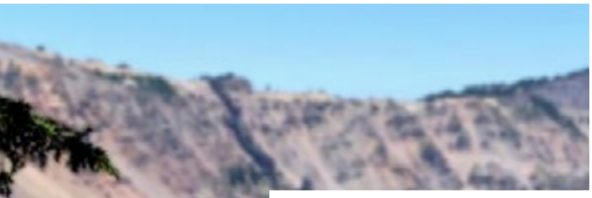
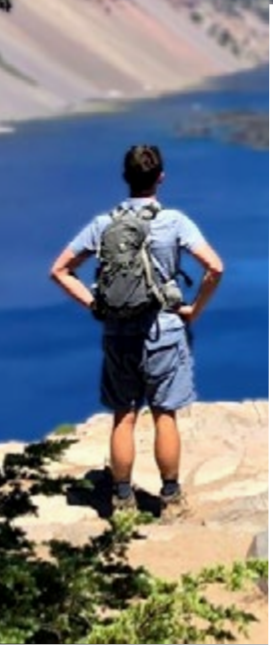
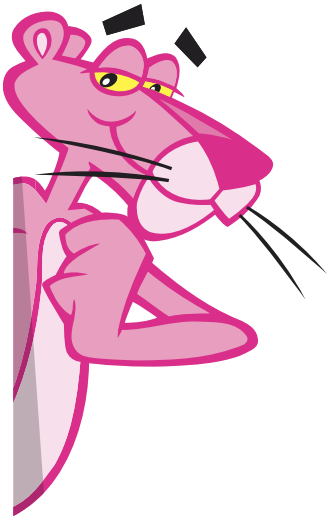






OWENS CORNING
DIFFERENCE DRIVEN

2018 Sustainability Report

TABLE OF CONTENTS

Employees from several European locations participate in a Human-Centered Design workshop.

INTRODUCTION

BRINGING THE STORY TO LIFE

Throughout this report, we feature photos taken by – and of – our employees around the globe. Each photo is a snapshot of an employee's personal experience of the way we strive to be difference-driven. Our people are proud of Owens Corning's commitment to making the world a better place, and this report reflects their many contributions.

Thank you for your interest in our 13th annual sustainability report. We are proud of our long-standing commitment to the environmental, social, and governance issues that are material to our business and important to stakeholders. This report also marks the second year we have prepared our report in accordance with the GRI Standards: Comprehensive option.

The theme of our 2018 report is ***Difference Driven***. It highlights our promise to deliver a material difference for all our stakeholders. Our employees deliver on that promise each day and those stories make up the body of this report. Difference Driven also means looking ahead and realizing there is always more to be done throughout our journey.

In this report, you will find independently verified data and descriptions of our efforts to uphold our commitments to sustainability. New for the 2018 report, we have moved some supporting data to the appendices to better highlight the work of our employees in the most recent reporting period.

We have also taken a new approach to how we organize the topics we report on, which better aligns with our overall company strategy. Owens Corning leadership uses a framework that supports managing the company as a sustainable enterprise. The pillars of our sustainable enterprise framework are: **high-performance people, customer-inspired innovation, operational excellence, world-class sustainability,** and **financial strength.** These pillars guide our evaluation of the businesses, performance criteria, resource allocation, and other strategic choices focused on both short-term and long-term horizons. These pillars also enable us to better serve key stakeholders, including customers, investors, employees, and the communities in which Owens Corning operates.

EXECUTIVE SUMMARY

PHOTO CREDIT:
Alessio, Frizziero | Besana, Italy
Lake of Aviolo

MESSAGE FROM OUR CEO AND CSO

Brian Chambers, president and CEO,
and Frank O'Brien-Bernini, CSO

It's a pleasure to present our 2018 Sustainability Report and share the progress Owens Corning has made against our 2020 sustainability goals, as well as our commitment to making the world a better place.

The theme for this year's report, ***Difference Driven***, reflects our sustainability commitments as well as our aspirations. Owens Corning is a materially different company than it was in 2002, when we established our first set of long-range sustainability goals. Expanding our impact through safety, wellness, and sustainability remains a strategic priority — one that reflects our belief that we succeed as a company when we live our core values. That means we must consider the future in all we do, with a commitment to care for people and the planet while delivering a material difference to all stakeholders.

Safety remains our top priority. As 2019 unfolds, there is an increasing focus in all Owens Corning facilities on identifying hazards and eliminating risks that can lead to serious injuries, going beyond the traditional emphasis on reducing recordable injuries. This additional assessment is key to our continued march to zero injuries.

We believe that health and wellness contribute to employee engagement and quality of life, which is why we continually seek ways to help our employees and their families embrace healthy living. For instance, our new U.S. opioid policy limits the initial prescription to a three-day supply for U.S. employees and dependents on Owens Corning health plans. This facilitates more constructive discussions between patients and doctors, and the policy has reduced the number of opioid pills dispensed by 40% in the first year, ultimately reducing the risk of addiction.

This report includes stories like these and highlights the progress we've made against our 2020 sustainability goals. It also offers a candid look at the work that's still

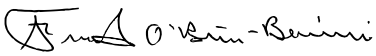
Message from Our CEO and CSO

needed as we begin formulating our next set of long-term goals. We have met or are making steady progress toward five of our six 2020 footprint reduction goals. However, the sixth goal, reducing our waste-to-landfill, is an ongoing challenge and priority, and in this report we share some of what we've learned along the way. Those lessons are the basis of our determination to keep striving to reduce waste in the company's own processes and within the industry.

Our next set of long-term goals, with a target date of 2030, will be based on science and informed by where the world needs us to be, as a leader in addressing the most critical issues, local and global. We aspire to be a net-positive company, where the positive impacts of our people and products far outweigh the negative impacts. We're engaging a wide range of stakeholders in the process of identifying the right aspirations and setting ambitious and measurable goals. All Owens Corning employees share the goal to ensure this is a company whose actions make a positive difference to the world and inspire our many stakeholders to be part of our journey.

Through this report and our website, we are proud to report our progress and reflect on our opportunities as a sustainable enterprise. Built on the pillars of high-performance people, customer-inspired innovation, operational excellence, world-class sustainability, and financial strength, Owens Corning has a long history that we believe is the foundation for a successful future. We are managing our company for the long term, knowing that we can make a difference that matters.

Brian Chambers
President and
Chief Executive Officer



Frank O'Brien-Bernini
Vice President and
Chief Sustainability Officer

2018 YEAR IN REVIEW

In 2018, we made progress on our goals and engaged in initiatives and programs that demonstrate our difference-driven culture.

Our progress against our goals is indicated as follows:

- On track to achieve goal
- Steady progress but not on pace
- Goal results at risk

Progress is explained in detail in the sections of this report.

High-Performance People

- Joined more than 600 CEOs from around the world through Chairman and CEO Mike Thaman's pledge to the CEO Action for Diversity & Inclusion™. Our new CEO, Brian Chambers, considers continuing this work to be one of the key strategic priorities for the company.
- Joined more than 150 global companies in hosting a Day of Understanding. More than 220 employees from around the world participated in an open discussion, sharing their experiences and engaging with colleagues in candid dialogue about equality and inclusion.
- Filled 79% of director roles with internal talent, continuing a multi-year trend in this direction.
- Awarded nearly $175,000 in scholarships to Owens Corning employees and their depedents.
- Increased our percentage of actively engaged employees to 97%, up from 89% in 2014.
- Recorded an average of 13 training hours per employee. Our recorded average training hours for 2018 fell short of our goal due, in part, to the inability to track training hours for new acquisitions in our learning management system.

Goal	Progress
Employee Development	
▪ Average 18 hours of training per employee for development purposes	

2018 Year in Review

Toni Saukkonen, left, (Helsinki, Finland, PAROC® stone wool insulation plant) with a customer.

Customer-Inspired Innovation

- Introduced the first and only mineral wool formaldehyde-free perimeter fire containment system available in North America.
- Increased the number of products produced with a "Made with 100% Wind-Powered Electricity and Reduced Embodied Carbon" certification, including EcoTouch® insulation for flexible duct and QuietR® duct board insulation, to a total of seven products available under the certification.
- Launched our Duration Flex™ shingle platform, providing a more resilient roof system to the homeowner. Duration Flex™ is the only modified asphalt shingle with SureNail® technology, with nearly 1.5x the nail pull strength and 10% better tear strength than standard shingles.
- Grew our portfolio of science and technology centers to 11, with the addition of Parainen, Finland, and Tessenderlo, Belgium, from recent acquisitions.
- Worked closely with Chilean organizations to support increases in building code requirements related to external and internal insulation. A revised version of the code is expected to be published by the Housing and Urban Development Ministry in Chile in 2019.
- Educated more than 140 architects on WUFI Heat & Moisture Standards and Professional Use of WUFI.

Goals	Progress
Building Science	
▪ Increase the number of Owens Corning-supported net-zero energy ready buildings year-over-year vs. 2015 baseline of 35	✓
Product Innovation	
▪ Create pipeline of sustainable products, and increase the value through sustainability in the innovation process	✓
Product Stewardship + Sustainability	
▪ 85% of our new products and 85% of our new applications will have net sustainability gains by 2020	✓

2018 Year in Review

Petr Cmelik, right, (Klášterec, Czech Republic) leads Owens Corning executives on a tour of the FOAMGLAS® cellular glass insulation plant.

Operational Excellence

- Enhanced engagement with our supply chain by inviting select suppliers to attend our annual Sustainability Summit.
- Graduated the first class of 25 employees from Owens Corning's TPM Academy Leadership Program. The program helps instill Total Productive Maintenance concepts in the next generation of plant leaders.
- Progressed in the implementation of our TPM approach in all plants, with 100% of our plants committing to TPM in 2018.
- Earned a TPM Excellence award from the Japan Institute of Plant Maintenance (JIPM) at our Rio Claro, Brazil, plant. This is our fourth plant to achieve this recognition.

Goals	Progress
Supply Chain Sustainability	
▪ Set clear expectations for sustainability progress by our suppliers	✓
▪ Use leading-edge sourcing practices	✓
▪ Measure and disclose supply chain performance	✓
▪ Expand our training on sustainability to meet the needs of our global sourcing organization	✓
▪ Convert transportation miles to natural gas or use alternative fuel savings methods by the year 2020	○

2018 Year in Review

World-Class Sustainability

- Responded to the U.S. opioid crisis by implementing a three-day limit on short-acting opioid prescriptions.
- Became tobacco-free at our U.S. legacy facilities in 2018, and our international legacy facilities did so in early 2019. We are committed to bringing our newly acquired facilities on the same journey. Paroc has already committed to being 100% tobacco-free. Our other recent acquisitions, both in the U.S. and internationally, have all pledged to be tobacco-free by the start of 2020.
- Attained a 6% improvement over a five-year period of non-tobacco users within the U.S.
- Implemented additional safety measures at a facility where a fatal accident took the life of a worker in 2018, and increased our focus there and at other locations to enhance efforts to prevent accidents before they happen.
- Implemented a model to ensure accountability and thorough execution of our human rights policy. This cross-functional approach allows for a more strategic, integrated focus that implements the spirit of our human rights policy, beyond compliance.
- Completed 47 home builds or renovations in partnership with Habitat for Humanity in the U.S., Canada, and China, which was a 68% increase over 2017.
- Sourced approximately 52% of our electricity through renewable sources.
- Implemented 32 energy conservation projects for a total savings of approximately 16,500 metric tons of CO_2e.
- Developed a solution that will reduce the Wabash, Indiana, mineral wool plant's waste-to-landfill intensity by 73% and Owens Corning's total waste-to-landfill intensity by 8%. This solution was developed in partnership with 10X Engineered Materials.

Financial Strength

- Completed three acquisitions: Paroc Group, Guangde SKD Rock Wool Manufacture Co., Ltd., and a manufacturing facility in Blythewood, South Carolina.
- Successfully deployed about $2 billion on mergers and acquisitions between 2016 and March 2018.
- Reported record revenue of $7.1 billion.
- Delivered double-digit earnings before interest and taxes (EBIT) margins in all three segments.

Goals	Progress
Living Safely	
▪ Our safety aspiration is to have a workplace that is free from any injury or illness with our highest focus being on the prevention of Serious Injuries and Fatalities (SIF), which we have defined as injuries that are permanently life altering or life threatening. We have started to deploy metrics to measure our progress on eliminating SIF, but continue to utilize recordable injury rate (RIR) to monitor year-over-year improvement. RIR is a ratio of injuries to employee hours worked. Ultimately, what matters is that we are continuously striving to build a workplace that is safe and free of hazardous conditions.	○
Community Impact	
▪ Achieve 82% site participation in community service projects in 2018, with a long-term goal of 100% facility engagement by 2022	✓
▪ Annual increase in volunteer hours	✓
Energy	
▪ Reduce primary energy intensity by 20% by 2020 vs. 2010 baseline	✓
▪ Reduce consumed energy intensity	✓
Emissions	
▪ Reduce greenhouse gas intensity by 50% by 2020 vs. 2010 baseline	✓
▪ Reduce toxic air emissions intensity by 75% by 2020 vs. 2010 baseline	○
▪ Reduce dust emissions (PM 2.5) intensity by 15% by 2020 vs. 2010 baseline	✓
Water	
▪ Reduce water intensity by 35% by 2020 vs. 2010 baseline	✓
Waste	
▪ Reduce waste to landfill intensity by 70% by 2020 vs. 2010 baseline	!

Owens Corning volunteers gather at a Habitat 4 Humanity build.

ABOUT OWENS CORNING

Owens Corning is a global leader in engineered materials for insulation, roofing, and composites. Our market-leading businesses deliver a broad spectrum of innovative and high-quality products and services. Our products range from glass fiber used to reinforce composite materials for transportation, building and construction, marine, infrastructure, wind energy, and other high-performance markets, to insulation and roofing for residential, commercial, and industrial applications.

Global in scope and human in scale, we use our deep expertise in materials, manufacturing, and building science to develop products and systems that save energy and improve comfort in commercial and residential buildings. Through our glass reinforcements business, the company makes thousands of products lighter, stronger, and more durable. Ultimately, Owens Corning people and products make the world a better place.

Owens Corning was founded in 1938 in Toledo, Ohio, and we are still based there today. The company has been on the *Fortune*® 500 list for 64 consecutive years.

Owens Corning by the Numbers

20,000
EMPLOYEES

33
COUNTRIES

3 SEGMENTS

~100 MANUFACTURING FACILITIES

$7.06
BILLION IN NET SALES

$4.32
BILLION IN TOTAL EQUITY

$9.77
BILLION IN TOTAL ASSETS

$3.36
BILLION IN TOTAL DEBT

About Owens Corning

Owens Corning is a publicly traded company on the New York Stock Exchange. As of December 31, 2018, beneficial ownership includes: The Vanguard Group, 8.9%; Boston Partners, 7.2%, and BlackRock Inc., 5.9%.

As of December 31, 2018, Owens Corning employed about 20,000 people in 33 countries.

We have manufacturing and research and development operations in the following countries:

- **Asia Pacific:** China, India, Singapore, South Korea
- **Europe:** Belgium, Czech Republic, Finland, France, Italy, Lithuania, Netherlands, Poland, Russia, Spain, Sweden, United Kingdom
- **Americas:** Brazil, Canada, Mexico, United States

The Owens Corning Story

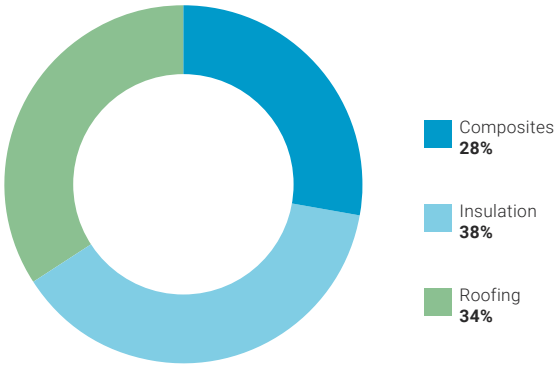
Our Mission: We aspire to build market-leading businesses; global in scope – human in scale.

Our Purpose: Our people and products make the world a better place.

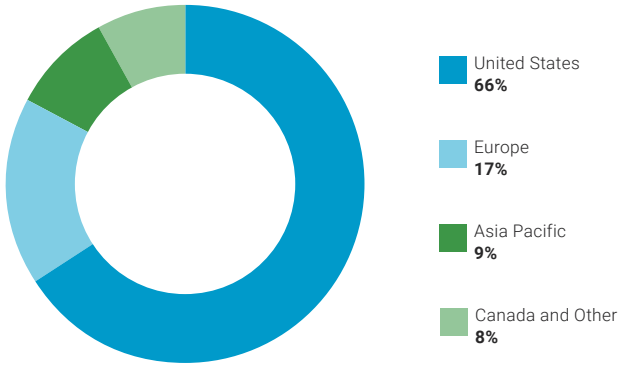
Our Company Values:

- Living Safely
- Winning with Customers
- Leading in Quality
- Expanding Our Impact through Sustainability
- Turning Knowledge into Value
- Striving to Be Better, Every Day

2018 Revenue by Segment



2018 Revenue by Region



Our Definition of Sustainability:

For us, sustainability is about meeting the needs of the present while leaving the world a better place for the future.

About Owens Corning

Our Businesses

The company has three reporting segments: Composites, Insulation, and Roofing:

COMPOSITES

Owens Corning® glass fiber materials can be found in over 40,000 end-use applications within five primary markets: building and construction, transportation, consumer, industrial, and power and energy. Such end-use applications include pipe, roofing shingles, sporting goods, consumer electronics, telecommunications cables, boats, aviation, automotive, industrial containers, and wind energy. Our products are manufactured and sold worldwide. We primarily sell our products directly to parts molders and fabricators. Within the building and construction market, our Composites segment sells glass fiber and/or glass mat directly to a small number of major shingle manufacturers, including our own Roofing segment.

Our Composites segment includes vertically integrated downstream activities. The company manufactures, fabricates, and sells glass reinforcements in the form of fiber. Glass reinforcement materials are also used downstream by the Composites segment to manufacture and sell glass fiber products in the form of fabrics, non-wovens, and other specialized products.

INSULATION

Our insulating products help customers conserve energy, provide improved acoustical performance, and offer convenience of installation and use. Our Insulation segment includes a diverse portfolio of high-, mid-, and low-temperature products with a geographic mix of U.S., Canada, Europe, Asia Pacific, and Latin America; a market mix of residential, commercial, industrial, and other markets; and a channel mix of retail, contractor, and distribution.

Our products in the residential channel include thermal and acoustical batts, loosefill insulation, foam sheathing and accessories, and are sold under well-recognized brand names and trademarks such as Owens Corning® PINK® FIBERGLAS™ Insulation. Our products in the commercial and industrial channel include glass fiber pipe insulation, energy efficient flexible duct media, bonded and granulated mineral wool insulation, cellular glass insulation and foam insulation used in above- and below-grade construction applications, and are sold under well-recognized brand names and trademarks such as Thermafiber® , FOAMGLAS®, and Paroc® insulation. We sell our insulation products primarily to insulation installers, home centers, lumberyards, retailers and distributors in the U.S., Canada, Europe, Asia Pacific, and Latin America.

ROOFING

Our primary products in the Roofing segment are laminate and strip asphalt roofing shingles. Other products include roofing components, synthetic packaging materials, and oxidized asphalt. We have been able to meet the growing demand for longer lasting, aesthetically attractive laminate products with modest capital investment.

We sell shingles and roofing components primarily through distributors, home centers, lumberyards, retailers, and contractors in the U.S. Our synthetic packaging materials are used primarily in the construction industry for lumber and metal packaging. Oxidized asphalt is a significant input used in the production of our asphalt roofing shingles. We are vertically integrated and have manufacturing facilities that process asphalt for use in our roofing shingles manufacturing process. In addition, we sell processed asphalt to other shingle manufacturers, to roofing contractors for built-up roofing asphalt systems, and to manufacturers in a variety of other industries, including automotive, chemical, rubber and construction. Asphalt input costs and third-party asphalt sales prices are correlated to crude oil prices. As a result, third-party asphalt sales are largely a cost-plus business.

Read more about our businesses in the Owens Corning Annual Report on Form 10-K.

Owens Corning Headquarters

One Owens Corning Parkway, Toledo, Ohio, 43659, USA

Owens Corning executives tour the FOAMGLAS® cellular glass insulation facility in Klášterec, Czech Republic.

STAKEHOLDER ENGAGEMENT & MATERIAL ISSUES

Building a Net Positive Company

Sustainability is at the heart of our business, from the products we make to the way we make them. We use our deep expertise in materials, manufacturing, and building science to develop insulation and roofing products and systems that save energy and improve comfort in commercial and residential buildings. Our glass reinforcements business helps us make thousands of products lighter, stronger, and more durable.

We reduce the company's environmental footprint by delivering energy-efficient and durable material solutions at scale, supporting local communities, and ensuring safe work environments. Furthermore, we constantly set goals to measure, reduce, and report our footprint. We are also committed to the goal of expanding our handprint around the globe, offering solutions for some of the world's most pressing issues such as climate change, energy consumption, infrastructure development, and safe, healthy, and efficient homes. Based on the science of climate change, we are taking aggressive actions in our operations to reduce our environmental impact, well in advance of public policy requirements.

Stakeholder Engagement & Material Issues

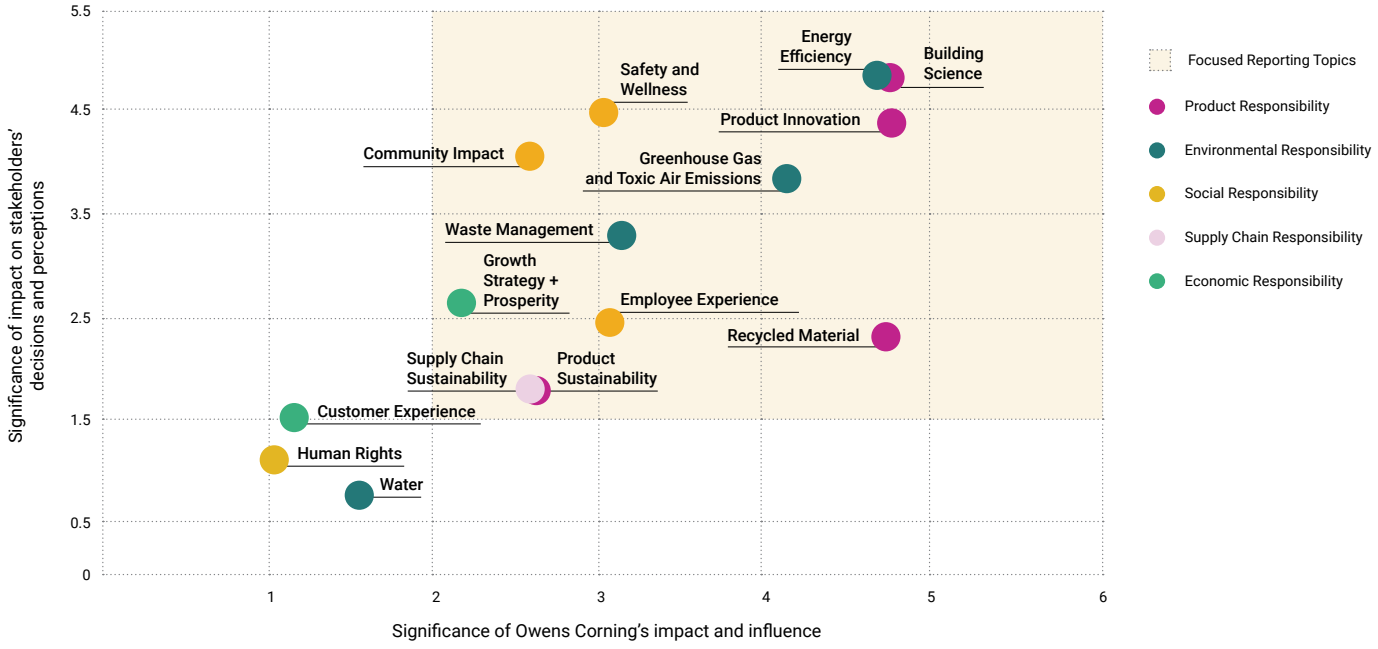
In keeping with our philosophy, we are committed to objectively identifying material issues and evaluating the level of impact across our value chain. We began our materiality journey in 2013 with interviews and surveys of internal and external stakeholders, and in 2014-2015, we gathered additional input to refresh our list of top issues, noted in our materiality assessment report.

In 2016, we conducted additional internal and external stakeholder interviews. In particular, we wanted to hear more directly from our employees not in senior leadership roles. One of the outcomes of that work was that we refined our materiality assessment to reflect greater attention to issues that are of high importance to our employees. Therefore, we elevated employee development, safety and wellness, community impact, and waste management in our materiality matrix in the 2016 report. In addition, we reclassified greenhouse gas and toxic air emissions as a priority area. Previously, due to differences in terminology, emissions had been identified as a priority, while climate change was not as prominent among our stakeholders. In our outreach, we found many stakeholders now see climate change and greenhouse gas and toxic air emissions as essentially the same, material issue.

Also as a result of this additional stakeholder input, we made a number of changes in the format and design of our sustainability report. In addition, "Disclosure of Risk," which barely registered on our previous matrices, has been removed from the 2017 matrix. Disclosure and management of risk remain critical throughout our business and in how we address all our material topics; therefore, we do not believe it should be called out as a distinct material topic.

Owens Corning is committed to objectively identifying material issues and evaluating the level of impact across our value chain. In support of this, Owens Corning is devoted to the assessment of our materiality matrix on a five-year cycle in accordance with AA1000 methodology. As part of our ongoing processes, we continue to evaluate the impact of any significant changes to our operations for potential risks or areas that could have a positive or negative impact on our stated goals. We have developed a process of stakeholder engagement, reviewing both internal and external groups. Owens Corning is in the process of assessment for our next-generation goals and we are preparing to publish our results in the coming year.

OWENS CORNING'S MATERIALITY MATRIX



Stakeholder Engagement & Material Issues

STAKEHOLDER ENGAGEMENT

Owens Corning interacts with a wide range of stakeholders on a regular basis. These stakeholders range from investors, customers, suppliers, community members, trade associations, NGOs, to name a few. Through engagements we seek to accurately and transparently discuss our efforts, understand concerns, and work together for solutions.

	Customers	Suppliers	NGOs	Governmental Agencies	Employees	Investors	Trade and Industry Assocations	Media	Communities	Potential Employees
Social media	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Website information	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Meetings and conferences calls	✓	✓	✓	✓	✓	✓	✓	✓		
Conferences, speaking engagements	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Surveys, focus groups	✓	✓			✓					
Visits and account management	✓	✓								
Education/summits	✓	✓			✓	✓				✓
Internal communications					✓					
Volunteer and community projects	✓	✓			✓				✓	
Membership, sponsorship, Board service, or project support			✓				✓		✓	
1-800-GETPINK™ and GETTECH@owenscorning.com	✓	✓							✓	

Stakeholder Engagement & Material Issues

Alignment with United Nations Sustainable Development Goals

The UN Sustainable Development Goals (SDGs) are an important consideration in our assessment of materiality. We have identified specific areas of alignment between our material topics and the SDGs. Following are two representations of this alignment:

- Plotting the SDGs as an overlay on our materiality matrix
- Mapping our material issues to the most relevant SDGs in the table accompanying the matrix

The SDGs where Owens Corning can have the most direct impact or influence, and are also material to our business, are identified by the icons that fall within the shaded box of Focused Reporting Topics. SDGs in that category are #3, #5, #7, #8, #9, #12, and #13. Additionally, SDGs #4, #6, #11, and #16 are areas in which we believe we have a lesser, and less direct, impact but which nonetheless reflect our values, policies, and outreach work – and may also have a significant impact on stakeholders' decisions and perceptions about our company.

OWENS CORNING'S MATERIALITY MATRIX

Note: *The overlay of the SDG icons should be regarded as a general visual representation; it is not intended to place them exactly where they fit with all relevant material topics. Use the table that follows to understand the more specific connections between our material topics and the SDGs.*

Stakeholder Engagement & Material Issues

MATERIAL TOPICS	MOST RELEVANT SDGs
High-Performance People	
Employee Experience	
Customer-Inspired Innovation	
Building Science	
Product Innovation	
Recycled Material	
Product Sustainability	
Operational Excellence	
Supply Chain Sustainability	
World-Class Sustainability	
Safety and Wellness	
Human Rights	
Community Impact	

Stakeholder Engagement & Material Issues

MATERIAL TOPICS	MOST RELEVANT SDGs
World-Class Sustainability	
Energy Efficiency	
Greenhouse Gas and Toxic Air Emissions	
Water	
Waste	
Financial Strength	
Economic Responsibility	
Customer Experience	

Company's overall committment to sustainability and participation in the UN Global Compact

See Appendix D for a list of our Partnerships and Collaborations with Organizations/Governing Bodies

Stakeholder Engagement & Material Issues

OUR IMPACT AND INFLUENCE ON THE UNITED NATIONS SDGs

The seven SDGs where we believe we have the most direct impact or influence, and are also material to our business, were discussed in depth in our 2017 report. Highlights on progress in 2018 are shown here and discussed more fully in the report.

#3 Good Health and Well-Being

With our commitment to safety (zero injuries) and our Healthy Living platform, we have goals or actions for many of the indicators for SDG #3. We also participated in the Health is Everyone's Business Action Platform within the UN Global Compact to further accelerate SDG #3 in the business community.

SDG Target 3.4 | By 2030, reduce by one-third pre-mature mortality from non-communicable diseases (NCDs) through prevention and treatment, and promote mental health and well-being

Our Healthy Living platform aspiration is to eliminate lifestyle-induced disease across the company. In our third year since its introduction, we have made substantial, measurable progress, including training over 100 new Wellness Champions and creating new metrics.

SDG Target 3.5 | Strengthen prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol

In response to the U.S. opioid crisis, Owens Corning implemented a three-day limit on short-acting opioid prescriptions.

SDG Target 3.6 | By 2020, halve global deaths and injuries from road traffic accidents

We continue our policy banning cell phone use to conduct company business and encourage employees to do so with families to stop distracted driving.

SDG Target 3.8 | Achieve universal health care coverage (UHC), including financial risk protection, access to quality essential health care services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all

We have increased engagement in the Healthy Living platform internationally. We will continue to develop our strategy for a full-scale international rollout beginning in 2020 while taking into account cultural considerations.

SDG Target 3.9 | By 2030 substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination

We made progress on our beyond-compliance goals to reduce our emissions footprint worldwide, and with our product stewardship process that ensures that all products (new and existing) are safe to make, use, perform as intended, and can be disposed of responsibly.

SDG Target 3.A | Strengthen implementation of the Framework Convention on Tobacco

In 2018, our U.S. legacy facilities became 100% tobacco-free, and our international legacy facilities did so in early 2019. We are committed to bringing our newly acquired facilities on the same journey. Paroc, a producer of mineral wool insulation in Europe, has already committed to being 100% tobacco-free. Our other recent acquisitions, both in the U.S. and internationally, have all pledged to be tobacco-free by the start of 2020.

#5 Gender Equality

We measure gender diversity across our workforce, and programs for ensuring equity and increasing the participation of women in our business are part of our diversity efforts.

SDG Target 5.1 | End all forms of discrimination against all women and girls everywhere

Chairman and CEO Mike Thaman joined more than 600 CEOs from around the world in support of the CEO Action for Diversity & Inclusion™. The pledge is the largest CEO driven business commitment to advance diversity and inclusion within the workplace.

Stakeholder Engagement & Material Issues

SDG Target 5.2 | Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation

We continue to strengthen our processes to ensure our human rights policy is implemented worldwide.

SDG Target 5.5 | Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision making in political, economic and public life

Our Women's Inclusion Network (WIN) made significant strides toward its mission of attracting, retaining, and developing outstanding women through development and involvement opportunities. The group expanded geographically and diversified its programming.

5.5.2 Proportion of women in managerial positions

Women hold 24% of management positions in Owens Corning, and currently there are three women serving as directors on our board, representing 30%.

#7 Affordable and Clean Energy

We made progress on our 2020 goal to reduce our primary energy intensity (energy used per unit of product produced). For the third year in a row, Owens Corning attained the "A List" on the CDP Climate report.

SDG Target 7.2 | Increase substantially the share of renewable energy in the global energy mix by 2030

SDG Target 7.A | Enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil fuel technology, and promote investment in energy infrastructure and clean energy technology

In 2018, approximately 52% of our electricity was sourced through renewable sources such as wind, hydro, solar, and geothermal, across our portfolio globally.

SDG Target 7.3 | Double of the global rate of improvement in energy efficiency by 2030

With our building science expertise and products, we supported builders to construct more than 400 net-zero or net-zero-energy-ready homes in 2018.

#8 Decent Work and Economic Growth

Our vision for a sustainable enterprise includes attention to environmental and social progress, human rights, and an employee experience that leads employees to want to recommend the company to a friend.

SDG Target 8.1 | Sustain per capita economic growth in accordance with national circumstances, and in particular at least 7% per annum GDP growth in the least-developed countries

Between 2016 and March 2018, we successfully deployed about $2 billion on mergers and acquisitions. By 2019, we expect that these acquisitions will contribute combined revenue of $1.2 billion, according to financial projections as of the end of 2018. We evaluate our acquisition candidates through multiple lenses, including sustainability, and ask a critical question: Will this business be better with us as its owner?

SDG Target 8.4 | Improve progressively, through 2030, global resource efficiency in consumption and production and endeavor to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programs on sustainable consumption and production, with developed countries taking the lead

In addition to comprehensive goals and programs for material, water, and energy conservation, we are on a "march to zero" — zero accidents, zero defects, zero losses – through a systematic approach called Total Productive Maintenance.

SDG Target 8.5 | By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value

A consistent philosophy in the design, application, and administration of total compensation programs globally ensures equitable treatment for all employees independent of gender, age, or minority status, and we conduct biannual pay reviews to ensure our employees are paid equitably.

Stakeholder Engagement & Material Issues

SDG Target 8.7 | Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labor, including recruitment and use of child soldiers, and by 2025 end child labor in all its forms

SDG Target 8.8 | Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment

In 2017, to further align our efforts with the UN SDGs, we added human rights to our materiality matrix and have devoted a section of this report to our commitment and progress. We continue to strengthen our processes to ensure our human rights policy is implemented worldwide.

#9 Industry, Innovation and Infrastructure

All three businesses in Owens Corning (Composites, Insulation, and Roofing) engage in research and innovation for products and services that bring performance and durability to infrastructure and the built environment.

SDG Target 9.1 | Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human wellbeing, with a focus on affordable and equitable access for all

SDG Target 9.4 | By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities

Regarding both 9.1 and 9.4, we develop materials and systems that create resilient buildings and infrastructure. We increased the number of products "Made with 100% Wind-Powered Electricity and Reduced Embodied Carbon" certification, giving commercial architects and specifiers the option of low-carbon products to build greener structures. We developed UltrabladeX™, a new generation of high-performance glass fabrics that enables OEMs to design and make longer and lighter wind blades, decreasing the cost of wind energy.

SDG Target 9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending

We have established science and technology centers in key markets worldwide. In 2018, we acquired Paroc, a leading manufacturer of high-performance mineral wool insulation solutions, which added further expertise and increased our global S&T centers to 11.

#12 Responsible Consumption and Production

Our sustainability practices for our operations and supply chain reflect the attention to product sustainability and reducing our manufacturing footprint.

SDG Target 12.2 | By 2030, achieve sustainable management and efficient use of natural resources

In addition to comprehensive goals and programs for material, water, and energy conservation, we are on a "march to zero" — zero accidents, zero defects, zero losses – through a systematic approach called Total Productive Maintenance.

SDG Target 12.4 | By 2020, achieve environmentally sound management of chemicals and all wastes throughout their life cycle in accordance with agreed international frameworks and significantly reduce their release to air, water and soil to minimize adverse impacts on human health and the environment

We added products to our line of formaldehyde-free Thermafiber® mineral wool insulation, providing the first formaldehyde-free perimeter fire containment system in North America.

Stakeholder Engagement & Material Issues

SDG Target 12.5 | By 2030 substantially reduce waste generation through prevention, reduction, recycling and reuse

Waste to landfill reduction has been one of our biggest challenges, but small progress was made in 2018. We continue to be a large purchaser of recycled materials such as glass from container recycling and are supporting work to make this material more available.

SDG Target 12.6 | Encourage companies, especially large and transnational companies to adopt sustainable practices and to integrate sustainability information into their reporting cycle.

We disclose sustainability performance on a number of different platforms. Due to timing and data collection requirements, we have not yet published simultaneous financial and sustainability reports, but we are considering what we would need to do to make that possible.

SDG Target 12.7 | Promote public procurement practices that are sustainable in accordance with national policies and priorities

Our 2018 report has an entire chapter outlining our commitment to supply chain sustainability.

#13 Climate Action

To reduce the impact of our operations and activities on global climate change, we focus on accelerating energy efficiency improvements, renewable energy deployment, and greenhouse gas (GHG) emission reductions.

SDG Target 13.1 | Strengthen resilience and adaptive capacity to climate related hazards and natural disasters in all countries

We participate with builders, architects, and engineers to provide technical information and product innovations for resilience in building construction and infrastructure. In 2018, we educated more than 140 architects on the use of hydrothermal tools such as WUFI Heat & Moisture Standards to design for durability.

SDG Target 13.3 | Improved education, awareness raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

We provide education throughout the company. Our 2018 Sustainability Summit featured education, and a forum for brainstorming for employees, customers, and suppliers on climate change, health and well-being, and product and operations sustainability.

HIGH-PERFORMANCE PEOPLE

EMPLOYEE EXPERIENCE

EMPLOYEE DEVELOPMENT

INCLUSION AND DIVERSITY

- **We believe our success as a difference-driven company starts with our ability to attract, engage, and retain the most talented and highest-performing employees.** We are committed to providing employees with a meaningful and engaging work experience and helping them reach their full potential by offering extensive training and development programs, learning opportunities, tools, and incentive rewards. We also believe a diverse and inclusive workforce adds value to the business by fostering an environment that leads to innovative thinking.

Steven Badger, second from right, (Granville, Ohio) tours a facility with Owens Corning colleagues.

PHOTO CREDIT:
Harley White | Fairburn, Georgia, U.S.

Lamont Johnson (Fairburn, Georgia, Insulation plant) is "thanked" by a sea lion at the Birmingham Zoo in Alabama for the materials donated through Hose2Habitat.

Our Employee Experience efforts align with the following UN SDGs:

The social data in this chapter marked with a + sign were independently assured to a moderate level by SCS Global Services. For more information or to see the verification statement, please go to page 178 in the About the Report section.

EMPLOYEE EXPERIENCE

Our success as a difference-driven company starts with our ability to attract, engage, and retain the most talented and highest-performing employees. We strive to provide our employees with a meaningful and engaging work experience. At the same time, ensuring the safety and health of our employees is a top priority, and we recognize the benefits of a supportive workplace for employee well-being.

Strategy and Approach

We align our talent management strategy and recruiting approach with our business strategy.

Our efforts to maximize the employee experience are guided by four pillars:

- **Leadership Vision**: Create a global team environment worthy of our company and enhance the lives of our people
- **Diversity Connections:** Drive awareness and build a sense of community and inclusion, which benefits our employees, customers, suppliers, communities, and shareholders, and develops our corporate reputation
- **Workforce Representation:** Attract and retain a workforce that enables us to better meet our customers' needs and market trends
- **Recognition:** Leverage opportunities that lead to increased recognition of our employee investments and results, which we believe will help to reinforce and accelerate our progress

Employee Experience

In addition, we are committed to providing our employees with competitive compensation and benefits, as well as additional incentives based on several factors, including individual and company performance. We align our hiring strategy with local labor markets, particularly as we grow more outside the U.S. We offer additional programs, such as flexible work arrangements, to help our employees maintain a healthy work/life integration.

ANNUAL SURVEY MEASURING EMPLOYEE ENGAGEMENT

We have established metrics to help us track our employees' happiness and engagement while working at Owens Corning. For example, we have deployed an annual leadership survey to all our staff (i.e., salaried employees) for the past several years. One of the items in this survey aims to understand the extent to which employees are actively contributing to their work by asking the question, "I frequently feel like I am putting all my effort into my work." For the last two years, 97% of employees surveyed have reported feeling actively engaged at Owens Corning.

When reporting on engagement, we combine Strongly Agree or Agree to show overall percentage of employees with any level of agreement, which is a common practice among the engagement surveys that we benchmark against.

Measuring Employee Engagement+

	2014	2015	2016	2017	2018
Employee engagement (% of actively engaged salaried employees)	89%	91%	91%	97%	97%
% of total salaried employees responding	48%	50%	80%	87%	89%

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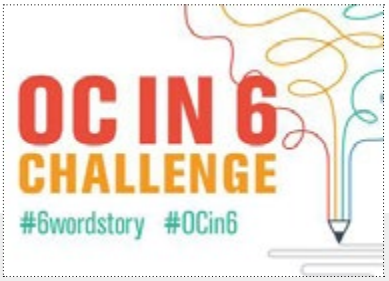

SUSTAINABILITY IN ACTION

Owens Corning in Six Words

The *Owens Corning in 6 Challenge* asked employees from across the globe to use just six words to answer a simple question, "What's your Owens Corning experience?" Stories came in from every region and business unit, and we heard from a wide range of experiences, from Owens Corning veterans to our newest employees.

Several of these six-word stories were then featured in a video during one of our CEO town halls. We plan to use others in future communications. Here are examples of responses from around the world:

One company. One goal, zero accidents.
James Jarvis | Oklahoma City, Oklahoma, U.S.

Committed to improving ourselves and world.
Diane Neumann | Toronto, Ontario, Canada

Always leading by challenging the standard.
Eric Ramirez | Tlaxcala, Mexico

Use your imagination, ignore the hesitation.
Sachin Kadam | Taloja, India

Pink Panther. Surprise. Happy to join.
Taija Lehtola | Helsinki, Finland

Working together for a better tomorrow.
Sanjay Rao | Powai, India

Solutions to change, improve, and protect.
Caleb Hield | Denver, Colorado, U.S.

Employee Experience

Average Years of Service by Region

Celebrating Employee Milestones

Owens Corning is proud to employ nearly 20,000 dedicated people, many of whom have been with the company for most of their careers. As of December 31, 2018, more than 3,500 employees had served 20 years or more with Owens Corning, with the longest term of service being 57 years. We continuously work toward providing a positive employee experience where talented individuals can grow their careers.

Years of Service by Region

Region	Number of employees serving over 20 years	Longest Years of Service
North America	2,159	57
Europe	931	48
Latin America	166	40
Asia Pacific	341	35

Karl Gutridge (Granville, Ohio, Science & Technology Center), pictured with CEO Mike Thaman, has been with Owens Corning for 57 years.

Working at Owens Corning

SUMMARY OF COMPENSATION AND BENEFITS

Employee compensation is intended to be performance driven, market competitive, and fair. We reward both individual and collective contributions to our business' success through base and variable pay. Base salaries are determined by job responsibility level, benchmarking data on market competitiveness, individual competencies, and performance. A consistent philosophy in the design, application, and administration of total compensation programs globally ensures equitable treatment for all employees regardless of gender, age, or ethnicity.

Compensation at Owens Corning is designed to be competitive at the local labor market level. Base pay rates are determined by job responsibility level and are targeted at the market median (50th percentile of comparable companies with whom Owens Corning competes for talent). Base pay rates are reviewed and updated annually, based on the job performed and the local market wages for similar skills.

