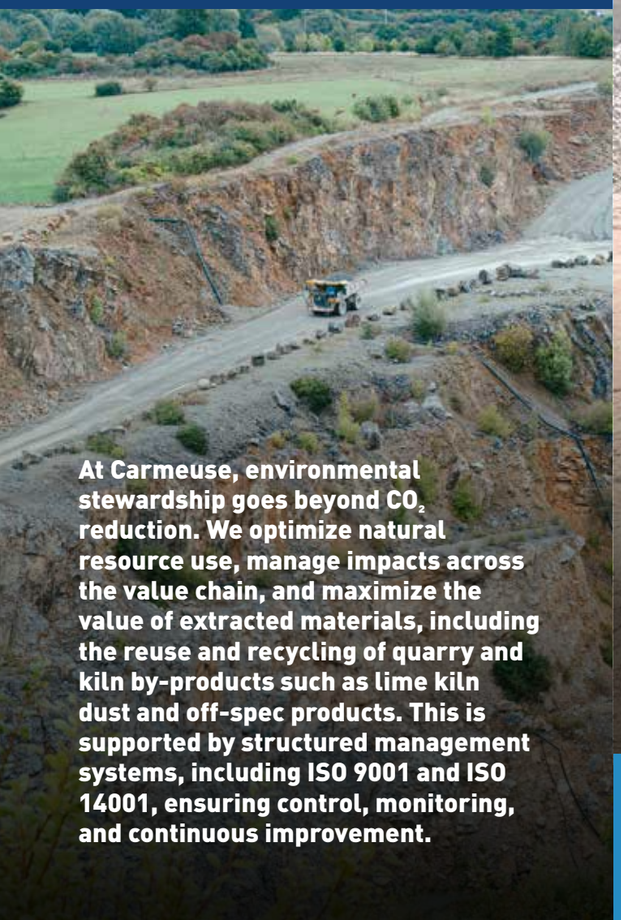
Planet



At Carmeuse, environmental stewardship goes beyond CO_2 reduction. We optimize natural resource use, manage impacts across the value chain, and maximize the value of extracted materials, including the reuse and recycling of quarry and kiln by-products such as lime kiln dust and off-spec products. This is supported by structured management systems, including ISO 9001 and ISO 14001, ensuring control, monitoring, and continuous improvement.

REDUCING OUR CLIMATE IMPACT IN A HARD-TO-ABATE SECTOR

Environmental responsibility is central to our role as a producer of essential materials.

At Carmeuse, environmental stewardship goes beyond CO_2 reduction. We optimize natural resource use, manage impacts across the value chain, and maximize the value of extracted materials, including the reuse and recycling of quarry and kiln byproducts such as lime kiln dust and off-spec products. This is supported by structured management systems, including ISO 9001 and ISO 14001, ensuring control, monitoring, and continuous improvement.

Our products support essential sectors, notably construction, water treatment, agriculture, and the steel industry. We aim to produce these materials with minimal environmental impact while supporting a more sustainable value chain.

However, lime production is carbon-intensive and represents approximately 1% of global industrial CO_2 emissions, mainly from kiln operations. Lime production relies on the thermal transformation at temperatures above 900°C of limestone in a kiln, resulting in the chemical conversion of limestone to lime and CO_2. This means calcination generates two types of direct (Scope 1) emissions. Combustion emissions from fuel use account for 25% to 40% of direct CO_2 emissions, and process emissions from the chemical limestone decomposition account for 60% to 75%.

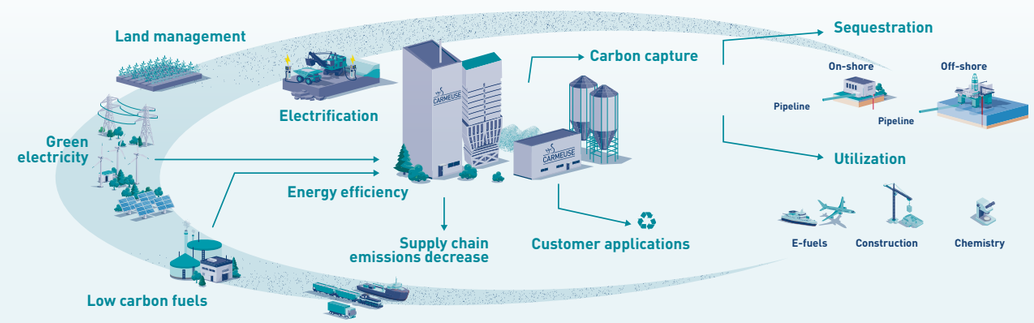
Because these process emissions are unavoidable, they represent our main decarbonization challenge. Long-term mitigation depends on carbon capture and storage (CCS) or carbon capture and utilization (CCU), supported by CO_2 transport and storage infrastructure.

