Hope Hill Lavender Farm, Pottsville, Pennsylvania

2024

Materializing Sustainability

Formica Group North America | A path toward carbon neutrality

Introduction

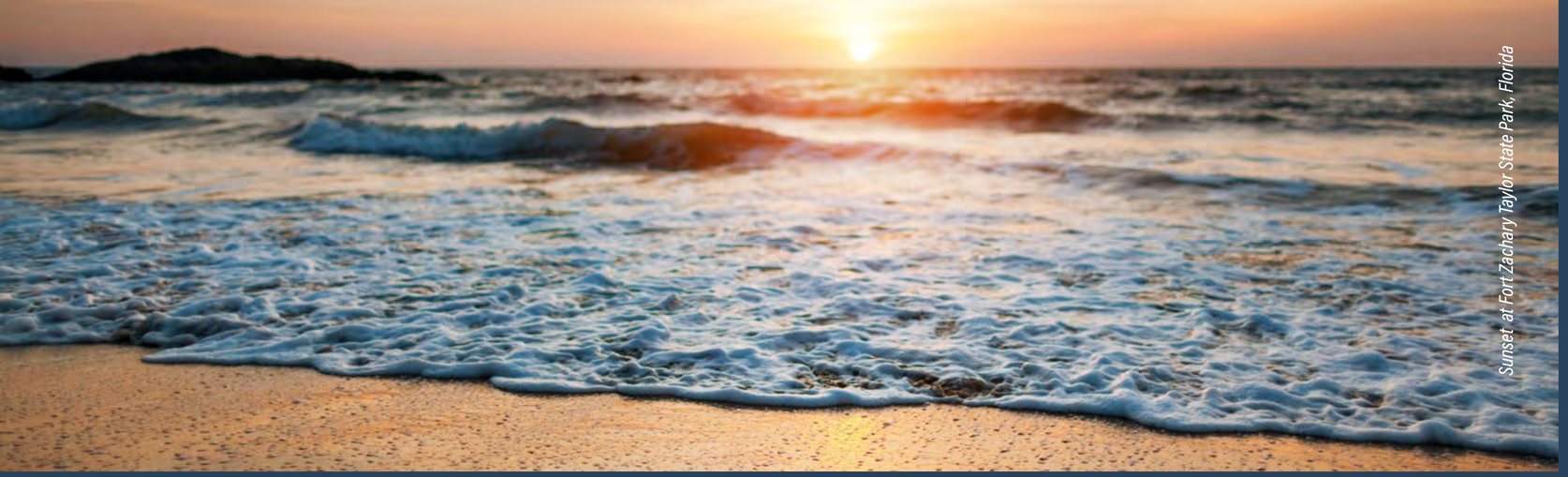
Since its founding in 1913, Formica Group North America has worked to provide innovative, high quality products to its customers. Using resources efficiently has always been a key part of how we run our business. In 2019, Formica Group joined Broadview, a Netherlands based company and leader in sustainability in the decorative materials market. The acquisition by Broadview has increased our focus on sustainability and provided access to tools and technologies to accelerate our sustainability improvement trajectory.

The next step in Formica Group's sustainability journey is a higher level of transparency - proactively communicating our environmental impact data and our plans for improving in the future. To do that, in 2021, we published our first Sustainability Position Paper in collaboration with NEMHO, the Broadview Sustainability and R&D Team.

Our first paper detailed Formica Group North America's journey to reduce emissions in our facilities and develop offset projects that help reduce or capture carbon emissions in the broader environment. We committed to achieving carbon neutrality by 2030, and outlined our path forward, which includes a targeted reduction of 25% and a compensation of 25% of our emissions via carbon offsets by 2026.

We were pleasantly surprised by the reaction to our 2021 Sustainability Position Paper. Over 5,000 people downloaded the paper, reached out to our team with questions or participated in our introductory webinar. Clearly, reducing the environmental impact of what we do is a shared goal across the design and construction industry. That shared goal and the industry focus on doing what is right for the planet gives us great confidence for the future.

Death Valley National Park, California



Sunset at Fort Zachary Taylor State Park, Florida

As we rolled out our 2021 Sustainability Position Paper, several questions emerged and were regularly asked by the design and construction community. They are answered below.

Q: Why does Formica Group North America use the cradle-to-gate scope?

A: We use the scope cradle-to-gate for our on-site Life Cycle Analyses (LCAs), because we focus on the stages that are under our control and that we can influence. We can improve our processes to make them more efficient and we can select less impactful raw materials. Moreover, for the life cycle stages that are after our factory gate, we have limited visibility and data as to the useful life and ultimate disposal of our product (making estimates difficult). We continue to closely monitor developing regulations on the potential for carbon storage benefits of long life cycle products at the end of their useful life.

Q: What scope does Formica Group North America use for its Environmental Product Declarations (EPDs)?

A: For the Environmental Product Declarations (EPDs), we use cradle-to-grave scope as required by the standards. Our Sustainability declarations and certifications including product EPDs and HPDs (Health Product Declarations) are available for review and download at https://www.formicadocs.info.