Employee Experience

In addition to base pay, most primary employees are eligible to participate in Owens Corning's Variable Incentive Plan (VIP) at the plant level, which is dependent on individual and plant results. This compensation program leads to a competitive structure and above average total cash compensation when a location performs well. Employees receive compensation that is proportionate to the impact of the role and contribution the individual makes to the company, ensuring fairness in our programs.

Owens Corning's compensation philosophy is to effectively use all elements of compensation to align employees with the goals of the company and its businesses, and encourage our employees to meet and exceed desired performance objectives. Most staff employees are eligible to receive additional cash incentives via the Corporate Incentive Plan (CIP) based on the year-end company results and their individual performance. EBIT targets by business and a consolidated corporate target compile the corporate component, while the individual component is based on each employee's annual performance.

Our compensation team has done a thorough analysis of our U.S. population and all current and approved, but not yet enacted, minimum wage increases. We are currently compensating our people at or above all established minimum wage requirements. For Owens Corning, minimum wages are generally not relevant because most entry-level Owens Corning positions require a higher level of skills or knowledge than jobs at which the minimum wage rate would apply.

We are committed to providing all employees with equal remuneration for work of equal value. Equal remuneration is a key element of a truly diverse and inclusive environment, and we are dedicated to ensuring equal treatment for all employees. Owens Corning conducts biannual pay reviews to ensure our employees are paid equitably regardless of gender or minority status.

SCHOLARSHIPS

Employees who have worked at Owens Corning for at least one year are eligible to apply for the Owens Corning Employee Scholarship for a higher education degree. Recipients are selected based on manager recommendations, statement of career goals, demonstrated leadership, and past academic performance. To promote our goal of access to education and academic excellence, the Dependent Employee Scholarship Program was established as an enduring gift for the dependents of Owens Corning employees to assist students in reaching their full potential who demonstrate scholastic aptitude and financial need.

~$175,000

IN SCHOLARSHIPS AWARDED TO OWENS CORNING EMPLOYEES AND THEIR DEPENDENTS IN 2018

TRANSITION ASSISTANCE PROGRAMS

We look to help employees through every level of their career, from entry level to retirement. For example, Owens Corning offers onsite retirement planning workshops to help employees prepare for life after work. Owens Corning has studied its retirement program to ensure it supports employees through this transition. As a result, in 2018, we piloted a program in which select employees nearing retirement were given the opportunity to work part-time prior to retiring while maintaining full-time benefits. Both our employees and Owens Corning have benefited from a smoother transition, and employees can retire with confidence that their legacy will be preserved.

To help employees who leave the organization and will be pursuing their careers elsewhere, Owens Corning partners with a third party to offer a variety of career transition programs. Individuals benefit from a personalized approach to career transition with flexible access, state-of-

Employee Experience

the-art technology, and connections to critical resources. Career transition assistance is not available for employees who are terminated for cause.

U.S. LEAVE OF ABSENCE POLICIES

In the U.S., Owens Corning grants up to 12 weeks of leave as specified by the Family and Medical Leave Act (FMLA). An additional leave of absence for personal reasons may be granted without pay when approved by the appropriate management. Maximum leave for personal reasons is 60 days, unless approved by the business unit or process area vice president of human resources. Personal reasons could include education, family issues, etc. Additionally, for U.S. salaried employees, our bereavement leave allows up to four weeks of paid time off in the event of the death of an employee's spouse or child under age 18. For other immediate family members (siblings, parents, grandparents, and children over 18), five days of paid time off is provided.

For U.S. salaried employees, Owens Corning provides six weeks of maternity leave for the birth of a child, eight weeks if delivery occurs via C-section, through our short-term disability (STD) leave. Upon completion of the STD benefit, birth parents are provided an additional two weeks of paid time off. Non-birth parents recieve two weeks paid time off. In the event of an adoption, employees are provided with two weeks paid time off.

As parental leave varies in accordance with both local laws and customs across the areas where we operate, Owens Corning is unable to track retention rates of employees coming back from parental leave.

FLEXIBLE WORK ARRANGEMENTS

To support the diverse needs of our increasingly mobile workforce, we offer flexible work arrangements that allow employees to meet obligations outside of the job. This is an important part of our work/life integration offerings, allowing both the employee and the company to meet objectives. Here are some of the flexible work arrangements that we offer:

- **Part-time:** work less than a full-time schedule;
- **Job sharing:** a special form of part-time work where two employees share the responsibility of one full-time role;
- **Flexplace:** work a full-time schedule, but work offsite for a portion of the time;
- **Flextime:** work a full-time schedule in the office, but with shifted start and end times, within the guidelines determined by the management, provided the person works within core hours every day; and
- **Compressed work schedule:** perform a full-time job in fewer days than a typical work week.

Arrangements can be temporary or permanent depending on the employee's needs. The employee and manager work together to develop the most appropriate schedule, authorize the agreement, and ensure work is still getting done on time and meeting objectives.

For more information on employee benefits, visit: https://jobs.owenscorningcareers.com/benefits

PHOTO CREDIT:
Yana Liu | Shanghai, China
Yana and her son visit the Forbidden City, Beijing, China.

Employee Experience

Labor Relations

Owens Corning prides itself on being a good corporate citizen and respects the rights of its employees, including the rights to exercise freedom of association and collective bargaining. We seek to partner with suppliers who have the same philosophy.

Approximately 65% of our employees are covered by collective bargaining agreements. This includes relationships with unions, work councils, and employee associations around the world.

The specific language and scope of our labor agreements vary from site to site. All are structured to recognize the importance jointly placed upon the commitment to health and safety as guiding principle and core value for both Owens Corning and our workers. In all our facilities, employees are trained to understand, appreciate, and mitigate risk in the interest of their own safety and health, the safety and health of those around them, and of the organization overall.

NOTICE PERIODS FOR OPERATIONS CHANGES

The company uses a variety of methods, including its global intranet site, email communications, and leadership meetings with team members, to ensure that workers are informed of operations changes.

Owens Corning provides at least the minimum notice required, which varies by local legislation and collective bargaining agreements in the regions where we operate. In many jurisdictions, our union and self-represented employees enjoy similar notice periods because of strong employee relations and labor practices, as well as applicable regulations.

PHOTO CREDIT:
Jennifer Payne | Tennessee, U.S.

Owens Corning employees visiting the Science & Technology Center in Granville, Ohio, U.S.

EMPLOYEE DEVELOPMENT

Owens Corning's Goal:

- Average 18 hours of training per employee for development purposes+

Our Employee Development efforts align with the following UN SDG:

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At Owens Corning, we are committed to providing our employees with lifelong learning opportunities to help them reach their full potential. We nurture our people by offering ample opportunity for development at all stages of their careers. Both formal and informal training ensure we develop well-rounded, skilled employees who contribute to our growth and success.

Strategy and Approach

We are committed to offering challenging, impactful, and rewarding opportunities to our employees. In fulfilling this commitment, we recognize the value of investing in training and development to ensure our employees are equipped to succeed in their roles. We have created robust training programs that address a range of development goals and provide opportunities for growth throughout the company.

To guide our employees through their development journey, Owens Corning created a talent development team within human resources (HR). This team is dedicated to providing employees with opportunities to further develop their skills, knowledge, and expertise, including formal education, mentoring, self-guided activities, instructor-led programs, and community involvement. In addition, many learning opportunities take place informally through everyday experiences.

Employee Development

In 2018, we placed a particular focus on reframing some of our training and development programs to better meet the needs of our employees. We also adjusted how we measure employee performance, both in the objectives employees set for themselves and our goals for training.

Training and development are key differentiators in attracting, engaging, and retaining top talent. These are also essential in building our pipeline of future leaders of the company. In 2018, we filled 79% of director roles with internal talent, continuing a multiyear trend. As of 2018, we retained 95% of Early Career Development Program participants after one year, and 77% of participants after five years. This is above the benchmark retention rates obtained from 2018 National Association of Colleges and Employers (NACE) data of 71% retention after one year, and 50% after five years.

79%

OF DIRECTOR ROLES HAVE BEEN FILLED WITH INTERNAL TALENT

77%

OF OUR EARLY CAREER DEVELOPMENT PROGRAM EMPLOYEES HAVE BEEN RETAINED FOR 5 YEARS

EMPLOYEE TRAINING AND DEVELOPMENT PROGRAMS

We view development in five areas, each with supporting activities and programs connected to a different leadership skill. These programs target specific objectives for achieving a higher level of business performance. Programs range from early career development and midcareer advancement to executive-level targeted training. Employees can participate in these programs based on their number of years with the company.

1. **Aspiration and Goal Alignment:** We strive to support employees' goals and align them with opportunities inside Owens Corning, such as mentoring, performance management, participation in town halls, and OC One, an annual global leadership meeting with approximately 150 of the company's top leaders.
2. **Building a Stronger Connection with People:** A critical part of development is learning how to lead and work with a diverse set of colleagues. Opportunities to advance in this area include the Enterprise Leadership program, Leading at the Next Level program, Basadur Problem Solving training, Coaching for Impact, and People Leadership Fundamentals.
3. **Strategy and Commercial Skills:** In addition to providing our employees with tangible skills, we also look to advance our employees' ability to think critically and strategically. Some of the ways employees can gain these skills include executive finance and communication training, marketing councils, human-centered design training, margin enhancement training, organizational design, and strategy execution.
4. **Operational Skills:** These instructor-led programs help employees learn new skills that are typically performed outside of an employee's normal job role. Opportunities provided include tuition support and graduate-level assistance, employee scholarship programs, facility skill training, functional leadership programs, and operational excellence leadership programs.
5. **Assignments:** To hone their leadership skills, our employees can lead groups, projects, and assignments, putting their skills to use in real situations. Other possibilities include becoming an affinity group leader, working on special projects, and rotational assignments.

Employee Development

Our talent development team also pays close attention to the development of employees from minority groups, making sure that we have the right opportunities and project work to support a diverse workforce. Additionally, we look at how many employees are on the career succession plan and how we can prepare our people for bigger opportunities.

We employ a three-phase strategy each year to anticipate staffing needs and develop succession plans:

- **Strategy Planning:** In the third quarter, business leaders from across the company come together to talk about our company's goals and how we will reach them. This deep look into the company provides a strong base and allows HR to anticipate staffing needs.
- **Operational Planning:** This phase looks more in-depth at the company's budgets, schedules, and needs, enabling HR and leaders to anticipate specific talent needs and cultivate the pipeline to fill positions.
- **Talent Planning:** The final step in this process looks at strengths and gaps in the talent pipeline, including succession planning at the officer level. Critical discussions happen around development and business growth.

Examples of topics we explore through this evaluation process include:

- What capabilities are required in the future that we do not have today? Is it possible to grow these capabilities internally?
- Are there any retention concerns?
- What is the existing talent pipeline?

Our employees' readiness for future roles and experiences within the organization is evaluated as part of this process. In tandem, a plan is developed for the growth of our employees to ensure the next steps are in place for their development.

Employee Performance and Career Development

We track the progress of our learning and development activities across the company through data recorded in our learning management system (LMS). Each facility reports participation in formal learning programs such as classes, e-Learning courses, and structured on-the-job activities.

Data include any training that was recorded in our LMS for the year, primarily for the formal learning programs conducted across the company. Most of the learning and development activities that take place in Owens Corning are considered to be informal learning, such as coaching, mentoring, social groups, projects, assignments, and readings, and these are not captured in the LMS.

Owens Corning employees and zoo keepers at the Columbus Zoo in Ohio participate in a Hose2Habitat event.

Employee Development

We set a goal to average 18 hours of training per employee for development purposes. In 2018, we recorded an average of 13 training hours per employee+, focused on both quality and quantity of development beyond basic compliance training. Nearly 2,000 employees (about 10% of our total population) joined us through acquisition and were not added to our system, and granted LMS access, until December 2018. Any training this employee group received prior to this time occurred outside of our LMS.

Moving forward, we have adjusted our annual goal to be as follows: an average of 20 hours of training for our primary workforce and 10 hours of training for our non-primary (salaried) workforce. Separating these targets makes sense, as the two populations have different needs for regular education and typically receive their training in different ways. For example, our staff and managerial employees tend to receive development through methods not recorded in our LMS, such as special project assignments or job rotations.

We have also established various indicators that measure the effectiveness of our training strategy. These include nonfinancial indicators, such as development hours, reduced turnover, and percent of internal placements, as well as other HR performance indicators.

Review and appraisal percentages, by gender

	2014	2015	2016	2017	2018
Male	99%	99%	99.9%	99.9%	99%
Female	99%	99%	100%	100%	99%

Of the 1% of staff employees who did not receive reviews, most were either on leave during the year, recently promoted to a staff role, or hired after November 1, 2018. Employees aren't required to have a review until after three months of employment.

See Appendix B for additional employee training data.

Jack Davis (Granville, Ohio, Science & Technology Center) confirms the protocol for a fire test.

13

AVERAGE NUMBER OF TRAINING HOURS PER EMPLOYEE+

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Employee Development

SUSTAINABILITY IN ACTION

Testing Purposeful Reflection

In order to deliver on our strategy for growth, we must continue to be innovative and explore new concepts and ideas. In 2018, we empowered our North American HR staff and global HR leaders to take part in a test-and-learn examination of purposeful reflection time. This technique is designed to allow employees to pause, and use that time to do the vital tasks that often get pushed aside: prioritize tasks, learn a new skill, evaluate their allocation of resources, or consider alternative strategies.

In total, 106 participants from our HR staff and leadership took part in the test-and-learn study. On average, 57% took time to reflect each week. By sending a pulse survey to participants weekly, we were able to gather data on which reflective methods were used and the impact they made on work. We gathered a number of valuable lessons:

- Reflective time works. Following employees week-to-week gave us qualitative data on their improved performance;
- At least 90 minutes of reflective time each week was found to be effective;
- Having the support and encouragement of leadership was important in driving reflective behaviors; and
- Finding and keeping reflective time is difficult, which led to the development of a reflection toolkit for Owens Corning employees.

PHOTO CREDIT:
Gianfranco Romano | Besana, Italy

Employees who set aside time to be reflective demonstrated a number of positive behaviors that improved performance including:

2.8

TIMES MORE LIKELY TO TEST A DIFFERENT WAY TO DO THEIR WORK

2.7

TIMES MORE LIKELY TO CONSIDER WORK FROM A DIFFERENT PERSPECTIVE

2.0

TIMES MORE LIKELY TO MAKE CHOICES ABOUT HOW TO BETTER ALLOCATE TIME OR RESOURCES

2.0

TIMES MORE LIKELY TO SEEK ADDITIONAL DATA OR INPUT TO EVALUATE A COURSE OF ACTION

Employee Development

SUSTAINABILITY IN ACTION

Asking the Right Questions for a Sustainable World

The right question can change the course of a company and even the world. This was one key message that emerged from the annual Owens Corning Sustainability Summit held in early 2018 at our global headquarters in Toledo, Ohio. Owens Corning Chief Sustainability Officer Frank O'Brien-Bernini discussed this concept in his opening remarks.

The keynote speaker, Frank Sesno, former journalist, author, and director of George Washington University's School of Media and Public Affairs, added another element in his own address: "Let's all shut up and listen." Sesno focused on the importance of asking the right questions and listening for answers, for what is left unsaid, and noting things such as facial expressions and body language.

Sesno stressed the importance of asking strategic questions about the sustainability journey in terms of risk, success, and challenging the status quo. "Ask yourselves and the people around you for creativity, in thought, in what you can do, in what you're doing as a team," he said.

In his opening remarks, O'Brien-Bernini explained, "We're trying to get so much done in our company right now. We can change the conversation, perhaps, and maybe change the trajectory of the world by asking the right question at the right time of the right person."

The summit was attended by employees, customers, and suppliers, and broadcast and recorded for all Owens Corning employees. In addition to the keynote, it featured sessions on customer expectations, employee expectations, community expectations, and increased transparency.

Frank O'Brien-Bernini discusses Owens Corning's progress in sustainability.

Gunner Smith, president, roofing, and Luis Henrique Martins, vice president, global operations, speak on a panel at the Sustainability Summit.

PHOTO CREDIT:
Jyrki Männikkö | Helsinki, Finland
Taken in Espoo, Finland

Our Inclusion and Diversity efforts align with the following UN SDG:

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INCLUSION AND DIVERSITY

Inclusion and diversity are major components of our business and a key piece of what makes Owens Corning a difference-driven organization. We believe that we must have an inclusive environment in the workplace to truly benefit from the strength of a diverse workforce. When employees know that different experiences and perspectives are valued, they are more comfortable being their authentic selves at work. That's why we put "inclusion" first. It's a reminder to all of us that we must choose to include others, and we must choose to be included.

Strategy and Approach

We strive to foster a culture where all employees come to work feeling appreciated and knowing they have an equal opportunity to grow and succeed based on their performance, regardless of individual differences. We invest equally in our employees and ensure all employees have the opportunity to share their unique perspectives and experiences, learn from one another, and contribute to Owens Corning's global workplace. We believe that if employees feel respected and valued for who they are and their contributions, they will perform better and help drive organizational success.

Our inclusion and diversity strategy requires the support of all employees – everyone is accountable for contributing to an inclusive and diverse workplace. We provide training opportunities on topics such as unconscious bias to further our employees' mindfulness and knowledge. Many employees around the globe are also engaged in affinity groups, which help drive awareness among all employees, in addition to providing support to the members of each group. We also continue to benchmark and measure our progress in diversifying our workforce.

Inclusion and Diversity

Affinity Groups

We believe in creating a culture where people can authentically be themselves. Through discussions and programs, including our Day of Understanding, we validated that employees value an environment where they can be vulnerable and true to their personal, cultural, or racial identity.

One way we support our increasingly diverse workforce and embrace its differences is through our five affinity groups. Each group consists of an executive sponsor, leader, and co-leader, in addition to group members. Collectively, our affinity groups drive awareness, strengthen employee engagement, and create internal and external connections.

Employees in Rio Claro, Brazil, participate in a Day of Understanding.

SUSTAINABILITY IN ACTION

Taking Action to Advance Inclusion and Diversity

As part of our ongoing commitment to nurture a culture of inclusion and diversity, in 2018, Chairman and CEO Mike Thaman joined more than 600 company leaders from around the world in support of the CEO Action for Diversity & Inclusion™. The pledge is the largest CEO-driven business commitment to advance inclusion and diversity within the workplace and allows business leaders to jointly address issues and affect short- and long-term change.

"At Owens Corning, we constantly strive to create a diverse and inclusive environment for our employees, so they feel valued and respected," Thaman said. "It's not just the right thing to do. It adds value to business by fostering an environment that leads to innovative thinking in the workplace and in the communities in which we operate."

As part of the pledge, Owens Corning joined more than 150 global companies in hosting a Day of Understanding in early December 2018. Companies entered the day with the goal of embracing diversity, encouraging compassion, and building a more inclusive workplace. At Owens Corning, more than 220 employees from around the world participated in an open discussion, sharing their experiences and engaging with colleagues in candid dialogue about equality and inclusion. There also were sessions across Latin America and Asia focused on unconscious bias. Employees connected with each other and emerged with a better understanding of what unconscious biases are and how to build a more inclusive workplace. Unconscious bias training has been offered by Owens Corning for several years as part of our effort to recognize and eliminate bias in the workplace.

The Day of Understanding, open discussions, and unconscious bias training are valuable steps forward in our efforts to foster an inclusive work environment. However, we recognize that there's always more work to be done and more conversations to happen. Our new CEO, Brian Chambers, considers continuing this work to be one of the key strategic priorities for the company. Additional sessions are planned for 2019 to help continue the momentum and create a culture that is inclusive for all employees.

Inclusion and Diversity

Owens Corning's affinity groups are:

- **African American Resource Group (AARG):** To advance excellence through attracting, acclimating, retaining, and accelerating career growth, thus enhancing Owens Corning's business performance while leveraging the strength of a diverse workforce.
- **Gay, Lesbian, Bisexual, Transgender & Advocates (GLBTA):** To achieve a work environment that is inclusive and safe, where people feel they can be fully engaged to create and problem-solve to their maximum potential and can be confident in a work environment where they will be fairly evaluated.
- **Owens Corning Multicultural Network (OCMN):** To enlighten our employees on cultural differences to foster diverse solutions and enhance our business relationships all around the world, strengthening our company's growth agenda.
- **Women's Inclusion Network (WIN):** To attract, retain, and develop outstanding women through professional development, personal development, and community involvement.
- **Connections:** To enrich the lives of our employees by partnering with those in career transition, while fostering personal and professional growth and promoting community involvement to attract and retain top talent.

In addition to helping support our diverse colleagues, the affinity groups benefit all colleagues and help Owens Corning build a more inclusive and emotionally intelligent culture. By focusing on creating inclusive teams and building a sense of community through our affinity groups, we are strengthening our commitments to our business, our customers, and each other.

PHOTO CREDIT:
Emma Rozand | Brussels, Belgium

Charlotte Emery, left, (Chambéry, France, tech center) and Emma Rozand are part of the WIN affinity group.

SUSTAINABILITY IN ACTION

Women's Inclusion Network Expands Reach

In 2018, our Women's Inclusion Network (WIN) made significant strides toward its mission of attracting, retaining, and developing outstanding women through development and involvement opportunities. The group continued to expand around the globe, engaging with new colleagues in different locations. Our existing chapters also diversified their programming, brought in new speakers, and launched initiatives to help better serve the employees of Owens Corning. Highlights include:

- **In Brazil,** Owens Corning employees officially launched the site's WIN chapter and held its first meeting in Rio Claro.
- **The Brussels, Belgium,** chapter hosted a new speaker series, which addressed: the need for agility to improve collaboration; self-leadership strategies; how technology will change society and business in the future; and how diversity at Owens Corning supports growth. The group also surveyed employees about key diversity themes to make sure the chapter is fostering an inclusive culture at its location. Survey results were very promising with 100% of participants feeling there is gender diversity in the office.
- **The Granville, Ohio, chapter,** hosted a three-part series on the science of persuasion and how employees can leverage principles of influence in the workplace. The team also participated in programs aimed at getting girls interested in science, technology, engineering, and math (STEM) careers.
- **In India,** the WIN team collaborated to attract and develop women engineers for the Taloja operations following the plant's recent expansion. The group also hosted several sessions focused on self-defense, financial planning, and prevention of sexual harassment at work.
- **In Toledo, Ohio,** the chapter launched several new initiatives including quarterly membership meetings, a book club focused on personal branding, and a parent mentoring program where members pair up to support each other through the challenges of being a working parent.
- **Our U.S. sales team** launched its chapter by hosting its first meeting at Owens Corning's national sales conference.

Inclusion and Diversity

SUSTAINABILITY IN ACTION

India Facilities' Renewed Focus on Inclusion and Diversity

Our India facilities made notable strides in advancing their inclusion and diversity efforts in 2018. In response to Owens Corning's recent expansion in the region, the India facilities hired a significant number of new employees, including more than 50 women. This increase in female coworkers led the Owens Corning leadership team to take a new look at inclusion and diversity in order to ensure the facility was a welcoming place for everyone.

The plant operations team collaborated with Owens Corning human resources and the local WIN chapter to develop workshops, programs, and interactions to help foster an inclusive environment. Initiatives included:

- Robust orientation and onboarding plan for new hires;
- Female representation in existing programs such as Total Productive Maintenance circles, and the corporate social responsibility and cultural committees;
- Mentorship programs for young women engineers; and
- Training to help transform perceptions around women's roles on the operations floor.

These programs have received great response from male and female colleagues and help strengthen Owens Corning's commitment to build and nurture a diverse and inclusive workforce.

"I think of diversity as being similar to selecting people for a chorus who have different musical backgrounds, vocal ranges, and abilities. The inclusion piece of 'inclusion and diversity' means making sure that those different voices are heard and valued and that they contribute to the performance. [I am] happy to see all departments, production as well as sales, marketing, and support, filled with women reflecting true colors of diversity."

Diksha Sirwani, assistant manager, customer service

"I [am] really proud that I am working in production with my colleagues...This opportunity has made me realize my physical strengths and potential, and I feel positive about all the learnings."

Amruta Salunkhe, operations engineer, manufacturing

Inclusion and Diversity

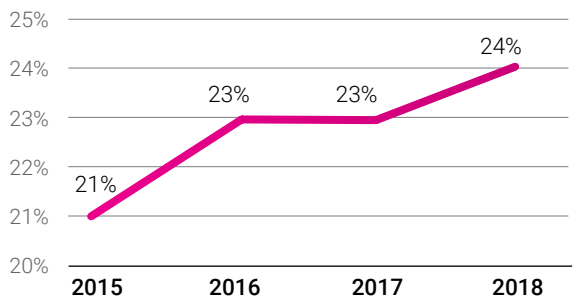
Women in Leadership

Owens Corning believes that increasing gender equality in the workplace strengthens our business. A diverse leadership group brings together unique ideas and experiences that will ultimately aid the growth of our business. We also find that having diverse leadership is an important piece of the overall employee experience as it helps diverse colleagues envision their own career path. As such, we are committed to increasing the number of women in leadership roles across the company. Several years ago, we formalized our commitment to putting women in leadership roles by establishing a target for female representation of 25% in all leadership levels. In 2018, Owens Corning employed 426 women in leadership roles across the company, representing 24% of the total management workforce.

Percentage of Women in Roles Across the Company[+]

Share of workforce who are women	19%
Women in management positions (as % of total management workforce)	24%
Women in junior management positions (as % of total junior management workforce)	26%
Women in top management positions (maximum two levels away from the CEO or comparable position; as % of top management workforce)	19%
Women in management positions in revenue-generating functions (as % of all managers)	26%
Women in board director roles (as % of total board of directors)	30%

Percentage of Women in Middle and Upper Management



Inclusion and Diversity

SUSTAINABILITY IN ACTION

OpenUp Campaign Helps Families, Colleagues in Understanding

In 2017, the GLBTA affinity group produced a video campaign called OpenUp, featuring Owens Corning employees discussing various ways LGBTQ issues had impacted their lives. One such story was Luc, a composites manufacturing engineer, who joined Owens Corning in 2013. Luc is a transgender male who volunteered to tell his story through the campaign. Today, he reflects on the impact it made on his life.

"I am so glad GLBTA approached me to take part in the campaign. Since the video was shared, I have received nothing but positive feedback. It came from my colleagues on the plant floor, Owens Corning executives all over the country, even employees from around the world. The most meaningful audience for me, though, was my family. Hearing me tell my story on video, in my own words, helped them really grasp things and allowed everything to click into place.

"My advice to others would be: don't be afraid and don't rush. You have to understand who you are, embrace yourself, and be confident. It's such an emotional thing and it mattered so much that I knew my HR leader and company were supportive. It was the relationship I had with them and the Owens Corning culture that made all the difference."

By coming to work every day feeling valued, safe, and respected, Luc has been able to do his best work and grow at Owens Corning. After completing the engineering development program at our Starr, South Carolina, plant, Luc was chosen to join the technical team for the start of a new plant in Gastonia, North Carolina, which included months of process training at other Owens Corning sites. At Gastonia, Luc later became the operations manager before transferring to Gresham, Oregon, where he currently serves as plant leader.

Learn more about Luc's story by watching his OpenUp video

HUMAN RIGHTS CAMPAIGN FOUNDATION
BEST PLACES TO WORK
2019 for LGBTQ Equality
100% CORPORATE EQUALITY INDEX™

Owens Corning achieves perfect score on Corporate Equality Index

For the 15th straight year, Owens Corning received a perfect score of 100% on the Corporate Equality Index (CEI), a national benchmarking survey and report on corporate policies and practices related to LGBTQ workplace equality, administered by the Human Rights Campaign Foundation. As a company dedicated to inclusion and diversity, Owens Corning takes great pride in this ongoing recognition.

Businesses were evaluated on LGBTQ-related policies and practices including workplace nondiscrimination protections, transgender-inclusive healthcare benefits, domestic partner benefits for same and opposite sex couples, competency programs, and public engagement with the LGBTQ community. Satisfying all CEI's criteria resulted in a 100% rating and the designation as a Best Place to Work for LGBTQ Equality.

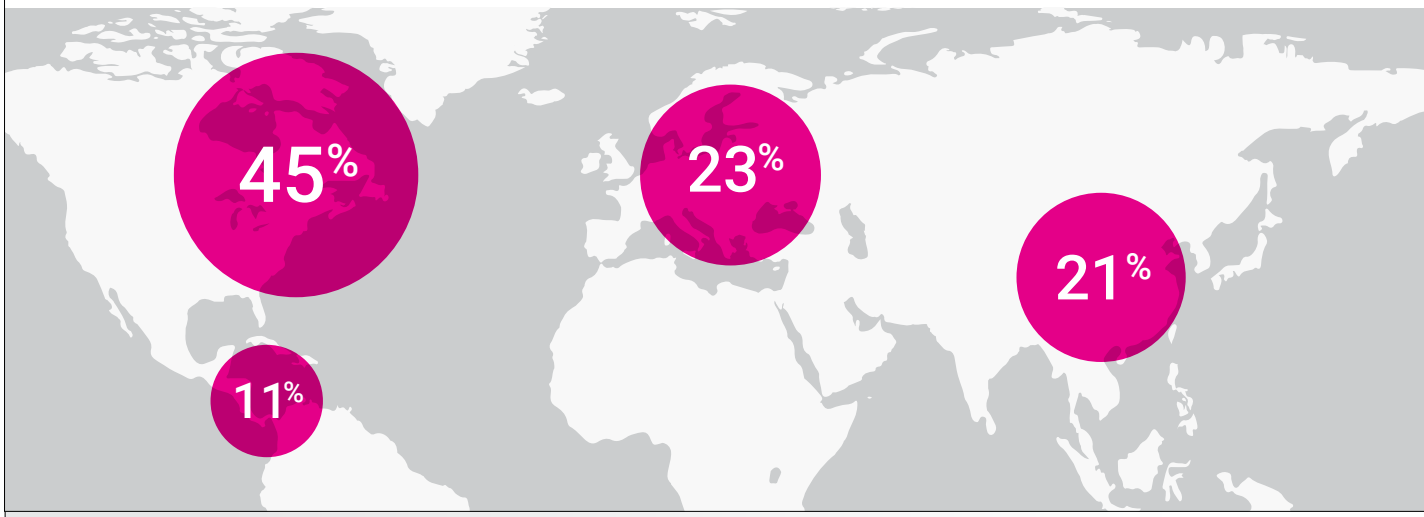
Inclusion and Diversity

Our Workforce

We believe it's vital to have a diverse workforce that represents both our global business and customer base. Our various experiences and perspectives allow us to look at things in a different way and deliver results for our customers.

We are pleased to report a 6.5% increase of U.S. hires who were from minority groups in 2018. We also experienced a 2% increase in the percentage of females in all levels management positions globally, from 22% in 2017 to 24% in 2018, while we show an increase of 1% for the time period in our middle and upper management.

Workforce Composition by Region



39%

PERCENTAGE OF 2018 U.S. HIRES (STAFF AND PRIMARY) WHO WERE FROM MINORITY GROUPS

4,236

NUMBER OF EMPLOYEES JOINING THE ORGANIZATION IN 2018

CUSTOMER-INSPIRED INNOVATION

BUILDING SCIENCE

PRODUCT INNOVATION

PRODUCT SUSTAINABILITY & STEWARDSHIP

- **Owens Corning's deep expertise in engineered materials helps create high-quality and valuable products and solutions that are relevant to our customers and help them achieve their sustainability goals.** Our application of building science, environmental footprint-reducing product innovation, and product sustainability and stewardship knowledge supports the company's purpose to make the world a better place. We strive to lead through our actions, including offering the first formaldehyde-free mineral wool insulation in North America.

PHOTO CREDIT:
Jyrki Männikkö | Helsinki, Finland
Taken in Lisbon, Portugal

Customer-Inspired Innovation

BUILDING SCIENCE

Jack Davis (Granville, Ohio, Science & Technology Center) prepares samples of insulation batt for fire testing.

Owens Corning's Goal:

- Increase the number of Owens Corning-supported net-zero energy ready buildings year-over-year vs. 2015 baseline of 35+

Our Building Science efforts align with the following UN SDGs:

The data in this chapter marked with a + sign were independently assured to a moderate level by SCS Global Services. For more information or to see the verification statement, please go to page 178 in the About the Report section.

Owens Corning engineers the complex, interconnected systems that make buildings and homes comfortable, energy efficient, high-performing, durable, sustainable, and affordable – that is our material difference.

Our work in building science helps to advance building codes and allows builders to comply with stringent efficiency standards such as the International Energy Conservation Code (IECC) and the Energy Rating Index (ERI). We look for opportunities to drive additional gains in environmental sustainability, while also supporting opportunities for affordable housing. We are solving performance challenges each day to make the buildings in which we all live and work more beneficial for us and the environment.

Strategy and Approach

Our building science team, formed in 2010 and constantly evolving and expanding its impact, applies scientific knowledge and experience to analyze and design for the physical phenomena that affect building structures. An individual building presents a set of complex systems, such as building materials, the building envelope, heating, ventilation, and air conditioning systems. The interactions among these distinct elements dramatically influence the building as a whole. By using predictive capabilities to understand how these systems interact, we help architects, builders, contractors, and homeowners optimize building performance, understand and prevent building failures, and ensure year-round comfort.

Building Science

By developing innovative products, forging partnerships, and serving as advocate and educator, we are improving the way people design and construct today's buildings, as well as their comfort as they live and work in them. Our work in this area includes several strategies:

1. **Partnering and collaborating with builders, contractors, architects, and homeowners** to understand their needs and adopt better building products and systems, based on building science;
2. **Developing, through science and technology, innovative building products and systems** to improve energy efficiency, durability, and occupant comfort;
3. **Supporting building code compliance** and advocating for code improvements; and
4. **Sharing our building science expertise** across the building industry.

Building Science Solution Center

Owens Corning's experts continually research and deploy building science to serve architects, buildings, occupants, and the planet. The Owens Corning Building Science Solution Center is a 24/7 portal connecting architects to emerging research, best practices, and thought leadership across a spectrum of building disciplines.

Beyond delivering expertise on sustainability, the Building Science Solution Center offers practical insights addressing the diverse challenges architects experience and provides access to certification documentation to meet green building program requirements. For example, the free portal's resources range from content drawing on more than 40 years of experience pioneering perimeter fire containment assemblies, to helping architects apply WUFI analysis to predict moisture and thermal performance across a range of climates.

Touted as the greenest commercial building in the world, the Bullitt Center in Seattle, Washington, is designed to increase the pace of change in the movement toward high performance green buildings and resilient cities. The building was constructed using RainBarrier® continuous insulation and is Certified Living by the International Living Future Institute.

Advancing Building Codes in Chile

In some instances, we use our building science expertise to advocate for building code improvements that make compliance easier and achieve better energy performance.

Our work in Chile is a great example. To keep homes warm in Chile, many residents burn large amounts of wood, which has resulted in significant air pollution across the country, especially in southern Chile, where winters are very cold. Through research, benchmarking against international standards, and fieldwork discussions with builders and homeowners, our building science team demonstrated that additional improvements in insulation and air sealing would help keep homes warmer and reduce air pollution.

We worked closely with Chilean organizations to support increases in requirements related to external and internal insulation. A revised version of the code, with the proposed changes including increased building envelope requirements, is expected to be published by the Housing and Urban Development Ministry in Chile in 2019. This revised code will increase insulation requirements and air sealing, which will significantly reduce heat transmission values in all regions of the country.

Low-income houses in southern Chile are being retrofitted with Owens Corning fiberglass insulation and air sealing to reduce the need for wood burning heat, an air pollutant. The Chilean government's Atmospheric Decontamination Plan has improved thousands of homes in Temuco and more recently in Osorno, where this photo was taken.

Building Science

Partnering to Increase Net-Zero Energy Ready Buildings

From blueprint through construction, our building science team helps builders, contractors, architects, and homeowners to improve building performance and comfort. Together, we address climate challenges and achieve performance goals such as those included in the Home Energy Rating System (HERS) Index. The HERS index evaluates performance against the standards of RESNET (Residential Energy Services Network).

One of the primary performance goals for our building science team has been to support the design and construction of net-zero-energy (NZE)-ready buildings. An NZE building has zero annual net energy consumption, meaning the total amount of energy the building produces equals the amount of energy it consumes. An NZE-ready building is designed to be ultra-efficient, and when combined with the use of renewable energy, such as solar panels, it can achieve net-zero energy status.

In 2015, we set a goal to increase the number of Owens Corning-supported NZE-ready buildings year-over-year, compared to a 2015 baseline of 35. Through strategic partnerships with several homebuilders, we continue to outperform our goal. We supported more than 400 such homes in 2018+.

As we transition our focus to 2030 goals, we are in the process of reevaluating our work in this area to set targets that better align with our building science strategy described on page 45.

Builder Name	Number of NZE or NZE-Ready Homes Built in 2018	Location
Thrive Homes	252	Colorado
De Young Properties	140 (in progress)	California
Shea Homes Trilogy at Rio Vista	116	California
Luchetta Homes	5	Ontario
Gatto Homes	8 unit Townhouse	Ontario
Reid's Heritage Homes	10	Ontario
Other U.S. and Canadian homebuilders	10	Various

Understanding the HERS Index

Many consider a HERS Index Score of 40 or less as a tipping point to achieving NZE-capable homes. Here's how the scale works:

0
HOME PRODUCES AS MUCH ENERGY THROUGH RENEWABLE RESOURCES AS IT CONSUMES

40
TARGET SCORE

50
HOME IS 50% MORE ENERGY EFFICIENT THAN A STANDARD NEW HOME AND 80% MORE EFFICIENT THAN THE AVERAGE RESALE HOME

100
HOME IS AS ENERGY EFFICIENT AS A STANDARD NEW HOME

150
HOME IS 50% LESS ENERGY EFFICIENT THAN A STANDARD NEW HOME

Building Science

The New American Home® 2019

For homebuilders aspiring to achieve higher levels of energy efficiency, The New American Home® (TNAH) demonstrates some of the most efficient elements ever built into a home. Owens Corning worked on the design and construction of TNAH throughout 2018, and it debuted at the International Builders Show in January 2019.

For demonstration purposes, the home is massive, at 8,226 square feet, which created unique challenges that had to be overcome to maximize efficiency. An abundance of windows added another layer of complexity to the project. In line with our goals for NZE-ready homes, a HERS rating of below 50 was set as the target for the project.

To compensate for the windows, the build team increased the R-value in the walls. In addition, the home uses the Owens Corning building envelope system, which places insulation not only behind the walls and within the ceilings, but also around the slab. This prevents radiant heat penetration and enhances moisture control.

"To build a high-performance home with such a large footprint, you have to first understand each and every component – from windows and air sealing, to the roof and the home's orientation," said Neil Freidberg, Owens Corning's building science leader. "In doing so, we can identify and use the optimal materials in the right locations."

SUSTAINABILITY IN ACTION

Paroc Expands Net-Zero Home Opportunities

Thanks to Owens Corning technology, Citus Construction, a real estate development company in Lithuania, has completed an ambitious project to construct two, nearly net-zero energy buildings.

The project, called Aeronamai, included two single-family homes with attached flats. The homes utilized a number of key efficiency improvements, including solar architecture and high efficiency lighting, but it wouldn't be possible without supremely insulated, tight construction materials from Paroc.

Paroc stone wool slabs give the building longevity and fire resistance, while also reducing heating and cooling costs and dampening noise pollution. Today, these homes have earned the highest energy certificates from the Lithuanian Construction Production Certification Center (A++) and are in the process of receiving certification as passive homes from the German Passivhause Institute. The Aeronamai homes are among just seven residential buildings in Lithuania with the A++ energy certificate.

Building Science

Leveraging Our Building Science Expertise to Educate the Industry

We voluntarily share our building science expertise with the industry, helping to elevate knowledge about improving efficiency and creating comfortable structures. Our team conducts education sessions to help engineers, builders, contractors, and homeowners look at the total build and find ways to improve sustainability, including introducing solutions they might otherwise overlook. For example, while most builders know that adding insulation helps energy efficiency, they also learn about air sealing, which boosts the overall efficiency of a building.

We are also educating architects on sustainable design. We sponsor training on the use of advanced hydrothermal tools such as WUFI and WUFI Passive. In addition, we teach architects and building envelope consultants to design for durability, collaborating with national research organizations such as Oak Ridge National Laboratory.

PHOTO CREDIT:
Lizzie Evard | Compton, California, U.S.

Mario Muñoz (Compton Roofing plant) installs a new roof during a Habitat for Humanity build.

140+

ARCHITECTS EDUCATED ON WUFI HEAT & MOISTURE STANDARDS AND PROFESSIONAL USE OF WUFI

5

SOLD-OUT PRESENTATIONS AT THE AMERICAN INSTITUTE OF ARCHITECTS CONFERENCE

Jolanta Płóciennik (Trzemeszno, Poland, stone wool insulation plant) conducts a test in a lab.

Customer-Inspired Innovation

PRODUCT INNOVATION

Owens Corning's Goal:

- Create pipeline of sustainable products, and increase the value through sustainability in the innovation process+

Our Product Innovation efforts align with the following UN SDGs:

The data in this chapter marked with a + sign were independently assured to a moderate level by SCS Global Services. For more information or to see the verification statement, please go to page 178 in the About the Report section.

At Owens Corning, innovation drives our culture. Creating new products and processes brings value to our customers and shareholders. Innovation also allows us to play a role in addressing some of the most significant global environmental challenges while raising the quality of life for millions around the globe. Fostering innovation that advances sustainability continues to be a cornerstone of our work.

Strategy and Approach

We work to innovate broadly across our company. It begins with our core businesses of Composites, Insulation, and Roofing, and continues through new products in a growing range of key market segments. We listen to customer needs and position ourselves to address developing trends. Close collaboration with our customers and world-class technical experts enables us to create solutions that drive our customers' success and meet the changing demands of the marketplace. Our science and technology (S&T) centers in key markets worldwide play a vital role in this process, and together they comprise one of the strongest technical teams in the industry. In 2018, we acquired Paroc, a leading manufacturer of high-performance mineral wool insulation solutions, which added further expertise and increased our number of global S&T centers to 11.

Product Innovation

Owens Corning Science + Technology Centers

Whether it's repurposing existing technology into new platforms or developing entirely new ideas, our employees are relentless in their efforts to reimagine and create innovative materials that uncover tomorrow's possibilities for our customers and the world. Within our organization, we have developed unique relationship networks and events such as our annual Innovation Week that encourage people to connect and spark innovation.

OUR COMMITMENTS TO INNOVATION

1. To evaluate 100% of our new and significantly modified products through our stringent product stewardship process; and
2. To evaluate the potential lifecycle impacts using our sustainability mapping tool within our gated innovation process.

Sustainability-Driven Innovation

In each of our businesses, we are focused on delivering innovation that provides sustainability advantages for customers in our strategic markets.

COMPOSITES

New products developed by our Composites business help customers use energy more cost effectively, reduce waste, and have less impact on the environment than competing materials. Highlights in 2018 included:

- **Developing UltrabladeX™, a new generation of high-performance fabrics** that enables original equipment manufacturers to design and make longer and lighter wind turbine blades, decreasing the cost of wind energy. Based on proprietary technology, UltrabladeX allows for a 5% reduction in blade mass and up to 20% longer blades, driving down the cost of wind energy.
- **Piloting a new ceramic composite product, which increases fracture toughness while reducing waste in production.** Developed in collaboration with another manufacturer, the product involves the addition of glass fiber to increase the ceramic's strength and fracture toughness.
- **Creating Aslan 100 Rebar, a new composites rebar product for bridge reinforcement.** Composite rebar provides better corrosion resistance and weight benefits compared to steel structures. The first offering in our new line, Aslan 100, decreases the scrap rate from 10-12% to 5-7%, while maintaining performance.