Lime also reabsorbs CO_2 through spontaneous recarbonation during downstream use, with approximately 33% of process emissions reabsorbed on average in the first year, creating potential future offset opportunities for Carmeuse and our customers.

REDUCING OUR CO_2 EMISSIONS

Learn more

OUR CO_2 ROADMAP TOWARDS 2050



CARMEUSE CO_2 ROADMAP 2050 CARBON NET ZERO

To address our climate impact, we have established a robust transition plan anchored in our commitment to achieve net zero emissions by 2050. This plan is implemented through our CO_2 roadmap, mobilizing teams across the organization to deliver measurable progress.

Our roadmap combines immediate actions with long-term structural levers across four domains: combustion processes, process emissions, electricity sourcing, and value chain collaboration. These efforts are supported by a robust pipeline of projects, strategic partnerships, and targeted investments designed to accelerate progress toward our 2030 and 2050 climate ambitions.

Changes in absolute emissions over time may reflect the integration of newly acquired operations into the Group reporting perimeter. As we continue to expand our

industrial footprint, newly consolidated sites contribute additional emissions to the Group total and are resetting our 2019 baseline. As a result, variations in absolute emissions do not necessarily reflect changes in operational efficiency or decarbonization progress. Our climate targets therefore focus on reducing emission intensity while advancing our long-term pathway toward net zero by 2050.

OUR NET ZERO AMBITION

We are committed to achieving net zero greenhouse gas emissions across our operations by 2050. This long-term ambition is supported by intermediate regional and operational targets.

Our priorities

Our priorities include:

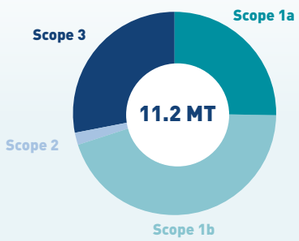
- reducing combustion emissions through low-carbon or carbon-neutral fuels
- advancing carbon capture technologies
- switching to green electricity
- lowering supply chain emissions through collaboration

Our 2030 targets supporting progress toward our 2050 objective

While our ultimate objective is set for 2050, we keep the interim 2030 goals firmly in focus to ensure timely and purposeful progress. Compared to a 2019 baseline, **for 2030 we aim to:**

- **reduce direct emissions by 30% in Europe** scope 1
- **reduce direct emissions by 20% in North America** scope 1
- **reduce combustion emission intensity by 25% globally** scope 1
- **achieve 75% green electricity in Europe** scope 2
- **reach carbon capture technology readiness by 2028**.

We monitor KPIs aligned with our material topics to track performance and support CSRD-aligned disclosures, including scope 1, 2, and 3 CO_2 emissions, combustion emission intensity, share of low-carbon fuels, and share of renewable electricity. We mainly focus on reducing scope 1 emissions.



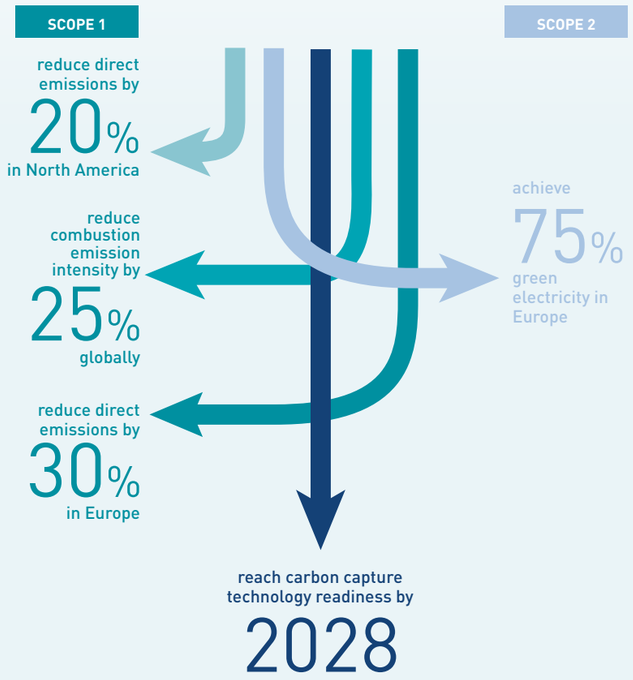
Scope 1
Direct emissions from our own operations:
scope 1a (combustion emissions)
scope 1b (process emissions)