Q: How many of your North American facilities use Renewable Electricity?:

A: Our manufacturing plants in Cincinnati, Ohio, United States and St-Jean-sur-Richelieu, Quebec, Canada rely on 100% renewable electricity to power operations.

Q: Who performs the measurement and analysis for Formica Group North America's LCAs?

A: Formica Group North America's sustainability reporting and analysis are performed in collaboration with the Sustainability Team at NEMHO, Broadview's Center of Excellence for R&D and Sustainability. Our Chief Sustainability Officer and her team of scientists and analysts are located at NEMHO, where they quantify the environmental impact of Formica Group North America and other Broadview Material companies via LCA, and support companies to define improvement actions to reach their targets.

This report marks our third Sustainability Position Paper. We are excited to share how we continue to improve our measurement process and drive progress across our business and manufacturing plants to decrease our environmental impact and achieve our 2030 carbon neutrality goal.

Q: Are your sustainability measurements 3rd party verified?

A: Yes, we make sure that everything we mention on our sustainability communication is fact-based and third-party verified. At the end of 2022, we received the EPD process certification (an LCA management certification) by an accredited 3rd party that annually audits us on our whole LCA process starting from data collection, to modeling, to reporting and continuous monitoring.

Stony Man Mountain, Shenandoah National Park, Virginia

01 Executive Summary

Formica Group North America is committed to a higher level of engagement on sustainability along with transparent communications about our data, plans, and improvements. This paper outlines our environmental impact data from 2022 and our continued journey toward carbon neutrality in 2030, with a reduction of 50% by 2026 delivered through a targeted reduction of 25% and a compensation of 25% of our emissions through carbon offsetting.

A STRAIGHTFORWARD APPROACH TO SUSTAINABILITY

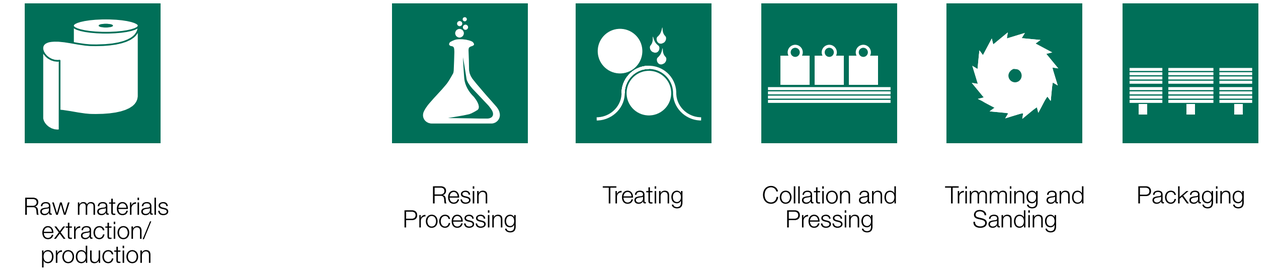
Reducing our carbon footprint is based on our core belief that it is the right thing to do. We are also convinced that reducing our overall environmental footprint is essential to the long-term success of our business and the environment around us. That is why sustainability is embedded in our business philosophy with the credo 'do no harm, do good, do better.'

At the core of our sustainability strategy is the principle that we should start with ourselves when we seek to improve the world: 'do no harm.' Our approach is straightforward: we measure our impact, select targets to reduce this impact and monitor and report on progress. To measure our impact, we use the Life Cycle Assessment (LCA) methodology. LCA captures the details of the entire environmental footprint of our products, from its raw material extraction up to leaving the gate of the factory.

The second element of our strategy is to seek opportunities that support the environment beyond the direct scope of our own manufacturing footprint: 'do good.' This includes creating highly durable products that have a long lifespan and limit the need for replacement. Additionally, we also develop and support projects in our communities that help to absorb or reduce carbon emissions that are not directly linked to our factories and our product portfolio.

We believe that addressing sustainability challenges will allow our company to continue to grow and 'do better' in the future. Investing in sustainability should – in the end – ensure that these efforts go beyond established regulatory requirements and the net effect of our efforts will positively impact the environment in which we operate.

FORMICA® HIGH PRESSURE LAMINATE MANUFACTURING PROCESS



Facts on our Footprint

We believe you cannot manage what you do not measure. With Broadview, Formica Group North America has been able to leverage leading sustainability tools to create a Life Cycle Assessment (LCA) and update it annually. The LCA results are shown here for the two manufacturing plants that constitute Formica Group North America, namely the factories in Cincinnati, Ohio, United States, and St-Jean-sur-Richelieu, Quebec, Canada for the three key environmental factors: Global Warming, Primary Energy Demand and Water Footprint.

The results reflect two years: 2019 (baseline for our 5-year targets) and 2022.

Formica Group North America has plans to address all three environmental factors, however, the urgency of Global Warming requires that the reduction of CO_2 emissions be our absolute priority for the years to come. Our primary focus will be on projects to reduce the 110,263 thousand tonnes of CO_2 emissions generated in the production of our products in 2019.