Product Innovation

INSULATION

Due to our progress in 2018, we are on track to deliver more formaldehyde-free products. Recent developments include:

- Introduced the **first and only mineral wool formaldehyde-free perimeter fire containment system** available in North America+. This advanced solution made with Thermafiber®, Firespan®, and Safing™ mineral wool insulation delivers tested and proven fire resistance performance to help commercial architects, specifiers, and contractors build safer and energy-efficient buildings.
- **Increasing the number of products produced with a "Made with 100% Wind-Powered Electricity and Reduced Embodied Carbon" Certification,** including EcoTouch® Insulation for Flexible Duct and QuietR® Duct Board Insulation+. This gives commercial architects and specifiers, builders, and homeowners the option of lower-carbon products to build greener structures.

ROOFING

In 2018, the Roofing business launched or expanded its work in several innovative categories focused on driving sustainability. Milestones include:

- **Launching our Duration Flex™ roofing shingle platform, providing a more resilient roof system to the homeowner.** Duration Flex™ is the only modified-asphalt shingle with SureNail® Technology, with nearly 1.5x the nail pull strength and 10% better tear strength than standard shingles. It also features improved granule adhesion and meets the highest impact resistance rating.
- **Continuing to drive a powerful value proposition around the benefits of synthetic underlayments** versus traditional organic products. Our work to communicate these benefits to contractors and the roofing market has led to significantly greater adoption of products that are more durable, repel water, and are faster to install and easier to use. Ultimately, this shift will result in better-built residential roofs.
- **Expanding our offering of "cool roof" shingles.** Using a highly reflective granule technology that reflects the sun's rays, cool roof shingles help reduce energy use by keeping roofs cooler and reducing air conditioning energy levels. Some of our cool roof solutions meet ENERGY STAR® requirements for solar reflectance.
- **Enhancing our geosynthetic and protective packaging products** to provide superior solutions for water management, agriculture, and the protection of high-value raw materials. These recyclable products can serve as moisture barriers when used as covers, and as engineered liner solutions to contain liquids for water conservation or groundwater pollution prevention.
- **Providing products with recycled content, including synthetic underlayments.** We are working on applications for end-of-use shingles.

PHOTO CREDIT:
Jan-Christian [Janne] Stenroos | Parainen, Finland

Paroc factory in Parainen, Finland. Owens Corning acquired Paroc in 2018.

Product Innovation

SUSTAINABILITY IN ACTION

Enhancing Product Innovation through Talent Development

People fuel innovation at Owens Corning, through the relationships we make with our customers and our inherent desire to improve the world around us. Harnessing the energy of our world-class talent is critical to the future of our company. We nurture our technical experts through development opportunities such as our Senior Technical Leader and Science & Technology Development programs.

SENIOR TECHNICAL LEADERS (STL)

The Senior Technical Leadership program is designed to identify distinguished technical experts within Owens Corning. These individuals are well respected in their field and often wield significant influence externally as research fellows or as board members of technical organizations. STLs are subject matter experts, project leaders, principals, and small-team leaders. They are some of the top minds in their respective disciplines and are active stewards of Owens Corning technology.

The program's selection process is run by a committee, which each year reviews approximately 10 nominations submitted by leaders within Owens Corning. The committee then presents its recommendations to the S&T Leadership Council, which makes the final decision.

By the numbers:

- Launched in 1976
- 45 STLs worldwide
- Approximately 10 nominations each year

SCIENCE & TECHNOLOGY DEVELOPMENT PROGRAM

The Science & Technology Development Program is designed to accelerate the growth and development of Owens Corning employees who are in the early stages of their careers, with a goal of training these individuals for leadership in management or technical roles.

The program includes two 18-month rotations and gives employees the opportunity to gain cross-functional experience. Employees participate in both on-the-job training and classroom education to develop the skills and knowledge necessary to drive future innovation and growth. Focus areas of the program include technical development, innovation, leadership, communication, and business acumen. Through this program, employees have the opportunity to work on high-impact projects that add value to the company.

Mentoring and coaching are key elements to provide employees with the right support to develop a career path and grow into a leadership role. Partnerships also receive meaningful feedback on a regular basis to aid in their development.

By the numbers:

- Launched in 1999
- 10 to 15 employees in rotation at any one time
- 74% retention rate post program

Product Innovation

SUSTAINABILITY IN ACTION

Building Momentum to Drive Innovation

Last May, employees gathered at our Granville S&T Center for four days of speakers, presentations, and workshops dedicated to innovation for a rapidly changing world. Innovation Week 2018 was designed to inspire attendees to pursue innovation in the markets that matter to Owens Corning and catalyze new approaches to research and development.

The theme for 2018 was "Momentum." External speakers shared knowledge of megatrends in energy, materials, intelligent buildings, and technologies including drones and artificial intelligence.

Another key part of the event was the annual Owens Corning "Poster Day," where team members had a chance to present their current science and technology projects and seek input from others. The best projects, as selected by eight judges, were awarded prizes across four distinct categories as well as one overall winner.

2018 winners in the Poster Day categories include:

Early Pipeline: Showcases projects that will help Owens Corning support extended growth by highlighting insight into a new technology, user, or growth application and connecting it to a growth opportunity

- **Winning Project:** Join the Material Revolution – A look at manufacturing waste as profitable byproducts
- **Team Members:** Beth Dufresne, Jesse Gadley, Jaime Gonzalezbrana, Carrie Sim, Chris Stoneburg, Jennifer Tankersley, Pam Toth, and Chris Veilleux

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Fundamental Science: Features a new or improved understanding of technology, applications, or users and describes a scientific approach used to deliver new value

- **Winning Project:** Size Evaluation – Linking chemistry with performance through an evaluation of WindStrand® 2000 chemistry for epoxy resin composites
- **Team Members:** Nardine Abadeer, Eric Carlier, Clay Harris, and Dee Rollins

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New Approach to Innovation: Shows the benefits of applying a new approach to innovation that relates to Owens Corning's leadership capabilities for growth: ideation, evaluation, and action

- **Winning Project:** New Analysis Methods: Fiber to Composites – Resulted in new capabilities to assess specific properties of products and enable faster, smarter, more sustainable product development
- **Team Members:** Johanna Beguinel, Eric Carlier, Doriane Flohic, Jérôme Jouvet, and François Vinet

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Growth Initiative: Links to specific business opportunities that have already been defined and clearly explains how they will benefit Owens Corning against its competitors

- **Winning Project:** PST Expansion – A novel process to create new insulation for cooking ranges resulted in a product that provides many benefits for Owens Corning, customers, and end users
- **Team Members:** Andy Davis, Matt Gawryla, and Jeff Tilton

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Overall: Best represents its category and shows excellence in content and visual display

- **Winning Project:** It's a Bird, It's a Plane, It's Super Glass – All-digital poster used a comic book layout with animation to explain how the machine learning enabled the development of glass
- **Team Members:** Chris Ehemann and Michelle Korwin-Edson

Product Innovation

SUSTAINABILITY IN ACTION

Driving Impact through Product Innovation

The new HVAC Combi AluCoat T pipe insulator from Paroc® made a big impact on the construction site of Metropolia University of Applied Sciences' Myllypuro, Helsinki, Finland, campus. The job required contractor Hewaco Oy to insulate more than 20 kilometers of pipe, and they chose Paroc because of a small design feature with a surprisingly large impact.

The Combi insulator is an aluminum-laminate-coated-stone wool product used for heat and condensation insulation of building system piping. Its key differentiator is a star-shaped interior, allowing one piece of insulation to be used for pipes of various dimensions.

"Based on our experience with the product, the Combi section has sped up inventory turnover, streamlined installation at the worksite, reduced material spillage, and even improved occupational safety and health for our installers," said Tomi Elolähde, Hewaco's project manager at the Metropolia project. "Installation at the worksite has become easier and faster, as there is no longer any need to take packages of four or five different sizes of piping insulation."

"We listen carefully to our customers' thoughts and feedback," said Toni Saukkonen, Paroc's Product Manager for Technical Insulation. "This user experience was really significant because it was such a new product for the Finnish market and a great opportunity for us."

Toni Saukkonen, left, (Helsinki, Finland, stone wool insulation plant) with a customer.

PHOTO CREDIT:
Jennifer Payne | Tennessee, U.S.
Banyan tree at Kawela Bay Beach Park, Hawaii

Owens Corning's Goal:

- 85% of our new products and 85% of our new applications will have net sustainability gains by 2020+

Our Product Sustainability & Stewardship efforts align with the following UN SDGs:

The data in this chapter marked with a + sign were independently assured to a moderate level by SCS Global Services. For more information or to see the verification statement, please go to page 178 in the About the Report section.

PRODUCT SUSTAINABILITY & STEWARDSHIP

At Owens Corning, we are committed to responsible innovation. Whether we are creating a product that gives customers new performance capabilities or improving the efficiency of our own production processes, we do so only if we know it will also safeguard or improve the natural environment for the benefit of current and future generations.

Strategy and Approach

To be responsible innovators, we thoroughly evaluate the sustainability aspects of all we do, from research projects to production processes, and work hard to be good stewards of all we touch – from raw materials to finished products. We challenge ourselves continuously to manage both aspects effectively and to perform better each year.

Across all three of our businesses, we seek to implement continuous and measurable improvements in the way our products are developed and produced, including:

- Saving energy and water;
- Using salvaged, recycled, or plant-based content;
- Conserving natural resources by reducing material usage, or using materials that are exceptionally durable, low maintenance, or renewable;
- Reducing the risk of exposure to hazardous and harmful materials;
- Contributing to a safe, healthy indoor environment;
- Striving to make products that are reusable and recyclable at end-of-life; and
- Reducing the environmental footprint of our products.

Product Sustainability & Stewardship

One of our most important strategies is to include or increase the content of recycled materials in our products and packaging, either in initial design or through continuous improvement. Recycled content reduces waste and saves resources in our manufacturing operations. It also assists our customers in complying with green building program requirements and their own sustainability goals. We validate the recycled content of our products through third parties such as SCS Global Services and ICC-ES, and offer documentation for green building programs such as LEED®. We continue to educate customers and consumers on the value of recycled content for reducing landfill waste, saving resources, and conserving energy.

We are also working to raise awareness about the urgency of addressing climate change and our efforts to find new and better solutions. Through our annual Sustainability Summit and other approaches, we educate our employees companywide, as well as customers and suppliers, on sustainability practices.

BUILDING TRANSPARENCY AROUND ENVIRONMENTAL IMPACTS

As part of our 2020 goals related to product sustainability, we have committed to evaluate, and be transparent about, our core products' impacts throughout their life cycles. We have adopted the following two-part methodology to calculate and show the full cradle-to-grave environmental impacts of our core building products:

- Conduct a life cycle assessment (LCA) according to the ISO 14040, 14044, and 14025 standards, followed by a third-party review and verification;
- Develop an environmental product declaration (EPD) from the LCA, and implement continuous and measurable improvements related to those impacts.

Life Cycle Assessments (LCAs)

Our LCAs are comprehensive measurements of the environmental footprint of a product at all stages of its life cycle. This includes the extraction of raw materials, and continues through processing, manufacturing, product use, and end of life through disposal or recycling.

We have conducted full LCAs on 81% of our products, including fiberglass, mineral wool, and extruded polystyrene (XPS) foam insulation, as well as composite glass product offerings, which encompass reinforcements, non-woven mats, and technical fabrics. We also have simplified LCAs for 5% of our other products.

Performing LCAs has identified many opportunities for improvement in our processes and products. We have also identified the raw materials of high impact, so we can work with suppliers to reduce their footprint, in turn helping us reduce our own product footprint. In 2018, we updated our LCAs on EcoTouch® Insulation, unbonded loosefill insulation, and FOAMULAR® XPS insulation products. We also help our customers improve and promote the sustainability of their products. We consistently provide life cycle inventory data for our products that are used to make finished goods by our customers, helping them achieve more precise LCAs and EPDs.

Owens Corning LCA practitioners are active members of the American Center for Life Cycle Assessment (ACLCA), and Owens Corning is an organizational member of ACLCA. The ACLCA is a nonprofit membership organization providing education, awareness, advocacy, and communications to build capacity and knowledge of environmental LCAs.

Product Certifications & Disclosures

Owens Corning uses third-party organizations to test and certify product attributes and to disclose their environmental, health, and safety impacts. We issue EPDs for core building products, which disclose the products' environmental impacts throughout their life cycle, in accordance with ISO 14025. We perform regular follow-up testing to maintain our certifications.

For our EcoTouch® batt and roll insulation, we created a UL optimization summary, which demonstrates a 17% improvement in global warming potential compared with our previous EPD. The summary also showed more than a 10% reduction in the areas of photochemical ozone

Product Sustainability & Stewardship

creation potential, acidification potential, eutrophication potential, and abiotic resource depletion (fossil fuels). This certification will help our customers qualify for LEED® credit under Option 2 for Building Product Disclosure and Optimization, as well as provide products to be specified for other building standards that reward lower embodied-carbon building material choices.

In 2018, we expanded our Thermafiber® mineral wool product portfolio and launched the first formaldehyde-free perimeter fire containment system, strengthening our portfolio of industry-leading products and services. Formaldehyde-free Thermafiber® mineral wool insulation solutions represent a breakthrough for architects, specifiers, and contractors interested in achieving green building standards. In addition to being formaldehyde-free, the Thermafiber® solutions are manufactured to have a minimum of 70% recycled content. Our new products were added to the USDA's BioPreferred catalog and earned Declare labels. These certifications help designers and specifiers make a more informed choice when it comes to product selection.

Material Transparency

In 2018, we added Health Product Declarations® (HPDs) to our material transparency portfolio and published HPDs for two of our product lines: 700 Series Fiberglas™ insulation, and air handling products. HPDs are effective for reporting the chemical makeup of a product and disclosing potential hazard concerns. The reporting follows a set of stringent regulations set by the Health Product Declaration Collaborative® (HPDC). The potential hazard is screened based on the GreenScreen for Safer Chemicals and additional lists from other agencies. HPDs enable architects, builders, and specifiers to evaluate and specify products with a comprehensive understanding of the product composition and potential hazards.

Owens Corning's published HPDs are available for download from HPD Public Repository.

Owens Corning Expands "Made with 100% Wind-Powered Electricity" Certification

In 2018, we expanded our products made with 100% wind electricity and reduced embodied-carbon portfolio to cover some of our high-density insulation products. These products were certified in accordance with SCS Global Services' certification protocol. The new certified products were made possible by the power purchase agreements Owens Corning signed in 2015, which enabled new wind capacity in Texas and Oklahoma. Both wind farms came online in late 2016 and have the potential to generate 1.1 million megawatt hours of electricity per year.

We currently have seven lines of commercial and residential insulation that are third-party certified as made with wind electricity:

- EcoTouch® insulation
- Pink® Fiberglas™ insulation
- Thermafiber® insulation
- Unbonded loosefill insulation
- QuietR® duct board insulation
- EcoTouch® insulation for flexible duct media
- QuietR® spiral duct liner

These certified insulation products give commercial architects and specifiers, builders, and even homeowners the option of lower-carbon products to build greener structures. They also help architects design buildings with reduced life cycle impacts, which are recognized goals of the Architecture 2030 Challenge and U.S. Green Building Council's LEED® certification.

Product Sustainability & Stewardship

Product Stewardship Reviews

We thoroughly review 100% of all new and significantly modified existing products to ensure they comply with all elements of Owens Corning's Environmental, Health, Safety, and Product Stewardship Policy, including regulatory compliance and other requirements. This comprehensive assessment of a product's life cycle – from input materials through end of life – ensures that each new and significantly modified product is:

- safe and environmentally sound to make;
- safe and environmentally sound to use;
- safe and environmentally sound to dispose of; and
- able to perform as claimed.

We require that our product developers, engineers, and scientists follow development guidelines in accordance with our standards and the results of product stewardship reviews. In 2018, we created the Product Stewardship Overview online training module to help our employees working in product development better understand this process and its requirements.

We have conducted 1,350 such reviews since 1997 and over 1,050 since 2006, when product stewardship reviews were made a mandatory element of our business code of conduct.

1,350

PRODUCT STEWARDSHIP REVIEWS CONDUCTED SINCE 1997

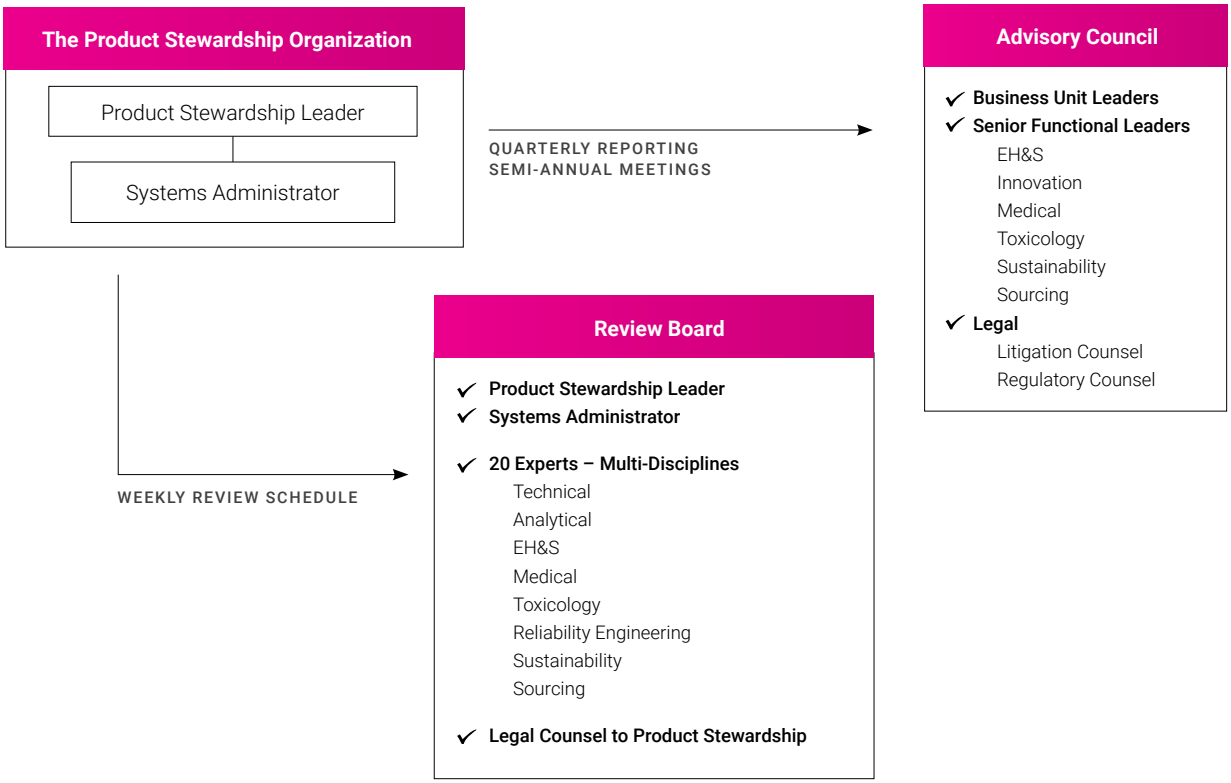
PHOTO CREDIT:
Jennifer Payne | Tennessee, U.S.
View of the Scottish Hills

Product Sustainability & Stewardship

PRODUCT STEWARDSHIP STRUCTURE

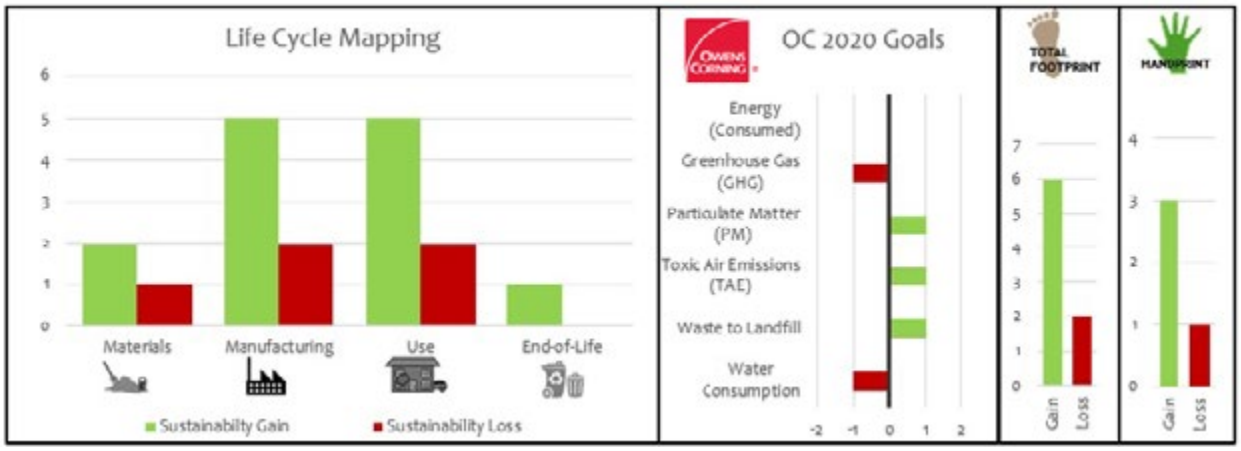
Our stewardship program involves many subject matter experts. Our product stewardship leader is accountable for managing the process and reports directly to our chief sustainability officer. The leader ensures that our product stewardship review board – consisting of global members with expertise in EHS, medical, toxicology, sustainability, sourcing, reliability engineering, technical subjects, and analytical testing – is balanced with the needed expertise. The review board meets weekly to review projects for new and significantly modified existing products.

In addition, we have a product stewardship advisory council, which consists of senior business and functional leaders who are responsible for linking product stewardship to the Owens Corning enterprise. The council meets throughout the year to provide insights on key EHS and performance issues, review product stewardship guidelines, discuss product stewardship review board activities, and then communicate to the company. This entire product stewardship organization provides counsel, guidance, and direction to ensure compliance with the Owens Corning product stewardship policy and Owens Corning standards.



Product Sustainability & Stewardship

Sample Extract from Our Sustainability Mapping Tool



MAPPING SUSTAINABILITY IMPACTS OF NEW PRODUCTS AND PROCESSES

As part of our product stewardship review process, we evaluate the sustainability aspects of research and development projects, new products, and new processes. Product developers are asked to complete a questionnaire using our Sustainability Mapping Tool. The tool is designed to spark thinking about the sustainable attributes of the product design and help product developers understand how the new product or process will impact the company's sustainability goals.

Summary reports from these assessments are shared internally with leaders on a quarterly basis by the product stewardship leader. These reports are used to track progress as well as identify trends and opportunities for us to further improve sustainability. In 2018, our efforts to meet these objectives throughout our manufacturing network resulted in benefits such as lower natural gas usage, lower material consumption, less plant waste generation, and higher process efficiencies, and these results contribute directly to our footprint reduction efforts. We introduced new product designs that use less material, improve final product durability, and result in less waste and energy usage for the end user.

In 2018, 73% of new products and 78% of new processes for our products have shown net sustainability gains, and 9% of projects reviewed focused on scrap reuse and waste-to-landfill reductions[+].

Throughout this tiered process, we measure and verify a product's composition and development at key points, according to desired safety, performance, and sustainability attributes:

1. **Testing of Input Materials**
   Raw materials for our products are covered by a purchasing acceptance standard (PAS) document signed by the supplier. The document specifies requirements applicable to the raw material, including the physical, chemical, and other properties that must appear on the "certificate of analysis" provided by the supplier with each delivery of the raw material. Delivery is accepted or rejected based on our examination of the certificate data.
2. **Manufacturing Process**
   Each product has a manufacturing specification that defines the manufacturing process settings and internal controls to ensure that the finished product meets expected properties.
3. **Product Composition**
   Each product has a defined standard composition that specifies its formulation as well as approved raw materials.
4. **Finished Products**
   Most finished products have a product data sheet that describes the specific properties of the products and compliance with standards.

Product Sustainability & Stewardship

5. **Management of Change**
   Intended changes related to raw materials or manufacturing process must be reviewed for approval before implementation.
6. **Traceability of Raw Materials**
   The manufacturing and data management system allows us to establish the relationship among finished products' manufacturing dates, process data, and raw materials.

Environmental, Heath, and Safety Impacts of Products and Services

Owens Corning strictly adheres to internal controls for environmental, health, and safety, which are incorporated in our business code of conduct. All employees are required to complete training on the Owens Corning code of conduct annually. Additionally, more in-depth training on our stewardship process is provided as needed to employees and new hires throughout the company. It is our policy that 100% of new and significantly modified products and services must be assessed for environmental, health, and safety impacts. As a result of these efforts and stringent voluntary commitments, we are not aware of any cases in 2018 where grievances were either filed, addressed, or resolved related to environmental impacts of our products.

FAILURE MODE AND EFFECTS ANALYSIS

We use many tools to ensure the safety of our products and processes, including failure mode and effects analysis (FMEA). FMEA is a systematic way to identify, evaluate, reduce, or eliminate problems in a product or process. FMEA is done by cross-functional teams to ensure it reflects different perspectives and knowledge. Based on the results, a risk mitigation plan is implemented to ensure our products are safe.

MANAGING MATERIALS OF CONCERN

Owens Corning's material of concern guidance applies to all manufacturing facilities and products manufactured under our control. It applies to the use of raw materials and other substances in all business activities used to produce products, including R&D, manufacturing, tolling operations, distribution, and materials used to maintain the site facility and equipment.

The guidelines are designed to control the use of chemicals, polymers, and other materials; to ensure compliance with laws and regulations in places where we make and sell our products; to avoid using materials that cannot be processed safely on our equipment; and to avoid using materials that are otherwise a concern. Some of our products contain ingredients that have been banned in some regions, usually on a timeline for discontinuance. Though we use comprehensive risk assessments to ensure all our products can be used without harm to people and the environment, we put into action a replacement plan whenever we learn of an ingredient ban or discontinuance requirement. Under this plan, we evaluate the applicable product line and enable R&D to address material substitution.

Owens Corning also sells products that may contain ingredients that are the subject of stakeholder questions or that are prohibited by certain green building programs. Through our product sustainability team, programs are developed to address all product-related stakeholder questions and concerns.

PRODUCT AND SERVICE INFORMATION AND LABELING

In accordance with our environmental, health, safety, and product stewardship policy, we provide information about all our products, their performance, and safe use.

Product content information can be found on product labels, EPDs, HPDs, and other transparency documents such as Declare labels. Content and disposal information is included on safety data sheets or safe use instruction sheets.

We have conducted LCAs and have issued EPDs on the following products: EcoTouch® Fiberglas™ insulation products; unbonded loosefill; FOAMULAR® XPS insulation; FOAMGLAS® cellular glass insulation; PAROC™ stonewool

Product Sustainability & Stewardship

insulation; Thermafiber® mineral wool insulation; Owens Corning® asphalt shingles; Fiberglas™ pipe insulation; 700 Series Fiberglas™ insulation; QuietR® duct board; and SOFTR® duct wrap.

Prior to being introduced in the marketplace, all product packaging and advertising is thoroughly reviewed by our technical services and law departments, along with each business unit, to ensure compliance with all regulations and codes. In 2018, Owens Corning had no significant incidents of noncompliance with regulations or voluntary codes concerning the labeling, marketing, or advertising of our products and material services.

FIBER SAFETY

Owens Corning has played an important role as a pioneer in the science of fiber safety and continues to provide industry-leading expertise. By engineering our continuous filament fibers to be too large to be inhaled and by controlling the composition of the raw materials we use to make our insulation wool glass, we ensure that all our fiber-based products are safe to manufacture and use. Owens Corning also has an internal product stewardship guideline on fibrous materials that states the company will not knowingly manufacture or use any fiber or fiber-containing material unless the fibers are shown to be nonrespirable or biosoluble, or unless use of the material generates insignificant exposure as shown by measurements in the manufacturing and end-use environments. Compliance with this guideline is verified during product stewardship reviews.

Among the most notable developments supporting the safety of Owens Corning® insulation products is the decision by the U.S. National Toxicology Program to remove soluble glass wool fibers from its list of substances "reasonably anticipated to be a human carcinogen." The decision was released June 10, 2012, in a report to the U.S. Congress titled the "12th Report on Carcinogens." On November 18, 2011, soluble glass fibers were removed from the California Prop 65 list. Owens Corning® mineral wool products were never listed by NTP or Prop 65. We perform regular composition audits to ensure the fibrous insulation products produced in our plants have the correct composition and are biosoluble. All continuous filament glass is nonrespirable.

In 2018, we developed a fiber-safety training online module to help our global employees better understand fiber health and our stand on the kind of glass fiber we produce and use.

Recycled Content in Primary Products and Services

Our commitment to using recycled content in building materials is demonstrated through a multipronged approach:

- We seek to include or increase the content of recycled materials in our products and packaging either in initial design or through continuous improvement;
- We validate recycled content through third-party verification bodies and offer documentation for use in green building programs such as LEED®;
- We promote the attributes of recycled content and educate customers and consumers on the value this brings to reducing landfill waste and saving resources and energy;
- We promote green products and green operations including the benefits of recycled content and reducing impact in the LCA of the product for all the industries we serve; and
- We participate as a member of organizations that promote recycled content in products including the USGBC and its LEED® program.

2018 Recycled Input Materials	
Total weight of material used	7,695,265 MT
Total weight of recycled raw materials	804,389 MT
Percent of recycled content	10%

Product Sustainability & Stewardship

Although most of the materials used within our processes are derived from nonrenewable inputs, we continue to look for opportunities to procure renewable sources, from raw materials to semi-finished goods and packaging. We are focused on increasing the use of recycled packaging.

We are a member and on the advisory board of the Container Recycling Institute, working to make North America a global model for collection and quality of recycled containers. Owens Corning supports this mission to increase our sourcing of recycled glass cullet.

INSULATION PRODUCTS

In our Insulation business, we are a leader in using recycled content for fiberglass insulation, ranging from a minimum of 53% recycled content to a high of 73% recycled content in our Canadian-made products. We also have a high level of certified post-consumer content in our light-density building insulation. Our North American residential fiberglass insulation is certified by SCS Global Services to contain at least 55% recycled content, while our commercial and industrial fiberglass insulation is certified to have a minimum of 53% recycled content.

As one of the largest users of recycled glass in the world, Owens Corning consumed over 1.4 billion pounds of recycled glass globally in 2018. Our XPS foam insulation in North America has 20% certified pre-consumer content. Our Thermafiber® mineral wool insulation is manufactured to have a minimum of 70% recycled content and is validated by ICC-ES.

Glass Recycling

Using recycled glass not only decreases community landfill waste, but also lowers our energy use associated with manufacturing insulation, as starting with raw materials such as sand requires more energy.

Although we strive for higher recycled-glass content in our insulation products, we realize that the supply of recycled glass is at risk. According to the U.S. Environmental Protection Agency and reported by the Glass Packaging Institute, only approximately 33% of all glass containers were recycled in 2015 (the last year for which such data have been published). In addition, numerous

Paroc's Take-back Program

At Paroc, our newly acquired mineral wool insulation producer in Europe, a take-back program has been in place for over 20 years. Customers can bring back cut-off mineral wool waste to be recycled or reused, which helps drive our customers' own sustainability efforts in reducing waste to landfill.

The Paroc team has worked closely with its customers to educate them on the take-back program and procedures to ensure the waste received can be recycled and reused. Approximately 95% of the waste received is melted down to be put back into manufacturing process.

Paroc's process has improved over time and is working well among its customers. It is also piloting packaging take-back programs in partnership with external recycling companies. Owens Corning is actively learning from Paroc's success to apply beneficial aspects to other parts of the business.

PHOTO CREDIT:
Zbigniew Witryk | Trzemeszno, Poland

Mantas Strazdas and Andrėjus Borovskis are part of the Paroc team in Vilinus, Lithuania.

Product Sustainability & Stewardship

municipalities across the U.S. have removed glass from their curbside recycling programs, further threatening future cullet supply.

To help counteract these trends, Owens Corning works actively with other companies and organizations to support the glass recycling industry and the entire glass recycling supply chain. The Glass Recycling Coalition (GRC) and the North American Insulation Manufacturers Association (NAIMA) are two of our key partners. Through GRC, we are particularly focused on promoting glass recycling in Florida, South Carolina, Georgia, New York, Tennessee, Oregon, and Washington, D.C.

We also helped form a glass cullet task force, with the objectives of: (1) improving communication on end-use of glass containers to make fiberglass; (2) increasing glass container recycling rates; (3) improving glass cullet quality; and (4) protecting current recycling programs at the state and local levels. Owens Corning participates in several educational and informational workshops, including those by the Closed Loop Fund and recycled glass processor Strategic Materials, to promote open dialogue and collaboration among stakeholders interested in glass recycling.

As a result of our efforts, and despite ongoing challenges in a number of communities across the U.S., we continue to increase our use of post-consumer bottle glass in North America. We believe the availability of high-quality recyclable glass is critical to the ongoing execution of our growth strategy. For more information on glass recycling, visit www.glassrecycles.org.

RECYCLING AND RECLAIMING OF PRODUCTS AND PACKAGING

Owens Corning was the first roofing manufacturer to establish a program for recycling shingles. Recycling torn-off shingles helps the environment in two ways: (1) old shingles do not end up in landfills; and (2) they get repurposed as pavement. Each year in the U.S., approximately 10 million tons of recyclable shingles are removed from the roofs of homes and buildings.

PHOTO CREDIT:
Abigail Sprague | Newark, Ohio, U.S.
Pointe du Hoc, Normandy, France

Product Sustainability & Stewardship

Through a national strategic alliance with Earth911, we connect contractors with convenient recycling facilities. As part of the program, we ask contractors to help the environment and promote sustainable business practices by pledging to recycle their shingle tear-offs. Over 650 contractors in our network have pledged to recycle their shingle tear-offs, including 32 new contractors who made the pledge in 2018. Seventy-four percent of U.S. consumers are located within operative range of these Owens Corning contractor locations.

The amount of recycled shingles continues to decline every year due to factors such as:

- Recycling centers closing;
- Recycling centers discontinuing their shingle recycling operation;
- Department of Transportation requirements; and
- Stockpile of material, and difficulty in getting asphalt companies to take the material.

The packaging for virtually all our business lines is recyclable. Owens Corning uses wood pallets, which are reused throughout our plants, and the majority are recycled at the end of life. Recyclable cardboard is used with some of our products. Our Insulation business uses recyclable cartons for its products. Each carton contains up to 30% recycled content and is fully 100% recyclable after use. Cores made from 100% recycled paper, recyclable totes, bags, and super sacks are used throughout our Composites business.

SUSTAINABILITY IN ACTION

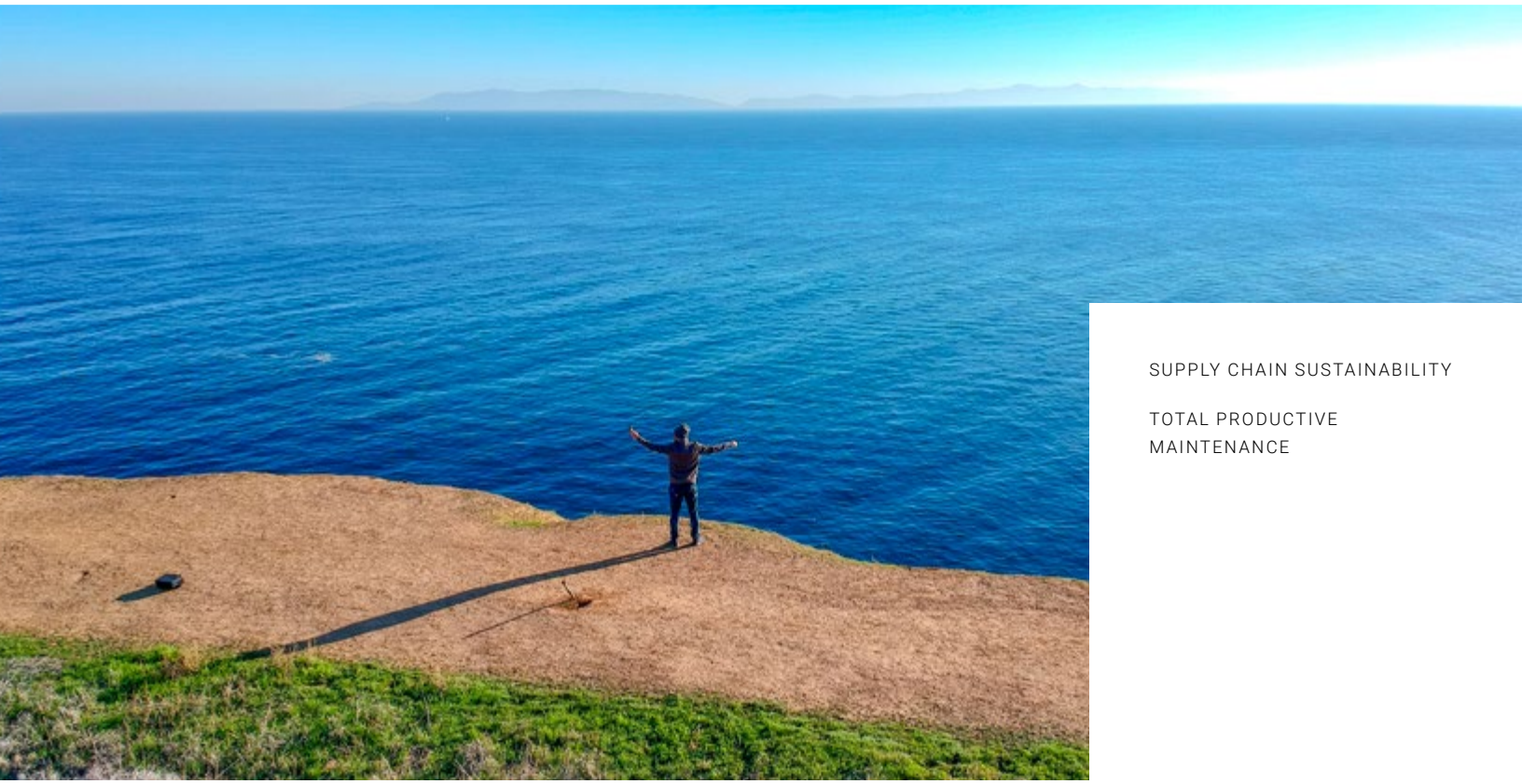
Investment in Packaging Pays Off

Since 2016, Paroc has made extensive investments in its stone wool production plant in Hällekis, Sweden, aiming to continuously reduce its environmental footprint. Its latest effort in 2018 consisted of a packaging line for low-density stone wool products.

Low-density products present sustainability problems in both storage and transportation because they are less efficient to store and move. The team in Hällekis set out to study the problem and discover ways increased compression of the product could be used to solve some of these issues. Paroc executed a variety of tests and worked in close cooperation with customers to evaluate quality through this process.

By summer 2018, the team was ready to install new packaging machinery at the plant. With this new process, they are able to compress stone wool products by as much as 70% without any loss of quality in the product. The team looks forward to making additional gains by optimizing the project and achieving more sustainable results.

OPERATIONAL EXCELLENCE



SUPPLY CHAIN SUSTAINABILITY

TOTAL PRODUCTIVE MAINTENANCE

- **Owens Corning is on a "march to zero" – zero accidents, zero defects, and zero losses in all our facilities. Our manufacturing plants have adopted a systematic management approach called Total Productive Maintenance (TPM),** which is transforming the way we work to ensure a culture of safety, quality, and productivity. As an extension of our business, our suppliers are held to high standards, including a comprehensive approach to ethics and human rights, and we have engaged them on Scope 3 emissions and science-based targets.

PHOTO CREDIT:
Mario Muñoz | Compton, California, U.S
Palo Verde, California

PHOTO CREDIT:
Alessio Frizziero | Besana, Italy
Ponte di Brivio in Lombardy, Italy

Owens Corning's Goal:

- Set clear expectations for sustainability progress by our suppliers+
- Use leading-edge sourcing practices+
- Measure and disclose supply chain performance+
- Expand our training on sustainability to meet the needs of our global sourcing organization+
- Convert transportation miles to natural gas or use alternative fuel savings methods by the year 2020+

Our Supply Chain Sustainability efforts align with the following UN SDGs:

The data in this chapter marked with a + sign were independently assured to a moderate level by SCS Global Services. For more information or to see the verification statement, please go to page 178 in the About the Report section.

Operational Excellence

SUPPLY CHAIN SUSTAINABILITY

As a global company with over 17,000 suppliers, Owens Corning considers it a business imperative to work with suppliers that comply with applicable laws and share our commitment to meeting and exceeding high standards. We see our suppliers as an extension of our business and are proud to work with companies that share our sense of responsibility to the environment, while striving to maximize our collective positive impact on economic prosperity, product innovation, stakeholder engagement, and more.

Strategy and Approach

We hold our suppliers to the same high standards that we apply to our company and our employees in the Owens Corning code of conduct. Our supplier standards are also consistent with the commitments we have made as a signatory to the United Nations Global Compact (UNGC) and as a member of the SAM Dow Jones Sustainability Index. Under the Owens Corning supplier code of conduct, we expect suppliers to:

- Fully comply with all applicable legislation, regulations, and legal requirements on human rights, labor, the environment, anti-corruption, and trade and customs;
- Provide effective management systems for environment, health, and safety (EHS), and product stewardship programs;
- Provide products that are safe and environmentally sound during use and disposal;
- Have programs to reduce the environmental impact of their products, such as reduction of discharges into natural surroundings and other sources of pollution;

Supply Chain Sustainability

- Establish goals and monitor the reduction of their environmental footprint; and
- Have employment standards and practices that include fostering diversity, providing suitable working conditions and compensation, and forbidding forced and child labor.

In all areas, Owens Corning expects the supplier to comply with country-specific or local legislation, the international norms explicitly referenced in the code, or Owens Corning-specific standards, whichever standard sets the highest expectations. We evaluate suppliers on whether they have sustainability goals and public reporting as well as performance objectives and progress, for the purposes of evaluating impact, foreseeing risks, and identifying opportunities to improve environmental, social, and economic performance. Where our supply chain/sourcing team finds gaps, Owens Corning is committed to driving measurable improvements in supplier focus, prioritization, engagement, performance, and risk mitigation.

Our key supply chain sustainability strategies include:

- Creating an environment for understanding and complying with our supplier code of conduct, which was developed with guidance from the UNGC's 10 universally accepted principles;
- Regularly evaluating suppliers' compliance with the supplier code of conduct and EHS best practices through an annual survey, site visits, and risk mitigation programs;
- Screening all suppliers for their sustainability practices, including those that become suppliers as a result of an acquisition that Owens Corning makes;
- Partnering with our research and development team to identify materials and potential suppliers that could reduce risk for Owens Corning and its customers. Examples include introducing more formaldehyde-free formulations, next-generation flame retardants, and products that do not contain any volatile organic compounds;
- Partnering with our business units to identify potential suppliers to reduce single-source risk;
- Supporting recycling programs for glass and roofing materials, which provide essential feedstock for our operations; and
- Providing an independent business-conduct helpline for suppliers to address infractions or the inability to adhere to our supplier code of conduct due to the actions of an Owens Corning employee.

Owens Corning Supply Chain

Owens Corning is a material converter – we buy raw materials and convert them to our final products, which include fibrous insulation (fiberglass and mineral wool) and extruded polystyrene foam insulation; roofing products (shingles and underlayment) and asphalt; and composite glass fibers for reinforced polymer products or other forms used for veils, liners, and other input products. The main direct raw materials for these products are minerals, chemicals, energy, and packaging.

At a very high level, our global manufacturing facilities perform processes that convert the raw material inputs to make finished products or, in the case of composites, finished input materials for another business to utilize. We have operations in 33 countries, and we manage inbound and outbound freight transport via truck, rail, and ship. Most of our supply spend goes to material suppliers, followed by transportation companies. In addition, we utilize distributors and service suppliers for capital goods, machinery, and a myriad of technical, consultative, and management services.