Scope 2
Indirect emissions from purchased energy (electricity emissions)

Scope 3
Upstream and downstream emissions (indirect emissions)

CARBON FOOTPRINT 2025 (excluding 2025 acquisitions)

OUR 2030 TARGETS SUPPORTING PROGRESS TOWARD OUR 2050 OBJECTIVE



Scope 1
direct emissions from our own operations

Combustion emissions

We aim for:

- conversion to lower-carbon fuels, such as biomass and natural gas
- energy efficiency initiatives, including best available technologies and process innovation
- electrification of operational equipment and transportation

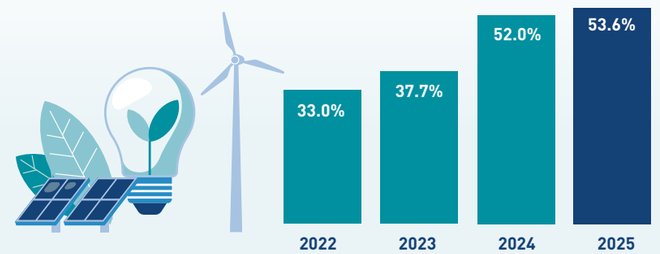
Process emissions and carbon capture

We aim for carbon capture technology readiness through:

- investigating the techno-economic feasibility of industrial-scale Carbon Capture technologies
- mastering key processes of carbon capture and understanding operational challenges through pilot testing
- understanding the integration of Carbon capture technologies with downstream processes such as CO_2 utilization, transportation and sequestration.

Scope 2
indirect emissions from purchased energy

Scope 2 currently represents a small share of our overall carbon footprint. However, the deployment of carbon capture solutions will significantly increase our electricity demand. Access to reliable, available, and affordable green electricity is therefore key, as with the implementation of CCUS our electricity consumption will increase substantially. By 2030 we pledge to source in Europe at least 75% of our electricity from renewable energy sources, via purchase power agreements (PPAs)[3] and onsite renewable investments.



RENEWABLE ELECTRICITY IN EUROPE

By 2030, we pledge to source in Europe at least 75% of our electricity from renewable energy sources

In 2025, we signed the extension of the existing solar power plant in Aisemont. This expansion adds over 14,000 solar panels, delivering an additional 10,000 MWh of annual electricity generation-equivalent to the consumption of approximately 2,500 households. The extended installation is expected to come online in 2026.

Scope 3
indirect upstream and downstream emissions across the value chain

Main scope 3 sources include:

- purchased materials, equipment, and services
- product transportation

In Europe, we have begun to improve monitoring and are developing a methodology to encourage suppliers' emission reduction commitments.

3 Power purchase agreement: a long-term contract where a company agrees to buy electricity directly from a renewable energy producer (such as a wind or solar farm) at a fixed price, helping secure green power while supporting new renewable projects.

TURNING OUR AMBITIONS AND PRIORITIES INTO ACTION

Combustion emissions reduction and fuel switching

We have reduced combustion-related CO_2 emissions through energy efficiency measures, kiln best available technology (BAT) and a shift toward lower-carbon fuels. Implementation varies by location, depending on market requirements, kiln type, and fuel availability.

In 2025, 60% of our kilns operated with BAT, with almost full deployment across Europe[4], the Middle East, Asia, and Africa. Kilns in Brazil and several kilns in Italy operate on 100% biomass. Conversions to biomass continue mainly in Central and Eastern Europe, while North America is shifting primarily to natural gas. A key milestone was the design of a new biomass dosing system for vertical kilns, improving combustion performance and fuel flexibility.

Our fuel transition strategy supports this approach by increasing the share of low-carbon and renewable fuels while maintaining operational stability and cost competitiveness. Key levers include biomass use, fuel flexibility, and improved combustion efficiency.

At the same time, biomass availability can be challenging. We only use sustainable biomass, ensuring that it does not compromise food production.

Biomass strategy management in Europe

We have proven technical capability and operational expertise to run our kilns on 100% biomass. Italy is at the forefront of this transition, with Bosnia and Deva demonstrating strong and consistent progress.

In 2025, we further reinforced this position by securing and strengthening reliable biomass supply chains across all countries where this fuel is utilized.