From 2019 to 2022, Formica Group North America noted an impact reduction on global warming by 31%. This reduction was driven by the switch to 100% Renewable Electricity and material efficiency increase at the Cincinnati factory as well as energy efficiency improvement at the St. Jean factory. We should note, however, that a portion of this decrease can be attributed to pandemic-related volume decreases and some data improvement activities. In order to achieve our 5-year targets, we will continue implementing impact reduction projects detailed in the next section.

Impact Category	Unit	2019 Impact	2022 Impact
Global Warming	ton CO_2	110,263	76,185
Primary Energy Demand	MJ	4.572 million	3.526 million
Water Footprint[1]	m^3	66.7 million	53.1 million

The results are expressed for cradle-to-gate scope. This means that the global warming impact includes CO2 storage of the wood fibers present inside of our panels.

[1] The water footprint indicator shall be used with care due to high uncertainties and limited experience as mentioned in the EN15804-A2 standard.

Port Renfrew, Vancouver Island, British Columbia

A Clear Action Plan

Reducing the carbon footprint of Formica Group North America starts with the goal of a 25% reduction (27,500 tons) of CO_2 emissions generated in our facilities by 2026. The key drivers of our improvement are outlined in the table below.

As of 2022, we achieved our goal of sourcing 100% green power at both manufacturing sites. To achieve the remaining goals, we will continuously explore every opportunity to increase the efficiency of our processes. In addition, we will leverage Broadview's Global R&D Center (NEMHO) to develop more sustainable bio-based and renewable raw-materials, which already constitute over 50% of our product inputs. Beyond Carbon Reduction, Formica Group North America will also pursue a 10% reduction in Primary Energy Demand and a 5% reduction of our Water Footprint.

As stated above, we will develop projects to capture carbon outside our business; this will include buying offsets or co-investing in projects. Broadview's commitment toward carbon neutrality has started with the acquisition of 830K certified carbon offsets.

WE WILL BE TRANSPARENT ABOUT OUR PROGRESS

The goal of our Sustainability approach is to provide transparency to our stakeholders about our sustainability efforts with updates each year going forward so you can see progress against our commitments. Formica Group North America will update its targets and initiatives each year as we progress through this journey.

For those interested in further details of our sustainability program, a long-form version of this paper is available with additional information and data. The Formica Team also is more than happy to answer questions - feel free to contact your local Formica Representative for more information.

CO_2 Emission Reduction Activity	Emissions Scope	CO_2 Reduction Potential	Status
Energy Efficiency - utilize closed loop systems and optimal recycling of thermal energy across processes	Scope 1, 2	15%	Ongoing
Sourcing of Green Power - including electricity and gas from renewable sources (PV, Hydro, Biogas)	Scope 1, 2	7%	Target Reached
Material Efficiency - improvements in material yield, internal recycling, and revised product construction to require fewer input materials	Scope 3	3%	Ongoing
Sourcing Renewable Raw Materials - including resins from biosources	Scope 3	TBD (incremental opportunity)	Ongoing
	Target Reduction Total	25%	

Tehuacan-Cuicatlan Biosphere Reserve Tehuacan, Puebla

02 Introduction

Formica Group North America was founded in 1913 in Cincinnati, Ohio as The Formica Products Company by former Westinghouse engineers Daniel J. O'Conor and Herbert Faber. The two discovered that plastic resins could be used as an effective substitute "for mica" in electrical componentry, and with their invention, they created a new category of materials known as high-pressure laminate (HPL). By the 1930s, The Formica Products Company had shifted away from industrial applications to decorative surfaces. Formica® Brand Laminates became well known for fashionable designs, durability and ease of cleaning, and Formica® Surfaces were broadly used in cafes, railway cars and ocean liners. Fast forward to today, the modern-day Formica Group North America remains committed to innovation and maintaining a leading position in design and manufacture of high quality HPL surfaces for applications ranging from health care to single-family homes, education to hospitality, retail to multi-family residences. Today, Formica Group North America operates manufacturing facilities in Cincinnati, Ohio and St. Jean-sur-Richielieu, Quebec along with a network of distribution warehouses across the United States, Canada and Mexico.

In 2019, Formica Group North America was purchased by Broadview Holding, a Netherlands-based global leader in material technology. Part of Broadview's explicit strategy is that each business in its group, including Formica Group North America, will pursue ambitious sustainability initiatives and results. Along with Broadview Holding, Formica Group North America is committed to a long-term planning horizon that includes becoming an industry-leading environmental steward. A key element to this approach is being highly transparent about our current environmental footprint as well as our plans and targets for reducing our overall impact. Formica Group North America is implementing a common sense, fact-based methodology to sustainability focused on a cradle-to-gate approach that is integrated into the way that we manage every part of our business.

As part of our new sustainability approach, Formica Group North America is publishing its environmental impact data every year, as well as our targets and initiatives for the coming year. This report marks the third annual publication of our sustainability data and results. We are excited to share it with you as we continue to advance our sustainability efforts.