Our total supply base consists of more than 17,000 organizations with approximately $4.0 billion in spend; 1,382 of these suppliers comprise 85% of our spend+. We have active management processes in place to evaluate, segment, and engage with all top-spend suppliers. We determine appropriate action items related to each supplier based on the supplier's specific profile, as described on the next page.

Supply Chain Sustainability

SUPPLIER SEGMENTATION

Utilizing a segmentation tool, we separate our suppliers into four quadrants based on risk and impact for Owens Corning. Each supplier is objectively scored using six questions on impact and 10 questions on risk. The resulting two-by-two matrix places each supplier in one of four supplier profiles:

Collaborative Suppliers (low risk & high impact)

These suppliers are significant to Owens Corning in a variety of ways, including innovation; productivity savings; a high level of spend; high impact to operations or cash (EBIT, terms, capital); a competitive advantage; as a critical customer to Owens Corning; or as a supplier Owens Corning cannot do business without.

Critical Suppliers (high risk & high impact)

The high risk may be due to single sourcing; extensive cost or difficulty of switching to an alternative supplier; or the supplier may be prone to instability, subject to disruptions, or may not have publicly stated sustainability and safety measures. The high impact may be due to innovative products or cost savings, competitive advantage, or a long-term relationship with Owens Corning.

Transactional Suppliers (low risk & low impact)

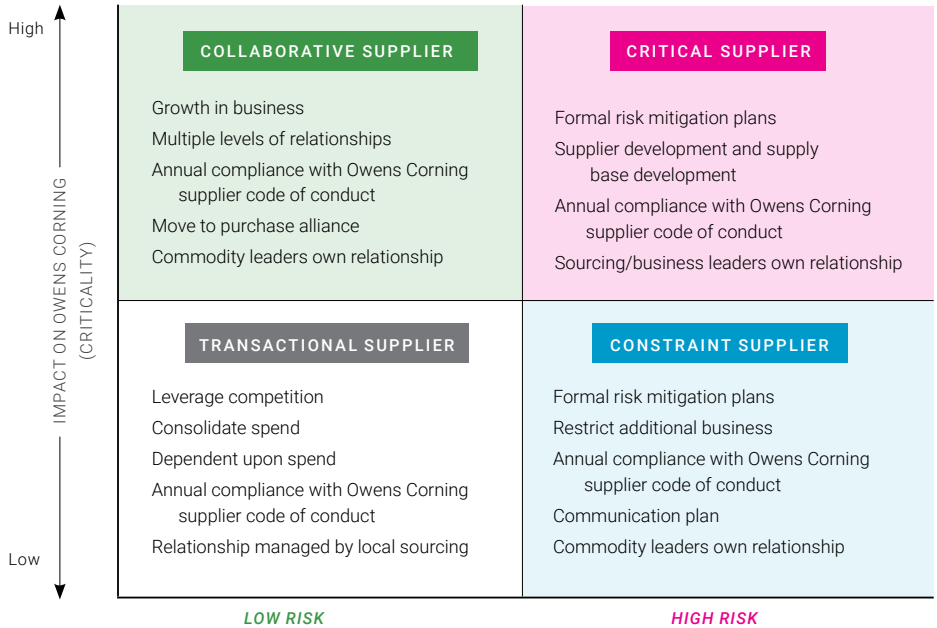
These suppliers represent a low level of Owens Corning's spend; low impact to operations or cash (EBIT, terms, capital); do not create competitive advantage; are not critical suppliers; and are easy to replace. Most transactional suppliers to Owens Corning have strong financial health, stability in business, and no supply disruptions.

Constraint Suppliers (high risk & low impact)

The high risk may be due to ongoing quality issues; they may be single-sourced; there may be extensive cost or difficulty of switching to an alternative supplier; they may be prone to instability or subject to disruptions; or they may not have publicly stated sustainability and safety measures.

Owens Corning commodity leaders create specific action plans to increase the impact and decrease, or mitigate, the risk related to our suppliers. Potential action items, by supplier profile, are shown here:

Supplier Segmentation – Potential Action Items



Supply Chain Sustainability

We have segmented the top 1,382 suppliers based on impact and risk. In 2018, approximately 5% of our suppliers were identified as critical suppliers, and approximately 20% were identified as constraint suppliers, both of which are key focus areas for our supply chain responsibility efforts.

2018 Supplier Base by Country

Country	% of Total
United States	47%
India	12%
China	8%
Canada	6%
France	5%
Mexico	5%
Brazil	3%
South Korea	2%
Italy	2%
Russia	2%
Netherlands	2%
United Kingdom	1%
Belgium	1%
Germany	1%
Spain	1%
Other	2%

Reducing Risk from Single-Source Suppliers

While raw material sourcing usually comes from more than one supplier, Owens Corning has some single-source supplier relationships that provide unique, value-added product and service capabilities. Such companies fall into the critical supplier category in the supplier segmentation tool and get close monitoring, engagement, and collaboration with the sourcing team.

Our sourcing team maintains a regular schedule of safety, environment, sustainability, and quality audits of single-source suppliers. In addition, we work with these companies to address any gaps in their risk analysis and contingency plans. At least annually, leaders of single-source companies and their Owens Corning counterparts meet to review and update this information.

Sustainability Summit Engages Suppliers

In January 2018, we enhanced sustainability engagement with our supply chain by inviting select suppliers to attend our annual Sustainability Summit. The summit connected these suppliers with key employees to share ideas and discuss how to work even closer together to achieve our shared sustainability goals.

Our intention was to challenge and inspire our suppliers to engage with us proactively and to continue to improve their sustainability performance, which helps their business and ours. The sessions included goals and best practices discussions related to topics such as safety, health and wellness; product innovation for healthy buildings; waste reduction and other aspects of environmental performance; employee and community engagement; and an update on trends, certifications, and standards. Following the formal sessions, Owens Corning hosted a roundtable for suppliers to share additional examples and questions.

For more information on the summit, see the Employee Development section of this report.

Evaluating Supplier Performance

Owens Corning has sustainability risk indicators that coincide with aspects of our supplier code of conduct. Based on these indicators and performance indicators described in our segmentation process, we adopted a risk assessment framework that maps environmental, social, and governance risks for the segmented supplier base.

We conduct an annual supplier survey mapped to the ESG risk categories. We keep this survey open throughout the year to allow new suppliers to participate. Based on responses, we assess all participating suppliers holistically.

When supplier risk is identified, a contingency plan may be created to assist in mitigating identified risks. The contingency plan may be a detailed document outlining action plans in the event of power outages, labor disputes, transportation issues, or materials shortages, or it could be an increased inspection or material recertification plan

Supply Chain Sustainability

at the supplier location. Each risk is reviewed, prioritized, and managed using the appropriate tools available to that organization.

We utilize an industry-standard process for corrective actions with our suppliers. This includes a short-term action and containment plan, root cause analysis, identification and verification of long-term corrective actions, implementation of long-term corrective action, and final verification and sign-off by stakeholders. We typically deliver our written request for corrective action during supplier assessments and at receipt of nonconforming material. In addition, we may also ask suppliers to provide additional inspection data with shipment showing actual measurements for critical characteristics, and sign-offs of management at supplier locations.

In 2018, 100% of new suppliers were screened using environmental and social criteria (e.g., human rights and labor practices) in line with the supplier code of conduct+. Screening includes review of suppliers' self-evaluation data or review by an Owens Corning commodity leader. As part of our new supplier screenings, we screen for any global or governmental sanctions using the Thomson Reuters World-Check system. Information is collated from an extensive network of reputable sources, which include:

- 530+ sanction, watch, regulatory, and law enforcement lists;
- Local and international government records;
- Country-specific data sources;
- International adverse electronic and physical media searches;
- English and foreign language data sources; and
- Relevant industry sources.

In 2018, 990 suppliers were subject to assessments for impacts on society and labor practices. As found by these assessments, Owens Corning does not have any suppliers identified as having potential or actual significant negative impacts on society, human rights, labor practices, or the environment. No cases related to human rights were reported in 2018. Owens Corning has a human rights policy in accordance with the UNGC, and expectations on human rights are outlined in our supplier code of conduct.

100%

OF GLOBAL COMMODITY LEADERS ARE TRAINED IN OC SOURCING WAY, OUR CONTINUING EDUCATION PROGRAM+

SUSTAINABILITY IN ACTION

Surveying Our Suppliers+

We contacted 990 suppliers from around the world to take our 2018 supplier survey, and 455 did so – a response rate of approximately 46%. The contact list included any supplier that had been scored using the supplier segmentation tool described previously as well as any other large, new suppliers. The survey was revised in recent years to go deeper on certain key issues and remove less important questions.

More than 95% of Owens Corning® suppliers are able and willing to comply with all aspects of our supplier code of conduct, according to our survey results.

Owens Corning asked suppliers about their sustainability and safety policies and goals. We found that 83% of suppliers have organizational goals and policies for safety, and 77% have them for sustainability. Many of the companies report on their goals and policies internally and externally, and some publish their data at least annually.

The survey data are used in a variety of ways:

- Learn what companies are doing, including where they are strong and where they may need support;
- Highlight areas that need additional attention and follow-up. For example, not answering a question was treated the same as a negative response, which triggered direct follow-up; and
- Identify best practices and leading companies that should be considered for an Owens Corning® supplier award.

Supply Chain Sustainability

Local Sourcing

Supplier selection depends upon many considerations, including costs, quality performance, delivery performance, innovation, financial viability, and conformance to social, safety, and environmental standards in our supplier code of conduct. Supplier location is also important. We recognize that when a supplier is nearby, engagement and transportation of materials can be more efficient, thereby enhancing sustainability across the supply chain. While we do not have a policy in place for local procurement, we track this information for our U.S. facilities and define "local" to be within a 250-mile radius of any of our facilities.

In 2018, 37% of Owens Corning's purchases were made locally for significant locations of our operations. Some products, such as cullet (recycled glass), are sourced near plant locations as a matter of course. Many of our facilities have rail delivery capability, which falls outside the 250-mile radius for local procurement but still provides cost and environmental benefits compared with truck transportation.

Transportation Sustainability

Transportation sustainability continues to be an important, though challenging, aspect of our Scope 3 emissions calculation and goals. Starting in 2012, we set a plan to convert shipping lanes from diesel-powered equipment to natural gas-powered equipment, and to convert truck lanes to intermodal transportation. We have maintained our goal of converting 12% of North American transportation miles from diesel fuel to natural gas by 2020, but due to several factors, we did not make significant progress against this goal in 2017 or 2018. First, the reduced cost of diesel over the last four years has stalled the conversion to natural gas power, as the return on investment on equipment conversions has not been favorable for carriers. Second, economic growth and market demand have made it difficult for Owens Corning to make the conversion from truck to intermodal equipment. Lastly, the capacity of intermodal equipment in our heaviest conversion lanes has been below our level of demand+.

Regardless of these challenges, Owens Corning continues to focus on reducing the number of shipments made each day. Two current examples are based on the fundamental objectives of minimizing the number of moves required to ship a product to a customer, as well as maximizing the utilization of each shipment:

1. Reducing stock transfer orders, where finished goods inventory is moved from one warehouse location to another, creating double handling as well as adding to the number of miles the product travels prior to arriving at a customer location; and
2. Improving utilization of each truck, by maximizing the amount of product on each shipment and, wherever possible, collaborating with our carrier partners to haul heavier loads on specific roads as allowed by special permit.

In choosing our transportation partners, Owens Corning continues to utilize a best-of-breed approach, choosing providers who share our corporate values. We also evaluate our carriers based on membership in the EPA's SmartWay program, workforce sustainability, and meeting safety and human rights requirements. Many of our partners are investing in technologies that include cameras to continuously monitor driver behavior, equipment that tracks vehicle parameters that may lead to unsafe actions, and drivetrain improvements that have increased fuel efficiency by as much as 40% since 2014. To combat the ongoing truck driver shortage in North America, carriers are investing more than ever in recruitment and driver training schools. In addition to safe operations, driver training classes are also focused on educating drivers on how to spot and report unsafe situations such as human trafficking and other illegal activity.

Looking forward, we are in the process of developing next-generation transportation sustainability goals based on science-based targets, which will include Scope 3 emissions.

Supply Chain Sustainability

Sand Mining and Our Supply Chain

We continue to monitor our silica sand mining suppliers for environmental and human rights conduct, as this industry was identified as a risk with the rise in sand consumption around the world. Owens Corning has a vested interest in ensuring a sustainable, responsible supply chain for sand to manufacture our products. Our annual sand (silica) consumption approaches 764,000 metric tons, with nearly 65% coming from North America. Glass production requires a high grade of silica that generally comes from mines and quarries rather than riverbed and shoreline sources. Our global commodity leaders regularly reach out to our suppliers in Asia, India, North America, and Europe, and have confirmed that we source silica specifically from legal mines and quarries, without human rights violations. We are confident in the integrity and continuity of our silica supply base. We are also major supporters of glass recycling, which reduces our reliance on sand for fiberglass insulation production.

How Acquisitions Impact Supply Chain Sustainability

Our growth strategy includes acquisitions. Acquisitions often bring with them new suppliers, sometimes significant ones, from outside the U.S. Whenever we consider an acquisition, we conduct due diligence to evaluate supply chain risk. It is important that the current suppliers of the target company are high quality, capable, and safe, and will be able to meet our standards.

After a transaction is completed, we engage early with each acquired business to set expectations and implement a consistent structure for supplier relationships. We provide extensive training so that the acquired business understands our supplier code of conduct and how to administer it. In addition, our commodity leaders spend time getting to know the acquired company's key suppliers, explaining the supplier code of conduct, following up on issues of concern, and, if necessary, identifying alternative potential suppliers.

For more information on how we integrate acquisitions into our sustainability program, see page 152 in the Economic Responsibility section of this report.

PHOTO CREDIT:
Jyrki Männikkö | Helsinki, Finland

Owens Corning leaders present daily management work during TPM training.

Operational Excellence

TOTAL PRODUCTIVE MAINTENANCE

Strategy and Approach

At Owens Corning, we are on a "march to zero" – zero accidents, zero defects, zero losses. Our ultimate goal is to achieve perfect production at all our global manufacturing plants.

To achieve this ambitious goal, we have adopted a systematic approach called Total Productive Maintenance (TPM). TPM is a comprehensive management system focused on proactive and preventive activities to maintain, operate, and improve production and to foster a culture of safety and zero losses. TPM includes eight pillars:

- **Training and development:** Skills assessments identify gaps, and training and sharing of best practices improve skills in a practical and safe way.
- **Autonomous maintenance:** By empowering teams to prevent or fix problems, we slow the deterioration of equipment and processes, and drive cultural and behavioral change.
- **Focused improvement:** By identifying and quantifying losses throughout the plant, we can focus on prioritizing how the losses will be eliminated and assign the right resources to these tasks.
- **Planned maintenance:** Combined with autonomous maintenance, planned maintenance enables us to be more proactive.
- **Early management:** Eliminating losses and abnormalities in the design and development of new equipment, processes, and products reduces the time between development and launch and lowers lifecycle costs.

Total Productive Maintenance

- **Quality maintenance:** Establishing and maintaining optimal equipment conditions helps prevent quality defects.
- **Office and administration:** Activities that increase the quality, usefulness, and timeliness of information for internal and external customers lead to real improvements and align administrative resources with performance needs.
- **Environment, health, and safety:** Combining corporate environmental, health, and safety (EHS) programs with TPM activities furthers the culture of safety among all employees.

TPM is much more than a way to keep machines running smoothly. It is a way of thinking and approaching work that engages all employees in maintaining, operating, and improving production and processes. TPM is a total team effort, which we believe creates added value for our employees and our customers.

Our TPM Journey

Since committing to TPM in 2016, we have made great strides in launching and implementing the approach throughout our global operations. Across all three businesses, our plants have declared their commitment to TPM:

- The **Composites** business, which began its journey in 2010, has maintained a commitment to TPM across all of its plants.
- Our **Insulation** business made great progress, with 100% of plants committed to TPM in 2018.
- In the **Roofing** business, 100% of our roofing and asphalt shingle plants as well as 100% of our components plants have demonstrated a commitment to TPM.

Every plant is at a different point on the journey, but each is moving with purpose and sharing TPM lessons across the network. All plants follow a strategic approach, starting with a preparation plan that focuses on daily management – the foundation of TPM. Incorporated in the preparation plan is an analysis of baseline key performance indicators centered on safety, quality, delivery, cost, production, and morale, including management indicators that drive accountability and results. We survey employees to help plant leaders understand their teams' readiness for TPM and to identify opportunities to enhance knowledge and improve skills. Based on this information and best practice examples, plants create training workshops and team-building opportunities appropriate to their stage in the journey.

PHOTO CREDIT:
Sharla Cochran | Granville, Ohio, U.S.
Taken on Rarotonga in the Cook Islands

Driving TPM through People Leadership

Owens Corning's TPM Academy Leadership Program helps instill TPM concepts in the next generation of plant leaders. In 2018, the first class of 25 employees completed the year-long program, and they are now changing the way Owens Corning operates by applying the lessons they learned.

The TPM Academy focuses on the pillars of TPM and how each of our businesses is carrying them out for greatest impact. The program provides a natural way to share what has been learned and is instrumental in helping us codify the Owens Corning approach to TPM.

Among the topics discussed are autonomous maintenance, cost deployment, design improvements, and other methods. Advances in these areas help Owens Corning create a TPM culture that supports our drive toward zero injuries, zero defects, and zero losses. With a stronger understanding and commitment to TPM and new leadership skills, TPM Academy graduates are equipped to help any plant on the "march to zero."

Total Productive Maintenance

SUSTAINABILITY IN ACTION

Achieving Excellence in TPM

Two Owens Corning plants celebrated key TPM milestones in 2018. These plants demonstrated full adoption of the TPM mindset, creating a culture dedicated to safety and zero losses.

RIO CLARO, BRAZIL

In 2018, our Rio Claro, Brazil, plant became the latest Owens Corning facility to earn a TPM Excellence award from the Japan Institute of Plant Maintenance (JIPM), joining the ranks of our facilities in Taloja, India; Tlaxcala, Mexico; and Yuhang, China.

To earn the recognition, plants must meet JIPM's rigorous criteria. Applications are only accepted once a plant has fully implemented TPM for at least three years. The assessment process then spans an entire year, with multiple visits from JIPM evaluators who assess how TPM is deployed across the plant and measure improvements.

Rio Claro employees embrace the autonomy that TPM methodology brings, and the way it inspires them to be better every day. They have also shared their work and results with other Owens Corning plant leaders to help them along their journey.

Employees from the Rio Claro, Brazil Composites plant earned the TPM Excellence award from the Japan Institute of Plant Maintenance after completing the second of two required assessments.

Members of the Taloja, India Composites plant's TPM team pose with their TPM trophy, held by the TPM event judge.

TALOJA, INDIA

Two Taloja, India, plant teams earned honors for their progress in TPM at the TPM Circle competition, which is organized by the Confederation of Indian Industry. This was Owens Corning's first time participating in the competition.

Taloja's Glass Reinforcement Solutions team won first prize for its work on the focused improvement pillar. The team shared how it implemented best practices learned from other plants to drive improvements, with a focus on understanding, documenting, and analyzing losses. The Technical Fabrics team earned second prize for the environment, health, and safety pillar based on its approach to safety improvements made on machines and the plant floor.

WORLD-CLASS SUSTAINABILITY

LIVING SAFELY
HEALTHY LIVING
HUMAN RIGHTS
COMMUNITY IMPACT
CLIMATE CHANGE
ENERGY
EMISSIONS
WATER
WASTE
PROTECTING BIODIVERSITY
ENVIRONMENTAL CONTROL

- **World-class sustainability creates a caring culture of safe work and healthy living for our people, supports human rights around the world, protects the environment, and positively impacts our communities in so many ways.** We challenge ourselves to make greater progress faster in all these areas, and aspire to be a net-positive company – a company whose handprint, or the positive impacts of its people and products, far outweighs its footprint, or the negative impacts.

PHOTO CREDIT:
Matthew Lustig | Irving, Texas, U.S.
Lilac-breasted Roller

Katarzyna Kasprzyk-Śmiłowska (Trzemeszno, Poland, stone wool insulation plant) demonstrates the safety mindset.

Owens Corning's Goal:

Our safety aspiration is to have a workplace that is free from any injury or illness with our highest focus being on the prevention of Serious Injuries and Fatalities (SIF), which we have defined as injuries that are permanently life-altering or life-threatening. We have started to deploy metrics to measure our progress on eliminating SIF, but continue to utilize recordable injury rate (RIR) to monitor year-over-year improvement. RIR is a ratio of injuries to employee hours worked. Ultimately, what matters is that we are continuously striving to build a workplace that is safe and free of hazardous conditions.+

Our Living Safely efforts align with the following UN SDG:

The social data in this chapter marked with a + sign were independently assured to a moderate level by SCS Global Services. For more information or to see the verification statement, please go to page 178 in the About the Report section.

LIVING SAFELY

Living Safely is one of Owens Corning's six company values. We believe all accidents are preventable, so safety is always our top priority. We are unconditionally committed to the health and safety of our employees, and we work to hold our contractors to the same high standards. Safety isn't simply a workplace initiative for us; it is part of our culture of truly caring about our employees and their families. We encourage our employees to carry the health and safety knowledge they gain at work into their personal lives, to include employees' families, homes, and communities.

Strategy and Approach

Our safety culture is one of the most direct expressions of how we care for the people of Owens Corning. We believe that our unconditional commitment to safety contributes to employees' quality of life, and that we all share the responsibility to help each other stay safe.

We engage all our employees, through multiple approaches, to promote a healthy and safe workplace. Together, we work on identifying hazards and reducing the risk of injury by eliminating or controlling those hazards. We also thoroughly investigate all incidents and share learnings across our company. Employees engage through safety committees, mandatory safety training, specialized hazard recognition and control programs, behavior-based safety processes, and an operational focus on total productive maintenance (TPM) to keep our operations running safely and smoothly. We continuously work to ensure company-wide compliance with all applicable environmental, safety, health, and sustainability requirements. For more information on TPM, see page 75.

Living Safely

In terms of how we engage employees in our occupational health and safety management system, the specific language and scope of our labor agreements vary from site to site; however, all are structured to recognize the importance jointly placed on the commitment to health and safety as a guiding principle and core value of both Owens Corning and our workers. In all our facilities, employees are trained to understand, appreciate, and mitigate risk in the interest of their own safety and health, the safety and health of those around them, and of the organization overall.

Our shared commitment can be seen in the many health- and safety-related processes and procedures active within Owens Corning facilities, the caring demonstrated across all levels of the organization, and the world-class safety results produced by the collaborative efforts of our people.

Our collective bargaining agreements contain all the provisions noted above at the local level, as well as procedures for resolving issues affecting a safe workplace.

Safety Techniques and Controls

We strive to reduce the number and severity of incidents by implementing specific initiatives and techniques at the corporate and facility levels. This includes developing tangible measures for each environmental, health, and safety (EHS) initiative. In 2018, our facility teams identified and addressed a variety of risks and hazards through "hazard hunts" and employee safety committee assessments. Our standard protocol is to immediately address these incidents and hazards as well as those identified through corporate-level assessments and third-party, assessments such as OSHA Voluntary Protection Programs audits.

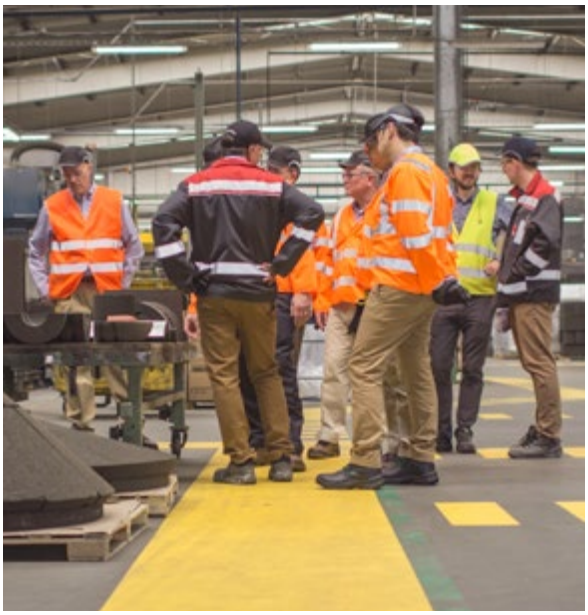
We also apply various corporate standards to reduce injury risk across the organization. Personal protective equipment (PPE) is provided to all impacted workers, and PPE requirements are clearly posted in work areas. Employee health and safety committees, training programs, and risk assessment and control procedures all play key roles in achieving safety. Regular inspections of equipment also help ensure safety. We continuously apply lessons learned from individual incidents to reduce the risk of repeat occurrences. In addition, we work closely with trusted vendors, safety suppliers, and other third parties that provide us with PPE, training support, information on best practices, and a platform for advancing operational safety globally.

Employee Health and Safety Committees

Each facility has a variety of EHS initiatives underway at all times and employees, both union and non-union, are encouraged to participate in them, along with management. These initiatives include:

- Oversight safety committees;
- Behavior-based safety observation teams;
- Hazard recognition teams;
- "Serious Injury and Fatality/Critical Six" program teams;
- Human performance improvement teams;
- Green teams (environmental); and
- Employee wellness teams.

For more information on the "SIF/Critical Six" programs, see page 81.



Employees visit the Klášterec, Czech Republic facility.

Living Safely

Employee Training

All Owens Corning facilities regularly conduct several types of EHS training and develop an annual training matrix. Through our global corporate intranet, our facilities use a common web-based training platform for standard training modules, which are supplemented by site-specific education. This system is fully integrated with our talent management system and provides the ability to customize learning plans for individuals. All the training is competency-based.

Safety training begins with new-hire orientation and continues throughout an employee's tenure with activities such as daily safety huddles, scheduled monthly sessions, and annual refresher courses. Significant health and safety procedures are provided in local languages when needed. For major programs, training is designed and deployed by corporate-level safety leadership with support and input from plant and other relevant personnel. We also work with business partners to provide specialized training, such as driver safety for our sales team and PPE support for our facilities.

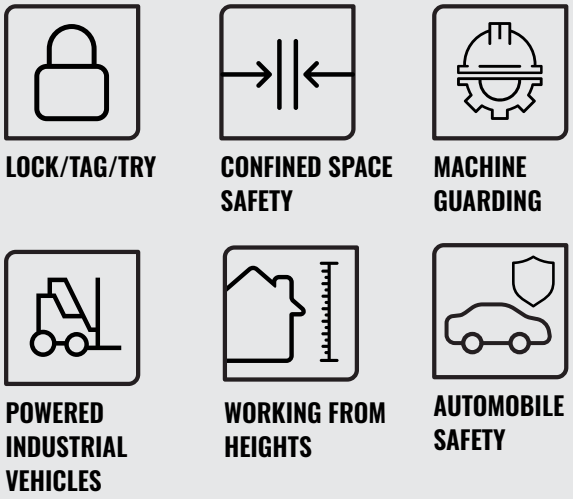
For our global EHS professionals involved in our safety programs, we provide advanced safety training. Our EHS Skill Building LiveMeeting events are one-hour sessions that allow our EHS leaders to gain additional, practical, state-of-the-art knowledge on specific topics.

In addition, we offer EHS training sessions at our science and technology center in Granville, Ohio, and at other facilities worldwide. Participants receive in-depth training on diverse topics, including the "Critical Six," proper fall-protection strategies, ergonomics, human performance improvement, and incident investigation. Additionally, we host periodic meetings with our EHS leaders to review our EHS strategies, share best practices, and receive technical training.

We are particularly proud of our two certification-based training programs: TPM (described earlier in this report) and Hazard Recognition Control (HRC). Under our HRC program, employees learn what we define as "acceptable" risk (based on leading indicator metrics), plus specific techniques to identify hazards, quantify risk, and develop effective corrective actions to minimize or eliminate

Preventing Serious Injuries and Fatalities

In 2018, we continued to implement our program focused on reducing the risk of serious injuries and fatalities (SIF) within our operations, primarily associated with non-routine tasks and maintenance activities by employees and contractors. Included in these efforts were enhanced procedures to address our risk-based "Critical Six" safety programs:



We continue to use what we learn from previous incidents. We are also pursuing promising technology that can be integrated into new processes and equipment, as well as retrofitted into existing equipment, with the ultimate goal of "SIF-proofing" our operations. For example, we recently instituted a new, more stringent machine guarding standard.

Living Safely

Prith Gandhi (Toledo, Ohio) and Paul Wei (Shanghai, China) tour a facility.

hazards. In 2017, we expanded the reach of our new HRC Version 2.0, raising the bar on safety training. To date almost 1,200 employees globally have achieved HRC certification.

We hold our contractors to the same high standards and monitoring as we do our own employees. We expect contractors to conduct appropriate safety training for their employees. Contractors also attend Owens Corning safety training. We conduct behavior-based observations, walk-through inspections, and audits to ensure that contractors maintain the health and safety of our workplace.

We have mature and consistent processes for prequalifying and measuring contractor performance associated with large-scale projects within our facilities, and for contractors that we directly manage. However, in 2018, we identified some gaps and inconsistencies in our contractor processes for smaller projects or ongoing maintenance of our facilities. During the year, a cross-functional team assessed various methods for prequalifying all contractors that perform work at our sites, other than low-risk activities, and proposed a new process for managing contractors that will be deployed globally in 2019 and 2020.

Health and Safety Risk Assessment and Controls

Owens Corning has developed and implemented systems to ensure that potential occupational exposure is recognized, understood, and effectively mitigated in our global operations. Programmatically, this is achieved via a comprehensive and rigorous focus on exposure control and a classic approach to employee health screening, where appropriate. As a result, there are no worker groups with a high incidence of occupational disease.

We also work to understand and control exposure to hazards that might cause injury, including stress and noise. Safety procedures are in place for specific hazards, including handling chemicals or hazardous substances. We use a risk ranking system based on the frequency of exposure, how severe an injury could be, how likely an incident is to happen, and the level of controls currently being utilized. This risk ranking system is used to prioritize projects, identify resource requirements, and allocate working capital across the corporation. This system is also used to measure risk reduction at the plant, business unit, and corporate levels, which enables us to hold leaders accountable for reduction targets and to obtain the most risk reduction benefits for the resources allocated.

Risk identification is an ongoing process that includes:

- Completing a detailed risk assessment of each task prior to starting it, or high-risk conditions within the facility;
- Conducting a root cause investigation if incidents do occur;
- Developing corrective actions to prevent recurrence of incidents; and
- Sharing learning across the site and between sites, as appropriate.

Each site develops action plans to eliminate or reduce its top risks. Internal teams conduct site assessments that contribute to the enterprise risk management assessments that are completed for the audit committee and the board of directors.

Living Safely

Business unit managers regularly discuss work-related risks. These discussions are then shared among our EHS departments, the executive management team, and the board of directors on a quarterly basis, resulting in additional action plans for the entire organization. We strive to continually improve our safety model by conducting these quarterly formal business unit reviews, which then roll up into a continuous improvement program.

Our regional leaders conduct periodic plant inspections as well as provide support and growth opportunities to each of their plants. In some cases, regional leaders cross divisional lines to help eliminate hazards. Owens Corning also operates a corporate EHS assessment department, which thoroughly reviews EHS processes at every site at least once every three to four years.

When required by our customers, we also obtain third-party safety certifications, which covers approximately 43% of our employees. Our global safety and environmental organization verifies and documents the status of management systems during scheduled audits. After assessments are completed, we obtain a published report. All items identified for improvement in the report are incorporated into the facility improvement plan. Critical items are called out and directed to the vice presidents of operations, sustainability, and EHS for further action.

When employees are assigned to work at facilities not controlled by Owens Corning, these employees assess the risk of their tasks and in the general work environment. If the level of risk is not acceptable, they will discontinue their activities until risk-mitigating actions are completed by the owner of the facility where they are located. If necessary, our EHS personnel visit these facilities to assist with risk assessment and help develop risk mitigation strategies in partnership with the site owners.

RISK ASSESSMENT ACTIVITIES

Thoroughly investigating, reporting, and tracking all incidents helps us improve our safety performance. We consolidate all recordable injuries, first-aid treatments, and significant near-miss events at the corporate level, and then analyze the data with respect to incident characteristics and trends.

OWENS CORNING'S RISK ASSESSMENT STRATEGY IS DATA-DRIVEN

Risk assessment	Tracking incident history
Facility and site risk assessment	Reviewing risk-related data

Enabling root cause analysis and corrective actions

The data are collected and analyzed each month against our leading indicator metrics, which fall into one of four functional areas:

- Human Resources
- Operations
- Maintenance
- Safety

The respective functional leaders at each plant are responsible for populating the data and documenting their action plans for any elevated levels of risk identified. Plant leaders own the execution of this process and ensure its accurate completion each month, as well as the implementation of appropriate actions to reduce risk. The monthly data collection and analysis give local leadership visibility into the changing level of risk and the opportunity to intervene and reduce that risk before an incident occurs. Based on what we learn, we regularly review and update the metrics and scoring system.

2018 Safety Performance Summary

In June 2018, a fatal accident at an Owens Corning facility in India took the life of a worker. We are deeply saddened by this accident, and our sympathy and support are with the family and friends of the fallen worker. This fatality underscores the critical importance of our safety commitment and is a stark reminder that our work is never done. It reaffirms the need for our targeted efforts,

Living Safely

initiated in 2017, to identify hazards and eliminate risks that can lead to serious injuries. Going beyond the traditional emphasis on reducing recordable injuries is key to our continued march to zero injuries.

After an extensive investigation, Owens Corning implemented additional measures at the facility, which the company acquired in 2016, and at other locations that were able to enhance their efforts to prevent accidents before they happen.

Our total recordable incident rate (RIR) in 2018 was 0.52 (number of injuries X 200,000 / total man-hours). This was a slight increase from the previous year, which we attribute mostly to continuing to emphasize reporting any and all incidents and the impact of adding sites through acquisitions that have higher rates of injuries than our legacy sites. We are pleased to note, however, that the severity of our incidents declined – as measured by our lost-time injury frequency rate (LTIFR) to 1.25 (lost workday cases X 1,000,000 / total man-hours), which we attribute to the positive impact of our SIF/Critical Six programs. It also reflects the safety performance progress we made at the previous InterWrap and Pittsburgh Corning locations, which we acquired in 2016 and 2017, respectively. Fifty-two percent of our global facilities were injury-free in 2018.

All incidents, including recordable injuries, first-aid treatments, and near-miss events, are subject to a detailed root cause analysis in consultation with an occupational health and safety specialist, and the "lessons learned" are shared throughout the organization. The affected employee is encouraged to participate in both the incident investigation and the review process. As a company, we have developed an objective to deliver all projects with zero incidents. We strive for consistent reporting across all facilities to highlight lessons learned from every incident.

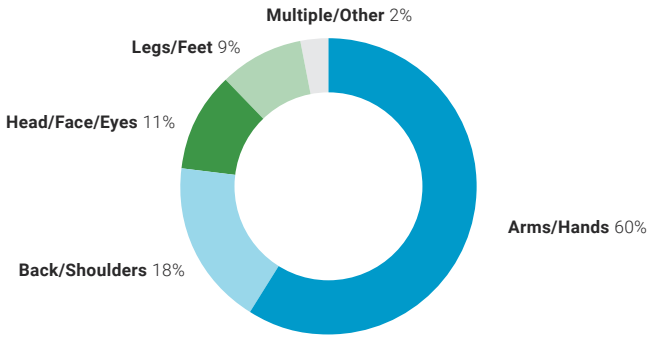
Addressing Employee and Contractor Safety in India

Contractor safety has always been a priority for Owens Corning. We started 2018 with a clear focus on identifying our best practices in this area and working to standardize them across our global network, which has grown significantly in recent years due to acquisitions. The tragic accident in which one worker died at our Dapada, India, facility in June 2018 added to the urgency.

The investigation of the accident led to additional measures at the facility, including instituting more rigorous screening processes for suppliers of temporary employees; enhancing the training and visibility of supervisors who work with contractors; bringing in key employees from other Owens Corning facilities in the region; and assigning experienced safety marshals to help monitor safety at the Dapada facility.

About 25 key employees came from our facility in Taloja, India, which has a strong safety culture. Those employees were in Dapada until we were able to assign approximately 20 safety marshals, Owens Corning specialists responsible for safety training and enforcement. We implemented these actions as soon as possible, while the facility – and its operations leaders, EHS team, and employees, with support from regional and corporate resources – focused on the longer-term work of enhancing Dapada's safety culture.

2018 Recordable Injuries by Type+



Please see About the Report for the definition of worker and Appendix B for additional safety data

Living Safely

Our overall contractor safety performance improved significantly from 2017 to 2018. Our contractors' RIR was 0.35, a 61% improvement compared with 2017, and our contractors' LTIFR was 0.87, a 42% improvement over the previous year+. In response to the fatality, and in the spirit of continuous improvement, we have been implementing a comprehensive global project to address contractor safety and contractor management in a systematic, risk-driven manner. It involves enhanced documentation of contractor-management programs (especially for recently acquired facilities), more rigorous contractor screening processes, and additional training for our supervisors who interact with contractors.

ALIGNING WITH LEADING SAFETY ORGANIZATIONS

Owens Corning has been an active member of the National Safety Council (NSC) since 1943, and we are a charter member of the Campbell Institute, which is the Center of Excellence for NSC. Multiple representatives of our company serve on steering teams, working groups, and advisory committees. In addition, we are active with the American Society of Safety Professionals, the Voluntary Protection Programs Participants' Association (VPPPA), and other organizations that promote safety solutions.

By partnering with these and other leadership organizations, we can develop and promote safety solutions and learn from best practices across other leading companies. As an example of our work to promote safety solutions, numerous Owens Corning employees in the past year have made presentations at NSC, Campbell Institute conferences, and other events on our leading work and research around fatigue management, along with our innovative use of "big data" tools to identify potential causes of SIF. Some of this work has been published as best practices in leading professional journals and technical white papers.

PHOTO CREDIT:
Jim Hill | Denver, Colorado, U.S.

Employees from the Denver Roofing plant take a break during a Habitat for Humanity home repair event.

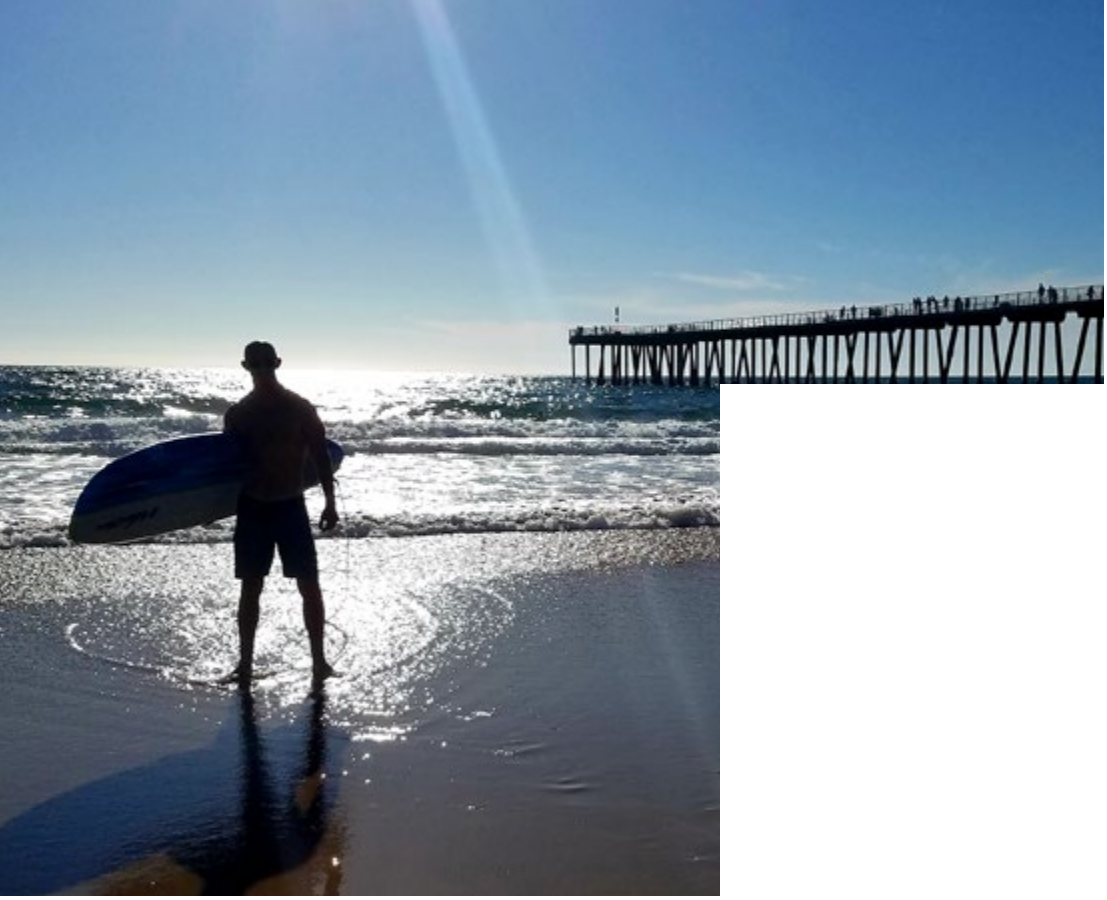


PHOTO CREDIT:
Lizzie Evard | Compton, California, U.S.
Hermosa Beach, California

Our Healthy Living efforts align with the following UN SDG:

World-Class Sustainability

HEALTHY LIVING

Our Healthy Living platform was formed with the aspiration to eliminate lifestyle-induced disease across the company. This company-wide priority is an extension of our commitment to safety and the care of our employees, knowing that good health and well-being lead to safety at work and to enjoying life with our families and friends.

Strategy and Approach

Our Healthy Living platform is a total employee well-being solution designed to drive sustainable, long-term change, improve the health and lives of employees, and strengthen the culture and work experience at our facilities throughout the world.

In the third year since the introduction of our Healthy Living platform, we made substantial, measurable progress, including training over 100 new wellness champions, creating new measurement metrics and dashboards, and making great strides in becoming tobacco-free across the company. Through these results, we know our efforts are making a positive difference.

Our efforts emanate from our caring culture. They are guided by a set of foundational pillars that empower our employees to take ownership of their wellness and set companywide aspirations for improved health.

Healthy Living

The Healthy Living platform is built on six pillars:

1. Know Your Numbers

We aspire to enable all Owens Corning employees and their families to obtain their age-appropriate preventive health screenings and immunizations annually and understand the health consequences related to their personal biometric health numbers.

We host biometric screening events at all U.S. sites, and several global locations, to help our employees and their spouses understand and pursue optimal health. We offer a wide array of preventive care screenings based on age, free of charge, to all employees and covered family members. We also maintain a partnership with healthcare provider ProMedica, which provides onsite care at our world headquarters in Toledo, Ohio, our science and technology center in Granville, Ohio, and our facility in Newark, Ohio. Through this partnership, employees are able to easily access care providers, establish a primary care physician, and schedule appropriate age-related services.

2. Healthy Mind

We aspire to help all Owens Corning employees enjoy meaningful work and life experiences in an environment that supports and inspires them. It's everybody's responsibility, especially our leaders, to foster a supportive and inspiring workplace.

Opportunities for professional learning, performance feedback, and career advancement are a few ways that leaders provide support. In addition, our employee assistance program (EAP) helps employees, dependents, and household members with challenges that could affect health, relationships, or job effectiveness and safety. Read more about this program in the sidebar on page 90.