Biomass forestry management in Brazil

In Brazil, lime production is primarily biomass fired, partly supported by our forestry operations. We manage 2,300 hectares of forest land, including 1,300 hectares of eucalyptus plantations. Forestry management prioritizes productivity and low environmental impact, with 20% of land maintained as legal reserves and permanent preservation areas to protect biodiversity. Precision technologies, including unmanned aerial vehicles (UAVs), support fire detection, damage surveys, and overall monitoring, while mechanized operations are prioritized to enhance operational safety. Eucalyptus clone selection focuses on varieties with strong edaphoclimatic (soil and climate) adaptation, high productivity potential, balanced water use, and strong resistance to environmental stress, reducing the need for inputs and helping minimize environmental impacts.

Longview kilns transition toward natural gas

We continued to make progress with our low-carbon fuel transition at our Longview plant in the United States. The project involves upgrading the natural gas supply line and installing multi-channel burners to enable the site's kilns to operate on up to 100% natural gas. These burners also allow flexibility to operate with a combination of fuels, enhancing operational flexibility and fuel cost optimization. The objective is to achieve more than 90% heat substitution from natural gas on each of the three kilns. In 2025, the engineering phase of the project was completed for two of the three kilns.

EUROPE → BIOMASS STRATEGY MANAGEMENT

4 except for one kiln in Italy

Biomass dosing system enables

100% biomass use at Slavec (Slovakia) and Deva (Romania)

At Carmeuse, we are advancing our long-term objective of achieving carbon neutrality by 2050 through the implementation of biomass dosing systems in the kilns at our Slavec and Deva plants. These projects support our CO_2 roadmap by targeting near-zero combustion-related emissions, contributing to our carbon neutrality program, reducing CO_2 allowance costs, increasing fuel flexibility, and mitigating fuel cost variability. They are designed to enable up to 100% biomass substitution in lime production.

The project requires significant modifications to an existing installation and close coordination between the project and operations teams to minimize disruption to production. Following the granting of construction permits in 2025, execution is underway, with completion scheduled for June 2026. Once finished, combustion-related emissions from lime production are expected to be close to zero (conditional on to availability of biomass), representing approximately 25% of total emissions.

Innovation in addressing process emissions

Most of our CO_2 emissions stem from the calcination process in lime production. While combustion emissions can be reduced with existing solutions, process emissions are inherent and represent our main decarbonization challenge.

We are targeting carbon capture techno-readiness by 2028 and enabling future transport and storage integration.

Butterfly: New wings for the future of kilns

Through Carmeuse Technologies, we are developing next-generation kiln and carbon capture solutions. One example is the Butterfly project, which represents an advancement in kiln technology to enable low-carbon lime production through a parallel flow regenerative oxyfuel kiln designed to capture and concentrate CO_2 directly at the kiln level, integrating carbon capture into the core process rather than treating emissions downstream. Construction of the industrial demonstrator began in June 2023.

The Butterfly project is a collaboration between Carmeuse, CRM Group, the University of Liège, the University of Mons, CORETEC, and VOC Sens, and has received funding support from the Walloon region and the European Union. It completed its second hot campaign in 2025, followed by maintenance, upgrades, performance analysis, instrumentation improvements, and preparations for a third campaign. The second campaign achieved 75% CO_2 concentration at the kiln outlet and a 75% capture rate without affecting lime quality. The third campaign, launched in March 2026, aims to exceed 80% CO_2 concentration and achieve capture rates above 90%, supporting industrial-scale deployment.

Saturn: End-of-pipe CO_2 concentration solution

The Saturn project supports our transition toward carbon-neutral lime production through an end-of-pipe carbon capture solution. This solution separates and concentrates CO_2 from flue gas in the final stage of production, integrating with existing lime kilns without a fundamental redesign and providing a practical and scalable decarbonization pathway. Developed through cross-industry collaboration with Aperam, AGC, Prayon, CRM Group, VOCSens, the University of Mons (UMons), the University of Liège (ULiège), and CORETEC, and supported by the Walloon region and the European Union, the first pilot was installed at our Aisemont plant in Belgium. Civil works and infrastructure were completed in Q1 2025; The first pilot test took place during 2025 and a full operational campaign is scheduled for May 2026.

