

Church & Dwight Co, Inc.:

A Business Case for Carbon Offsets



The Arbor Day Foundation helped Church & Dwight, one of America's oldest companies, take the lead in sustainability through offsetting carbon emissions with trees.

EXECUTIVE SUMMARY

Corporate sustainability professionals face complex challenges when implementing programming that has the power to make real, positive impacts on an organization's triple bottom line — making progress on social, environmental, and financial metrics. Measuring and mitigating a company's contributions (in the form of greenhouse gas emissions) to a warming atmosphere is a critical piece of any credible sustainability plan. Reducing total emissions is certainly the best way to decrease the size of a company's footprint, but it can take time to reach significant reductions. Offsetting emissions can be a timely complement to making internal reductions, resulting in reduced emissions in other locations or, in the case of offsets through trees, the direct removal of carbon dioxide from the atmosphere.

So how do corporate leaders determine the best option for offsetting their organizations' carbon footprints, to maximize environmental impact and derive a strong return on the investment? The Arbor Day Foundation, with a history of sequestering carbon through tree planting since 1972, has the

experience to lead organizations through the decision-making process of purchasing accredited carbon offsets, ensuring a lasting legacy on the environment. Trees are beneficial to our planet for many reasons, and it is critical to leverage their incredible natural abilities to help solve one of the Earth's toughest challenges.

One success story is the Arbor Day Foundation's work with Church & Dwight, one of the nation's top manufacturers, to make great strides towards their goal of becoming a carbon-neutral company by 2025. Since setting this goal in 2014 as part of their comprehensive sustainability plan, Church & Dwight has embraced annual commitments to carbon offsetting with trees as an economic solution to lowering their impact. With verified credits from forestry operations in the Mississippi River Valley and details of how this program aids the region, Church & Dwight can confidently report on the concrete environmental investment it is making as a leader in corporate responsibility.

ABOUT CHURCH & DWIGHT

Church & Dwight Co., Inc. is the leading U.S. producer of sodium bicarbonate, also known as baking soda. The company is most well-known for its ARM & HAMMER brand of baking soda and household cleaning products. But since its founding in 1846, the organization has grown to manufacture a wide variety of household products under notable brands including Nair, Orajel, OxiClean, and Xtra. The company, headquartered in Ewing, New Jersey, has expanded in recent years to become a global organization, with operations in Canada, Mexico, the United Kingdom, France, Australia, Brazil, China, and New Zealand. Church & Dwight has a workforce of approximately 4,500 employees across these locations. Furthermore, they export to more than 100 other countries. In 2016, net sales reached nearly \$3.5 billion.

Yet through this growth, the company has worked to stay true to its roots. Since its founding, Church & Dwight has made environmental responsibility a core value, believing that taking care for the environment is simply the right thing to do. The company supported wildlife conservation efforts in the late 1800s and was the only corporate sponsor of the first Earth Day in 1970. Across their brands, Church & Dwight has worked to increase the safety and reduce the environmental impacts of its products, including releasing the first phosphate-free laundry detergent in the United States. They also lead on efforts to protect from deforestation due to palm oil harvesting, working to ensure that the small amount of palm oil derivatives purchased from their suppliers are produced sustainably.

Church & Dwight has an active team focused on maintaining their sustainability goals and standards, led by Pete Marshall, Director of Environmental Safety Global Operations. Under Marshall's guidance, Church & Dwight has created sustainability action plans since 2008. Their approach to sustainability focuses on four pillars:

- The quality of Church & Dwight's products.
- A supportive work environment for its employees.
- Ethical and environmental standards for its supply chain and operations.
- Being active partners in the communities in which it operates.

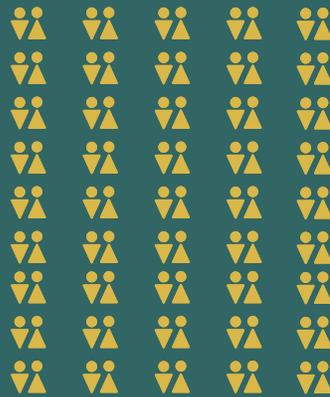
Church & Dwight's Corporate Issues Council, comprised of leaders from across the company's departments, developed and continue to evolve their sustainability plan. As a component of their supply chain and operations standards, Church & Dwight set out to analyze their energy usage and identify opportunities to reduce the overall carbon footprint of its operations, including management, manufacturing, and shipping. The initial analysis was completed in 2014, with the company setting a goal to reduce its global greenhouse gas emissions by 20 percent by 2025 (compared to data recorded in 2013). Each subsequent year, Church & Dwight has audited their emissions to track progress toward that goal, and in 2017 increased their commitment by aiming for carbon neutrality by 2025.