Our fatigue risk team partnered with the National Safety Council and Campbell Institute in research on worker fatigue in 2018. The team made recommendations for both hours worked and consecutive days worked. An Owens Corning standard was then drafted and is now in review with operations and human resources leadership so that they may assist plants in effectively managing implementation.

In response to the U.S. opioid crisis, Owens Corning implemented a three-day limit on short-acting opioid prescriptions. Any pills dispensed beyond the three-day limit must be pre-authorized. This decision was informed by a report from the Centers for Disease Control and Prevention that addiction rates to a prescribed opioid can double after four to five days of continued use. Since implementing this policy in late 2017, we have seen positive results. We continue to listen to our employees for feedback and are closely engaged in addressing this health care problem.

40%

DROP IN OPIOID PILLS DISPENSED

85%

DROP IN PILLS DISPENSED ON PRESCRIPTIONS LONGER THAN THREE DAYS

6%

OF PRESCRIBERS ASKED FOR AUTHORIZATION BEYOND THE THREE-DAY INITIAL LIMIT

Healthy Living

3. Physical Activity

We aspire to support all Owens Corning employees and their families in being active and taking action to counter the negative health consequences of low physical activity and lack of movement on and off the job.

We educate our employees about the benefits of physical activity and give them access to tools, resources, and incentives that promote daily movement. Employees earn points for steps recorded through our Healthy Living mobile platform, and several facilities have their own fitness center, offer physical training sessions, and sponsor run/walk or other fitness challenges. The increased focus on Total Productive Maintenance and the launch of the environment, health, and safety (EHS) pillar have brought awareness to the importance of being actively ready for work. We are also developing a stretch and flex program to be implemented within our manufacturing locations to assist in decreasing musculoskeletal injuries and incidents.

4. Nutrition

We aspire to help all Owens Corning employees and their families eliminate key health risks that result from poor nutritional education and unhealthy food choices.

We provide education to employees about nutrition-related health risks and make healthy food options readily available. A significant number of our U.S. locations now offer fresh fruit and vegetables weekly to all employees free of charge, with many locations changing out vending machines for open kiosk markets that provide fresh, healthy meals and snacks. Read more about our efforts to improve nutrition in the sidebar on page 89.

5. Tobacco-Free

We aspire to be a company that helps our employees and their families lead tobacco-free lives.

Thanks to the many resources available, including onsite group coaching, small group discussions, nicotine replacement therapy, and medications, we have made significant progress toward our goal of being 100% tobacco-free. In 2018, our U.S. legacy facilities became 100% tobacco-free, and our international legacy facilities did so in early 2019. We are committed to bringing our newly acquired facilities on the same journey. Paroc, a producer of mineral wool insulation in Europe, has already committed to being 100% tobacco-free. Our other recent acquisitions, both in the U.S. and internationally, have all pledged to be tobacco-free by the start of 2020. We look forward to assisting these new Owens Corning employees in achieving a better quality of life through tobacco cessation.

6%

IMPROVEMENT ATTAINED OVER A FIVE-YEAR PERIOD OF NON-TOBACCO USERS WITHIN THE U.S.

Stepping Up to the Challenge

Owens Corning employees logged 645 million steps globally during our Walk the Wonders challenge in October 2018. That's enough to get from earth to the moon. Nearly 2,500 employees participated, of which 65% averaged 7,000 steps or more per day of the challenge. The challenge pitted employees from around the globe in a virtual race to some of the world's most exotic locations. Step totals were then tallied and prizes awarded across several categories, including regional teams, offices, and individuals.

"I was so impressed with the number of employees who laced up their tennis shoes and competed in the challenge," said Laura Higginbotham, health and productivity leader. "We increased the number of participants from last year's Healthy Living walking challenge and accumulated enough steps to walk the Seven Wonders of the World multiple times."

Healthy Living

6. Financial Health

We aspire to help our employees confidently manage their financial lives today, while preparing for the future and dealing with the unexpected.

We seek to raise awareness of company financial benefits available to our employees. This includes planning tools and resources such as financial and legal counseling through Beacon Health Options, retirement counseling through Fidelity Investments, and the implementation of several test-and-learns with banking partners in our plant communities.

MANAGING AND EXPANDING OUR HEALTHY LIVING PLATFORM

Aspiration teams, which include leaders from business and corporate function groups around the globe, support each pillar, while local Healthy Living champions and teams at each of our facilities help to drive impact. Each site has adopted its own Healthy Living charter that lays out its own goals and aspirations. In addition, we have regional leadership councils that direct the execution of our global wellness strategy in each region. The councils guide the aspiration and local wellness teams in prioritizing and integrating solutions across each pillar, and ensuring proper resources for success. As a result, implementation of our Healthy Living platform is locally driven, with broad corporate support and strategic oversight at many levels.

Beginning in 2017, we rolled out training for local wellness teams and Healthy Living champions in the U.S., Canada, and Latin America through a third-party provider, OWLS (Organizational Wellness Learning Systems). The training helps better equip wellness leaders to support our wellness programs. In 2018, we continued new champion training with the support of OWLS, as well as provided a training refresh for existing champions led by our internal wellness experts.

Our Healthy Living program started in the U.S., but we have also increased engagement internationally, particularly at facilities in Latin America, Europe, and Asia Pacific. All three regions created systems parallel to those we have in the U.S. to drive achievement in the six pillars.

James Chrabaszcz and Garry Delgado harvest the vegetable garden at the Delmar, New York plant.

Reaping the Benefits of Employee Gardens

Many of our locations continue to work on specific wellness programs and goals for their employees. Both our Delmar and Granville sites have placed a focus on nutrition by planting their own vegetable gardens. The gardens are 100% maintained by the employees with the fresh produce grown onsite given to employees or local food pantries.

In addition to fulfilling the Nutrition pillar, employees are reaping other benefits from the gardens. Employees connect with fellow team members and find peacefulness while also enjoying the physical activity, which aligns with our Healthy Mind and Physical Activity pillars.

At the end of 2017, four international sites launched Healthy Living mobile app pilot programs. Our Asia Pacific pilot location reached 82% enrollment, while our European and Canadian pilot locations reached 47% enrollment.

We will continue to develop our strategy for a full-scale international rollout beginning in 2020. Around the world, our global facilities will seek to achieve the same successes we've seen in the U.S., while also taking into account cultural considerations. Operations vice presidents in the regions will lead the efforts, with broad cross-functional corporate support, per our Healthy Living governance model.

Healthy Living

Healthy Living Tools and Metrics

Each year, we continue to refine and increase our foundational approaches to improving the lives of our employees by proactively implementing new tools. In 2018, we placed particular focus on measurement and accountability.

To facilitate a culture of well-being, we continued to expand the reach and impact of the Healthy Living mobile app. Originally launched in 2017, the mobile app links thousands of our employees to our wellness resources. Employees can track progress and receive daily reminders about fitness goals. We also provide incentives for enrollment in our Healthy Living mobile app, plus cash and other rewards based on daily engagement for actions such as recorded steps, hours of sleep, and healthy eating habits. One of the more popular financial incentives allows for contributions to be made directly to employee HSA accounts in the U.S. By adopting these and other incentives, we have also visibly tied our Healthy Living platform to our employee health benefits program.

Support through the Employee Assistance Program

Balancing the demands of a fulfilling career and personal life can be challenging. To help our employees be better both at work and at home, we offer broad, comprehensive counseling through the employee assistance program (EAP). We partner with a third party to provide professional and confidential counseling sessions to our employees free of charge for up to six visits. Counseling can be conducted either face-to-face or through telephone sessions and covers a range of topics, including:

- **Traditional counseling services** for issues such as stress management, depression, grief, or addiction;
- **Work/life integration challenges,** including child and elder care, home repair, or adoption;
- **Financial and legal advice,** such as college funding, creating wills and trusts, and credit score management; and
- **Tobacco cessation,** which provides employees with tools, support, and motivation to quit smoking.

From left, John Goodman, Bobby McGee, Jeff Victor, and Mark Crawmer, from the Newark, Ohio Insulation plant. The wellness team at Newark created a one-mile walking trail that includes stops representing each Healthy Living pillar.

Making Health Everyone's Business

Owens Corning became a member of the Health is Everyone's Business Action Platform of the UN Global Compact in 2018. The ambition of the Action Platform is to make health everyone's business, where SDG #3 is a corporate goal and leadership aspiration among businesses across all sectors. Owens Corning provided best practice information on our Healthy Living platform and was interviewed by Duke University researchers, who gathered and analyzed the state of corporate actions for wellness and well-being. We also introduced the SHINE organization to the ongoing work of the Action Platform. The Action Platform is working toward providing a guide for corporations to use to approach health as an integrated part of their business goals and to go beyond immediate occupational health actions to meet the goals of SDG #3.

Healthy Living

We report our Healthy Living critical metrics across three tiers: Activity-Based, Health Risk, and Disease-Related.

- **Tier 1: Activity-Based Metrics** act as leading indicators for tracking program success. Our key Tier 1 metrics include: percentage of employees enrolled in the Healthy Living mobile platform, percentage of employees who are engaged or highly engaged, percentage of employees completing their annual health risk assessments and biometric screenings, heart age survey completion, and the average number of steps taken at each facility per employee every week.
- **Tier 2: Health Risk Metrics** look at health risk factors and primary preventive measures such as immunizations and age-appropriate screening tests. Our key Tier 2 metrics include: percentage of employees with appropriate BMI indices, percentage of employees with normal blood pressure and cholesterol, percentage of employees receiving appropriate cancer screenings for age and gender, and the percentage of employees receiving their key, age-appropriate immunizations.
- **Tier 3: Disease-Related Metrics** track actual disease and illness statistics in the aggregate within our program population. Relevant lifestyle-related morbidities include: diabetes, atherosclerotic coronary vascular disease (ASCVD), high blood pressure, and certain cancers. These are longer-term program metrics, and we will define program success over months to years. If we are having success in Tier 1 and 2 metrics, our Tier 3 metrics should also improve in the months and years ahead.

In 2018, we refined our measurement tool to be housed in a central system and we can assist sites with gap closure due to enhanced reporting in each of the six pillars.

A high-level dashboard was created to house aggregated Tier 1 Activity-Based metrics. The dashboard is updated weekly and has been rolled out to all Owens Corning employees. Within the dashboard, we also capture tobacco use and critical metric gap closures. A separate dashboard will be finalized in 2019 and will report our Tier 2 Health Risk metrics. This aggregated data will be available to a limited group of health professionals.

OUR RESULTS

For over a decade, we have been collecting and assessing data with respect to links between objective measures of wellness program participation and objective measures of health. This allows us to gain further insight into the effectiveness of our program and in driving participation. The data show that higher levels of participation in Owens Corning's Healthy Living program are quantitatively linked to better health among employees. Additionally, we believe the data we are tracking is effective because better biometrics correlate strongly with better (lower) health risk scores.

Measuring Employee Well-being

In 2018, we surveyed our U.S. employees using the Worker Well-being Survey from the Harvard School of Public Health's Sustainability and Health Initiative for NetPositive Enterprise (SHINE) program. This survey, first administered in 2014 and again in 2018, provided data-driven insights into our employees' overall well-being. As a result of our ongoing healthy living initiatives, employees have reported the following improvements:

- Decrease in number of mental health days affecting work ability;
- Increase in percentage of employees reporting feeling healthy and with good energy 28 or more days out of 30; and
- Decrease in employees reporting that (sometimes or often) the demands of their job interfere with home life.

As in the 2014 survey, most employees again reported not getting at least 7 hours of sleep and fatigue still being a factor. We plan to roll out the results of the study in 2019, and work with our employees to explore which workplace resources contributed to changes, as well as identify areas for further improvement.

SUSTAINABILITY IN ACTION

Big Numbers. Smaller Waist Lines.

THE 2018 LIGHTEN UP! CHALLENGE

Surveys and data are great, but it's hard to overstate the feeling of health you get from pulling your belt a few notches tighter. This year, more than 3,200 employees in 77 locations across the globe engaged in our annual weight loss competition. In total, Owens Corning employees around the globe lost 12,000 pounds in just 14 weeks. Those participating in the program measured their body composition every two weeks for three months. Prize packages were awarded to the top three female and top three male employees.

David Joyce | Guelph Plant | Lost 100 Pounds

"I knew I could lose weight, I just couldn't get started. The Lighten Up! competition not only kick-started my weight loss, but also kept me going. I want to thank the rest of the Guelph Lighten Up! contestants for their encouragement and support. It really helped me keep going through those tough days."

Female employee | Tiffin Plant | Lost 30 Pounds

"With 12 wonderful grandkids and another one on the way, I knew I needed to lose weight. I want to be around a long time to see my grandchildren grow. Losing weight during the Lighten Up! challenge has given me a new life with my family."

Small Plants

WEIGHT LOSS

1. **Brentwood** 269 pounds
2. **Gresham** 185 pounds
3. **Concord** 180 pounds

FAT LOSS

1. **Brentwood** 84.2%
2. **Denver Roofing** 57%
3. **Gresham** 55.4%

Large Plants

WEIGHT LOSS

1. **Toledo** 828 pounds
2. **Newark** 685 pounds
3. **Waxahachie** 433 pounds

FAT LOSS

1. **Toledo** 208.8%
2. **Taloja** 143.3%
3. **Newark** 111%

12,000 POUNDS LOST

3,204 PARTICIPANTS

77 LOCATIONS

PHOTO CREDIT:
Gianfranco Romano | Besana, Italy

This cherry tree in the Besana countryside is more than 200 years old, and is included in the list of monumental trees in Italy.

Our Human Rights efforts align with the following UN SDGs:

HUMAN RIGHTS

Owens Corning has the privilege of working with people all over the world. We believe that this privilege comes with the responsibility to treat all people with dignity and respect and to protect their fundamental rights. We are committed to being a leader in setting and upholding the highest standards for safeguarding human rights.

Strategy and Approach

We strive to always conduct ourselves and our business in alignment with the Ten Principles of the United Nations Global Compact (UNGC), the Universal Declaration of Human Rights, the UN Guiding Principles, and the International Labor Organization's (ILO) Declaration on Fundamental Principles and Rights at Work. These are the foundation of our human rights commitments and approach.

Our strategy is intentionally broad and inclusive – both in the people we protect and in the ways we protect them. We respect the rights of people within and outside our organization: all employees (including full-time, part-time, temporary, and contractors) of Owens Corning; the entities we own; the entities in which we hold a majority interest, including joint ventures; the facilities we manage; our franchises; and branded operations.

Moreover, we work with our suppliers, customers, and other business partners to uphold our human rights principles. We expect them to adopt similar policies within their businesses and extend the same protections to their various stakeholders. We use our code of conduct and supplier code of conduct to review and evaluate our locations and acquisitions and guide our interactions with suppliers and other external groups.

Human Rights

Our many human rights commitments are detailed in our human rights policy and in several related policies and documents, as noted in this chapter. Our director of compliance is responsible for ensuring our human rights policy is followed by all employees.

In addition, our policy is based on the following definitions:

- Owens Corning defines "child labor" as work or service extracted from anyone under the age of 16, the minimum age for employment in that country, or the age for completing compulsory education in that country, whichever is higher.
- Owens Corning defines "forced labor" as any work or service not voluntarily performed and extracted from an individual under the menace of penalty or subject to unduly burdensome conditions such as, but not limited to, the surrender of government-issued identification, passports, or work permits, or any other limitations inhibiting the employee's free will with respect to work.
- Owens Corning defines "convict labor" as any labor performed by a legally convicted person on or outside of prison grounds.
- The definitions of "slave labor" and "bonded labor" as defined by Owens Corning are reflective of the Supplementary Convention on the Abolition of Slavery, the Slave Trade, and Institutions and Practices Similar to Slavery under Articles 1 and 7.

Human Rights Policy

The Owens Corning Human Rights Policy and our framework for compliance specify our commitments in these areas:

Non-Discrimination and Equal Opportunity: We provide employment and advancement opportunities to all individuals based on merit, qualifications, and abilities, and do not tolerate harassment or any acts of discrimination.

Forced Labor/Child Labor: We do not employ child labor in our operations. We also will not knowingly engage with a supplier or distributor or enter into a joint venture with an organization that directly or indirectly does.

Similarly, we do not use forced, slave, convict, or bonded labor in our operations, and we will not work with a supplier or distributor or undertake a joint venture with an organization that employs forced labor or people trafficked into employment. Where applicable, migrant workers will have the same entitlements as local employees.

We follow the U.S. Securities and Exchange Commission guidelines in disclosing any use of conflict minerals and in conducting reasonable country-of-origin inquiries as required by those guidelines. We also do not tolerate the use of raw materials that directly or indirectly contribute to armed conflict or human rights abuses in any of our products. We follow the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.

Indigenous Peoples'/Traditional/Land Rights: We subscribe to the principles of ILO Convention No. 169 on Indigenous and Tribal Peoples wherever our operations may impact the human rights of indigenous peoples. We have reviewed all new acquisitions, and this question is now part of our due diligence. There have been no issues involving the rights of indigenous people.

PHOTO CREDIT:
Chuck Oliver | Amarillo, Texas, U.S.

Pont de Guad, L'Ardoise, France
"I got the opportunity to go overseas for the first time in my life to help L'Ardoise bring up a new furnance. The people in the plant and outside on the street were all very kind, and patient, as we tried to communicate. I found we all laugh in the same language."

Human Rights

Freedom of Association/Collective Bargaining: We do not restrict workers' rights to exercise freedom of association or collective bargaining in any of our operations. Independent trade unions represent 65% of our employees, who are also covered by collective bargaining agreements. To support employees' right to exercise freedom of association and collective bargaining, as of the end of 2018, we had 18 consultations/ negotiations with trade unions concerning organizational changes, including restructuring and outsourcing. These principles are also extended to our suppliers through our supplier code of conduct.

Employment Standards, Compensation, and Working Conditions: We provide employees with compensation, benefits, and working-hour schedules in compliance with all applicable laws and collective agreements. We support mechanisms for employee grievances and resolution of disputes that protect the employee's privacy, allow for anonymous reporting, and protect the employee against retaliation.

Privacy: We comply fully with all applicable data privacy laws as regulated by the countries where we do business for the safety of our employees and stakeholders. We collect, process, and transfer personal data responsibly and in accordance with the principles and obligations set forth in our data privacy policy, unless it conflicts with stricter requirements of local law.

Safety, Health, Environmental, & Product Stewardship: We are committed to the principles of environmental sustainability, product stewardship, and the safety, health, and well-being of our employees and their families.

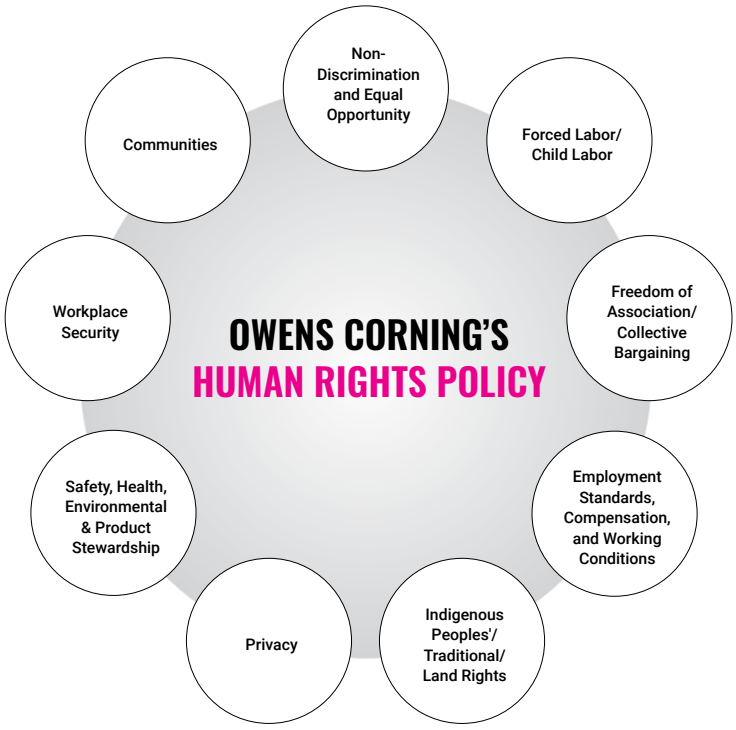
Workplace Security: We are dedicated to maintaining a workplace that is free from violence, harassment, intimidation, and other unsafe or disruptive conditions. Specifically, we define harassment as any conduct that threatens, intimidates, or coerces another person. Regardless of whether it is committed by a coworker, a manager, or even a non-employee, harassment will never be tolerated at Owens Corning. Employees at all our worldwide locations and at all levels have the responsibility to avoid any act or actions that suggest harassment in the workplace or in a work setting. This includes interactions with contractors, vendors, consultants, customers, and other non-employees, such as visitors, who are involved with Owens Corning.

Communities: We are committed to proactive, meaningful dialogue with stakeholders on human rights issues related to our business, and encouraging employee involvement with community organizations and foundations.

HUMAN RIGHTS ACCOUNTABILITY MODEL

In 2018, we developed a model to ensure accountability and thorough execution of our human rights policy. Each element of the policy is assigned to and managed by specific corporate functions within Owens Corning, including human resources, legal, operations leadership, corporate development, real estate, IT, sustainability, EHS, security, and community relations. This cross-functional approach allows for a more strategic, integrated focus that implements the spirit of our human rights policy, beyond compliance. In addition, our ownership model is responsible for training, continuous improvement processes, and annual reporting.

Human Rights Accountability Model



Human Rights

PHOTO CREDIT:
Ken Moseley | Toledo, Ohio, U.S.
Ken's wife, Teresa, with their grandson, Bryce

IMPLEMENTING OUR HUMAN RIGHTS FRAMEWORK

Owens Corning has a comprehensive compliance framework in place to support our human rights commitments. The compliance framework covers our human rights policy and several supporting policies and documents (together, "code of conduct and policies"):

- Owens Corning Code of Conduct
- Supplier Code of Conduct
- Statement on Slavery and Human Trafficking
- Equal Opportunity Policy
- Non-Harassment Policy
- Environmental, Health, Safety, and Product Stewardship Policy
- Data Privacy Policy (internal only)

TRAINING EMPLOYEES ON HUMAN RIGHTS

Our code of conduct and policies are extensions of our corporate values, which is why we expect 100% compliance, without exception. To support compliance, the code of conduct and policies are provided to all employees. The code of conduct is available in 16 languages through our internal network. We also expect all our facilities to display materials that highlight these human rights policies. In the case of acquisitions, the integration team will distribute physical copies of the code of conduct and policies to the new plant staff, as they do not have access to Owens Corning online systems immediately.

To ensure compliance, training is essential. All staff employees are enrolled in the code of conduct training course at hire and annually thereafter, are required to certify their compliance, and are given an opportunity to disclose nonconformance. Special attention is given to personnel in key groups such as environmental, safety, and security teams. In addition, managers are expected to lead by example and ensure that these policies are incorporated into the way employees interact each day with customers, colleagues, suppliers, and the public.

The following data reflect our investment in human rights training:

- 6,619 employees collectively received 4,400 hours of human rights training in 2018, which represents approximately 34% of our employees worldwide.
- 23% of security personnel, including those employed by third-party organizations, have received formal human rights training. New security standards were developed in 2018 that include reference to human rights issues.
- In 2018, we continued to train new acquisitions on our code of conduct and human rights requirements. Since March 2018, we have trained an additional 781 employees from new acquisitions in these areas.

Human Rights

SUSTAINABILITY IN ACTION

Enhancing Our Human Rights Focus

Owens Corning has deliberately enhanced our human rights protections during the past few years. In late 2016, we revised our human rights policy to be more inclusive, upgrading the content, as described in this report. Next, in 2017, we added human rights to our materiality matrix to reflect our ongoing efforts to align with the UNGC, to which Owens Corning is a signatory, and the UN Sustainable Development Goals. In 2018, we began implementing several companywide initiatives to support our expanded human rights commitments, with special focus on facility security and data privacy.

FACILITY SECURITY

Our approach to facility security has evolved over time, shifting from a "do's and don'ts" mentality to a people-centric perspective. Instead of focusing on how to protect our assets, we ask a different question: "How can we make our facilities safe for people, so that they can do their best work?"

In 2018, we operationalized this focus on personal security by developing revised security standards for all our facilities. The robust standards now provide a common statement of work for all security providers and required training programs regarding appropriate behavior and use of force. During 2018, we also rolled out compulsory training on workplace violence recognition and response in North America, which will be extended to our other locations in 2019.

We also transitioned our system for reporting incidents to an online platform, which makes it quicker and easier to share learnings. From 2017 to 2018, we saw a 150% increase in reports.

If an incident occurs at an individual facility, it becomes a point of engagement. Our security team assesses incidents and reaches out to the site to offer support. The team also analyzes the data from the incident for trends and areas of concern to inform future actions and share best practices with the business units.

Taking knowledge-sharing one step further, Owens Corning has started implementation of an integrated technology system across the enterprise. Transitioning a patchwork of security control systems to a single, enterprise-level access control management system will improve efficiency and our ability to ensure employees' safety.

DATA PRIVACY

We view data privacy as an element of personal safety and comply with global privacy laws. To help ensure personal safety, we are committed to collecting, processing, and transferring personal data in a trustworthy manner worldwide. This commitment extends to all Owens Corning employees and our stakeholders.

Owens Corning addresses data privacy by:

- Minimizing data collection;
- Protecting collected data;
- Limiting access to personal information to personnel that need it (our systems owners and data handlers);
- Providing system owners and data handlers with extensive training on the EU General Data Protection Regulation (GDPR); and
- Ensuring processes are in place to respond to personal data requests and to mitigate or address any privacy breach or other issues.

We also continuously strive to strengthen our data privacy program. In 2018, we worked on several fronts:

- We expanded the reach of GDPR safeguards;
- We raised data privacy awareness within our organization;
- We developed our own global data protection standard; and
- We adapted our IT systems and platforms to reflect a "privacy by design" perspective. When we acquire a company, we also assess that company's IT environment and technical security systems to ensure that, going forward, data collection and processing comply with Owens Corning's data protection policy.

In addition, in 2018, Owens Corning enhanced security measures designed to protect against the misappropriation or corruption of our systems, intentional or unintentional disclosure of confidential information, or disruption of our operations.

Human Rights

Upholding High Standards for Suppliers

We want to partner with businesses that share our commitment to human rights. We expect our suppliers, customers, and other businesses around the world to uphold the principles in our human rights policy and to adopt similar policies within their businesses and for their own business relationships with subcontractors and others.

For all entities that directly provide goods and/or services to Owens Corning, our supplier code of conduct holds them accountable to applicable laws and principles of ethical business. The code is explicitly consistent with our human rights policy and includes, for example, expectations related to human trafficking and the sourcing of conflict minerals.

Our sourcing and supply chain leaders are responsible for managing human rights issues among our suppliers. They use our supplier code of conduct as a reference point to select suppliers, measure their performance, train them, and assess risks. For more information on Supply Chain Sustainability, see page 68.

Reviewing and Assessing Impact

While we are confident in the components of our human rights policy and can point to facilities that we consider models of treating others with fairness and respect, we continue to look for ways to strengthen the implementation of our policy, verify compliance, and address gaps when needed.

Here are some highlights of our progress to date:

- We have revised our environment, health, and safety (EHS) audit processes to include on-the-ground visual observations for elements of our human rights policy. We began this on a trial basis during EHS audits that were already part of our process. When questions arise, we seek to resolve them immediately.
  - Nineteen sites were proactively assessed for human rights risks in 2018, which included sites representing all three Owens Corning business units, and production facilities in North America, Europe, and Asia Pacific. All 19 sites had some type of mitigation plan in safety and health. Findings are categorized by risk, and high-risk findings are tracked to completion in a corporate findings repository. All risk findings are required to be closed. There were no issues identified through the human rights audits in 2018.
- We identified country locations where risk of forced or compulsory labor is prevalent according to U.S. State Department and EIRIS data. Leveraging our supplier segmentation tool, we mapped both our top segmented suppliers and our own locations to identify the number of locations in higher-risk countries. This information provides a basis for continued monitoring for compliance both in evaluating supplier risk and within our own operations.
  - No cases of forced or compulsory labor were identified or reported in 2018. Also, no human rights risks were discovered that required remediation in 2018.
  - Due to the nature of the industry, we have canvassed our mineral mining suppliers to inquire about forced labor issues. No risk issues have come to light. This continues to be a question on annual surveys.
- As a company, we have identified women, LGBTQ, and minority populations as vulnerable groups and we have created affinity groups to address the specific risks and needs of these populations.
- We conduct annual human rights assessments via a survey for our key suppliers, which comprise 85% of our spending.
- Our human rights policy has become part of our due diligence for potential acquisitions, which are a key element of our growth strategy. This process involves reviewing labor and human rights policies and practices and assessing risks, including evaluating any potential impacts on vulnerable populations such as tribal lands/ indigenous people.

COMMUNITY IMPACT

PHOTO CREDIT:
Don Rettig | Toledo, Ohio, U.S.

Visiting Mumbai Mobile Crèches, a center for the children of migrant construction workers. The facility is located within walking distance of our HQ in Powai, India.

Owens Corning's Goals:

- Achieve 82% site participation in community service projects in 2018, with a long-term goal of 100% facility engagement by 2022+
- Annual increase in volunteer hours+

Our Community Impact efforts align with the following UN SDGs:

The social data in this chapter marked with a + sign were independently assured to a moderate level by SCS Global Services. For more information or to see the verification statement, please go to page 178 in the About the Report section.

Every year, Owens Corning strives to do more to enhance the quality of life in the communities where our employees live and work. Our extensive involvement in our communities is complemented by a high level of engagement by our employees. Through collective commitment and volunteerism, we are making a material difference for communities and people around the world.

Strategy and Approach

We structure our community initiatives around three key priorities, which are aligned with specific UN Sustainable Development Goals (SDGs) that relate to our global communities:

SHELTER AND SAFE, EFFICIENT HOUSING
IN LINE WITH SDG #11,
Sustainable Cities and Communities

BASIC HEALTH AND WELLNESS
IN LINE WITH SDG #3,
Good Health and Well-being
IN LINE WITH SDG #6,
Clean Water and Sanitation

EDUCATIONAL OPPORTUNITY
IN LINE WITH SDG #4,
Quality Education

Community Impact

PHOTO CREDIT:
Sabrina Weaver | Toledo, Ohio, U.S.
Women from World Headquarters participated in the 2018 National Women's Build Week.

Our strategy is designed to leverage our business expertise, capabilities, and financial resources of the Owens Corning Foundation and the corporate community affairs budget to maximize our positive impact in communities. Our focus on shelter and safe, efficient housing is a strategic fit with our business: As a leading global producer of residential and commercial building materials, we have the skills and opportunity to aid in providing safe and efficient housing and shelter for those who are unable to obtain housing through traditional methods. By combining our philanthropic activity and volunteerism with our ongoing efforts to develop cost-effective housing solutions, we expand access to safe housing and shelter for members of communities in need.

Along with providing shelter and housing assistance, we are also able to help people meet other fundamental needs in our most challenged communities. We are committed to using our capabilities and resources to support basic health and wellness and educational opportunities, to help people lead healthy and productive lives.

Our efforts to positively impact these communities align with key business drivers:

- Building a positive reputation within our communities – locally, regionally, and globally;
- Actively engaging and connecting with employees; and
- Enhancing relationships with key business stakeholders.

Our corporate citizenship activity is comprised of three key giving streams:

- Owens Corning Foundation community investments
- Corporate sponsorships/product donations
- Employee engagement

In relation to our growth strategy, we customarily begin community impact assessments and efforts at a site after its first full year with Owens Corning to ensure a seamless integration into our corporate citizenship program. Our 2018 acquisitions are not accounted for in our current community metrics.

Our corporate citizenship program is managed by the Owens Corning corporate affairs department. The director of community affairs/president of the Owens Corning Foundation reports to the vice president, corporate affairs with a dotted line to the chair of the Owens Corning Foundation board. The director is responsible for developing and implementing our companywide corporate citizenship strategy.

In addition to regular contact with the chief executive officer, the director of community affairs reports each year to the full executive committee or a member of the executive committee to ensure alignment and support of the approach to corporate citizenship and philanthropy.

Each year, the program is benchmarked against the Committee Encouraging Corporate Philanthropy's "Giving in Numbers" analysis of corporate giving and employee engagement data from the world's largest companies. Budgets and programs are then planned accordingly with a constant eye toward meeting our goal of 100% facility engagement by 2022.

Community Impact

Owens Corning Foundation Community Investments

Guided by our giving policy, the Owens Corning Foundation provides financial support through strategic partnerships with nonprofit organizations that align with our corporate citizenship strategy and key business drivers, as well as through our employee matching gift programs. In many instances, we develop these partnerships to address the findings from community needs assessments. We often work with nonprofit organizations to help us identify opportunities. Our partnerships frequently include financial donations – from the Owens Corning Foundation – and product donations and employee volunteerism.

For example, we have a current three-year partnership with Habitat for Humanity International, which supports neighborhood revitalization in Owens Corning communities across the U.S. and internationally. We donate building materials, provide financial support through the Owens Corning Foundation, and leverage employee volunteerism to provide safe and energy-efficient housing for those in need in our communities. In partnership with Habitat for Humanity, Owens Corning helped to complete 47 home builds or renovations in 2018 in the U.S., Canada, and China, which was a 68% increase over 2017.

United Way Worldwide is another key partner. Through this partnership, we have expanded our community investment in key locations beyond North America, to include China, India, and Mexico. Work in these countries is addressing the most basic needs in villages near Owens Corning facilities. Read more on pages 107-109, for examples of our community work in India, China, France, Italy, and Mexico.

Select Key Charitable Partners

Cantine Savoyarde Solidarite (France)

Cherry Street Mission (U.S.)

Concrete Preservation Institute (U.S.)

Escuela Hogar Perpetuo Socorro (Mexico)

Gary Sinise Foundation (U.S.)

Habitat for Humanity International (Global and Regional)

Mexican Red Cross (Mexico)

Mumbai Mobile Creches (India)

NetSpring Green IT (China)

Pack Shack (U.S.)

Toledo Public Schools (U.S.)

United Way Worldwide (Global and Regional)

World Vision (Global)

Danyelle Phelps (Granville, Ohio, Science & Technology Center) displays waste material donated to the Columbus Zoo in Ohio through Hose2Habitat.

Community Impact

SUSTAINABILITY IN ACTION

A Growing Partnership with the Gary Sinise Foundation

Owens Corning is excited about our partnership with the Gary Sinise Foundation, which supports U.S. defenders, veterans, first responders, and their loved ones. The Gary Sinise Foundation R.I.S.E. (restoring independence, supporting empowerment) program builds specially adapted homes for severely wounded U.S. military members and their families.

Owens Corning donates insulation and roofing products for homes built under the program and works with contractors who volunteer in the construction of these homes. Our commitment to supporting safe, efficient housing for people in need makes R.I.S.E. a perfect fit for Owens Corning. In helping our nation's veterans, we are also able to show the men and women in our manufacturing plants how the products they manufacture can make a profound difference in people's lives.

In 2018, four Owens Corning-sponsored R.I.S.E. homes were dedicated to their new owners. U.S. Army Capt. Nick Vogt was severely injured during his deployment to Afghanistan, and now lives with his wife and child in a new Owens Corning-sponsored R.I.S.E. home. The home was specially built so that Vogt can get around easily in his wheelchair – no stairs to navigate, extra wide halls and large rooms, plus smart controls for lights and heating.

Another Owens Corning-sponsored R.I.S.E. home was dedicated to U.S. Army Sgt. Eric Hunter, who was also injured during deployment to Afghanistan. He spent four years at Walter Reed National Military Medical Center, where he had 61 surgeries. He now lives in a custom R.I.S.E. home.

Employees from the Medina, Ohio Roofing plant, the Newark, Ohio Insulation plant, and World Headquarters in Toledo, Ohio celebrate the Vogts' new home.

U.S. Army Capt. Nick Vogt and his family pose in front of their new home, built with roofing and insulation donated by Owens Corning.

> "I'd like to thank everyone at Owens Corning for their support of the R.I.S.E. program. Through your generous partnership and support, the homes we build through R.I.S.E. will be protected by an Owens Corning roof and kept comfortable with Owens Corning insulation. To the team of Owens Corning roofing and insulation contractors that are volunteering their time to help us build these homes – you have my sincerest thanks and gratitude."
>
> — Gary Sinise

Community Impact

Corporate Sponsorships/Product Donations

As a global leader in building materials and composite solutions, we know the impact that donations of our materials can make in providing shelter and safe, efficient housing for those in need. Our donations of building materials fall in several key areas:

- Building and rehabilitation of safe, efficient housing;
- Neighborhood revitalization projects;
- Construction and support of shelters and community centers; and
- Disaster relief.

With the help of organizations such as Habitat for Humanity International and World Vision, our products are donated and put to good use. In 2018, Owens Corning donated enough material to re-roof more than 1,100 homes and insulate 142 homes.

In 2018, our company received World Vision's coveted Crystal Vision Award. The award honors a manufacturer that has supported the World Vision Storehouse program for at least five years. Storehouse distributes excess building materials inventory donated by manufacturers, retailers, and wholesalers to improve housing and community sites for low-income families. Since 2009, Owens Corning has donated enough product to insulate more than 11,000 homes for people in need.

Like many companies, Owens Corning is frequently approached with requests from charitable organizations. A great number of the requests for one-time gifts come from the Toledo, Ohio, community, the location of our world headquarters. As the sole *Fortune* 500 Company within the city of Toledo, we believe it is important to maintain a significant presence and will often sign on to be a corporate sponsor at events and fundraisers in the Toledo area. We also allow local charities to use our facilities, and we donate used office furniture and building materials to them. These donations are all provided directly from Owens Corning rather than through the Foundation.

Roofs and Insulation for Veterans

In 2016, Owens Corning initiated the Roof Deployment Project in partnership with our network of Platinum Preferred roofing contractors. Through this program, contractors are given the opportunity to volunteer services to a veteran in need, and Owens Corning donates the roofing materials. These veterans are identified through our charitable partners, primarily Habitat for Humanity. Through the program, 52 veterans in need received new roofs in 2018, a 53% increase compared with 2017. To date, 109 veterans have benefited from the program.

By adding the Gary Sinise Foundation as a charitable partner, Owens Corning was able to connect with another group of important contractors associated with our insulation business, Certified Energy Experts (CEE). CEE contractors volunteer their services to install insulation donated by Owens Corning in new accessible smart homes built for our nation's most severely wounded combat veterans. Four such homes were completed in 2018.

Employee Engagement

Our teams around the globe enjoy volunteering their time and talents to their local communities. The Owens Corning Foundation supports, encourages, and recognizes employee giving and volunteerism through a variety of programs, including:

- Matching gift programs that match employee charitable donations to educational institutions up to $2,500;
- Matching gift opportunities to provide assistance after natural disasters that affect Owens Corning communities;
- Global Volunteer of the Year Award program, which honors exceptional employee volunteerism;
- Enhancing Lives Grants, which give facilities in North America the opportunity to apply for grants for eligible community charities where employees volunteer; and
- Dependent Employee Scholarship Program, which assists children and legal dependents of Owens Corning employees who demonstrate scholastic aptitude and financial need.

Community Impact

In addition, we encourage employee engagement in other meaningful activities throughout the year, such as packing boxed meals or emergency kits.

We are proud of our employee volunteers, and we continue to strive to meet our aspirational goal of 100% facility engagement in community service projects by 2022. Our facility engagement was at 82% in 2018. Although the percentage is flat year-over-year, the number of our global locations grew by 9% over the previous year.

We also track employee engagement and connection with the company. In 2018, our people gave 27,305 hours of volunteer time at company-sponsored community events, representing a 7% increase from 2017. These hours equal $674,160 in monetary value, including paid and unpaid time. In response to a survey of approximately 900 employees, 95% said that it is important to them to work for a company that actively helps those in need in their communities. Of more than 700 volunteers surveyed after company-sponsored community events, 100% said that they would volunteer again.

Measuring Our Impact in Communities

We regularly measure the impact of our corporate citizenship program and verify its alignment with our key business drivers. This ensures that our work is both business-relevant and meaningful to local communities. We use several key metrics, including:

- Facility engagement in community service projects;
- Number of volunteer hours and other evidence of employee engagement with our company and local communities;
- Completion of contractor-related projects;
- Number of Habitat for Humanity builds in each community; and
- Number of homes that have been re-shingled or insulated through product donations or other work with strategic partners.

The measurable impacts of our strategic partnerships, product donations, and employee engagement are important evidence of how we make a difference in our communities. Beyond this, we recognize our businesses increasingly have other effects on the local economies we operate in, and we strive to ensure that all our economic impacts (direct and indirect) are in line with our broad sustainability goals. Through our wages, taxes, hiring, procurement, and financial contribution policies, we ensure that our global operations support communities and other stakeholders in positive ways.

In 2018, Owens Corning and the Owens Corning Foundation made cash contributions to nonprofit organizations that totaled more than $3.6 million and in-kind gifts totaling $2.1 million, which includes $1.6 million in product donations. In addition, through Owens Corning's annual giving campaign, our employees and vendors raised $1.2 million in 2018. All of this is accomplished with a management overhead of only $509,417, which includes costs for salaries and fringes, computer equipment, phone equipment, and travel to name a few+.

PHOTO CREDIT:
Kylie Jennings | Toledo, Ohio, U.S.

Members of employee affinity groups at the headquarters participate in a community outreach activity.

Community Impact

Community Impact by the Numbers

27,305

HOURS OF EMPLOYEE VOLUNTEERISM AT COMPANY-SPONSORED COMMUNITY EVENTS, A 7% INCREASE FROM 2017

>$3.6 MILLION

CASH CONTRIBUTIONS TO NONPROFIT ORGANIZATIONS FROM OWENS CORNING AND THE OWENS CORNING FOUNDATION

82%

WORLDWIDE OPERATIONS ENGAGED IN VOLUNTEER COMMUNITY PROJECTS

$1.2 MILLION

RAISED BY EMPLOYEES AND VENDORS IN ANNUAL GIVING CAMPAIGN

$1.6 MILLION

VALUE OF PRODUCT DONATIONS TO NONPROFIT ORGANIZATIONS

52

New roofs provided to veterans in need through the Roof Deployment Project

47

Home builds or renovations in the U.S., Canada, and China through Habitat for Humanity International

1,000

Children vaccinated in villages near Owens Corning facilities

2,700

Individuals provided basic health care

190,000

Meals packed by Owens Corning U.S. volunteers

4,000

Hygiene kits prepared

Community Impact

SUSTAINABILITY IN ACTION

Volunteer of the Year Awards

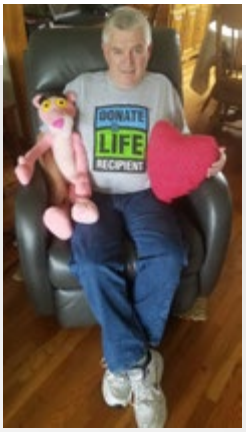
Each year, Owens Corning recognizes an employee, retiree, and team whose volunteer efforts are exemplary in terms of level of involvement and commitment, and the impact on the organizations they serve. These awards have been given annually since 1993, and winners are able to direct a $10,000 gift to the charity of their choice. In 2018, we were honored to recognize the following volunteers:

EMPLOYEE VOLUNTEER OF THE YEAR

Lauren Webber, tax analyst at our Toledo, Ohio, headquarters, offers tireless support to several organizations. In late 2017, she helped save Toledo Streets Newspaper (TSN), which helps homeless and low-income people get back on their feet by writing articles and selling papers. She stabilized TSN's finances and continues to ensure the organization complies with various reporting requirements. Lauren also is treasurer and vice president of a local cat shelter, where she oversees banking and payroll compliance, monthly reporting, and cash management. Plus, she regularly serves breakfast to the people in need who visit Cherry Street Mission Ministries, volunteers for Habitat for Humanity projects, and tutors weekly at a local school.