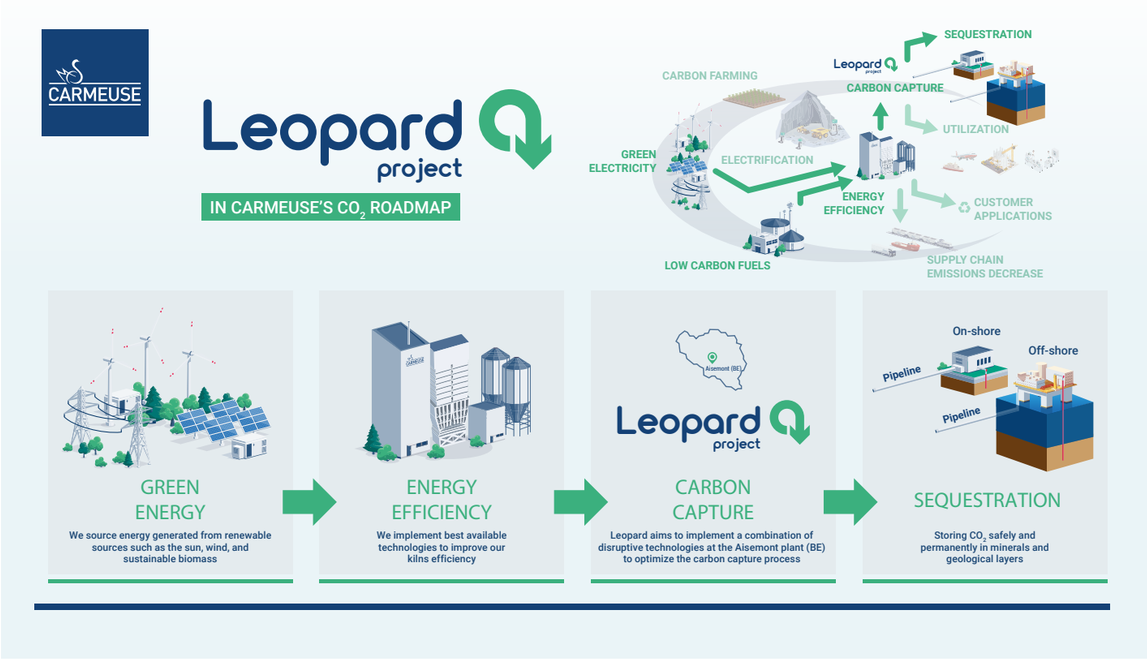
BUTTERFLY: NEW WINGS FOR THE FUTURE OF KILNS

SATURN: END-OF-PIPE CO_2 CONCENTRATION SOLUTION

Leopard: Step change toward neutral-carbon lime

A key recent milestone for Carmeuse's decarbonization roadmap is the Leopard project, which received support from the European Innovation Fund for deployment at the Aisemont site in Belgium.

Carmeuse expects the project to prevent over 70,000 tonnes of CO_2 emissions per year at the site and to remove additional CO_2 from the atmosphere through bioenergy carbon capture and storage (BECCS). Carmeuse also positions Leopard as a replicable pathway enabled by electrified capture, supporting broader deployment and contributing to the net-zero ambition by 2050.



Carbon Hub: Partnering in a pioneering CCS project

We are a key partner in the Holcim-led Carbon Hub CPT01 project in Romania, funded by the European Union Innovation Fund. As the region's first large-scale, full-chain onshore CCS project, it captures CO_2 from cement and lime production for permanent underground storage, reducing industrial emissions and supporting decarbonization in Eastern Europe's construction and industrial sectors. We contribute our technical expertise to help develop a sustainable CCS value chain using best-in-class technology and operational know-how.

SUPPORTING CUSTOMER AND VALUE CHAIN DECARBONIZATION

Because our products are used in many essential industries, improving their environmental performance has a direct impact across multiple value chains. By developing lower-carbon products and service models, we help customers meet their own sustainability goals while strengthening the responsible production of the materials that society depends on.

The objective of our CO_2 roadmap is to neutralize and potentially create a net-positive climate impact through our customers' processes. In addition to decarbonizing our own operations, we partner with key customers to help reduce their environmental footprint. Our sales and application experts collaborate closely with customers, suppliers, universities, and other stakeholders to develop new products and define services and business models that support this transition.

PROTECTING BIODIVERSITY AND ECOSYSTEMS

Our approach to protecting nature's capital reflects our responsibility as a limestone quarry operator. Limestone, a natural carbonate sedimentary rock formed from accumulated calcium carbonate, is abundant in the earth's sedimentary crust, and as lime is produced by heating limestone, our focus is on responsible extraction. Limestone extraction is regulated to ensure environmental protection, operational safety, and minimal disturbance to neighboring communities. As operators of quarries and mines worldwide, we apply long-standing expertise in sustainable quarry management through a holistic environmental approach that integrates biodiversity and restoration, energy efficiency, water stewardship, air quality, and noise and vibration control.