Ash Falls, Hocking Hills State Park, Ohio

Overall Philosophy

Formica Group North America's sustainability policy is built upon a basic motivation to shift from "being less bad" for the environment to being "good" and having a positive impact on the world around us. This approach has three stages:

Do no harm: Formica Group North America will comply with safety, product and sustainability regulations and guidelines set by the countries in which we operate. Beyond that, we will seek opportunities to minimize the environmental impact in all of our operations and products.

Do good: Formica Group North America will support our suppliers and customers in realizing their sustainability challenges. We will continue to look for opportunities and initiatives to support and promote longer-term sustainability beyond the direct scope of our current operations.

Do better: Formica Group North America believe that investing in sustainability is beneficial to the overall environment and to the long-term health of our business. Many sustainability challenges constitute good business opportunities that support our customers while continuing to allow the company to thrive.

Enhancing sustainability requires a realistic vision, specific actions and integrated approach across the entire company. Formica Group North America's sustainability path is defined by three key principles that shape our thinking and action plans.

Vermillion Lakes, Banff, Banff National Park, Alberta

COMMON SENSE

Formica Group North America takes a common-sense approach to sustainability. This requires the acknowledgment that, by definition, a product requires resources and energy in its creation and as a result, some level of environmental impact will occur. That said, we have adopted the relentless pursuit of maximizing our product functionality while minimizing its environmental impact. We believe that sustainability is a balancing act between product functionality and its impact. Our goal is to reduce the impacts without losing sight of the product functionality our customers require.

FACT-BASED APPROACH

At Formica Group North America, we believe you cannot manage what you do not measure. In order to address sustainability in a bigger way, we needed to quantify our current impact on the environment. To do this, we implemented the Life Cycle Assessment (LCA) methodology because it represents the most reliable and data-driven tool available to help companies, institutions and governments systematically incorporate sustainability into their decision-making process. LCA is a process to evaluate the environmental burdens associated with the entire life cycle of a product, process, or activity. For our business, this assessment is done through the identification and quantification of the energy and materials used in the production of Formica® Brand products and the resulting wastes and emissions released into the environment.

By using a product life-cycle approach, we get a clear understanding of the actual impact we have on the environment. We can then identify the drivers of sustainability and prioritize initiatives across the entire value chain – from the raw materials through the consumer's use of the product.

The environmental burden of product or an activity can be expressed through a number of impacts, such as global warming, acidification, eutrophication, ozone depletion, primary energy demand, photochemical oxidant formation, water footprint, abiotic depletion and many others. For Formica Group North America's LCA assessment, we show results tied to three key environmental factors: Global Warming (CO_2 Emissions), Primary Energy Demand and Water Footprint.

From among these three environmental impacts, global warming represents Formica Group North America's absolute priority. This impact poses a serious threat to our planet, one that demands urgent action on a global scale. Beginning with the Rio Earth Summit, then the Kyoto Protocol and the Paris Agreement, action to tackle this global challenge is speeding up. With the Paris agreement, 191 countries (including China and Thailand) committed to limit global warming to well below 2º Celsius compared to pre-industrial levels. This means aiming to reach global peaking of greenhouse gas emissions as soon as possible to achieve a climate neutral world by mid-century.

Fishhook Creek Trail, Sawtooth Range, Idaho

White Dome Road, Valley of Fire State Park, Nevada

PART OF HOW WE RUN THE BUSINESS

All sustainability initiatives are part of Formica Group North America's rolling business planning and review cycle. Our sustainability priorities stem from the results of our LCA studies and what we believe are realistic but challenging targets for achieving meaningful progress.

The review cycle comprises annual target setting in the budgeting process and a monthly management review of progress measured in key performance indicators. Each year, new sustainability targets are set and formalized in a detailed sustainability target agreement. Progress is closely monitored and discussed by the leadership team of Formica Group North America on a quarterly basis during regularly-held sustainability meetings which are our tool for tracking activities and progresses, and brainstorming on new sustainability initiatives.

Moreover, we are incorporating sustainability training into our on-boarding process and updates into our employee communications. Formica Group North America is committed to informing our entire team about our sustainability initiatives and engaging them in our efforts to protect the environment.

Aurora Borealis, Boreal Forest, Yukon

03
Sustainability Strategy

Cradle–to–Gate Approach

At the heart of Formica Group North America's sustainability vision and approach is reducing the impacts generated from the cradle-to-gate portion of our materials life cycle. Our guiding principle is two-fold: increasing efficiency or "do more with less" and replacing the most impactful energy and material inputs of our process.

INCREASING EFFICIENCY

Efficiency upgrades represent the first lever for improving a product's environmental footprint by reducing the required energy and raw material inputs.

Energy There are many opportunities to improve the energy efficiency of industrial equipment through the use of modern technology and intelligent system design. Replacing motors and pumps with new high-efficiency designs, storing and recycling heat within a closed-loop system, and optimizing the integrated manufacturing system are examples to reduce energy consumption.