Church & Dwight at a Glance

Founded in
1846



4,500 employees



25 Operations facilities
across 11 states



21 Operations facilities in
13 countries outside U.S.



3.5 bil. revenue

Church & Dwight aims to be
carbon neutral by 2025.



“When we look at the costs related to trying to reduce energy in a growing company, it can be very expensive. The carbon offsets through the Arbor Day Foundation provide a very economical way to reduce our impact on the environment.”

– Pete Marshall

Director, Environmental Safety Global Operations at Church & Dwight, Co., Inc.

CARBON REDUCTION STRATEGIES

From Church & Dwight’s analysis, the organization set a course to reduce emissions through energy efficiency initiatives — including upgrades to equipment and lighting — as well as transitioning more of their product shipping from truck-based to railroad transportation, which is more fuel efficient by load weight. From 2015 to 2017, Church & Dwight’s absolute (or total emissions, as compared to emissions intensity per pounds of product shipped) greenhouse gas emissions decreased by 12.9 percent. Yet in a growing company, energy efficiency can only make up so much of a plan for reducing energy use. The challenge for Church & Dwight was how to continue progress toward the carbon neutrality goal in an economically viable way.

To solve that challenge, Church & Dwight researched options for offsetting emissions through renewable energy credits and through forestry carbon credits. They chose to pursue both avenues, offsetting a portion of their emissions from electrical power generation through purchasing renewable energy credits (RECs). Since there are no REC programs for offsetting fossil fuels (primarily natural gas and fuels for shipping and transportation), the Arbor Day Foundation’s forestry carbon program was able to fill the gap.

Through this research, Church & Dwight found the Arbor Day Foundation to be a strategic option for partnering to offset emissions from fossil fuels. For them, the multiple benefits that tree planting offers, as well as the Arbor Day Foundation’s recognized heritage in forestry and conservation efforts, set this carbon offsetting program apart.

It’s critical to understand the full scope of a sustainability plan when considering offsets. There are many approaches possible for offsetting, whether focusing on offsetting specific locations, employee travel, or for new organizations to start out completely carbon-neutral. The Arbor Day Foundation met with Pete Marshall in early 2016 to learn more about Church & Dwight’s goals for sustainability as a whole, as well as goals for carbon emission reductions and offsets specifically.

Through working with Marshall, it was found that offsetting the emissions generated from burning fossil fuels at a subset of Church & Dwight’s facilities in the U.S. as well as offsetting the emissions from corporate travel would fit the reduction and offset portfolio they were building for their plan. In 2016, this equated to offsetting a quarter of the total carbon dioxide emissions from their operations in the U.S.

Accompanying the scope-setting process, the Arbor Day Foundation detailed how the trusted American Carbon Registry would verify their offset credit, ensuring that their investment would result in the permanent sequestration of the full amount of carbon in their commitment. With this information, Church & Dwight was confident in moving forward with the plan.



THE IMPORTANCE OF PLANTING TREES

At the global level, forestry is receiving increased interest as a solution to the planet's warming. In 2017, The National Academy of Sciences published a study that found forestry to offer two-thirds of the opportunities for cost-effective "natural climate solutions" needed to keep warming to below 2°C. Specifically, reforestation is the largest single pathway to mitigating mass carbon emissions.

Marshall noted the appeal for offsetting via the planting of trees, connecting it to Church & Dwight's heritage of supporting wildlife conservation efforts. In addition to the absorption of carbon dioxide from the atmosphere, the trees planted by the Arbor Day Foundation provide improved water quality, erosion and flood control, quality local jobs, and valuable habitats for a diverse range of wild species.

These benefits make offsetting with trees a powerful option for a company looking to tell a story of positive impact and build stakeholder engagement. Everyone can relate to trees. For Church & Dwight, it was easy to share the message of how their offsets through the Arbor Day Foundation fit into their overall sustainability efforts.

The offset credits that Church & Dwight acquired come from the forestry carbon program in locations throughout the Mississippi River Valley. The Arbor Day Foundation also has carbon offset projects through partnerships in Peru, Zambia, and Indonesia.

In North America, the Mississippi River Valley is a vital habitat for migratory birds and numerous plant and animal species. In fact, 40 percent of the continent's waterfowl and 60 percent of all bird species migrate along the Mississippi River, although their population has dwindled from habitat loss. This region used to be covered with 25 million acres of forests but currently has less than 5 million forested acres. This was of interest to Church &

Dwight, recognizing the need to restore the forest habitat — particularly to maintain and rebuild the pathway needed for migratory birds. In the Mississippi River Valley, Arbor Day Foundation partners have been planting for more than 20 years. This partnership allows for combined resources to plant trees at the scale needed to restore the region. It's an opportunity for maximizing carbon absorption, water quality, watershed resilience, and economic benefits to local communities.