RETIREE VOLUNTEER OF THE YEAR

Dave Gray, who worked in the sourcing department at the Owens Corning Delmar, New York, plant for more than 37 years, is a devoted advocate for organ donations. Back in 2016, Dave received a heart transplant. Even before the transplant, and continuing now, he supports patients and families going through the transplant process. Six days each month, he volunteers at Westchester Medical Center, where his transplant took place. He also visits other hospitals, lobbies for funds to educate about organ donations, tells his story to local media, and volunteers with groups to raise awareness of the need for organ donors. Dave remains active with the Center for Donation and Transplant, Donate Life New York State, and the American Heart Association.



2018 Owens Corning Volunteer of the Year Award recipients

VOLUNTEER TEAM OF THE YEAR

Taloja plant employees were honored for their exceptional work in India. In partnership with United Way of Mumbai, the corporate social responsibility team helped meet basic hygiene needs and provide a safe learning environment for 90 students at Pethali School, a primary education government school. The team launched a fundraising campaign, which raised $5,800 in employee contributions, and used the money to repair the roof, paint, renovate the washroom, provide access to drinking water, add electricity, and buy sandals for students. Team members did all the renovation work, and continue to monitor ongoing maintenance at the school. Their work will help to prevent waterborne disease at the school and is expected to decrease the student dropout rate.

Community Impact

Giving and Volunteering Highlights Around the World

The following are examples of Owens Corning's 2018 community impact in North America, Europe, and Asia Pacific.

DENVER, COLORADO, U.S.

Our roofing and asphalt plants in the Denver area partner with Habitat for Humanity of Metro Denver for a neighborhood revitalization program focused on three neighborhoods – Elyria, Globeville, and Swansea – all of which are close to our manufacturing locations. Since the 2012 start date of the program, we have sponsored work on 12 homes, engaged more than 90 volunteers, and donated enough roofing material to re-shingle more than 20 homes.

MEXICO

We partner with the Mexican Red Cross to provide weekend health fairs in villages near our plants. At these events, disadvantaged residents have access to basic health services, such as eye exams, blood pressure monitoring, and AIDS awareness training. We also meet other basic needs by distributing blankets, walkers, wheelchairs, eyeglasses, and basic nutrition. In 2018, this work benefited 1,320 individuals. Our health fairs also afforded support for disaster recovery and rebuilding after a devastating earthquake in 2018.

In Mexico City, our facility has adopted a girls' orphanage located within walking distance of the plant. The girls and their teachers come to the Owens Corning campus regularly for sporting events, plays, lunch outings, and other fun activities. In 2018, the Owens Corning Foundation continued to provide financial support to improve the safety and infrastructure of the orphanage building and to cover the cost of a pediatrician, psychologist, and nutritionist. Through 2018, 47 girls ages 3 to 13 benefited from this volunteerism and financial support.

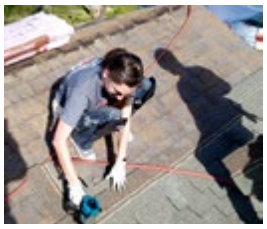
In 2018, construction was completed on a new school building for deaf children near our plant in Tlaxcala, with funding support from the Owens Corning Foundation. Word of the new building spread to neighboring villages, which has caused attendance to swell. The school now serves 40 deaf children who otherwise would attend a public school with little attention to their special needs.

INDIA

Owens Corning works with United Way Mumbai and Habitat for Humanity India to provide basic health services, clean water facilities, basic sanitation, and nutrition in villages and schools. In 2018, 205 students gained access to clean water in their school, and 250 village residents gained access to 50 new toilet facilities. In partnership with Habitat for Humanity India, we also provide communication and education regarding appropriate toilet use and good hygiene practices for these families. Our employee volunteers spearhead a lot of this work, which benefits the children of some of our own migrant workforce as well.

PHOTO CREDIT:
Lizzie Evard | Compton, California, U.S.

Harold Dimagiba (Compton Roofing plant) at a Habitat for Humanity build.



Lizzie Evard (Compton Roofing plant) helps install a new roof during a Habitat for Humanity build.

Community Impact

PHOTO CREDIT:
Don Rettig | Toledo, Ohio, U.S.

Visiting Mumbai Mobile Crèches, a center for the children of migrant construction workers. The facility is located within walking distance of our HQ in Powai, India.

In Powai, India, our support for Mumbai Mobile Creches also gives the young children of migrant construction workers exposure to early learning and a safe day care facility that they would otherwise lack. In 2018, Owens Corning's support and volunteerism brought 180 young migrant children basic health and nutrition services.

Also in 2018, an additional 90 migrant children began receiving assistance through non-formal education opportunities that help them build basic skills in reading and math. Regular home visits, interaction with parents, and educational counseling for children are special features of this program and help children learn at their own pace. More than 1,400 students were provided access to computers in the classroom, and 35 students were awarded scholarships to encourage families to keep them in school. We also built restrooms for schools where they did not previously exist, allowing girls to stay in school at the onset of puberty. In addition, volunteers from local Owens Corning facilities provided support to students in areas such as English lessons, mentoring, and safety awareness sessions.

Our focus on health and wellness in India also expanded in 2018. Approximately 2,700 individuals were provided basic health care, and 1,000 children were vaccinated in villages near Owens Corning facilities. In addition, 1,500 students participated in Owens Corning-sponsored sports events to promote health and wellness, and 250 attended programs promoting environmental and safety awareness. This work was supported by more than 700 employee volunteer hours.

We also continue to partner with local organizations to support skilled job training and other education. For example, under a program funded by Owens Corning in partnership with the Kohinoor Technical Institute in Taloja, India, 12 young women from local villages completed a six-month training course in computer applications in 2018. To date, four of those young women have gained employment through the program. This builds on the success we saw in 2017, in which 27 young men completed electrical vocational training.

CHINA

The Owens Corning Foundation invests in programs that improve education and youth development, enhance the living conditions of the impoverished aging and vulnerable families through home renovation, and provide support to children of migrant workers and poor families.

In partnership with Habitat for Humanity China, three home renovations in Shanghai and three in Guangzhou were completed with funds from the Owens Corning Foundation and 238 volunteer hours from employees. The Owens Corning Foundation, and employee volunteers, helped more than a dozen families with their urgent home needs in Guangdong Province, through the Habitat China Young Leaders Build program.

The Owens Corning Foundation and employee volunteers also continue to support Green IT Classroom programs in migrant schools near several of our plants in China. With the opening of a new Green IT Classroom in Xi'an, there are now five of these classrooms in Owens Corning communities, which benefit more than 2,400 students.

Community Impact

One of the significant obstacles encountered in 2017 and 2018 was the impact of new laws in China governing the activities of foreign NGOs. While the issue slowed the transfer of funds, our employees continued to volunteer and make a difference for people in need in their communities.

EUROPE

Based on the results of a community needs assessment completed in partnership with the King Baudouin Foundation in 2017, the Owens Corning Foundation provides funds to support various European communities. For example, in Chambéry, France, the Owens Corning Foundation partnered with Cantine Savoyarde Solidarité, an organization that provides meals for people in need. Our team of employee volunteers served meals, and funds from the Owens Corning Foundation purchased a new food delivery vehicle for the organization, helping to provide some 80,000 meals each year to community members in need.

A tiger puts donated waste material from an Owens Corning plant to use at Noah's Ark Animal Sanctuary in Georgia. (Photo courtesy of Noah's Ark)

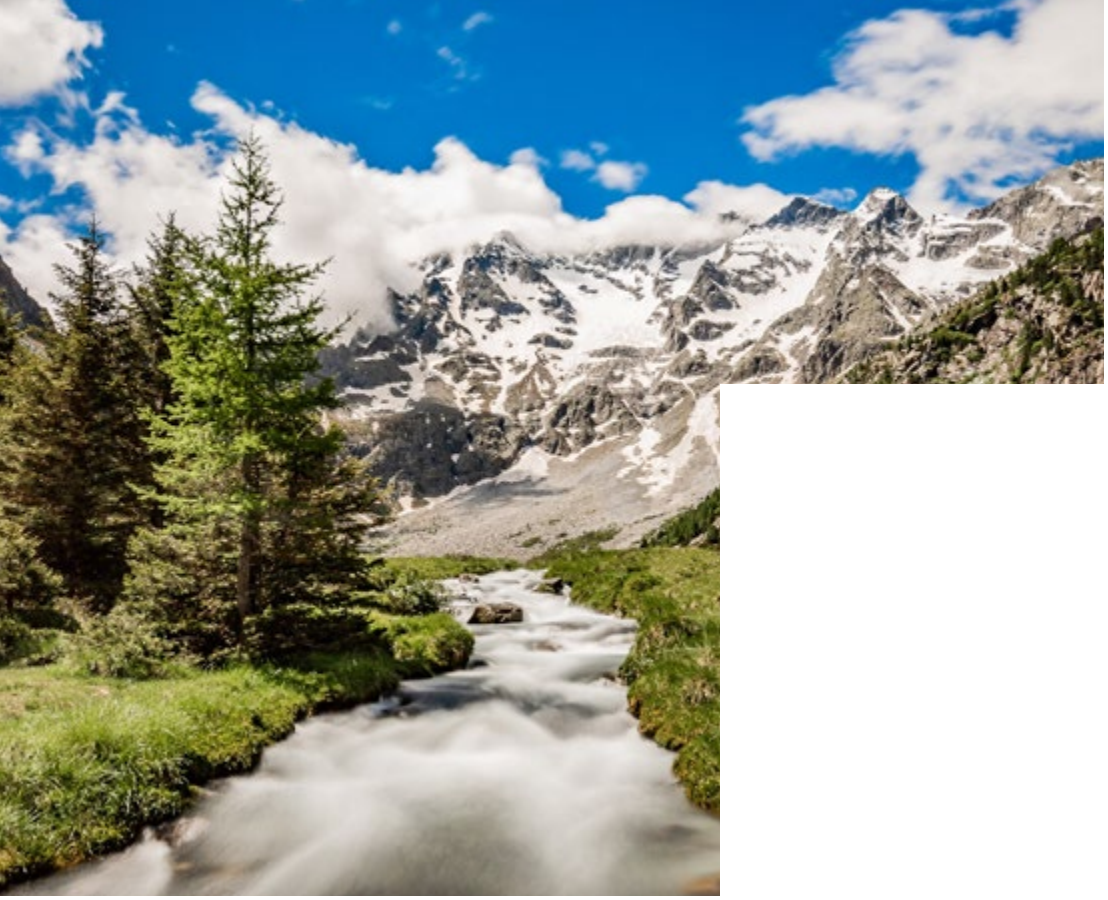


PHOTO CREDIT:
Alessio Frizziero | Besana, Italy

Water rushes near Lake Aviolo, almost 2,000 meters above sea level in Edolo, in the province of Brescia, in Lombardy.

Our Climate Change efforts align with the following UN SDG:

CLIMATE CHANGE

In line with the latest science, Owens Corning is committed to taking meaningful and ambitious action to fight the serious impacts of climate change. We are proud to be among those in the private sector dedicating time and resources to help lead the transformation to a low-carbon economy.

Strategy and Approach

In our Climate Change Statement, we acknowledge key conclusions about the impact of human activity on global climate change, the widespread support these findings have achieved among governments and businesses worldwide, and the related need to reduce energy use, water use, and greenhouse gas (GHG) emissions.

Our response to the global challenge of climate change is proactive and multifaceted. We are addressing it through:

- the products we offer;
- our continuous efforts to innovate and develop practical and affordable sustainability solutions;
- the management of our energy and environmental footprint; and
- our active participation in international and national programs for climate change policy and resolution.

Our products provide key solutions for climate change. Many of our products are deliberately designed to help increase energy efficiency and reduce GHG emissions. As we continuously develop new technologies and solutions to create energy-efficient buildings, we move building design and construction closer to the goal of achieving net-zero

Climate Change

energy. We aim to improve our products by considering the potential influence of climate change (increasing frequency and severity of storms, changing weather patterns, and the need to reduce energy use and related GHG emissions) in product development. For example, we have prioritized the development of roofing products with improved wind resistance and durability, to enhance building resilience and longevity in response to the changing environment.

Recognizing the vast scope of our operations and activities, we also dedicate substantial time and resources to managing our own climate change impacts. We include energy and climate change in our risk register and focus on accelerating energy efficiency improvements, deploying renewable energy, and reducing our overall energy use. In addition, we have committed to address risks of water shortages and perform life cycle assessments to continue to reduce our footprint and expand our handprint.

We continue to accelerate our shift toward renewable energy. We seek opportunities to expand our portfolio of renewable energy sources and have designated a cross-functional team of internal and external subject matter experts to evaluate all potential opportunities – including both onsite renewable programs and larger offsite installations.

Several aspects of our long-term sustainability strategy are also influenced by climate change. For example, we have moved from focusing on one to three years of power supply to planning for 15 to 20 years of access to renewable energy in a cost-effective manner. We include offsite renewable programs in our energy analysis and portfolio, and impending water shortages in water-stressed areas are now part of our evaluation of suppliers and customers. In addition, our research and development portfolio is guided by our sustainability mapping tool and our focus on ultimately becoming a net positive company with regard to carbon.

Our company also focuses on reducing GHG emissions related to our operations and activities. In recent years, our GHG reduction goal (see Emissions) has been informed by science-based methodologies that are designed to reduce carbon emissions to limit global warming to less than 2° C above pre-industrial levels, consistent with our commitment to the Paris Agreement of 2015. In 2018, an Intergovernmental Panel on Climate Change issued a follow-up report urging the temperature rise be held below 1.5° C to avoid the worst impacts of climate change, and we intend to transition our strategies to align with this new goal. We are proud to be among the companies heeding the call for greater urgency and continuing to use the latest climate science in setting targets for GHG emissions reductions and measuring progress.

2018 Renewable Energy Highlights

Over the past several years, while investigating opportunities to expand our renewable energy portfolio, we realized that to succeed, we would need to support the development of large renewable energy projects through long-term power purchase agreements. Therefore, we have diligently pursued contracts with renewable energy developers, like wind developers, to supply our renewable energy needs and support the growth of wind power.

In 2015, Owens Corning signed two agreements for a total of 250 megawatts of new wind capacity to be developed in Texas and Oklahoma. Both wind farms came online in late 2016 and can generate 1.1 million MWh of electricity per year. For every MWh of renewable electricity generated, the company receives one renewable

PHOTO CREDIT:
Nassreen Olang | Granville, Ohio, U.S.
Wildfires at Lake Sherwood in California

Climate Change

energy credit (REC). It then applies the RECs toward the manufacture of more sustainable products. The impact of these purchases is included in our 2018 GHG accounting (see Emissions), and our 2018 report reflects our first full year of accounted RECs.

In May 2017, Owens Corning's Fairburn, Georgia, plant became home to an onsite 1 megawatt renewable installation. The solar panel project produces renewable electricity to power the grid through the utility company. Pursuant to the contract, Owens Corning receives RECs (see Energy).

We are constantly seeking opportunities to further expand our renewable energy portfolio around the world.

Partnering to Address Climate Change

As part of our climate change work, we increasingly engage with external parties that can leverage our expertise and products to advance sustainability. For example, we partner with trade groups to expand our reach to consumers and industry professionals, making it easy for them to employ energy efficiency and renewable energy practices. For a list of the trade groups we engage with, see Appendix D.

We also engage extensively with policymakers. Much of this work involves supporting regulations to eliminate GHG emissions. Our government affairs team coordinates these efforts and ensures that activities are aligned with our climate change policy. Our external affairs and sustainability departments regularly review proposed communications and activities. In addition, we conduct legal reviews of all external communications, including letters, testimonies, and activities with outside advocates or NGOs.

Owens Corning actively partners with organizations that drive forward-thinking programs on topics such as advanced standards for energy efficiency and durability of buildings. We participate at the board level in strategically relevant organizations, such as the Residential Energy Services Network (RESNET), Building Performance Institute (BPI), National Association of Home Builders (NAHB), and Energy & Environmental Building Alliance (EEBA). In 2018, we became members of the Carbon Leadership Forum, because of our increased commitment to addressing embodied carbon in building products and promoting whole-building life cycle assessment and impact reduction.

PHOTO CREDIT:
Jyrki Männikkö | Helsinki, Finland
Taken in Lieto, Finland

Hiren Patel (environmental leader) with his team in Toronto, Canada

ENERGY

Owens Corning's Goals:

- Reduce primary energy intensity by 20% by 2020 vs. 2010 baseline
- Reduce consumed energy intensity

Our Energy efforts align with the following UN SDGs:

The energy data in this chapter were independently assured to a high level by SCS Global Services. For more information or to see the verification statement, please go to page 178 in the About the Report section.

For the data in this section, baseline adjustments were made following the World Resources Institute (WRI) protocols. Read more on page 176 in About the Report.

Intensity metrics are normalized based on MT of product produced.

At Owens Corning, we seek energy-efficient solutions in everything we do – from how we manage operations to the products we develop that provide better environmental choices for our customers and communities. We are making steady progress in shrinking our energy footprint by reducing consumption, using more renewable energy sources, and improving plant efficiency.

Strategy and Approach

We take a holistic approach to energy management, encompassing product development, manufacturing, operations worldwide, and all levels of our workforce. Our strategy revolves around developing innovative, energy-saving products (see Product Sustainability & Stewardship) and implementing programs aimed at reducing our energy usage and shifting toward renewable energy sources. As a sign of our progress, in 2018 approximately 52% of our electricity came from renewable sources.

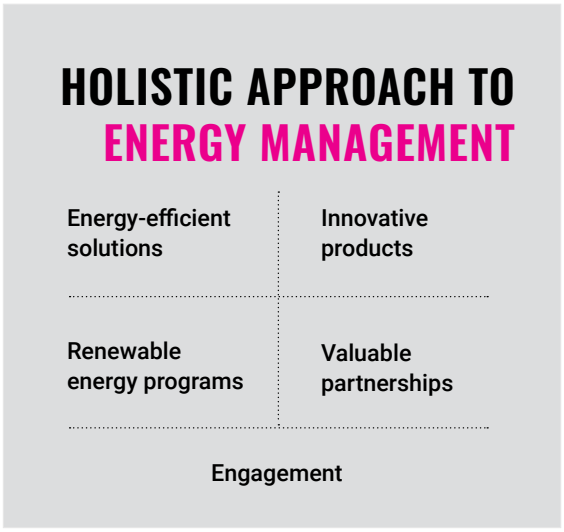
We have strong systems in place to track and monitor our performance against key energy-related indicators. Plants report performance on our goals and targets monthly to stay current on the data and to be able to spot variations that may require corrective action. We use various external platforms, including this sustainability report, to publicly disclose our environmental performance, and invite comments and feedback from all our stakeholders.

Energy

At each of our plants, a designated energy leader oversees the implementation of energy management activities and helps identify areas for improvement. In addition, each business has a full-time energy program manager or engineer to conduct assessments, facilitate Kaizen and Total Productive Maintenance activities, develop projects, and provide technical support. Several of our plants with medium and high energy usage also have energy teams that meet monthly.

To ensure accountability and encourage further progress, we recognize plant energy teams with company-wide performance awards and include sustainability goals in management's incentive compensation.

Additionally, Owens Corning partners with over 200 like-minded organizations in the U.S. Department of Energy's Better Plants Program. Our energy leaders utilize the Better Plants program for tools, training, and technical assistance. The program also sponsors competitions that highlight best practices industrywide, and we were honored to win its team competition in 2018.



Owens Corning earns multiple honors from the U.S. Department of Energy

Owens Corning's energy-saving efforts were honored twice in 2018 by the U.S. Department of Energy (DOE). In a special ceremony, DOE recognized Owens Corning for achieving our second set of energy intensity goals three years early. We set a goal of reducing primary energy intensity 20% by 2020, and by 2017, we had achieved a 31% reduction in primary energy intensity for our U.S. sites.

Our Composites business earned DOE's 2018 Better Practice Award for its Energy Team Challenge. The award recognizes success in energy-management actions, principles, and procedures.

Owens Corning is one of over 200 organizations that have partnered with the DOE Better Plants program for tools, training, and technical assistance. "Ten of the DOE's Better Plants partner companies applied for this award," explained Don Scarsella, energy program manager. "This is a select group with mature energy programs, so it's nice recognition."

Owens Corning's Energy Team Challenge, held annually since 2008, offers cash prizes to inspire competition among plant teams and to reduce energy intensity. Teams earn points in these contest categories:

- Energy program activities.
- Reliability program activities.
- Low/no cost improvements.
- Energy capital projects.
- Energy intensity metric improvement.

The three teams with the highest number of points earn cash prizes.

Energy

Energy Conservation and Savings

Since 2006, Owens Corning has implemented more than 1,150 energy-use reduction projects in its facilities across the globe, which together have reduced usage by more than 1.3 million MWh. These projects include lighting retrofits, compressed air optimization, cooling tower upgrades, pump optimizations, solar hot water tanks, fuel switching, process optimizations, and biomass conversions. In 2018, we implemented 32 projects, generating energy savings of over 59,000 MWh and reducing more than 16,500 MT of greenhouse gas emissions per year.

2018 Energy Conservation Projects

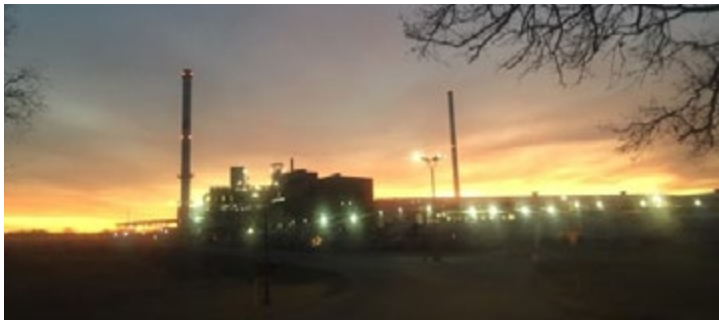
Description of activity	Estimated annual savings (metric tons CO_2e)	Annual monetary savings (USD)	Investment required (USD)	Payback period	Estimated lifetime of initiative
Six individual lighting projects focused on improving energy efficiency of lighting in various manufacturing plants across the U.S., Canada, Italy, and China	2,794	340,811	638,563	1-3 years	11-15 years
Three compressed air projects focused on improving the energy efficiency of compressed air systems in plants in the U.S. and China	217	30,253	78,486	1-3 years	16-20 years
Ten energy efficiency projects of various types across the U.S., Canada, Brazil, Italy, France, and South Korea including pump upgrades, motor upgrades, VFD upgrades, HVAC upgrades, and energy monitoring system improvements	2,669	383,359	472,096	1-3 years	16-20 years
Nine projects across the U.S., Canada, Brazil, Italy, and France impacting our processes, resulting in energy efficiency and operational improvements, including new metering systems, peak demand management, steam distribution system improvements, process equipment upgrades, and system automation and optimization	3,259	417,575	785,988	1-3 years	11-15 years
Four waste heat recovery projects focused on improving the energy efficiency of process heat systems in plants in India, France, and the Netherlands	7,616	842,267	732,918	1-3 years	6-10 years

Energy

Energy Performance Across the Organization

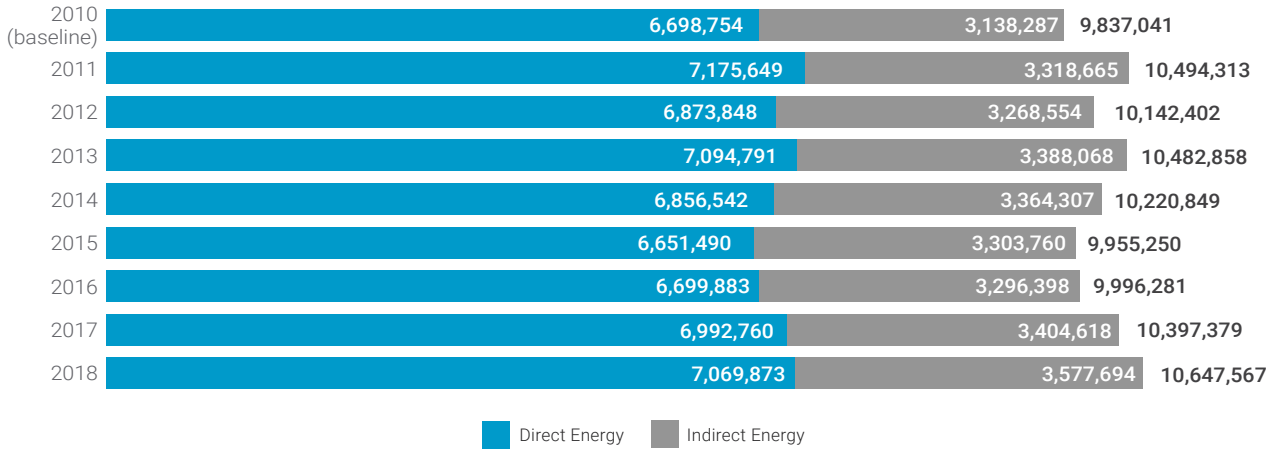
We track our consumption of both direct and indirect energy sources in accordance with DOE's "Save Energy Now – Energy Baseline Guidelines." These guidelines ensure that our metrics factor in the total energy needed to generate, transmit, and distribute electricity from the power generation source to the end user (also referred to as primary energy).

In 2018, Owens Corning increased its overall consumption of direct energy by 1% from 2017, due to recent acquisitions that have a higher percentage of direct energy consumption.

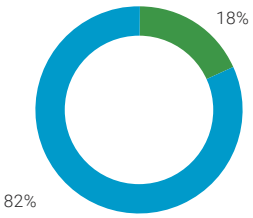


Joplin mineral wool plant at sunrise.

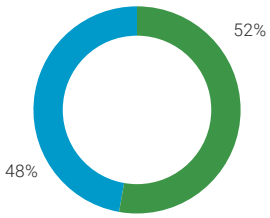
Energy Consumption within Owens Corning
(in Megawatt Hours)

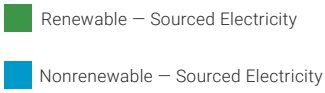


2010 Indirect Energy: Electricity



2018 Indirect Energy: Electricity





TRIPLED THE AMOUNT OF ELECTRICITY THAT CAME FROM RENEWABLE SOURCES SINCE 2010

Energy

COMMITMENT TO RENEWABLE ENERGY

Shifting toward renewable energy is a key part of our goals for carbon reduction. We evaluate renewable energy opportunities globally and invest in onsite renewable programs while collaborating with external partners. Through our sourcing organization, we look at renewable energy procurement options available through our utility providers.

In 2018, approximately 52% of our electricity came from renewable sources, such as wind, hydro, solar, and geothermal, across our portfolio globally; this metric is defined as the renewable energy sourced from the grid as well as that enabled by our power purchase agreements (PPAs), including onsite generation. Here are highlights of our onsite and offsite renewable programs in 2018:

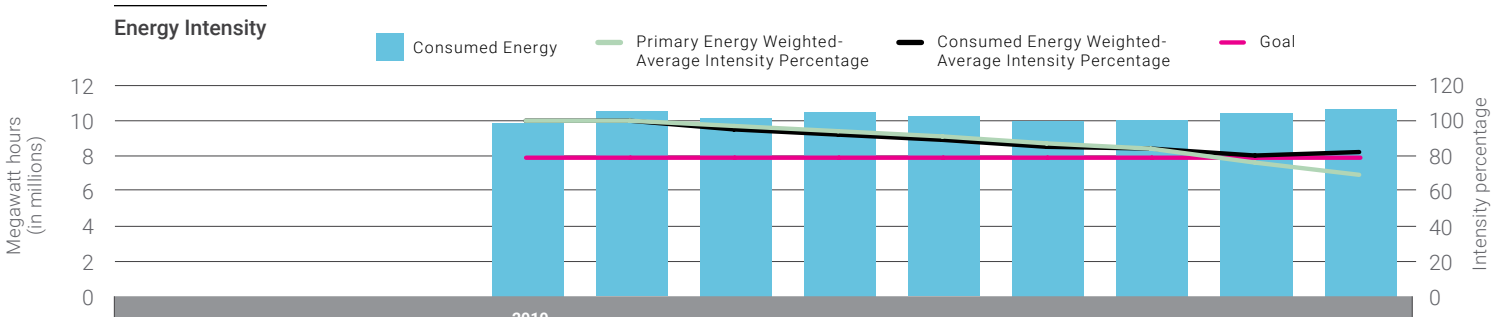
- Our L'Ardoise, France, facility sourced 100% renewable electricity through the Compagnie Nationale du Rhône's (CNR) Caderousse hydroelectric project that harnesses energy from the Rhône river.
- In Toledo, Ohio, a 2.4 megawatt solar array provided approximately 21% of the power for our world headquarters.
- The 2.7 megawatt solar panels installed at our Delmar, New York, insulation plant provided approximately 7% of its required electricity.
- Our Tessenderlo, Belgium, location sourced approximately 12% of its electricity from wind turbines onsite and offsite.
- The Kearny, New Jersey, roofing plant sourced around 4% of the required electricity from roof solar panels.
- A 1 megawatt solar installation at our Fairburn, Georgia, plant saved an estimated 1,312 metric tons of CO_2e.
- Owens Corning PPAs were responsible for sourcing 1.1 million megawatt hours from capacity of 250 megawatts of renewable electricity – 125 megawatts of wind energy in Texas and another 125 megawatts in Oklahoma.

Within the United States, approximately 61% of our electricity was sourced through renewable sources of wind (59%), hydro (1%), and solar (1%). This percentage includes renewable energy sourced from the grid as well as that enabled by our PPAs. Of the total, 59% is directly attributable to our renewable energy programs, with a breakdown of 58% from wind and 1% from solar.

> In 2018, approximately 52% of our electricity came from renewable sources

PHOTO CREDIT:
Gianfranco Romano | Besana, Italy
Morning view near Vimercate, a city near Milan.

Energy



	2010 (baseline)	2011	2012	2013	2014	2015	2016	2017	2018
Primary energy weighted-average intensity (MWh/MT of product produced)	5.23	5.24	5.06	4.93	4.78	4.55	4.40	3.97	3.61
Primary energy weighted-average intensity percentage	100	100	97	94	91	87	84	76	69
Consumed energy weighted-average intensity (MWh/MT of product produced)	3.45	3.46	3.29	3.18	3.06	2.91	2.88	2.76	2.82
Consumed energy weighted-average intensity percentage	100	100	95	92	89	85	84	80	82

Energy Intensity and Reduction

We continue to expand efforts to reduce our energy intensity across our operations. In 2018, our weighted-average primary energy intensity was 3.61, a reduction of 9% from 2017, and a 31% reduction in weighted-average energy intensity from 2010. We attribute this reduction to the conservation measures we have taken to significantly reduce energy consumption and improve plant efficiency, as well as a full year of wind PPA inclusion.

> The incorporation of renewable energy programs have resulted in a 5% reduction of our absolute primary energy from 2010 while growing our business

Energy Consumption Across the Value Chain

Energy consumption outside of the organization is determined using an EIO-LCA based method. The calculation is performed using the EIO-LCA online tool developed by Carnegie Mellon University. It is based on the respective NAICS manufacturing industry sectors associated with Owens Corning's three major business operations. Net sales figures in the 2018 Owens Corning Annual Report on Form 10-K were used as indicators of, and inputs for, economic activity in each of the three respective sectors. The reported value is reflective of only Scope 3 upstream use for each of our three businesses.

2018 Total Energy Consumed in Our Value Chain (in Megawatt hours)

	Composites	Insulation	Roofing	Total
Coal	1,579,215	2,517,267	1,329,215	5,425,697
Natural Gas	1,713,068	1,873,896	2,077,162	5,664,126
Petrol	731,113	1,267,937	1,816,818	3,815,868
Bio/waste	271,751	463,104	445,340	1,180,196
Nonfossil electricity	607,399	562,827	531,726	1,701,952
Total	**4,902,546**	**6,685,032**	**6,200,262**	**17,787,840**

Energy

Energy-Saving Products

Our commitment to sustainability starts with our passion for developing energy-saving products, such as insulation and durable products that significantly reduce energy use and associated emissions. Our wide range of energy-saving products includes:

- **Fiberglass Insulation:** Fiberglass insulation is the most widely used type of insulation in the United States, Canada, and Mexico today. A typical pound of insulation saves 12 times as much energy in its first year in place as the energy used to produce it. That means the energy consumed during manufacturing is saved during the first four to five weeks of product use. The insulation continues to save that amount of energy every month throughout the life of the home or building in which it is installed.

  Other fiberglass insulation products provide energy-saving thermal protection for HVAC, mechanical, and commercial applications.

- **FOAMGLAS® Cellular Glass:** FOAMGLAS® cellular glass is a high-performance insulation, offering water and fire resistance, high compressive strength, and long-lasting thermal protection in commercial and industrial systems. Post-industrial recycled glass is diverted from landfills and used to minimize energy consumption and optimize manufacturing efficiency.

- **Extruded Polystyrene (XPS) Insulation:** Our FOAMULAR® extruded polystyrene (XPS) insulation, a rigid board, is used on exterior and interior walls, foundations, roofs, and infrastructure for thermal insulation even in wet conditions. It is reusable, with a proven history of removal, salvage, and reuse.

- **Mineral Wool Insulation:** Our mineral wool insulation is used in commercial and residential buildings and can also deliver fire containment with its high-temperature durability. In particular, Thermafiber® mineral wool resists fire and temperatures up to 1,200˚ F while also providing sound control and energy conservation, and it contains a minimum of 70% recycled content.

- **Cool Roof Shingles:** Our wide color range of "cool roof" shingles uses a highly reflective granule technology that bounces back the sun's rays, helping keep roofs cooler to reduce air conditioning energy levels. Some of these shingles meet EPA ENERGY STAR® requirements for solar reflectance of 0.25, the fraction of solar energy reflected by the roof.

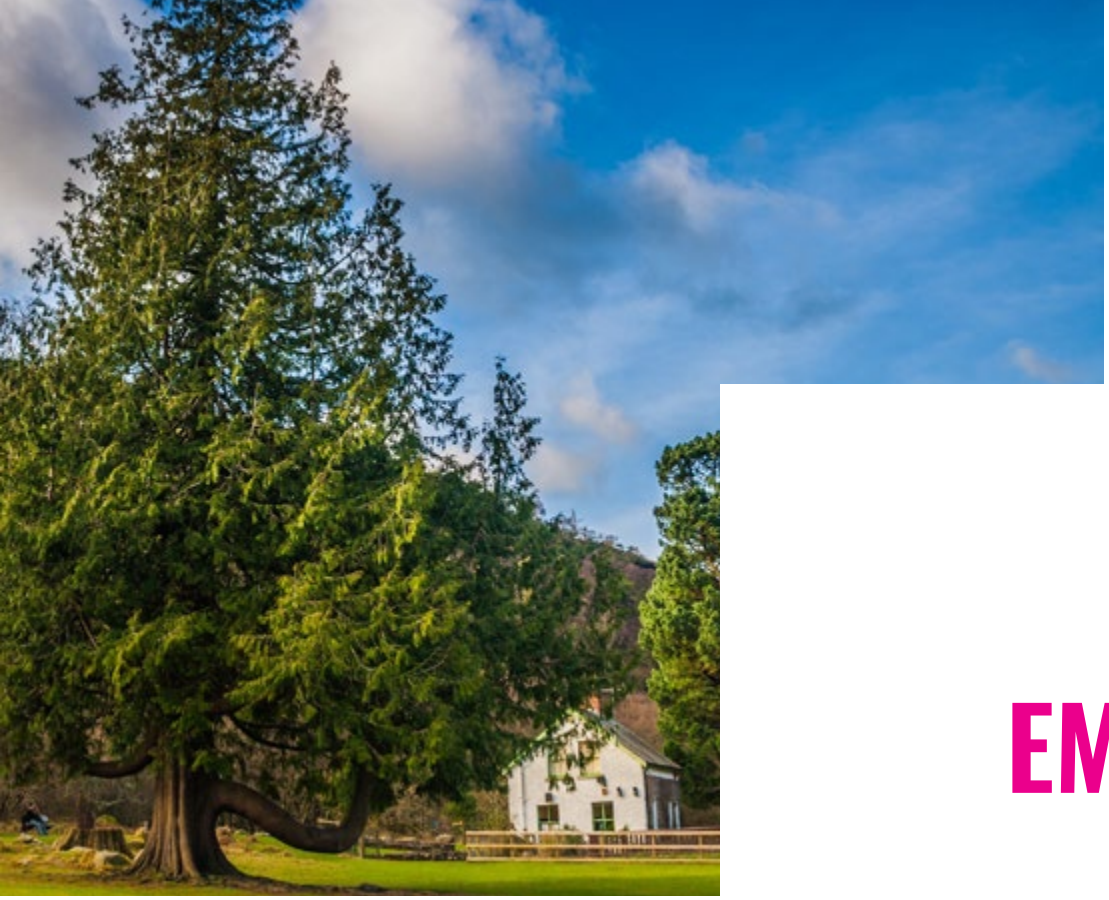
- **Composites:** Glass-reinforced composites can be light, insulating, and corrosion-, impact-, and heat-resistant, and are used to replace steel, aluminum, wood, and other materials. Fiberglass as a reinforcement provides for lighter weight while delivering comparable or better strength than other materials such as steel. Lighter weight means more fuel efficiency in all forms of transportation. With increasingly higher-strength technology, composites have also provided more efficiency and greater economy for wind energy turbines using longer, lighter, and more productive blades at lower wind speeds.

  For some applications, glass fiber composites also have been shown to have less impact on the environment through comparison of the life cycle assessment of specific parts made from steel and aluminum.

See Appendix C for additional energy data.

PHOTO CREDIT:
Michele Mazza | Texas, U.S.

Hiren Patel, environmental lead for the Toronto, Canada, Insulation plant was awarded the SaveON Energy Provincial Energy Manager of the Year.



EMISSIONS

PHOTO CREDIT:
Alessio Frizziero | Besana, Italy
Glendalough, Ireland

Owens Corning's Goals:

- Reduce greenhouse gas intensity by 50% by 2020 vs. 2010 baseline
- Reduce toxic air emissions intensity by 75% by 2020 vs. 2010 baseline
- Reduce dust emissions (PM2.5) intensity by 15% by 2020 vs. 2010 baseline

Our Emissions efforts align with the following UN SDGs:

The scope 1 and scope 2 data in this chapter were independently assured to a high level by SCS Global Services. Other emissions data in the chapter were independently assured to a moderate level by SCS Global Services. For more information or to see the verification statement, please go to page 178 in the About the Report section.

For the data in this section, baseline adjustments were made following the World Resources Institute (WRI) protocols. Read more on page 176 in About the Report.

Intensity metrics are normalized based on MT of product produced.

Owens Corning seeks to be a leader in safeguarding, sustaining, and improving the environment for the benefit of current and future generations. We believe that the impact of human activity on global climate change is an ongoing challenge, requiring the reduction of greenhouse gas emissions (GHG) around the world.

Strategy and Approach

Owens Corning is committed to helping our businesses, our customers, and the world increase energy efficiency and reduce GHG emissions. We are well positioned with technical skills and processes in place in our operations to reduce our own energy use and emissions by being more energy efficient and increasing our use of renewable energy. In addition, we offer innovative solutions that enable energy efficiency in the construction, transportation, and renewable energy markets.

Our sustainability leadership team collaborates with internal and external stakeholders to identify project opportunities, create large-scale footprint reduction programs, and enable supplier initiatives. Through these engagements, we ensure the development of a sustainable business that benefits all our stakeholders.

We use Schneider Electric Resource Advisor to track environmental data at the plant level. The data are normalized on a unit of production basis to evaluate variations and potential areas of risk. If risks are identified, mitigation plans are developed. The plant-level environmental data are then aggregated at a business unit and corporate level. Every plant, business unit, and corporate organization is provided footprint files for comparisons and the ability to track against their goals.

Emissions

We measure performance against our environmental sustainability goals on a periodic basis, depending on risk and availability of data. For example, energy is measured monthly while toxic air emissions are measured less frequently.

TARGETING 50% GREENHOUSE GAS EMISSIONS WEIGHTED-AVERAGE INTENSITY REDUCTION BY 2020

We are committed to reducing our footprint and have established 2020 GHG emissions goals using 2010 data as the baseline. We follow the World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD) GHG protocol to account for Scope 1, 2, and 3 emissions.

After achieving a 34% reduction in GHG emissions weighted-average intensity in 2014 (compared with the 2010 baseline), we raised our 2020 reduction goal in 2015 from 20% to 50%. In 2018, we achieved a 48% reduction from our base year. Through energy efficiency efforts and formulation improvements in the blowing agent we use in XPS foam insulation, we were able to show significant reductions from 2010 to 2018. From 2017 to 2018, we showed a year-over-year improvement of 7%, which is directly related to our investment in renewable energy.

Development of Cleaner and Greener Processes for Product Manufacturing

Our focus has always been on achieving intensity goals rather than absolute goals, as absolute measurements tend to vary widely based on business volumes and market conditions. We have achieved our intensity goals by developing lower GHG foam blowing agents and decreasing our fossil fuels and natural gas usage.

In our endeavor to address climate change issues, we are continuing to develop greener solutions and seeking more opportunity for renewable energy usage. Owens Corning has annual internal targets to ensure progress toward our 2020 goals.

Our roadmap for emission reductions is based on the following short- and long-term strategies:

SHORT-TERM STRATEGIES

- Convert the blowing agent used in manufacturing our foam products to reduce GHG emissions;
- Apply lessons learned from our legacy facilities to our newly acquired facilities; and
- Leverage our sustainability mapping tool to evaluate how a new product or process will impact the company's sustainability goals and to drive decisions in the design phase that will lead to a portfolio of more sustainable products.

LONG-TERM STRATEGIES

- Consider additional renewable energy opportunities on a global basis including longer-term agreements;
- Drive innovation within our research and development portfolio to ultimately be a net positive company, utilizing our sustainability mapping tool; and
- Ensure systematic knowledge sharing across our network of facilities.

Emissions Performance Across the Organization

SCOPE 1 AND SCOPE 2 EMISSIONS

Most of our Scope 1 emissions are attributable to the blowing agent used in our foam production process as well as fossil fuel combustion across the company. It should also be noted that changes in production output could cause increases or decreases in our emissions, given the raw materials and energy usage shifts.

Electricity from utility providers is the major source of our Scope 2 emissions. We use monthly invoices to capture end-to-end consumption at an enterprise level. In 2018, we used the latest eGRID factors to measure emissions from electricity for U.S. locations and the latest IPCC/IEA factors for international locations.

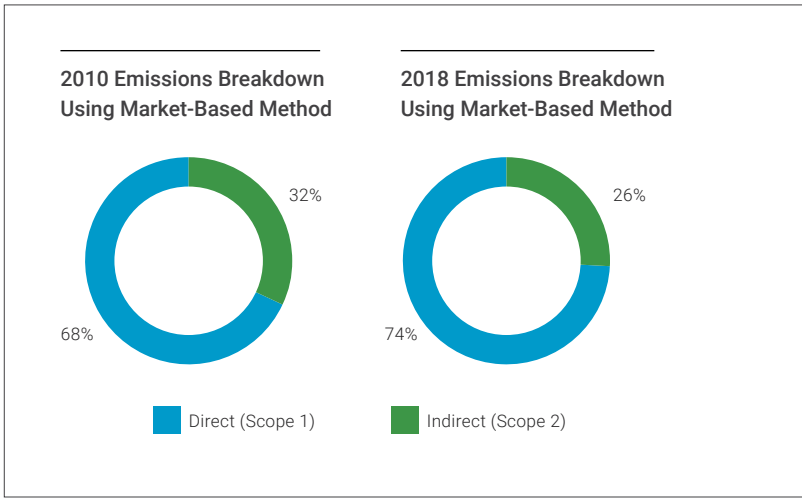
Emissions

We have provided our emissions based on the latest approach listed in WRI and WBCSD's "GHG Protocol Corporate Accounting and Reporting Standard" and "GHG Protocol Scope 2 Guidance" for segregation of market-based and location-based emissions.