Materials A large share of industrial emissions is associated with the creation of materials used in our products. A key opportunity is to absolutely minimize material waste at each step in the process. We are focusing on product and process designs that optimize the use of materials so that our finished product can provide outstanding performance while requiring less material input.

Additionally, we will work with the materials suppliers that contribute the most to our impact, to share our ambitions and goals and work with them to find mutually beneficial opportunities to improve our collective environmental footprint.

Rapeseed farm, Statesville, North Carolina

REPLACE MOST IMPACTFUL INPUTS

There are also opportunities to shift to lower-carbon alternatives for the energy and raw material inputs we source into our process. This approach normally translates into switching from fossil-based to bio-based and renewable options.

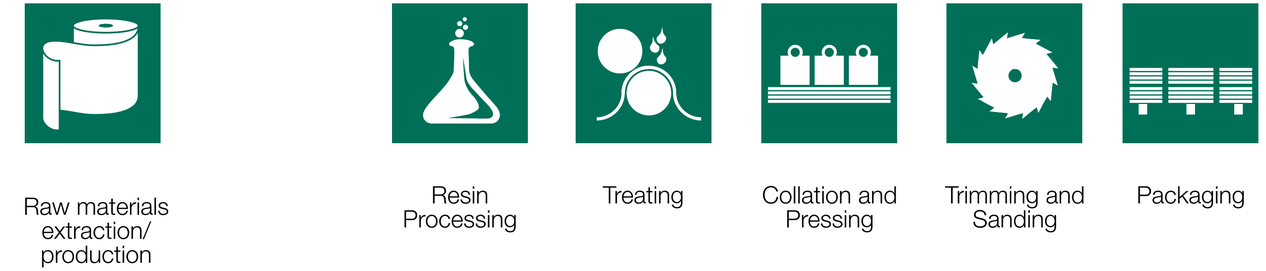
Energy The core element of this strategy is to actively pursue opportunities to replace traditional energy sources (electricity and natural gas) with renewable options for gas (e.g. biogas), and electricity (e.g. hydro, wind, solar). This will include working with third parties but also projects implemented on our own sites.

Materials Bio-based, renewable raw materials have a lower environmental impact than traditional petroleum-based inputs. They, in fact, help to save fossil resources and can contribute to reducing greenhouse gas emissions. Forest and crops absorb CO_2 from the atmosphere during their growth and continue storing it once harvested. To get a bit technical, trees absorb through the photosynthesis CO_2 and solar energy in their wood creation and release oxygen in return. The CO_2 absorbed is kept in the wood products for their whole life-time.

Our panels are made of a combination of bio-based, renewable materials (wood fiber) and resin, with the bio-based share exceeding the fossil-based one.

The rising availability of bio-based materials is making it more and more feasible to further increase the share of bio-based materials within our products. Between selecting bio-based alternatives and better-performing suppliers, sustainability will become a critical parameter when choosing our partners.

FORMICA® HIGH PRESSURE LAMINATE MANUFACTURING PROCESS



BALANCING OUR RESIDUAL EMISSIONS

As mentioned above, Global Warming (CO_2 emissions) represents our absolute priority for the years to come. This means we will put extraordinary efforts to cut the CO_2 emissions generated by our products . We will pursue this goal by applying the strategy outlined above to improve our efficiency (of both materials and energy) and replace the most impactful inputs.

Yet, it will not be possible to eliminate all emissions from manufacturing process of our physical product. For residual CO_2 generation, Formica Group North America will compensate with equivalent carbon dioxide savings elsewhere. This will be achieved either through purchase of fully-accredited carbon offsets, or, preferably, by developing our own carbon sequestration projects.

Carbon neutrality is defined by the state when the carbon emissions associated with an activity have been compensated by funding an equivalent amount of carbon savings elsewhere in the world. By buying offsets and developing carbon sequestering projects it is possible to fully balance out residual emissions and hence obtain a carbon neutral product. Our aim is to achieve carbon neutrality for our products by 2030*.

** Cradle-to-gate*

Lake Superior, Neys Provincial Park, Ontario

Stowe, Vermont

04

Baseline LCA Data

Our Learnings and Progress to Date

As we continue through this process, our data collection and measurement processes improve. Thus, we present the most updated data below – both for the baseline and 2022.

In recent years, Formica Group North America has put additional effort toward strengthening our sustainability approach. As a starting point, we have conducted detailed life cycle analysis at all our facilities and have created a plan to improve our environmental impacts.

Formica Group North America's recent LCA studies enabled us to:

- Better understand our mass and energy flows/balances
- Measure our environmental impacts per standard unit of material, to establish a normalized measure for future improvements
- Identify the major environmental impact contributors in our process in order to set priorities for action
- Investigate a number of external activities to understand their potential of decreasing our global warming impact

Misquamicut State Beach, Rhode Island

ENVIRONMENTAL IMPACTS OF THE BASELINE YEAR AND PROGRESS IN 2022

In this section, the results of the LCA study for the assessed impact categories are specified. These values are expressed per standard unit of material, and our total impact in 2019 (in all manufacturing facilities situated in North America), the baseline year for our 5-year targets, as well as 2022.