The Arbor Day Foundation's reforestation work in the Mississippi Alluvial Valley is restoring marginal, degraded crop lands back to their original and highly beneficial forest ecosystems.

Forestry is often the most transformational and comprehensive way for companies to meet their sustainability goals while also giving back to the people and communities they serve. The Arbor Day Foundation partners work with farmers and local landowners to help improve water quality and wildlife habitat. The goal of this project is to create forests that landowners will permanently maintain due to sustainable income streams such as carbon credit sales, wood products, and recreational services as well as the ecological benefits of restoring wildlife habitat. One Mississippi-based farmer whose trees provide a portion of Church & Dwight's offset credits noted that he sees the program paying off in both the short and long terms. Since planting new trees, he has already seen growth in the local deer and turkey populations. Looking to the future, he considers the carbon forest as a valuable part of the farm that he can pass on to the next generation, enabling his family to stay on the land and even grow their hired workforce.

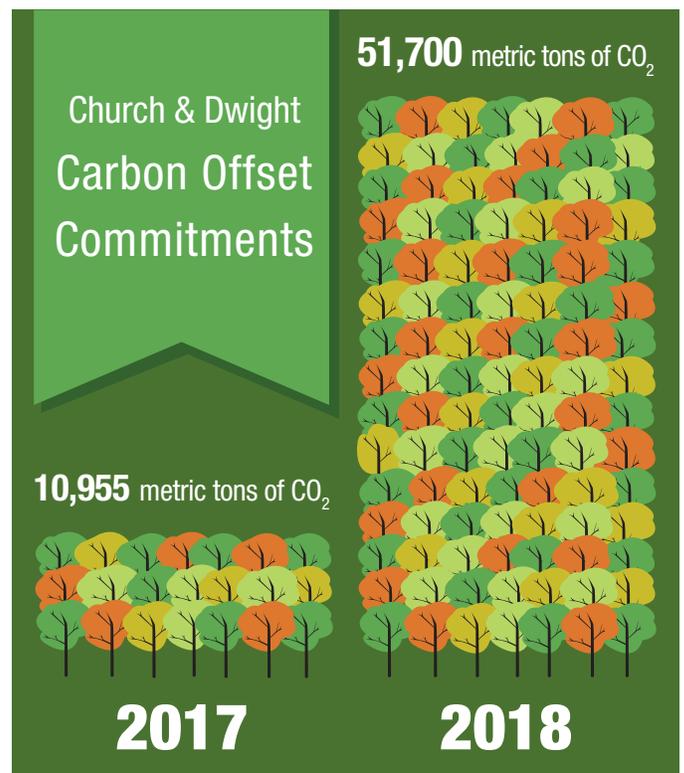


THE RESULTS

In 2016, Church & Dwight committed to offsetting a portion of their 2017 footprint, equal to the absorption of 10,955 metric tons of CO₂. These offsets allowed the Arbor Day Foundation to reinvest in the forests of the Mississippi River Valley, which will mature and offer even greater potential for carbon offsetting in the future. In addition to absorbing carbon dioxide from the atmosphere, these forests will help to restore the river valley's ability to filter out pollutants such as nitrogen and phosphorus before they reach the Mississippi River and the Gulf of Mexico.

These managed forests allowed Church & Dwight to offset a year's worth of carbon emissions from its headquarters in Ewing, New Jersey, as well as facilities in Princeton and Lakewood, New York, and in York, Pennsylvania. They also were able to mark their corporate travel as carbon-neutral. From these successful benchmarks, they further embraced carbon offsets in 2017, increasing their commitment to offset 51,700 metric tons of CO₂ from their 2018 emissions. As part of their effort to produce the 2017 sustainability report, they will complete a new analysis of their total emissions and look forward to being able to confirm a larger percentage of their emissions as offset.

Marshall considers it a necessity for any growing company to consider carbon offsets as a part of their sustainability plans, and notes trees as "a great system for reducing the impacts of CO₂ on the environment." And if companies want to layer and leverage the benefits associated with their investments in sustainability, trees and forests are tough to beat.



Contact us today to learn more.

Ready to speak with the Arbor Day Foundation about offsetting your carbon emissions through trees? Contact our Corporate Partnerships team at 877-445-9917 or corporatepartnerships@arborday.org.