IMPROVING BIODIVERSITY IN QUARRY OPERATIONS

Biodiversity management during and after operations

We combine active biodiversity management during extraction with restoration post extraction or after closure. Quarrying creates cliffs, screes, rocky and sandy areas, temporary water bodies, calcareous grasslands, and sparse meadows that are rare in surrounding landscapes. These habitats support pioneer species of high ecological value, and in many areas our quarries are recognized as biodiversity-rich environments.

BELGIUM →SAND MARTIN HABITATS AT FRASNES

BELGIUM →LANDSCAPING OF AN EMBANKMENT IN ENGIS

Quarry restoration and habitat development

Restoration and habitat development are integral to our biodiversity management approach. Across our global operations, we rehabilitate quarries during and after extraction by reusing stripped topsoil, subsoil, and overburden, and by creating habitats through planting, sowing, or controlled water level rise. These actions enable biodiversity management during operations rather than only after depletion, helping to minimize long-term environmental impact, strengthen ecosystem resilience, and support species returning to or settling in restored areas at local and regional levels.

Habitat renewal (Belgium)

In 2025, restoration in Belgium converted approximately 1.7 hectares into plantations with ponds, scree, limestone grasslands, and relocated protected species. Moreover, we remain committed to supporting the Frasnes wetland, created in 2016 with the City of Couvin and maintained annually with a local NGO to preserve biodiversity and enhance site value. Over 100 sand martin nesting pairs were recorded in 2025. Sand martins are small migratory birds that nest in vertical sandbanks, often found in quarries. They travel thousands of kilometers each year and are highly sensitive to habitat changes, which makes local protection efforts critical.

In Engis, landscaping of an embankment in the overburn storage area has improved environmental integration, stability, and landscape quality. The redesigned overburn embankment includes two scree habitats for reptiles and amphibians, including the natterjack toad. Bank swallows, natterjack tadpoles, and frogs have returned across our Belgian sites.

Recognition for Responsible Mining Practices (Thailand)

On 20 November 2025, Thai Marble Co. Ltd., a subsidiary of Golden Lime PLC within the Carmeuse Group, received the Green Mining Award 2025 from Thailand's Department of Primary Industries and Mines, presented by Deputy Minister of Industry Senior Sergeant Major Yotsingh Liamloet. Thai Marble was recognized for exceptional continued adherence to green mining standards covering environmental and social responsibility, community engagement, and efficient, sustainable resource use.

Global tree planting initiatives (Group)

Tree planting remains an annual initiative across our global sites, and it continued through 2025. In Turkey, we organized tree planting activities at our quarries in Soma and Pınarhisar, where rehabilitation projects were planned, with the participation of our colleagues and their children, and planted 5,560 trees. In Beachville (US), more than 200 trees were planted to enhance biodiversity and carbon sequestration. In Brazil, 6,500 native seedlings were planted to support biodiversity and groundwater recharge.

THAILAND → RECOGNITION FOR RESPONSIBLE MINING PRACTICES

GROUP → GLOBAL TREE PLANTING INITIATIVES

Monarch butterfly conservation (North America)

107.7 hectares
restored for biodiversity
(cumulative since 2020)

Carmeuse Americas launched its Monarch Butterfly Conservation project in 2022 and continued it in 2025 under its sustainability commitments. The program addresses the monarch population decline following the species' endangered listing in 2020 and its reclassification as vulnerable by the International Union for Conservation of Nature (IUCN) in October 2023.

We have converted quarries and company lands into monarch habitats by planting milkweed and other nectar species to offset critical habitat loss. Sites include Winchester and Middletown, Virginia; Maple Grove and Millersville, Ohio; Manitowoc, Wisconsin; several Michigan quarries; Beachville, Canada; and other locations along the migration corridor. Employees also receive milkweed seed packets to expand habitat creation beyond our sites, and we share photos and updates internally with the aim of inspiring colleagues to keep progressing.

We partner with the Monarch Joint Venture for conservation expertise. Monarchs migrate up to 4,000 km from Canada and the northern U.S. to Mexico, and their caterpillars rely exclusively on milkweed, making habitat restoration essential.