Please note that the results are expressed for cradle-to-gate scope.

The unit of scale or reference to which the LCA results are referred relates to the given function of the product, called a functional unit. Based on the function of our products, the input per unit is normalized to a standard measure of decorative surface area and product thickness, and can be used to evaluate changes in value or mix in the future.

These numbers provide a baseline of the environmental impact of our products.

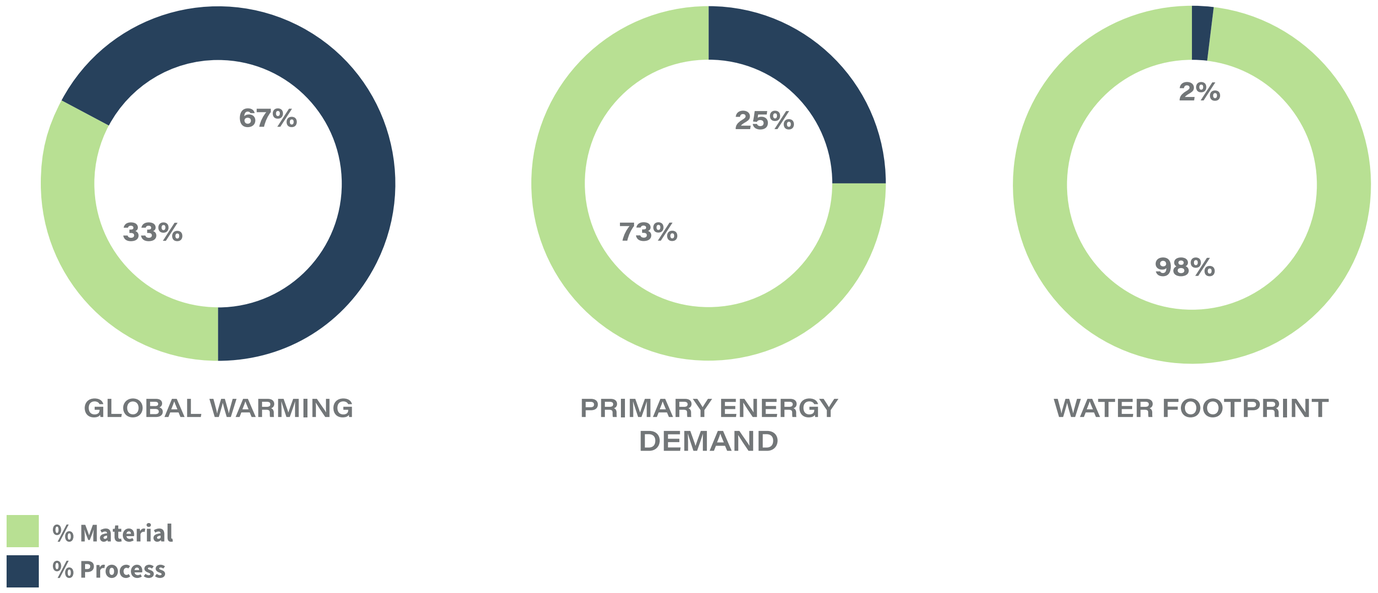
Compared to the baseline year of 2019, the total environmental impact of Formica Group North America's panels showed a decrease in 2022; by 31% on Global Warming, by 23% on Primary Energy Demand, and by 20% on Water Footprint. The primary driver behind the improvements across all impact categories were the switch to 100% renewable electricity and material efficiency improvement at the Cincinnati manufacturing plant as well as fuel efficiency increase at the St Jean factory. However, production volume decreases and data improvements also played a role. Excluding the production volume decrease, the impact change would have been a 26%, 17% and 15% reduction on global warming, primary energy demand, and water footprint. In the coming years we will continue to focus on the improvement activities mentioned in the previous sections.

Impact Category	Unit	Impact per unit 2019	Impact per unit 2022	Δ '19–'22	Total Impact 2019	Total Impact 2022	Δ '19–'22
Global Warming	**kg CO_2 eq**	0.38	0.28	-26%	110,263,544	76,184,569.87	-31%
Scope 1		0.13	0.127	-3%	37,760,797	34,213,670.86	-23%
Scope 2		0.06	–	100%	17,191,262	–	-100%
Scope 3		0.19	0.16	-19%	55,311,485	41,970,899.01	-15%
Primary Energy Demand	**MJ**	15.88	13.14	-17%	4,571,943,433	3,526,258,546	-23%
Renewable PED		6.22	5.68	-9%	1,789,874,616	1,525,762,844	-15%
Non Renewable PED		9.66	7.45	-23%	2,782,068,818	2,000,495,702	-28%
Water use[1]	**m3**	0.23	0.20	-15%	66,656,107	53,093,863.00	-20%

[1] *The water footprint indicator shall be used with care due to high uncertainties and limited experience as mentioned in the EN15804-A2 standard.*

CONTRIBUTION ANALYSIS FOR 2022

Each of the manufacturing steps described in the cradle to gate cycle contributes to a different extent to the total environmental impact of our laminates. Such impact originates from the manufacturing process itself (the energy and water consumed, waste produced and emissions generated) and from the production of the materials from which our panels are made. The chart below shows the contribution of the manufacturing process and raw materials for the three investigated environmental indicators: Global Warming (CO_2 emissions), Primary Energy Demand and Water Footprint. As it can be seen in the Figure below, a significant portion of the impact of our panels is attributable to the raw materials we buy, which guides our approach to making improvements to both our own operations and to the inputs we source.