Furthermore, as required through the GHG Protocol Scope 2 guidance, we calculate our GHG emissions by tracking our energy attribute certificates (RECs), contracts, supplier/utility emission factors, and where appropriate, residual mix. In support of our efforts to reduce our GHG emissions, Owens Corning has expanded its renewable energy portfolio.

Through our power purchase agreements (PPA), Owens Corning retired 1,120,536 RECs for a total of 524,877 metric tons of CO_2e in 2018. It should be noted that approximately 46% of our facilities utilize supplier/utility emission factors or residual mix factors, with the majority using supplier/utility emission factors. In addition, we have three European plants that have energy purchase agreements with accompanying green certificates.

We have described our renewable energy portfolio in the Energy section. Additionally, Owens Corning's Gastonia, North Carolina, facility is powered by 100% nuclear electricity.



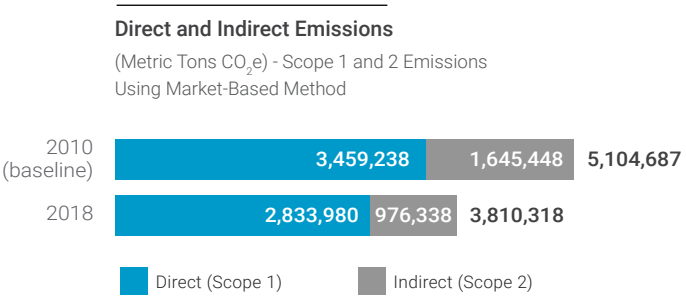


PHOTO CREDIT:
John Butler | Toledo, Ohio, U.S.
The Maumee River in Toledo at sunrise

12%

ABSOLUTE REDUCTION IN MARKET-BASED SCOPE 2 EMISSIONS FROM 2017 TO 2018

Emissions

Scope 3 Emissions

Summarized in the pie chart below are Owens Corning's estimated Scope 3 emissions by category. In 2018, our Scope 3 emissions totaled 3,892,181 metric tons CO_2e.

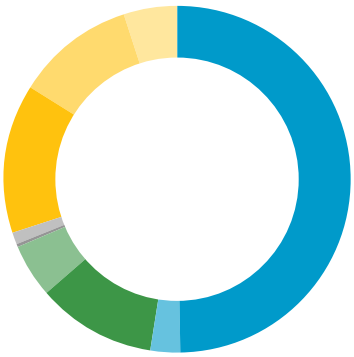
Recognizing the variety of activities both upstream and downstream of our operations, we follow multiple approaches to determine the amount of GHG emissions generated throughout our value chain. Read more about emissions across our value chain on page 205 of Appendix C.

Greenhouse Gas Emissions Intensity

Owens Corning uses a weighted-average intensity calculation to track progress against our 2020 environmental sustainability goal. The goal encompasses Scopes 1, 2, and Scope 3 business travel. Our weighted-average intensity decreased 7% from 2017 and has improved by 48% compared to our 2010 baseline. Our total GHG intensity in 2018 for Scopes 1, 2, and Scope 3 business travel was 1.10 MT CO_2e per metric ton of product produced.

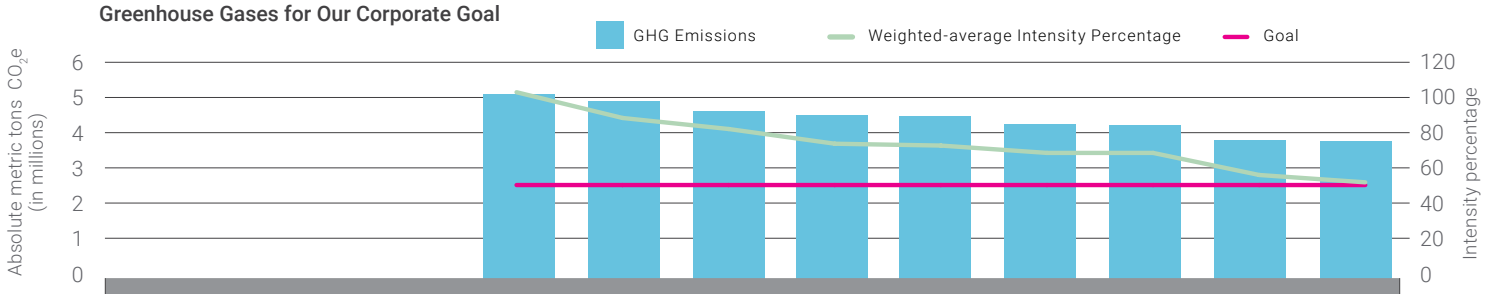
2018 Scope 3 GHG Emissions

(in Metric Tons CO_2e)



- Purchased goods and services **50%**
- Upstream transportation and distribution **5%**
- Downstream transportation and distribution **14%**
- Capital goods **4%**
- Business travel **Less than 1%**
- Processing of sold products **11%**
- Fuel-and-energy related activities (not included in Scope 1 or 2) **11%**
- Employee commuting **1%**
- End of life treatment and sold products **5%**

Greenhouse Gases for Our Corporate Goal



	2010 (baseline)	2011	2012	2013	2014	2015	2016	2017	2018
Absolute metric tons CO_2e	5,116,981	4,926,534	4,666,362	4,593,058	4,513,613	4,312,430	4,272,453	3,865,059	3,824,027
Weighted-average intensity percentage	100	86	80	72	71	67	67	55	52
Weighted-average intensity (MT/MT of product produced)	2.13	1.83	1.70	1.53	1.50	1.42	1.43	1.18	1.10

Emissions

Greenhouse Gas Emissions Reductions

18%

ABSOLUTE REDUCTION IN SCOPE 1 EMISSIONS FROM 2010 TO 2018

41%

ABSOLUTE REDUCTION IN MARKET-BASED SCOPE 2 EMISSIONS FROM 2010 TO 2018

25%

ABSOLUTE REDUCTION IN SCOPE 1 AND MARKET-BASED SCOPE 2 EMISSIONS SINCE 2010

We have continued our global strategy to reduce emissions of GHG across our operations. As previously mentioned, after nearly meeting our goal in 2014, we reset our GHG intensity goal to a 50% reduction from 2010 to 2020. As a company, we focus on reducing emissions from our raw materials and processing, increasing renewable energy sources, and implementing energy reduction programs, while also identifying low- or no-cost solutions to drive reductions. We continue to evaluate capital improvement opportunities within our production processes. To manage our CO_2 allowances, Owens Corning has a long-term strategy focused on compliance with regulations and driving cost reductions, while taking advantage of market opportunities in areas where trading schemes exist.

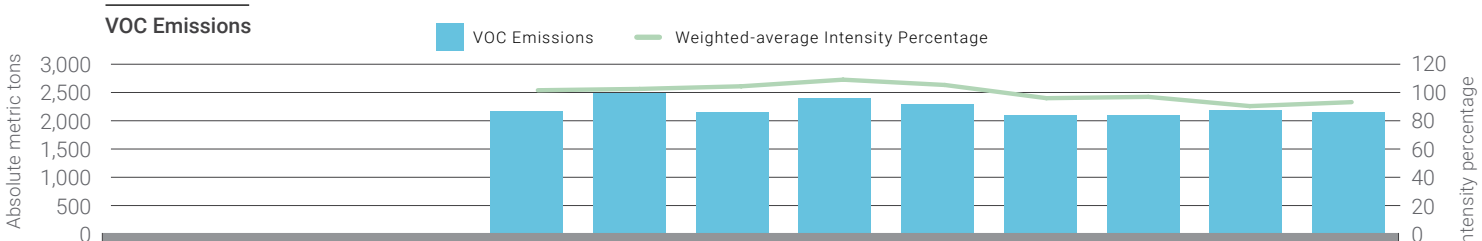
Implementation of energy-efficiency initiatives across our enterprise, evaluation of combined heat and power, heat recovery, and growth of renewables to replace grid electricity are all key programs for us as we make progress against our 2020 goal. As we are committed to making significant changes in our operations and driving change in the electricity grid to achieve our goals, we have elected to not purchase any carbon offsets to reduce our emissions since the inception of our sustainability reporting in 2006.

Further details on renewable energy and other emission reduction initiatives, including green buildings and energy-efficient products, have been mentioned in the Energy section. For detailed examples of our 2018 emission reduction projects, please see our response to question C7.9 in Owens Corning's CDP Climate Change 2019 Report to be published in the third quarter on the Owens Corning sustainability website.

Emissions

VOC Emissions

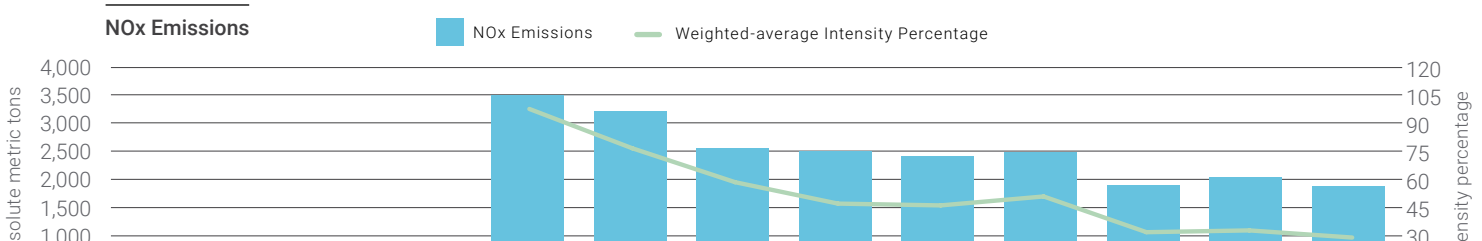
In 2010, Owens Corning announced a 14% reduction in VOC emissions from the base year of 2002. Given our past successes and our concerns for pollutants creating greater air quality challenges, we shifted our corporate goals from NOx and VOCs to toxic air emissions (TAE). Nonetheless, we continue to measure and report VOC, NOx, and SOx emissions.



	2010 (baseline)	2011	2012	2013	2014	2015	2016	2017	2018
Absolute metric tons	2,180	2,505	2,164	2,409	2,299	2,114	2,104	2,202	2,157
Weighted-average intensity percentage	100	101	103	108	104	94	95	88	91
Weighted-average intensity (MT/MT of product produced)	0.0007	0.0007	0.0007	0.0007	0.0007	0.0006	0.0006	0.0006	z0.0006

NOx and SOx Emissions

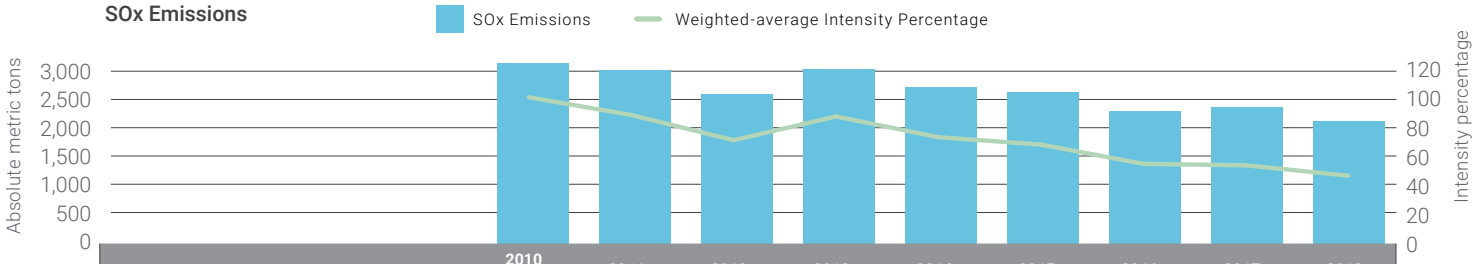
As part of our broader sustainability framework, we manage, track, and report against NOx and SOx air emissions requirements. In 2018, we saw a 47% absolute reduction in NOx and 32% absolute reduction in SOx from 2010 baseline metrics.



	2010 (baseline)	2011	2012	2013	2014	2015	2016	2017	2018
Absolute metric tons	3,468	3,192	2,536	2,488	2,395	2,465	1,885	2,018	1,853
Weighted-average intensity percentage	100	78	59	47	46	51	31	32	28
Weighted-average intensity (MT/MT of product produced)	0.0018	0.0014	0.0010	0.0008	0.0008	0.0009	0.0006	0.0006	0.0005

Emissions

SOx Emissions

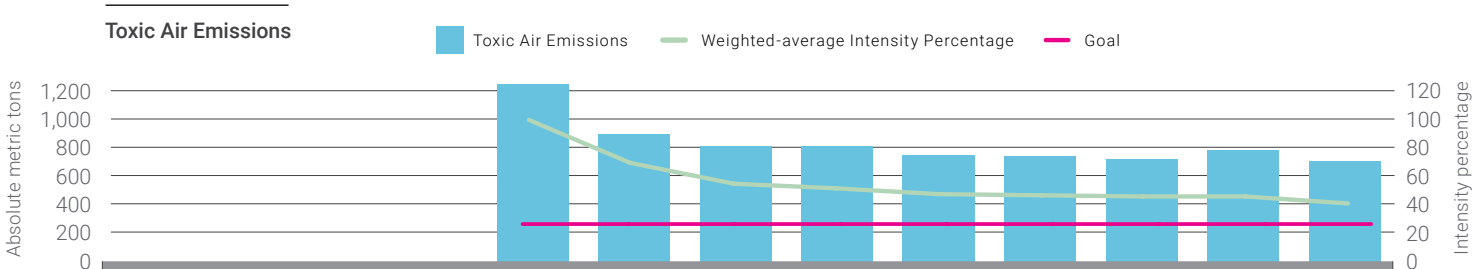


	2010 (baseline)	2011	2012	2013	2014	2015	2016	2017	2018
Absolute metric tons	3,146	3,031	2,611	3,049	2,738	2,644	2,306	2,380	2,142
Weighted-average intensity percentage	100	88	71	87	73	68	55	54	47
Weighted-average intensity (MT/MT of product produced)	0.0010	0.0009	0.0007	0.0009	0.0007	0.0007	0.0005	0.0005	0.0005

Toxic Air Emissions

Given our significant progress on air emissions, in 2016, we announced a new toxic air emissions (TAE) goal, a 75% reduction in TAE intensity by 2020 from the 2010 baseline. In the current reporting cycle, we achieved a 43% absolute reduction in TAE and a 59% reduction in toxic air intensity. Our recent acquisitions, late in our goal cycle, have increased the challenge in meeting the TAE goal.

Toxic Air Emissions



	2010 (baseline)	2011	2012	2013	2014	2015	2016	2017	2018
Absolute metric tons	1,248	901	816	817	757	745	724	789	712
Weighted-average intensity percentage	100	68	58	54	49	48	47	47	41
Weighted-average intensity (MT/MT of product produced)	0.0009	0.0006	0.0005	0.0005	0.0005	0.0004	0.0004	0.0004	0.0004

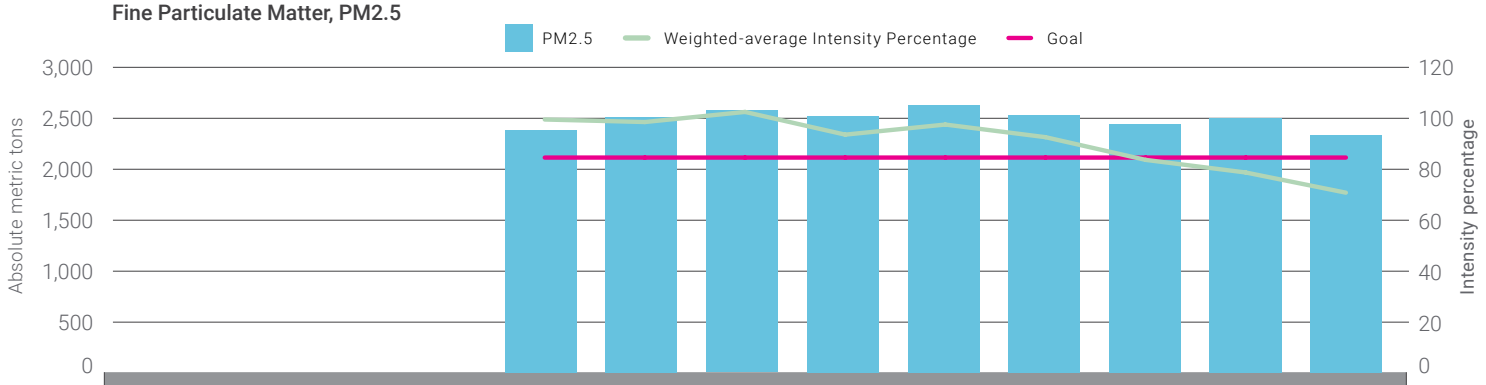
Emissions

Fine Particulate Matter (Dust Emissions), PM2.5

In 2010, we committed to a 15% reduction goal for PM2.5 by 2020. Due to acquisitions, our absolute weight of PM2.5 has decreased by only 48 metric tons in 2018 from the 2010 baseline, but our weighted-average intensity percentage reflects a 29% reduction from the 2010 baseline. Much of our progress to date has been driven by the residential EcoTouch® insulation conversion. As evidenced by the conversion, the key to achieving further gains will be capturing more synergies between greening our products and greening our operations.

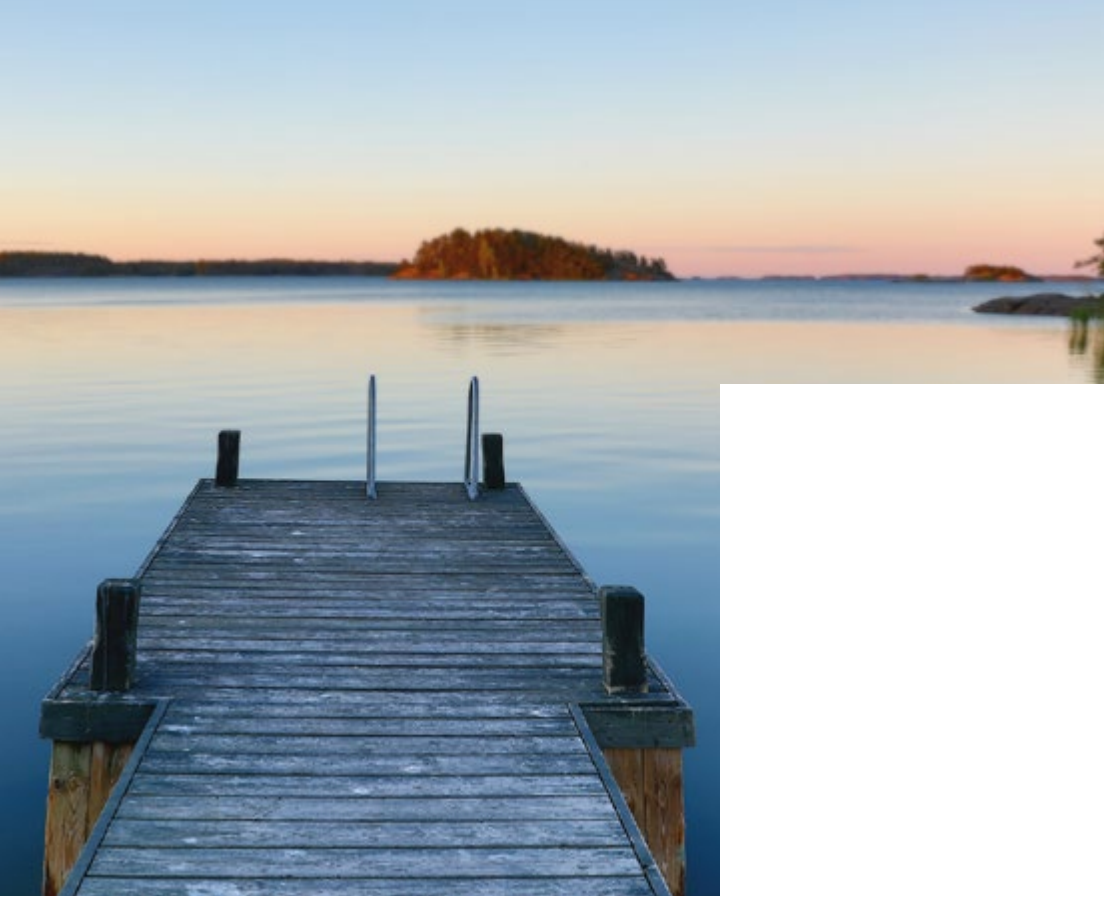
To ensure consistency of testing for air and PM2.5 emissions, we have experts who oversee testing at our facilities and verify the results. These individuals travel to our sites for testing events and review the lab results and findings. Additionally, they partner with the business units and plants to ensure that we understand the impact of potential changes to our processes and plan accordingly for future events.

Fine Particulate Matter, PM2.5



	2010 (baseline)	2011	2012	2013	2014	2015	2016	2017	2018
Absolute metric tons	2,361	2,487	2,554	2,502	2,609	2,508	2,421	2,484	2,312
Weighted-average intensity percentage	100	99	103	94	98	93	84	79	71
Weighted-average intensity (MT/MT of product produced)	0.0013	0.0013	0.0013	0.0012	0.0013	0.0012	0.0011	0.0010	0.0009

See Appendix C for additional emissions data



WATER

PHOTO CREDIT:
Jyrki Männikkö | Helsinki, Finland
Taken in Parainen, Finland

Owens Corning's Goal:

- Reduce water intensity by 35% by 2020 vs. 2010 baseline

Our Water efforts align with the following UN SDGs:

The water data in this chapter were independently assured to a moderate level by SCS Global Services. For more information or to see the verification statement, please go to page 178 in the About the Report section.

For the data in this section, baseline adjustments were made following the World Resources Institute (WRI) protocols. Read more on page 176 in About the Report.

Intensity metrics are normalized based on MT of product produced.

As a global manufacturer, conserving water to lessen our impact on the world's water resources is a priority. We recognize climate change will have a significant impact on both the increased demand for, and shrinking supply of, this natural resource. As a result, we aim to improve our water use efficiency, and when possible, use recycled and recirculated water.

Strategy and Approach

Owens Corning relies on high-quality water for many of its manufacturing processes. However, several factors, including regional water scarcity, limited water availability, and rising water costs, pose risks for our operations and business expansion plans. We are committed to minimizing water consumption and potential contamination from the production, use, and disposal of our products, with a focus on:

- Water efficiency;
- Deploying our sustainability mapping tool in the development of new and significantly changed products;
- Performing life cycle assessments (LCA) on all our core products; and
- Conducting product stewardship reviews of our products.

We use water management tools and systems to accurately track our water usage and identify potential risks and environmental impacts. This information supports the development of robust strategies to mitigate risks associated with water use. Our management strategy enables us to optimize and reduce water consumption through proactive measures

Water

such as the recycling and reuse of water, and leak detection and repair. We also provide training to create employee and stakeholder awareness of better water use practices.

Exposure to supply and other water-related risks varies among our geographies, processes, and product lines. We proactively minimize the effect of water risk for our locations through regular risk assessments using the World Resources Institute (WRI) Aqueduct Tool. Annual self-assessments are also conducted by suppliers, and the results of the assessments are sent to us, including whether suppliers are setting goals to reduce water usage. We also conduct LCAs to identify the amount of water embodied in each of our products. We routinely evaluate any process, product, regulatory, or price changes in our facilities as well as each site's environmental footprint.

We conserve water by reusing and recycling effluent water in facilities located in both water-stressed and non-stressed areas. Since 2010, we have considerably increased our water recirculation and recycling percentages. In keeping with our environmental policies and guidelines, we ensure that all our facilities meet or exceed requirements for release of effluents, and we implement reduction targets that go beyond regulatory compliance.

Our facilities comply with national, state, and local regulations and permits regarding water withdrawals and wastewater discharges. We have deployed advanced water treatment systems at our top three water-discharging facilities to ensure that the facilities' discharge water is a higher quality than dictated by their permit levels. These initiatives have helped reduce our total water discharge by more than 1 million cubic meters per year from 2010 levels. Moreover, several of our facilities have achieved a zero-discharge level (other than water discharged for irrigation).

Water use, water discharge, and recycled and recirculated water are tracked monthly at the site level. Most of our data come from invoices and meter readings, and are supplemented by calculations based on process

PHOTO CREDIT:
Alessio Frizziero | Besana, Italy
A stream that feeds the Acquafraggia Falls in Piuro, italy

Water

knowledge and production levels. All sites are expected to follow our detailed water governance documentation to ensure standardization and accuracy.

Partnering with stakeholders at both local and broader levels helps us continually optimize water usage and reduce consumption and wastewater. We consider stakeholder engagement critical to mitigating any future conflicts and we work to establish positive relationships with the communities in which we operate. We proactively engage with local stakeholders on an as-needed basis, as well as during new builds.

REDUCING WATER INTENSITY

Owens Corning continues to pursue opportunities to reduce water usage across our global locations, targeting a 35% weighted-average water intensity reduction by 2020 (using 2010 as the base year). In 2018, we continued to maintain progress beyond our goal with a 42% reduction against the baseline year.

OUR WATER RISK ASSESSMENTS: A NEW APPROACH

Owens Corning leverages the WRI Aqueduct Water Risk Mapping Tool to screen our sites for high baseline water supply stress, 2025 projections for water supply stress changes, and frequency of drought, as well as upstream water quality. We combine the tool with internal knowledge in our facilities located in water-stressed areas.

In previous water risk assessments for our sites, Owens Corning has historically used WRI's "overall water risk" index value from its Aqueduct Water Risk Mapping Tool. WRI's overall water risk metric is a calculated field that considers multiple aspects of water risk, such as current and future water availability at local levels, drought risk, reputational risk, and more. In October 2018, WRI started "rescaling" the overall water risk values that the tool provides, resulting in a significantly larger number of sites that qualify as having high overall water risk. In response to this change, Owens Corning met with WRI to discuss the Aqueduct tool, and how to best use the tool to meet our goals for water risk assessments going forward. Based on this discussion, the decision was made to switch from WRI's "overall water risk" metric to WRI's "baseline water stress" metric, which WRI describes as a strong proxy for all aspects of water risk to business operations. Baseline water stress has the added benefit of considering the supply and demand stress of regional water withdrawal, allowing for a more complete understanding of water-stressed areas.

Using this new approach, Owens Corning undertook our annual water risk assessment for the 7th consecutive year, our first year using baseline water stress as our metric. We used the findings of this analysis in conjunction with our sites' 2018 water intake and discharge statistics. This assessment informs the development of water management plans to optimize water efficiency at facilities in water-stressed regions with high water demand.

Our baseline water stress analysis identified that 19 of our sites that were active in 2018 were in areas classified by WRI as having the highest level of baseline water stress. Of these 19 sites, 18 are currently active, with one of the sites closing in 2018. These 19 sites accounted for 19% of our overall water withdrawal in 2018, as well as 12% of our overall water discharge in 2018. This is a considerable change in both sites and water volumes that have been identified in our assessment when compared to last year, but we feel this new approach is a better fit for our risk assessments, and will be the best metric for our needs going forward. Owens Corning is striving to be more conscious of our potential to impact (and be impacted by) the water conditions in our locations around the world, and in support of this heightened awareness, we are currently developing site-specific "context-based targets" for water, which we plan to integrate into our upcoming 2030 sustainability goals.

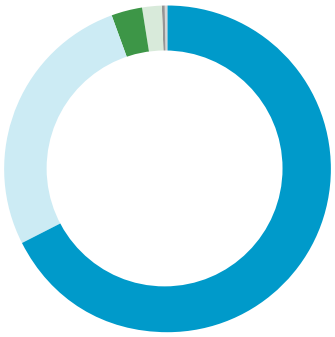
Read more about our water risk assessments, including an updated supply chain risk assessment that is currently in development, in our CDP Water 2019 Report, which will be published in the third quarter on our sustainability website.

Water

Water Withdrawal by Source

We source water for our operations from municipal water supplies, onsite wells, storm water, and from offsite water bodies and third parties. In 2018, we withdrew a total of 11,318,080 cubic meters of water, a 9% absolute reduction compared with 2010. From 2017 to 2018, our absolute water withdrawal decreased slightly, while our water use intensity increased slightly, by about 1%. The water intensity uptick can be attributed to a lower level of production for 2018. More than two-thirds of the water we used in 2018 was taken from municipal water supplies.

2018 Water Withdrawal by Source

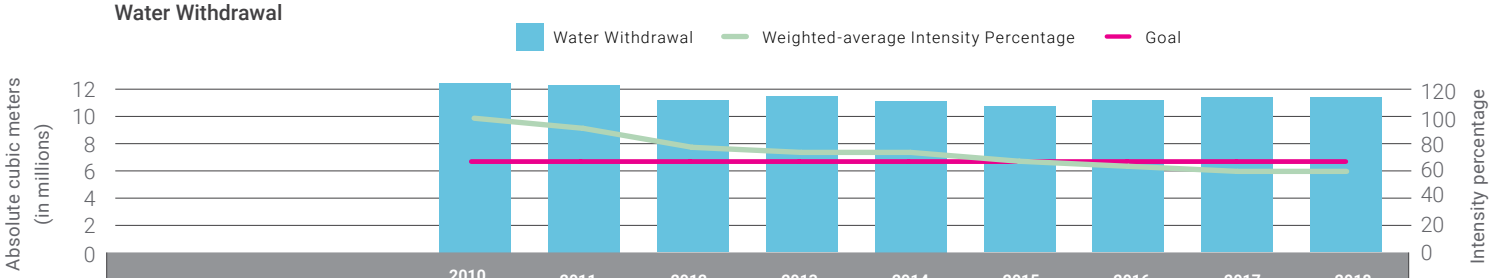


- Municipal Water **68%**
- Surface Water **3%**
- Water — Stormwater **Less than 1%**
- Water — Well Water **27%**
- Water — Third-Party Supplier **2%**
- Water — Other **0%**

PHOTO CREDIT:
Alessio Frizziero | Besana, Italy
Lake of Lova, Italy

Water

Water Withdrawal



	2010 (baseline)	2011	2012	2013	2014	2015	2016	2017	2018
Absolute cubic meters	12,375,895	12,247,569	11,111,202	11,408,678	11,070,589	10,671,581	11,123,578	11,340,403	11,318,080
Weighted-average intensity percentage	100	92	77	73	73	66	62	58	58
Weighted-average intensity (m3/MT of product produced)	5.51	5.08	4.24	4.04	4.05	3.66	3.44	3.19	3.21

Operational Efficiency

We believe that plant-level efforts and community engagement are critical to maintaining our achieved 2020 water intensity reduction goal. In support of this goal, we have undertaken water-saving initiatives at many of our facilities. Through the design of our products and processes, as well as our product stewardship program, we aim to reduce water consumption and minimize potential water contamination from the use and disposal of our products.

Cradle-to-grave life cycle impacts on water consumption are determined for all products where LCAs have been conducted. Insulation building products contribute to a reduction in energy consumption during the use phase; therefore, we do not include the use phase in our LCAs. As a result, water consumption for those products could be lower than reported, due to decreased energy consumption in the use phase. Using this method identifies products with high impact on water use, enabling prioritization of projects.

The key to further improvements in water efficiency is enhancing our grassroots engagement. Site-level efforts, such as leak detection and repair, identification of unnecessary water usage, and opportunities for increased water reuse, are essential to successful water conservation programs. We also recognize the need to continue to assess our operations for additional potential reuse and recycling opportunities at the corporate level.

We continually track water intensity across our facilities and monitor progress. A significant portion of the reductions since 2010 are attributable to our low- or no-cost water efficiency efforts and undertaking more significant capital investment projects.

Our conservation and efficiency efforts have saved an estimated 12.3 million cubic meters of water since 2010, and more than $9 million in water-related costs.

SAVED 12.3 MILLION CUBIC METERS OF WATER SINCE 2010

Water

Water Recycling and Reuse

As a company, we consider recirculated water to be water that is used in the production of prime product and is:

- Used in a recirculating (closed-loop) system; and
- Exits the recirculating system when it evaporates or the recirculating system is flushed or cleaned.

We define recycled water as water that is used in the production of prime product and is then:

- Pulled out of a specific production process area, mechanically and/or chemically treated, then returned to the same process; or
- Pulled out of a specific production process area and used in a different area (either production-related or nonproduction-related).

We have taken several steps to enhance recycling and reuse of water at our plants. In several facilities that manufacture our composites products, process water is recycled and used for cooling towers and landscaping purposes. Since 2010, we have considerably increased our water recirculation and recycled water percentages in our insulation facilities where processes support using recirculated water. As a result, we have seen a significant decrease in water withdrawal, despite increasing production in these facilities.

In 2018, 4%, or 450,176 cubic meters, of Owens Corning's water withdrawal was recycled. We recirculated 171,003,605 cubic meters of water, which constitutes 1,511% of total water use.

PHOTO CREDIT:
Jyrki Männikkö | Helsinki, Finland
Taken in Onkisalo, Finland

Wastewater Weighted-average Intensity (m3/MT)

2010 (baseline)	2011	2012	2013	2014	2015	2016	2017	2018
3.48	3.08	2.43	2.59	2.61	2.68	2.17	2.08	2.15

Water

Water Discharge

Compared to 2017, we experienced a slight increase of 1% in absolute water discharge, totaling 6,003,561 cubic meters. We also observed a 4% increase in our water discharge intensity as compared to 2017. This is attributable to lower levels of production reported for 2018.

Since Owens Corning's multiple businesses and segments use water in different regulated areas and for different processes, our approach is tailored to the site level. While we do not track Total Dissolved Solids (TDS), we actively monitor other relevant effluent data (COD, BOD, TSS) in sites where this approach is deemed necessary based on process, and we collaborate with external organizations who verify our discharge information. Most of our sites are charged for their water discharge, and all our sites are expected to comply with local regulations for their water discharge.

Average Discharge Quality by Effluent Type

Water Quality	2018
Effluent - BOD	88.00
Effluent - COD	882.24
Effluent - TSS	154.29

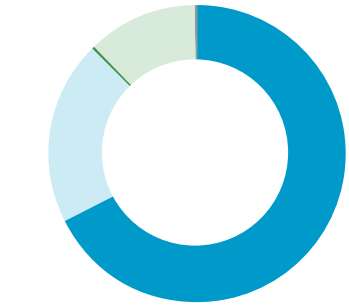
In average milligrams of effluent per liter of water

Impact on Local Water Bodies

We conduct annual evaluations of all our facilities to determine proximity to sites listed as ecologically sensitive or significantly important to maintaining biodiversity. Aquatic evaluations are also completed at the corporate level to determine if any of our facilities are located near rare, threatened, or endangered species, sensitive habitats, or the International Union for Conservation of Nature's (IUCN) Red List species.

Water withdrawals from our facilities do not exceed volume thresholds and/or do not extract from Ramsar Wetlands sites or other highly sensitive water resources (based on our knowledge of suppliers and sources).

2018 Water Discharge by Source



- Wastewater – POTW **68%**
- Wastewater — Other **12%**
- Wastewater — Surface Water **20%**
- Wastewater — Offsite Shipment **Less than 1%**
- Wastewater — Stormwater **Less than 1%**

Impact of Discharge Water

Owens Corning is not impacting any special protected water bodies and related habitats anywhere as defined at the country level by the UN World Heritage Sites, UN Biosphere Sites, Ramsar Wetlands, or Natura 2000 (European sites). This determination is based on an evaluation conducted annually by Owens Corning, which continues to show lack of proximity of company manufacturing site locations to the special sites or species. Regarding environments that are around our facilities, discharges are controlled through permits and required monitoring. Unauthorized discharges and runoff must also be reported to the environmental and legal departments of the corporation and corrective action must be taken if occurring. Employees are subject to disciplinary action for knowingly failing to comply with legally required environmental reporting.

See Appendix C for additional water data

Additional information available in our CDP Water 2019 Report, which will be published in the third quarter on our sustainability website

WASTE

PHOTO CREDIT:
Olga Marintseva | Gous-Khoustalny, Russia

Participants from the Gous-Khoustalny Composites plant collect garbage in a national park close to the plant.

Owens Corning's Goal:

- Reduce waste-to-landfill intensity by 70% by 2020 vs. 2010 baseline

Our Waste efforts align with the following UN SDG:

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

The waste data in this chapter were independently assured to a moderate level by SCS Global Services. For more information or to see the verification statement, please go to page 178 in the About the Report section.

For the data in this section, baseline adjustments were made following the World Resources Institute (WRI) protocols. Read more on page 176 in About the Report.

Intensity metrics are normalized based on MT of product produced.

Waste management is a high priority at Owens Corning. Our focus on waste includes the operational efficiency of our production processes, and extends to how we use, reuse, repurpose, recycle, and dispose of materials generated from our facilities, taking into account the complete life cycle of our products. We are committed to becoming zero waste-to-landfill (WTL) and, therefore, continuously look for beneficial uses for our byproducts and other waste materials.

Strategy and Approach

We have a comprehensive waste management plan to ensure that we meet all regulatory requirements related to waste, and to guide us in implementing additional reduction and diversion strategies beyond compliance. Through periodic assessments, we monitor our compliance with internal and external standards, guidelines, and laws, as well as progress on our goals.

We look for ways to reduce waste during the complete life cycle of our products. We have established a product stewardship review process, which is conducted at various stages, including design, development, test market, manufacture, and distribution, to conserve resources and prevent waste through our business operations.

We measure performance through WTL and waste intensity metrics. Owens Corning continues to evaluate and improve upon the methods and mechanisms for tracking waste streams that are ultimately landfilled, recycled, or reused. When waste management or recycler invoices are available, those are used for data reporting. Otherwise, we rely on onsite weigh scales or, in the absence of scales, we rely on

Waste

calculated estimates to determine the weights of our shipments. We depend on the final disposition of each material for assessing performance against metrics.

Leadership and reporting for waste reduction efforts roll up to the enterprise level, but many of the initiatives happen at the manufacturing facilities. Our global WTL leader is responsible for driving WTL reductions and fostering relationships with internal and external stakeholders across all businesses. In addition, our Composites business has its own WTL leader who prioritizes and tracks waste reduction efforts across the business. Periodic reviews are used to assess progress and take necessary corrective actions.

Source reduction and reuse/recycle techniques are important strategies for minimizing waste and the use of landfills. During the initial design phase and through continuous improvement efforts, we seek to increase the percentage of recycled content in our products and packaging materials. Recycled glass reduces demand for raw materials, which is why we maintain a research and development (R&D) focus on glass fiber. We use more than 1.4 billion pounds of recycled glass annually, making us one of the largest users of recycled glass in the world. We also support glass recycling by collaborating with strategic partners to increase the recycling of glass containers and factory waste.

ADDRESSING OUR WASTE REDUCTION CHALLENGES

In 2010, we established a goal to reduce our WTL intensity by 70% by 2020, compared with a 2010 baseline. Making progress toward this goal has been one of our biggest sustainability challenges. We are currently at a 6% reduction in WTL intensity compared with the 2010 baseline, even though our diverted waste was 61% of the total waste in 2018.

Nevertheless, we remain committed to our goal of 70% reduction in our WTL intensity by 2020, and our long-term goal of zero WTL. Unfortunately, we do not currently have a direct line of sight to the 70% reduction goal, even with the known internal and external opportunities to recycle, reuse, and reduce waste going to landfills. As an organization, we will continue to pursue opportunities to meet our zero WTL goal with passion and vigor.

Waste Management Initiatives

We have designated resources across our businesses that enable us to understand our waste data and develop solutions to reduce waste. Through this network of resources and led by our global WTL leader, we regularly share ideas, waste reduction best practices, and recycling outlets across our plants, businesses, and R&D.

Notable examples in 2018 include:

- Owens Corning executed an agreement with a waste consultant to recycle the largest process waste stream from one of our sites. The consultant's recycling facility will be in full operation in 2019. The initiative will reduce our total waste-to-landfill by 8%.
- One of our U.S.-based mineral wool plants applied a best practice from its sister plants in Europe. The plant began briquetting some of its waste to reintroduce into the process.
- One of our mineral wool plants in Europe installed a new grinder, which greatly improved the facility's ability to reintroduce and recycle fibers back into its process. The plant also installed a silo to store recycled fibers.
- A roofing plant coordinated weekly pick-ups of cardboard and plastic to ensure these overflow materials were being recycled and not landfilled due to lack of storage space.
- An Owens Corning plant in South Korea was able to find a recycling outlet for the plant's sludge. This resulted in over 400 metric tons of waste diverted from landfill.
- One of our European plants now has the ability to send its sludge to the plant's own internal wastewater treatment station, rather than sending it to an outside treatment facility.
- An Owens Corning facility in the U.K. recently created a "zero waste" team with volunteers from multiple shifts within the plant. With the addition of a new baler and renewed awareness across the plant, the plant has

Waste

significantly increased the amount of cardboard and polyethylene recycled. The plant also started diverting materials to its Hose2Habitat animal enrichment program with a local zoo.

- One of Owens Corning's Canadian plants was able to eliminate all waste-to-landfill, with the exception of hazardous waste.
- One of our Asia Pacific plants reduced its waste-to-landfill intensity by 47% as a result of reusing process materials in the product.
- Over the past several years, we have sought and used salvage markets for damaged and slightly out-of-spec materials from our shingle and insulation plants to divert this waste.

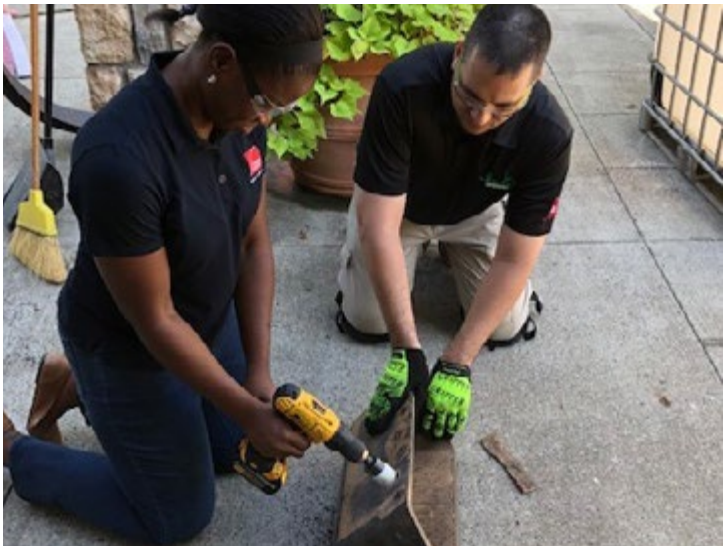
Owens Corning teams are also pursuing waste reduction initiatives at multiple levels and across various functional areas:

- Every year, our community relations team works closely with plants to donate product, and in 2018, these efforts resulted in 27 charitable organizations receiving 46,860 pounds of insulation, over 35,000 board feet of foam, and 80,000 bundles of shingles.
- One of Owens Corning's plants in Latin America worked closely with its customer technical service team to identify new outlets for its scrap/off-spec materials. The new outlets resulted in the plant reducing its waste-to-landfill intensity by 55%.
- The Composites business' cross-functional "Material Revolution" team continues to identify, prioritize, and drive waste reduction initiatives across the business.
- Our science and technology organization is actively engaged in evaluating process waste streams that could be reintroduced into processes as alternative raw materials.

