Service. Forest Inventory and Analysis Program


8. Data has been restated from information presented in our 2021 ESG Report to reflect external fiber sourcing more accurately. All values rounded to two significant figures. Individual values may not sum to total.


12. Greenhouse gas emissions estimates are based on the methods outlined in NCASI Report Calculation Tools for Estimating Greenhouse Gas Emissions from Wood Products Facilities Version 1.0 and associated workbook NCASI Spreadsheets for Calculating GHG Emissions from Wood Products Manufacturing Facilities Version 1.0. CO₂e (CO₂-equivalent emissions) is a term for describing different greenhouse gases in a common unit. For any quantity and type of greenhouse gas, CO₂e signifies the amount of CO₂ which would have the equivalent global warming impact. For PotlatchDeltic, CO₂e emissions include emissions of carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Calculations include 2018-2020 average for Ola as actuals are not representative due to 2021 Ola fire.

13. 2021 scope 2 emissions were calculated with the 2020 eGRID factors that were released in January 2022. Emissions & Generation Resource Integrated Database (eGRID) | US EPA

14. Calculations include 2018-2020 average for Ola as actuals not representative due to 2021 Ola fire.


18. Site index is a term used in forestry to quickly describe the tree growth potential at a particular location or “site”. Trees grown in areas with higher site index have better growth potential.

19. The green shaded areas are FIA plot data for climate and productivity where Douglas-fir is currently located.

20. The green shaded areas are FIA plot data for climate and productivity where Douglas-fir is currently located.

21. The green shaded areas are FIA plot data for climate and productivity where western red cedar is currently located.

22. The green shaded areas are FIA plot data for climate and productivity where western red cedar is currently located.


24. The green shaded areas are FIA plot data for climate and productivity where loblolly pine is currently located.

25. The green shaded areas are FIA plot data for climate and productivity where loblolly pine is currently located.


28. 2021 Fires in Idaho – 1,332 fires burned 439,660 acres. This is for all public and private ownerships and all cover types i.e., grass lands and forest lands. All data is from National Interagency Fire Center.

29. 2022 Total Fires in Arkansas, Alabama, Mississippi, and Louisiana – 2,847 fires burned 70,398 acres on all public and private ownerships and all cover types. All data is from National Interagency Fire Center.
FORWARD LOOKING STATEMENTS

As used in this Report, the term "PotlatchDeltic" and such terms as "the Company," "the corporation," "our," "its," "we," "management," and "us" may refer to one or more of PotlatchDeltic’s consolidated subsidiaries or affiliates or to all of them taken as a whole. All of these terms are used for convenience only and are not intended as a precise description of any of the separate companies, each of which manages its own affairs.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION

This Report contains, in addition to historical information, certain forward-looking statements within the meaning of the federal securities laws. Words such as "anticipate," "appears," "develop," "expect," "will," "intend," "goal," "plan," "target," "project," "believe," "continue," "achieve," "seek," "estimate," "could," "can," "may," "typically," "likely," "unlikely," "potential," "would," "future," "initiatives," and similar expressions are intended to identify such forward-looking statements. Statements and assumptions with respect to achievement of goals and objectives; anticipated actions to meet goals and objectives; allocation of resources; planned, encouraged, or anticipated actions; planned performance of technology; or other efforts are also examples of forward-looking statements. Among the forward-looking statements in this Report are statements about our strategies regarding planned annual harvests, replanting, and forest management; future environmental management and compliance; wildlife conservation; energy consumption and reduction; estimates and management of air emissions, estimates of the amount of CO2e removed and sequestered by our forests; estimated GHG emissions; estimated carbon stored in wood products; anticipated climate risks and opportunities; and similar matters.

These forward-looking statements reflect management’s current views regarding future events based on estimates and assumptions and are therefore subject to known and unknown risks, uncertainties, and other factors, some of which are beyond our control, and are not guarantees of future conduct or policy. The actual conduct of our activities, including the development, implementation or continuation of any program, policy or initiative, or our progress toward the achievement of any goal or target discussed in this Report may differ materially in the future. Many of the standards, protocols, methodologies, and metrics used in preparing this Report continue to evolve and are based on management assumptions believed to be reasonable at the time of preparation but should not be considered guarantees.

Actual results could differ materially from our historical results or those expressed or implied by forward-looking statements contained in this Report due to factors such as: the development of measurement standards, accounting protocols, and mitigation techniques; the availability of funding for the programs described in this report; our ability to achieve our goals and objectives; changes in our priorities as well as changes in the priorities of our customers and suppliers; the amount of our future investments; the accuracy of our estimates and assumptions; acquisitions and divestitures; the future effect of legislation, rulemaking and changes in policy or best management practices; scientific discoveries and innovations; changes in production and production capacity in the forest products industry; the competitive environment; the ability to attract and retain personnel and suppliers with technical and other skills; technological developments; the willingness of suppliers to adopt and comply with our programs; the impact of cyber or other security threats or other disruptions to our business; changes in requirements for third-party certification of our timberlands, logs, and lumber; the potential disruption or interruption of the Company’s operations due to accidents, political events, civil unrest, severe weather, floods, fires, cyber threats, pandemics, infestations, or other natural or human causes beyond the Company’s control; and global economic, business, political, and climate conditions.

These are only some of the factors that may affect the forward-looking statements contained in this Report. For further information regarding risks and uncertainties associated with our business, please refer to our U.S. Securities and Exchange Commission (SEC) filings, including our Annual Report on Form 10-K for the year ended December 31, 2021, our 2022 Proxy Statement, and our 2022 Quarterly Reports on Form 10-Q, which can be obtained at the Company’s website, www.potlatchdeltic.com. The forward-looking statements in this report are intended to be subject to the same harbor protection provided by federal securities laws.

Forward-looking statements contained in this Report present our views only as of the date of this report. Except as required under applicable law, we do not intend to issue updates concerning any future revisions of our views to reflect events or circumstances occurring after the date of this Report. Nothing in this Report is incorporated by reference or shall be deemed to be incorporated by reference into the documents that we have filed or will file with the SEC.