Additionally, Global Warming (CO_2 emissions) has been further broken-down in three categories consistently with the Greenhouse Gas Protocol (see figure A):

Scope 1 – All direct emissions from the manufacturing plant, including fuel combustion, boilers and afterburners.

Scope 2 – Indirect emissions from electricity purchased and used by the plant.

Scope 3 – All other indirect emissions from external sources, namely: raw materials extraction, production and transportation; fuel extraction; waste disposal

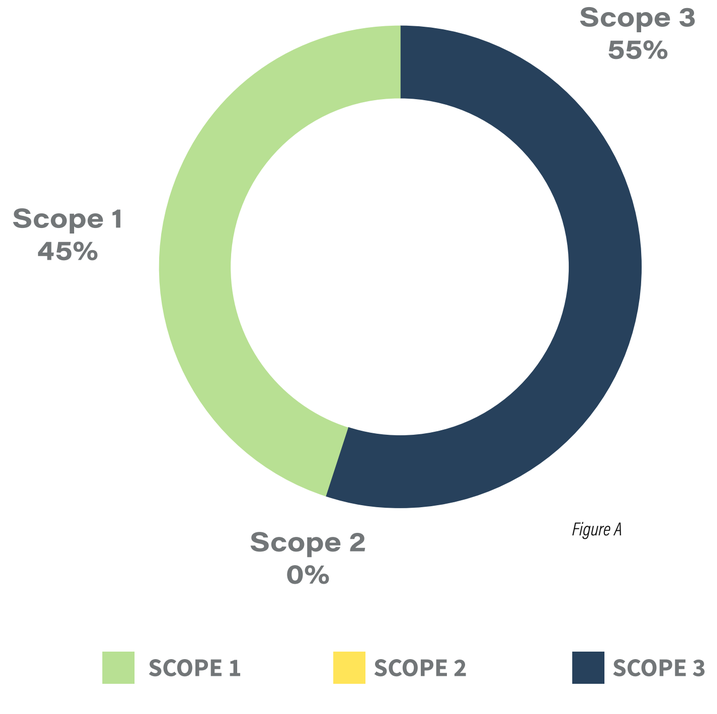


Figure A

Cradle–to–Gate Impact Reduction

The entire goal of Formica Group North America's sustainability approach is to define specific targets and actions to reduce our environmental impact, while continuing to supply the same products you have come to expect. Our reduction targets for 2026 (baseline 2019) are:

- Global Warming (CO_2 emissions): 25% reduction
- Primary energy demand (fossil): 10% reduction
- Water footprint: 5% reduction

In order to achieve the global warming target, Formica Group North America is undertaking a series of activities and projects detailed in the table.

CO_2 Emission Reduction Activity	Emissions Scope	CO_2 Reduction Potential	Status
Energy Efficiency - utilize closed loop systems and optimal recycling of thermal energy across processes	Scope 1	15%	Ongoing
Sourcing of Green Power - including electricity and gas from renewable sources (PV, Hydro, Biogas)	Scope 2	7%	Target Reached
Material Efficiency - improvements in material yield, internal recycling, and revised product construction to require fewer input materials	Scope 3	3%	Ongoing
Sourcing Renewable Raw Materials - including resins from biosources	Scope 3	TBD (incremental opportunity)	Ongoing
	Target Reduction Total	25% (27,500 tons)	

Lacandon Jungle, Chiapas

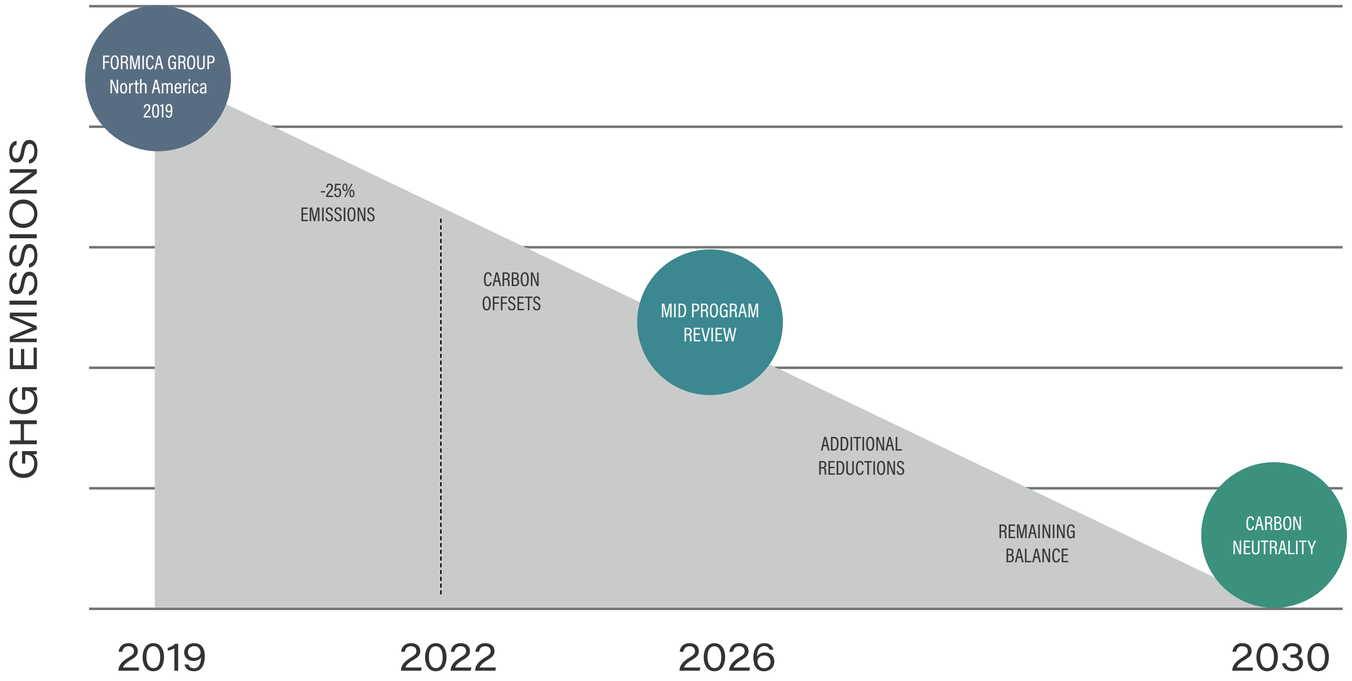
05
Sustainability Roadmap to 2030

Balancing out emissions

Formica Group North America has set an ambitious goal of becoming carbon neutral by 2030. Along with our internal improvement agenda outlined in the previous section, we also will start offsetting CO_2 emissions through the use of high quality carbon credits. In addition to buying carbon offsets, we have initiated efforts to identify and select projects to further reduce our carbon footprint and will report on these efforts in future position papers.

The table highlights our path towards carbon neutrality. It reflects the combined impact of our internal improvement measures and carbon offset compensation to help balance our emissions.

We recognize carbon neutrality is a long journey and there will be significant learnings along the way. As we progress through this process, we will leverage our experiences to update our approach, targets, and timelines. However, we believe it is vitally important to get started on this journey now, initiate the hard work of creating a more sustainable business, and become a leading steward of a better environment.



The Great Salt Lake, Utah

Improving our LCA Model

Another key component of our sustainability effort is reliable and transparent data embedded in our Life Cycle Analysis model. The accuracy of an LCA model is entirely dependent on the data available; ensuring this data quality is at the forefront of our priorities. For this paper, we were able to improve data collection and measurement processes which led to more finely tuned data reporting both for 2022 impacts and the 2019 baseline. During the next five years, we will continue to put effort toward increasing the breadth and accuracy of data collected in our plants. In LCA, there is a clear distinction between data collected on site (primary data) and data sourced from third parties (secondary data), with the former preferred over the latter. Given the significant role that raw material play in our products' LCA, we plan to continue to refine our data and collect inputs directly from our paper and chemical suppliers to further improve the specificity and accuracy of that data. Combined, the end goal is to develop and maintain a highly accurate and actionable LCA model for our products.

WHAT DO GLOBAL WARMING, PRIMARY ENERGY DEMAND AND WATER FOOTPRINT MEAN?

Global warming

This indicator expresses how much heat greenhouse gases trap in the atmosphere. Greenhouse gases are a group of compounds that are able to absorb the infrared radiation released by the Earth surface heated up by the sun. The more greenhouse gases in the atmosphere, the more heat stays on Earth. The main greenhouse gases are carbon dioxide (which is also the most abundant greenhouse gas), methane, nitrous oxide and fluorinate gases. The global warming indicator is calculated in terms of carbon dioxide equivalents.

Primary energy demand

Primary energy is energy found in nature that has not been subjected to any conversion or transformation process (such as primary energy content in crude oil, natural gas, and biomass). Energy that is already converted will require primary energy to provide this “delivered energy” (e.g. steam, electricity or other thermal energy derived from any technical process). Primary energy demand indicates the amount of energy that a system under assessment has extracted from the natural environment.

Water footprint

In this paper the water scarcity footprint has been evaluated. This indicator assesses the amount of water consumed weighted by a scarcity indicator, hence accounting for differences in potential environmental impact of water use based on given regional differences in water scarcity.

Hoh Rain Forest, Washington

Lake Tremblant, Quebec

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