Growing Support for Animal Habitats

Owens Corning continues to divert materials from landfills by donating them to zoos and wildlife sanctuaries through Hose2Habitat. Cardboard cores, wood pipe, cardboard chocks, metal grates, PVC pipe, water coolers, rubber hoses, plastic drums, street sweeper brushes, and plastic conduit – when we can no longer use these and other materials, they can be converted to animal enrichment items.

Since 2015, more than 35 Owens Corning plants have donated materials to more than 46 zoos and wildlife sanctuaries. The list of participating plants grows every year. In January 2018, our Jackson plant made its first donation to the Memphis Zoo – 10,000 pounds of discarded materials.



CJ Teneng (Mt. Vernon, Ohio) with Hose2Habitat cofounder Tony Slamin, during a Hose2Habitat donation event.

Waste

SUSTAINABILITY IN ACTION

Owens Corning Plants Recognized for Waste Reduction Efforts

Several Owens Corning plants are leading the way on driving out waste. In Tennessee, our Springfield and Cleveland facilities have been recognized by regulatory agencies for their great work.

In 2017, these plants joined the Tennessee Green Star Partnership (TGSP), which is a statewide environmental leadership program facilitated by the Tennessee Department of Environment and Conservation (TDEC). The program recognizes manufacturers in the state that are committed to sustainability and exhibit continuous improvement throughout their entire operation.

The program's requirements are rigorous. To participate, a site must:

- Have a minimum of three years of exceptional environmental compliance with Department of Environment and Conservation regulations; and
- Currently operate under an active ISO 14011 certification or an environmental management system that conforms to ISO 14001.

Each year, members of the TGSP are checked for compliance. In 2018, our Springfield and Cleveland facilities both qualified to continue as members.

The Springfield plant will fly the Tennessee Green Star Partnership flag, in part because of its efforts to recycle scrap.

The Cleveland, Tennessee plant celebrates silver status for diverting more than 80 percent of its waste-to-landfill.

"We're honored to be recognized by the Tennessee Department of Environment and Conservation for our sustainability efforts," said Danyelle Phelps, director of enterprise environmental and operations sustainability. "Waste management is a high priority at Owens Corning, beginning with the operational efficiency of our production processes to the disposition of recyclable materials. We are focused on becoming zero waste-to-landfill."

The Springfield plant reduces waste by recycling fiberglass and extruded polystyrene board scrap, and by continually looking for recycling outlets for all other waste it produces. The facility works with multiple companies to improve resource streams and even found a company to recycle FOAMULAR® extruded polystyrene insulation sheet scrap. In addition, the facility devised rainwater drainage systems, preventing erosion and providing better storm water drainage.

Our Cleveland plant was awarded Silver Status under the TGSP program for achieving greater than 80% waste to landfill diversion.

TDEC also recognized the plant for ensuring condensate water from cooling towers and the compressed air system are safe for the city wastewater system

Waste

Total Waste Generation and Disposal

Owens Corning separates waste into hazardous and nonhazardous categories. The majority of waste generated in our facilities is either landfilled or recycled. Depending on the type of waste, we also use other waste disposal methods such as commercial composting, incineration, and returning waste to the supplier.

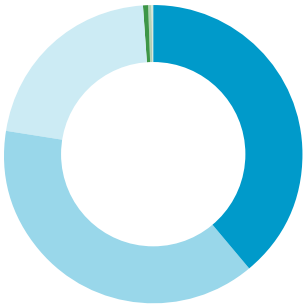
In 2018, we generated 947,713 metric tons of total waste. The overwhelming majority, 943,467 metric tons, was nonhazardous waste.

99.6%

OF WASTE GENERATED WAS NONHAZARDOUS IN 2018

2018 Nonhazardous Waste by Disposal Method

(Metric Tons)

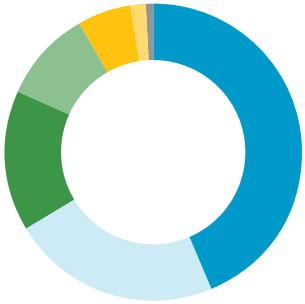


- Recycled Internally (onsite) **367,075**
- Recultivation **4,150**
- Controlled Confinement **275**
- Waste-to-Landfill **364,601**
- Incinerated With Energy Recovery **3,649**
- Composting **72**
- Recycled Externally (offsite) **202,907**
- Incinerated Without Energy Recovery **725**
- Returned to Supplier **14**

TOTAL: 943,467 Metric Tons

2018 Hazardous Waste by Disposal Method

(Metric Tons)



- Waste-to-Landfill **1,862**
- Incinerated Without Energy Recovery **422**
- Incinerated With Energy Recovery **34**
- Recycled Internally (onsite) **961**
- Controlled Confinement **255**
- Recycled Externally (offsite) **647**
- Treated and Recycled **64**

TOTAL: 4,246 Metric Tons

Waste

HAZARDOUS WASTE

Owens Corning facilities generate small amounts of hazardous waste during production and maintenance operations. This typically includes spent cleaning solvents, paint-related wastes, and spent laboratory chemicals. There are also some business-specific hazardous wastes. For example, Owens Corning's Roofing business uses flammable ink to mark shingle wrappers, so any unused ink or ink conditioner contributes a small amount to the total hazardous waste disposed at that facility. Each location has an appropriate hazardous waste management system to ensure that waste is properly and safely disposed.

In 2018, we generated 4,246 metric tons of hazardous waste. A total of 1,862 metric tons of hazardous waste was sent to landfill. Our business units have established a mechanism to track the intensity and amount of hazardous waste generated. The increases in hazardous waste over the years are correlated the rebuild cycles for our glass manufacturing locations.

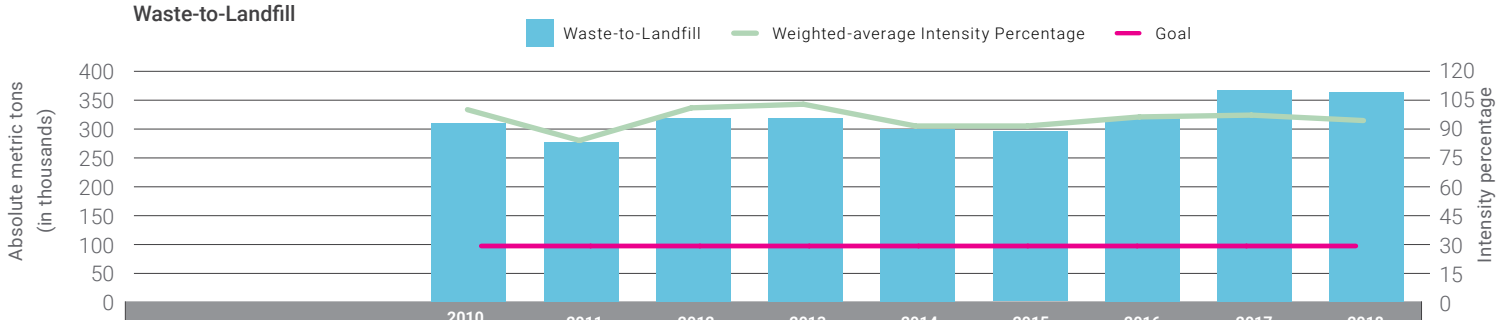
During the reporting period, no hazardous wastes, which can be classified under the terms of the Basel convention, were imported, exported, transported, treated, or shipped internationally for disposal.

Reducing Waste-to-Landfill

We have a long-term goal to generate zero WTL. In the interim, we have a goal to reduce WTL intensity (WTL disposed per unit of product) by 70% by 2020, compared with the 2010 baseline, which remains a challenge.

Compared to 2010, we are currently at a 6% reduction in landfilled intensity; however, our overall diverted waste has increased 165,350 tons (7%) since 2010. We continue to work toward our goal with support from our global WTL leader, who drives WTL reductions and fosters relationships with inside and outside stakeholders.

Waste-to-Landfill



	2010 (baseline)	2011	2012	2013	2014	2015	2016	2017	2018
Absolute cubic meters	312,890	279,208	320,973	321,594	302,428	298,200	323,832	370,840	366,463
Weighted-average intensity percentage	100	83	101	103	91	91	96	97	94
Weighted-average intensity (MT/MT of product produced)	0.105	0.087	0.106	0.108	0.095	0.096	0.101	0.101	0.099

Waste

Waste Diversion Recognition

As a company, we honor and recognize our facilities for their waste management efforts, using an internal rating system focusing on diversion from landfill compared to total waste generated. The rating scale is as follows: 100% waste diversion (platinum); more than 98% and less than 100% waste diversion (gold); and 80% to 98% waste diversion (silver). In 2018, 38 plants (five more than in 2017) achieved greater than 80% waste diversion.

	Composites	Insulation	Roofing
★★★ **PLATINUM** (100% waste diversion)	Thimmapur, India	Guangde, China Duncan (Ridgeview), South Carolina, U.S. Shanghai, China Thimmapur, India	Asan, South Korea Sayli, India
★★ **GOLD** (>98% and <100% waste diversion)	Taloja, India Yuhang, China	Tessenderlo, Belgium Trzemeszno, Poland Valleyfield, Quebec, Canada	Dapada, India Novia, China
★ **SILVER** (80 to 98% waste diversion)	Changzhou, China Doudian, China	Cleveland, Tennessee, U.S. Edmonton, Alberta, Canada Gresham, Oregon, U.S. Guangzhou, China Monterrey, Mexico (Foam) Mt. Vernon, Ohio, U.S. Nanjing, China Rockford, Illinois, U.S. Santa Clara, California, U.S. Springfield, Tennessee, U.S. Tallmadge, Ohio, U.S. Tianjin, China (Fiberglass) Tianjin, China (Foam) Tiffin, Ohio, U.S. Toronto, Ontario, Canada Vilnius, Lithuania Yantai, China	Irving, Texas, U.S. Jiaobei, China Kearny, New Jersey, U.S. Medina, Ohio, U.S. Portland, Oregon, U.S.

PORTION OF WASTE DIVERTED FROM THE LANDFILL INCREASED 7% SINCE 2010

Waste

Significant Spills

Owens Corning acknowledges that releases, spills, or disposal of wastes and other substances by our operations could have negative environmental impacts. In the event of an incident, we recognize our responsibility to complete environmental remediation, maintain remediated sites, and provide funding support at multiparty disposal facilities. Since 2013, Owens Corning has had zero significant spills.

Spills (2012-2018)

	2012	2013	2014	2015	2016	2017	2018
Number of spills	2	0	0	0	0	0	0
Total volume of spills (in cubic meters)	111	0	0	0	0	0	0

See Appendix C for additional waste data

Partnering to Reduce Waste-to-Landfill

Our Wabash, Indiana, mineral wool plant is reducing its waste-to-landfill by working with a third-party partner, Waste Hub, to find end-use applications for the plant's waste. Together, they found an application for the plant's largest waste stream: pieces of glass ("shot") that are tangled in the waste fiber ("dragline waste"). When the shot is separated, it can be used as an abrasive blasting material, which is used to smooth, clean, or shape hard surfaces.

Tests and trials resulted in a workable process to screen out the shot and dry the materials. In early spring of 2018, Waste Hub secured equity funding and formed a new company, 10X Engineered Materials, to own and operate a recycling facility to process the plant's dragline shot.

Months of work led to a solution that will reduce the site's waste-to-landfill intensity by 73% and Owens Corning's total waste-to-landfill intensity by 8%. In addition to diverting waste, the abrasive blast material made from Wabash's shot will offer an effective, safer alternative to sand and other blast media that contain crystalline silica.

PHOTO CREDIT:
Alessio Frizziero | Besana, Italy

Waste

SUSTAINABILITY IN ACTION

Creating Jobs and Reducing Waste in Izoplit, Russia

The Paroc plant in Russia's Tver region has been a constant innovator in reducing waste, fuel consumption, and carbon emissions. In 2018, the plant implemented a new briquette production line designed to reuse certain types of waste. Creation of the line resulted in the addition of 12 jobs and the reduction of more than 7,000 tons of waste.

Employees at the plant see this waste reduction success as just one element of a larger sustainability strategy. Paroc participates in activities that support environmental safety and protection in the Tver region. The business even advises the Commissioner for Human Rights of Tver Region's social program, which advocates for residents' environmental rights.

"We constantly seek to increase the level of ecological awareness of our employees," said Natalya Desheva, the Izoplit environment and industrial safety manager. "Just this year, we have organized several events including tree plantings, days without a car, and community work days."

Ivan Baranovskij (Vilinus, Lithuania) is part of the Paroc stone wool insulation team.

Jakub Przybysz and Jan Albinowski (Trzemeszno, Poland, stone wool insulation plant) on the job.

PHOTO CREDIT:
Alessio Frizziero | Besana, Italy
Parus cristatus

Our Biodiversity efforts align with the following UN SDG:

PROTECTING BIODIVERSITY

Owens Corning is committed to preserving and enhancing biodiversity and the natural habitats that surround our operations around the world.

Strategy and Approach

Under our Biodiversity Statement, which we first issued in 2015, we pledge to:

- Integrate biodiversity assessments into current and proposed activities;
- Work with governmental agencies at each of our operating locations to obtain appropriate clearances and information to operate, and take appropriate measures if necessary to protect the environment including sensitive ecosystems;
- Encourage and support facilities to participate in local initiatives to protect and restore biodiversity;
- Publicly report on biodiversity impacts and activities in a timely, consistent, and transparent manner; and
- Understand and positively influence our supply chain's impact on biodiversity.

We assess the biodiversity risk of our sites by comparing the location to those of the most protected and highly valued sites for biodiversity. These sites include:

- United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Sites and Biosphere Reserves;
- Ramsar Wetlands sites;

Protecting Biodiversity

- Alliance for Zero Extinction sites (referencing IUCN Red List designations);
- Key Biodiversity Areas (referencing the 2016 IUCN Global Standard report);
- Natura 2000 sites (as applicable to Europe); and
- Nationally listed nature and wildlife reserves.

We focus on meeting all our regulatory obligations related to air, water, and waste. We are also implementing footprint reductions beyond compliance, following our corporate environmental policies and guidelines, and evaluating the environmental performance of our operations. In addition, we engage stakeholders in our process and take environmental considerations, including natural resource protection, into account as part of capital project planning and internal approval.

As part of our due diligence process in acquiring new businesses and associated real estate, we evaluate the land and adjoining property to identify environmental impairment and protected habitat and species. We are committed to taking restorative and active protective measures.

In addition to assessing our impacts, we also actively engage our employees in protecting biodiversity and have held two global employee outreach and education campaigns. The first focused on what biodiversity is and why it is important. The second highlighted the importance of pollinators and what our employees can do at work and home to protect them.

Partnering with the Wildlife Habitat Council

In 2018, we continued our formal partnership with the Wildlife Habitat Council (WHC), further developing our site-level biodiversity initiatives with WHC guidance and best practices. Through this partnership, we have created valuable native habitats at various Owens Corning sites, and maintained our Wildlife Habitat Council Gold Certification for our Granville, Ohio, and Toledo, Ohio, locations.

The process to become certified started with a site visit by WHC experts who assessed the grounds and biodiversity programs in place. From there, they made recommendations on what Owens Corning could do to improve, or in some cases, what needed to be documented to earn accreditation. From the recommendations came a series of projects including:

- Prairie restoration;
- Bird box monitoring;
- Pollinator garden installation; and
- "Lunch and learns" to promote employee engagement.

The results of the projects were documented and submitted to WHC for consideration. As a result, in 2016, our programs at our Granville, Ohio, site were recognized with Wildlife Habitat Council Gold Certification, the highest level of certification possible. The following year, in 2017, we earned gold level certification for our world headquarters in Toledo, Ohio. In 2018, both certifications remained active, and the projects continued to have positive biodiversity impacts.

More details of these programs can be found on the WHC project database and by viewing our Wildlife Habitat Council video.

Impacts of Our Activities on Biodiversity

To evaluate and report on the biodiversity risk of our locations, Owens Corning assesses exposure to protected and highly valued areas for biodiversity within five miles of each site. We had no sites meeting this designation until our 2018 acquisitions, when we determined which of our newly acquired sites are located within this five mile boundary. For example, many Paroc sites are within five miles of areas listed by Natura 2000, whose network covers 18% of the EU's terrestrial area.

Upon identifying these new biodiversity exposures through our due diligence process, Owens Corning immediately began to plan how to engage these sites in a campaign to raise awareness and assess both activities around the sites and their respective biodiversity-related impacts. While we are confident these sites do not have

Protecting Biodiversity

direct impact on the biodiversity of the protected areas, we continue to enhance our approach where necessary to ensure that our biodiversity-related impacts are well understood and managed.

Further developments of our biodiversity assessment methodology may influence our approach to issues of biodiversity, which we will communicate publicly, as we have done in past reports.

MINING, QUARRIES, AND THEIR IMPACTS ON BIODIVERSITY

With the acquisition of Paroc, Owens Corning now owns sources of direct mineral extraction in the form of quarries. Owens Corning acquired the rights to nine mining concessions in Finland, four of which are actively being quarried to source industrial minerals. The quarries' impact on local biodiversity has been consistently monitored for compliance with local Finnish laws, and the quarries have never experienced a material fine for impact to local biodiversity or the environment.

We are actively implementing Owens Corning's internal auditing standards for the consideration and protection of habitat and other environmental impacts for these quarries, and are learning from industry leaders that have been recognized for their "beyond compliance" approach. To this end, each active quarry is third-party verified to ISO 14001 (2015) and ISO 9001 (2015), ensuring an integrated consideration of biodiversity, safety, and other environmental impacts.

In addition to the quarries we now operate, we continue to purchase materials from other groups that extract minerals as a component of our global supply chain

PHOTO CREDIT:
Alessio Frizziero | Besana, Italy

Protecting Biodiversity

for our businesses. We actively seek to understand our suppliers' performance standards and efforts to protect habitats and other aspects of sustainability.

OTHER ENVIRONMENTAL IMPACTS OF OUR QUARRIES

Our quarries extract industrial rock from the earth. In contrast to many traditional mining operations, all rock sourced from our quarries is used in some capacity. Leveraging operational control, we ensure that our quarries generate zero stone waste by having solutions in place for all variants of stone sourced from the quarries:

- Fine granules that are not directly relevant to stone wool production are either sold into the glass industry, used in construction, or compacted into briquettes, which can then be inputs for stone wool production;
- Usable stone is sent to our manufacturing sites to create stone wool;
- Rock that is not suitable for stone wool, known as "country rock," is used to provide infrastructure for the quarry, to shore up sediment embankments, and as aggregate material for building projects.

In addition to managing stone waste, we manage the soil and water impacts of our quarries. When a quarry is developed, topsoil is moved but kept onsite. Most of the topsoil becomes a part of the landscape again, with grass and trees growing in. Trees can be planted intentionally, but also come in naturally over time. Some of the topsoil is used as filler in quarry infrastructure.

The developed quarry also becomes a gathering point for rainwater from the surrounding region. Water that collects in the quarry is regularly monitored, tested, and pumped out to nearby sources. The water that gathers in Paroc's quarries is clean water, particularly by extractive industry standards, and none of the active quarries require treatment of their water before pumping it back out into nature.

PHOTO CREDIT:
Jim Hill | Denver, Colorado, U.S.

PHOTO CREDIT:
Gianfranco Romano | Besana, Italy
Otranto Lighthouse

Our Environmental Control efforts align with the following UN SDG:

ENVIRONMENTAL CONTROL

The company's 2020 sustainability goals require significant global reductions in energy use, water consumption, waste to landfill, emissions of greenhouse gases, fine particulate matter, and toxic air emissions. Owens Corning is dedicated to continuous improvement in its environmental, health, and safety performance; and to achieving its 2020 sustainability goals.

Strategy and Approach

Owens Corning has policies and procedures in place to ensure that its operations are conducted in compliance with all relevant laws and regulations, and that enable the company to meet its high standards for corporate sustainability and environmental stewardship.

Our manufacturing facilities are subject to numerous country-specific, regional, and local laws and regulations relating to the presence of hazardous materials, pollution, and protection of the environment, including emissions to air, discharges to water, management of hazardous materials, handling and disposal of solid wastes, and remediation of contaminated sites. Owens Corning applies an environmental management system based on the principles of ISO to all manufacturing facilities. The management system also helps us track progress toward our 2020 sustainability goals, which require significant global reductions in environmental impacts beyond compliance. In 2018, the environmental management system (EMS) for approximately 35% of our locations was certified to ISO 14001, which accounts for 43% of our employees. Additionally, 38 Owens Corning sites were certified to the ISO 9000 standard for a QMS (Quality Management System) in 2018.

Environmental Control

Owens Corning defines significant environmental actions as the total cost of fines or penalties equal to $100,000 or greater. There are no significant environmental actions to report for 2018. The company has not experienced a material adverse effect upon our capital expenditures or competitive position as a result of environmental control legislation and regulations. Operating costs associated with environmental compliance were approximately $40 million in 2018. The company continues to invest in equipment and process modifications to remain in compliance with applicable environmental laws and regulations worldwide.

Regulatory activities of particular importance to our operations include those addressing air pollution, water pollution, waste disposal, and chemical control. The company expects passage and implementation of new laws and regulations specifically addressing climate change, toxic air emissions, ozone-forming emissions, and fine particulate matter during the next two to five years. New air pollution regulations could impact our ability to expand production or construct new facilities in certain regions of North America. However, based on information known to the company, including the nature of our manufacturing operations and associated air emissions, at this time we do not expect any of these new laws, regulations, or activities to have a material adverse effect on our results of current operations, financial condition, or long-term liquidity.

Owens Corning is involved in remedial response activities and is responsible for environmental remediation at a number of sites, including certain currently owned or formerly owned plants. These responsibilities arise under a number of laws, including, but not limited to, the Federal Resource Conservation and Recovery Act (RCRA), and similar state or local laws pertaining to the management and remediation of hazardous materials and petroleum. The company has also been named a potentially responsible party under the United States Federal Superfund law, or state equivalents, at a number of disposal sites. We became involved in these sites as a result of government action or in connection with business acquisitions. At the end of 2018, Owens Corning was involved with a total of 22 sites worldwide, including eight Superfund sites and 14 owned or formerly owned sites. None of the liabilities for these sites are individually significant to Owens Corning. On December 31, 2018, the company had an accrual totaling $16 million for these costs. Changes in required remediation procedures or timing of those procedures at existing legacy sites, or discovery of contamination at additional sites, could result in material increases to our environmental obligations.

OUR ENVIRONMENTAL MANAGEMENT SYSTEM

Owens Corning's EMS is designed to assist in adhering to the principles in our Environmental, Health, Safety, and Product Stewardship Policy. The EMS is a collection of policies and procedures to manage environmental performance in a facility, including compliance, footprint reduction, and management systems. The system is a framework for setting and reviewing environmental objectives and targets to drive environmental improvement. All facilities globally are required to implement the system, track progress, and perform self-audits.

Our EMS includes the following elements:

A. Policy
B. Environmental Aspects and Impacts
C. Applicable Requirements
D. Objectives, Targets, and Action Plans
E. Structure Responsibility and Accountability
F. Training and Competency
G. Establishing Communication, Participation, Procedure, and Consultation
H. Management System Manual
I. Document Control
J. Operational Control and Management of Change
K. Executing Recurring and One-Time Tasks
L. Emergency Preparedness and Response
M. Performance to Legal and Other Requirements
N. Nonconformities, Corrective Actions
O. Record Management
P. Auditing
Q. Management Review

FINANCIAL STRENGTH

ECONOMIC RESPONSIBILITY

CORPORATE GOVERNANCE

ETHICS

- **Owens Corning seeks to maximize its financial strength through a disciplined financial strategy focused on long-term shareholder value.** We focus on growing the company by introducing new products that make the world a better place and applying our safety and environmental processes to the businesses that we acquire. Our enterprise operates with an unwavering commitment to ethics and our code of conduct. Our board provides consistent oversight of our sustainability efforts and is committed to gender and racial diversity in its membership.

PHOTO CREDIT:
Zbigniew Witryk | Trzemeszno, Poland

PHOTO CREDIT:
Christopher Vargas | Portland, Oregon, U.S.
Portland and Mt. Hood

Our Economic Responsibility efforts align with the following UN SDGs:

ECONOMIC RESPONSIBILITY

We believe that contributing to a sustainable economy is an important responsibility. We are deeply committed to delivering value to all our stakeholders by providing safe and gainful employment opportunities, quality products, ethical relationships, solid shareholder returns, and support to the communities in which we live and operate.

Growth Strategy and Approach

Over the last decade, we have transformed through thoughtful and disciplined actions that have built a strong, resilient company with three market-leading businesses. We have made significant and steady progress since the last economic downturn. Owens Corning's growth strategy has contributed to four consecutive years of record performance, improved our competitive position and earnings potential, strengthened our offering of market-leading solutions, and helped us achieve improved social and environmental impacts. Aided by attractive market dynamics, we expect our momentum to continue.

Our growth strategy focuses on:

- Building on our solid track record of performance;
- Accelerating organic growth by strengthening our leadership positions in markets in which we operate;
- Complementing our cost improvement efforts and other initiatives to help us operate more efficiently and effectively;
- Acquiring businesses that are profitable, provide synergies, and can be improved by our ownership; and
- Creating a workforce of leaders who will continue to drive our growth, (our "Leadership Capabilities for Growth" development program is described in detail later in this section).

Economic Responsibility

Whether growing our business organically or through acquisitions, our disciplined actions are building a better company with a greater ability to drive profitable growth and provide purpose for our people, positive impacts in our communities, and products that make the world a better place.

Sustainable Enterprise Framework

As part of our long-term strategy and governance model, we use a decision framework that supports managing the company as a sustainable enterprise. The pillars of our sustainable enterprise framework are: high-performance people, customer-inspired innovation, operational excellence, world-class sustainability, and financial strength. These pillars guide management's evaluation of our businesses, performance criteria, resource allocation, and other strategic choices focused on both short- and long-term horizons. These pillars also enable us to better serve key stakeholders, including customers, investors, employees, and the communities in which we operate. The sustainable enterprise framework is the foundation for our strategy to build market-leading businesses and reflects Owens Corning's purpose: our people and products make the world a better place.

Organic Growth: Investing in the Future

We are making strategic investments in our existing businesses to support our growth agenda, strengthen our value proposition to customers, and contribute to a sustainable enterprise. This encompasses expanding capacity to meet increasing demand; introducing new, more sustainable products; investing in more efficient equipment; closing underperforming facilities when necessary; and developing strategic alliances to align assets with our best growth opportunities.

To accelerate the development and commercialization of new products that drive growth, we have formed pipeline councils, which are tasked with taking the best ideas and getting them into our new product pipeline faster through expedited decision-making and a tight focus on innovation. In addition, we have developed an internal pool of MBA-trained strategy analysts who are available to work on various growth initiatives for our businesses.

For additional information on our product innovation and sustainable products efforts, see the Product Innovation section starting on page 50 of this report.

Acquisitions: Making Good Businesses Better

Acquisitions are an important part of our growth strategy. We look for acquisition opportunities with businesses that meet specific criteria: they must provide stable and attractive margins and strong synergies, address our target growth areas, and meet our strategic objectives.

We evaluate our acquisition candidates through multiple lenses, including sustainability, and we ask a critical question: Will this business be better with us as its owner? As sustainability guides our operations, we want to be confident that we can improve the environmental, health, and safety (EHS) performance, employee experience, customer experience, and community impact of the companies that join us. Can we bring a new perspective on safety and health? Can we improve energy efficiency and reduce waste in the operations?

Economic Responsibility

Between 2016 and March 2018, we successfully deployed about $2 billion on mergers and acquisitions. By 2019, we expect that these acquisitions will contribute combined revenue of $1.2 billion, according to financial projections as of the end of 2018.

In 2018, we completed three acquisitions:

- **Paroc Group**, a leading producer of mineral wool insulation for building and technical applications in Europe. The Paroc acquisition helped our Insulation business broaden its product portfolio and diversify its geographic scope to better address customers' needs. With the addition of Paroc, we now have insulation products across the high-, medium-, and low-temperature ranges in all three major markets (North America, Europe, and China), a leading position in the European insulation market, access to a variety of new end-use markets, and increased geographic sales mix outside of the U.S. and Canada for the Insulation segment.

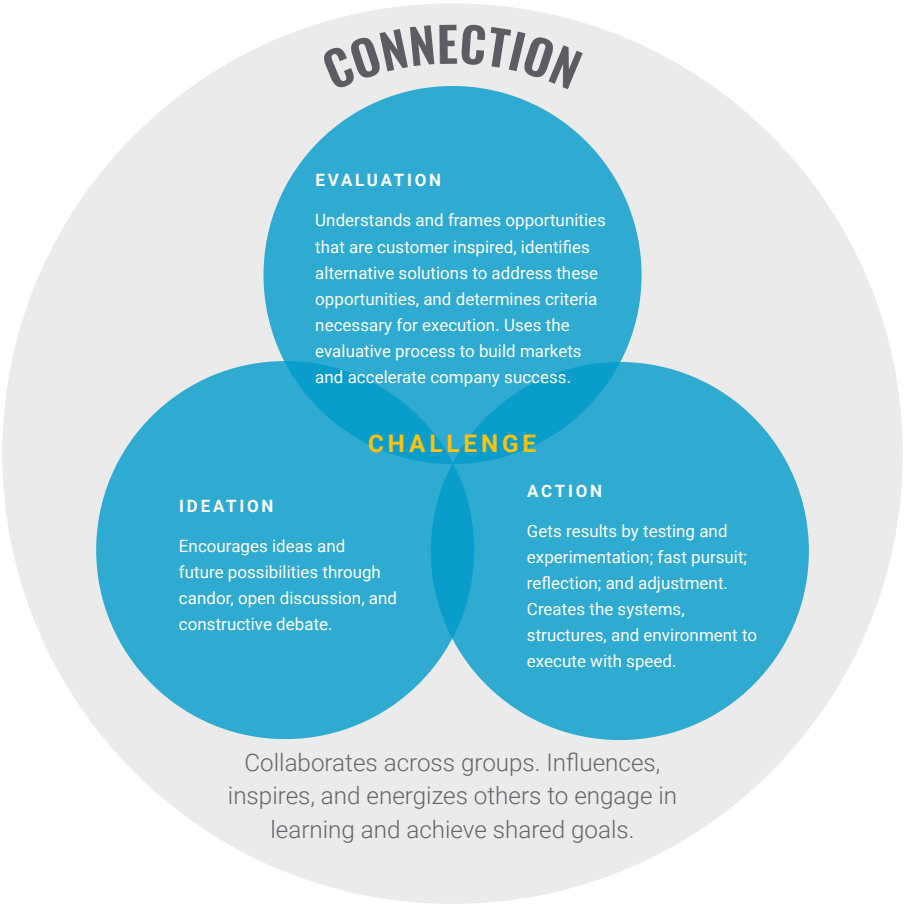
  Following the acquisition, we invested in a new mineral wool line at one of our newly acquired facilities in Poland. We expect this additional capacity to help accelerate our growth in the region and further strengthen our leadership position in the European insulation market. This new capacity is scheduled to come online in 2019. At the time of acquisition, Paroc already had a strong safety and sustainability culture in place, including previously issuing its own sustainability report, which is incorporated into this 2018 report.
- **Guangde SKD Rock Wool Manufacture Co., Ltd.**, a manufacturer of mineral wool insulation in China. Mineral wool is the primary insulation material in China due to its lifesaving and fire protection properties. Just hours after the transaction was completed, leaders representing Owens Corning's China insulation business and key functions welcomed the employees in a town hall meeting. During the meeting and in follow-up sessions, employees began learning about our culture; commitment to EHS and sustainability; organizational structure; performance management system; and legal compliance.
- Near the end of 2018, we purchased a **manufacturing facility in Blythewood, South Carolina, U.S.**, with plans to convert its existing line to produce coated non-woven products. Adding this new capacity and capability for glass-based coating solutions in this region will help us to better serve our residential and commercial building products customers across North America. This is the first step in the creation of our glass non-wovens excellence center, in which we will continue to invest, expanding our capacity with the best available technologies.

These transactions follow the acquisition and integration of two companies in 2017: **Pittsburgh Corning**, the world's leading producer of cellular glass insulation systems, including the FOAMGLAS® brand, for commercial and industrial markets; and **Aslan FRP™**, a producer of glass and carbon fiber reinforced polymer products, also known as composite rebar, used to reinforce concrete for roads, bridges, marine structures, buildings, tunnels, and other infrastructure. Also in 2016, we acquired **InterWrap**, a leading manufacturer of roofing underlayment and packaging materials. The acquired businesses successfully expand the capabilities and global reach of our three business segments of Composites, Insulation, and Roofing. Even with these substantial changes, Owens Corning is committed to meeting our sustainability goals.

Improving EHS performance and enhancing the employee experience are critical elements in our acquisition integration process. At Paroc, SKD, and Blythewood, just as we have done with prior acquisitions, we implemented our "Critical Six" program, which is focused on minimizing or eliminating life-altering injuries from six of the highest-risk causes.

We are focused on building a sustainable safety culture across all acquired facilities, including implementing behavior-based safety programs to promote peer-to-peer interaction and accountability. In addition, we are working to engage our acquired organizations in the Owens Corning Healthy Living platform, which has six wellness pillars. For more information on this program, see page 86 in the Healthy Living section of this report.

Economic Responsibility



Building Our Capabilities for Growth

At Owens Corning, we believe the growth of our business happens through the growth of our people. We have established a framework to help us build the necessary capabilities to support our growth agenda and attract professionals who have the desire and capacity to lead and grow with us in the years ahead. As part of this framework, we have identified key leadership skills needed to drive our growth strategy, and have put programs in place both to help current leaders master those skills and prepare rising stars to assume increasing leadership roles across the company.

In 2018, our leaders increased usage of our custom assessment tool that identifies individual areas for improvement and focus to move from a fixed mindset to a growth mindset. This is critical in an organization that prides itself on promoting from within. It is demonstrated by the fact that, in 2018, more than 79% percent of positions at the director level were filled by internal candidates.

Our growth leadership council also continued to serve as a resource for developing and practicing the skills necessary for growth. We have a competitive program that consists of sessions in which teams from each business present a new product idea or market opportunity. All executives participate in selecting the winning projects, which are then put in motion.

As acquisitions continue to be an important component of our growth strategy, we provide integration training to our current leaders, and offer tailored programs to help leaders from acquired companies learn quickly about our culture and how we view leadership. These programs include training on human-centered design, coaching for impact, and cultural diversity – which are consistent with our aspiration to build market-leading businesses that are global in scope, human in scale.

For more information on our employee and leadership development programs, see the Employee Experience section beginning on page 25 of this report.

Economic Responsibility

Driving Sustainable Economic Growth

Our commitment to balancing economic growth with social progress and environmental stewardship enables us to continue to deliver sustainable solutions to customers and stakeholders worldwide. Our economic progress has resulted in improvements in key financial indicators and robust performance across the company. Notably, in 2018, we achieved revenue growth of 11%, record adjusted EBIT, and all three of our businesses produced double-digit EBIT margins. This is the first time in our history that we have had this level of margin performance across the entire portfolio. Owens Corning is at its best when all our businesses make meaningful contributions to our financial results, and these results reflect the investments we have made to our portfolio of businesses and the overall improvement of our competitive profile. Based on the strength exhibited across our portfolio and confidence in our market outlook, our board of directors declared a quarterly dividend of $0.22 per share.

For more information on the company's financial performance in 2018, please refer to the Owens Corning 2018 Annual Report on Form 10-K.

KEY SUSTAINABILITY INDICATORS FOR ECONOMIC GROWTH

To drive sustainable economic growth, we are focused on addressing and continuously improving on our key sustainability indicators. These include:

- Achieving operational sustainability by reducing our environmental footprint, in line with global stakeholders' expectations;
- Charting a clear course of action to drive product and supply chain sustainability through enhanced engagement and by enabling product life cycle transparency;
- Ensuring community impact through local community initiatives, a key aspect of honoring our social responsibility;
- Partnering and collaborating with builders, contractors, architects, and homeowners to understand their needs and adopt better building products and systems, based on building science;

> In 2018, we achieved revenue growth of 11%, record adjusted EBIT, and all three of our businesses produced double-digit EBIT margins. This is the first time in our history that we have had this level of margin performance across the entire portfolio.

- Developing, through science and technology, innovative building products and systems to improve durability, and deliver energy efficiency and building comfort;
- Sharing our building science expertise to advocate for building code improvements and educate the industry; and
- Continuing to make the safety, health, and wellness of our employees a top priority.

Pension Liabilities

Because we believe people are integral to our success, we are committed to providing all employees with comprehensive retirement benefits. Generally, we offer these benefits via defined contribution arrangements. However, defined benefit plans may be provided in accordance with local custom to ensure a competitive overall benefits package.

PHOTO CREDIT:
Ariane Aerts | Tessenderlo, Belgium
Restoring the beach at Ostend, Belgium

Economic Responsibility

Over 97% of our defined benefit obligations are payable through a fund held and maintained separately from the resources of the organization. The U.S. qualified plan is 109% funded, as determined by actuarial valuation within the past 12 months. The U.K. and Canadian plans are less than 100% funded, also based on actuarial valuation within the past 12 months. These three plans represent over 92% of the company's defined benefit liabilities.

Our strategy for the U.S. plan is to contribute at least the minimum required amount each year and ensure that the plan is funded at 80% or greater. Other plans are funded to fully comply with local requirements.

Approximately 90% of Owens Corning employees who are eligible, participate in voluntary retirement savings (defined contribution) programs.

Owens Corning provides an automatic 2% contribution based on salary to all U.S. employees' 401(k) plan. The company also matches up to 6% based on individual contributions; thus, employees who maximize the company match will save 14% of salary toward retirement. New U.S. hires are automatically enrolled in our 401(k) plan. Our 401(k) plan represents approximately 93% of our contributory savings plans globally.

Financial Assistance

Owens Corning receives financial assistance in the form of various tax credits, which is reflected in the table below.

Tax Credits

	TAX RELIEF AND TAX CREDITS	SUBSIDIES
Brazil	$458,487	$0
France	$2,041,347	$283,193
Italy	$41,889	$0
Netherlands	$0	$139,236
Finland	$0	$985,157
United States	$1,336,000	$0
U.S. Territories	$2,288,213	$0
China	$0	$814,000

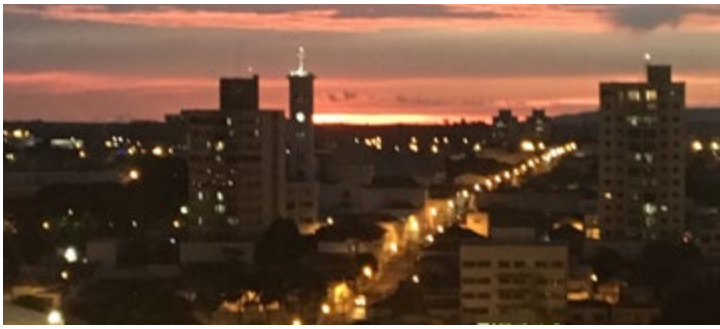


PHOTO CREDIT:
Cristina Cidre | Rio Claro, Brazil
Summer sunset in Rio Claro

Local Hiring

As an organization with operations across multiple geographies, we believe it is important to focus on local hiring to optimize costs and efficiency, and to support economic growth in the areas where we operate.

As of the end of 2018, 22 of 23 general managers and key business leaders live in or are citizens of the local country where they are assigned. The senior leader who was not sourced locally is an internal transfer, assigned to an international location as an expatriate for the opportunity to expand skills and grow as a global leader. We believe these select opportunities lead to increased cultural and business intelligence.

Percentage of Senior Leadership Hired from Local Communities

SIGNIFICANT LOCATIONS OF OPERATION	PERCENTAGE OF SENIOR MANAGEMENT HIRED FROM LOCAL COMMUNITY
Toledo, Ohio (world headquarters)	100% (19/19)
Chambéry, France	100% (1/1)
Granville, Ohio	100% (1/1)
Bersana, Italy	100% (1/1)
Shanghai, China	0% (0/1)

In this context, Owens Corning uses GRI's definition of "local" as country.

Owens Corning World Headquarters, Toledo, Ohio

Our Corporate Governance efforts align with the following UN SDG:

CORPORATE GOVERNANCE

Strategy and Approach

Effective corporate governance is a discipline at Owens Corning – a deliberate framework of formal guidelines, processes, and procedures that controls how we conduct business and interact with our stakeholders. Our approach ensures that we operate in accordance with the highest ethical standards, our charter documents, all applicable laws, and stakeholder interests.

The Owens Corning Corporate Governance Guidelines are the backbone of our corporate governance framework. They cover everything related to the board, including selection, composition, leadership, performance, relationship to management, meeting procedures, committee matters, and leadership development. Our guidelines are implemented through our Code of Business Conduct; all our employees are required to abide by the code's provisions on legal and ethical conduct.

We have other corporate policies and procedures that address specific corporate governance topics. Together with our corporate governance guidelines and code of business conduct, these policies and procedures inform the way we work every day, and guide us in conducting business ethically, maintaining strong relationships with our stakeholders, and staying true to our values.

As outlined in further detail in this section, on our website, and in our public filings, our governance framework integrates our values within daily operations across all our businesses. It provides oversight of performance and drives excellence, accountability, and transparency.

Corporate Governance

Board of Directors

Our business, property, and affairs are managed under the direction of our board of directors. Owens Corning's board of directors consists of two executive directors and eight independent non-executive directors. Among our board members, one is from an ethnic minority group, and three are female. In April 2019, Mr. Cesar Conde retired from the board.

Name	Significant Positions & Commitments	Gender	Age	Initial Year as Director	Role
Mr. Brian Chambers	President and CEO of Owens Corning	Male	52	2019	Executive
Mr. Michael Thaman	Executive Chairman of Owens Corning, Director of The Sherwin-Williams Company	Male	55	2002	Executive
Ms. Adrienne Elsner*	Former President of U.S. Snacks, Kellogg Company and former director of the Ad Council and the Museum of Science and Industry	Female	55	2018	Independent Non-Executive Director
Mr. J. Brian Ferguson	Former Chairman of Eastman Chemical Company, Director of Phillips 66	Male	64	2011	Independent Non-Executive Director
Mr. Ralph F. Hake	Former CEO of Maytag Corporation and Amana Appliances	Male	70	2006	Independent Non-Executive Director
Mr. Edward F. Lonergan	Executive Chairman of Zep, Inc., Director of The Schwan Food Company, Senior Advisor at New Mountain Capital	Male	59	2013	Independent Non-Executive Director
Ms. Maryann T. Mannen*	Executive Vice President and CFO of TechnipFMC	Female	56	2014	Independent Non-Executive Director
Mr. W. Howard Morris*	President and Chief Investment Officer of The Prairie & Tireman Group	Male	58	2007	Independent Non-Executive Director
Ms. Suzanne P. Nimocks*	Director of Encana Corporation, Rowan Companies Plc and ArcelorMittal	Female	60	2012	Independent Non-Executive Director
Mr. John D. Williams	CEO and Director of Domtar Corporation	Male	64	2011	Independent Non-Executive Director

**Indicates membership of under-represented social group*

BOARD LEADERSHIP

On January 3, 2019, Owens Corning announced the planned transition to a new president and chief executive officer (CEO), Brian D. Chambers. Mr. Chambers succeeds Mr. Thaman, who announced plans to retire as CEO after the Annual Meeting.

Mr. Thaman served as chairman of the board since 2002 prior to being elected the company's CEO. Upon assuming the role of CEO in 2007, the chairman and CEO positions were combined in order to ensure clear and consistent leadership on critical strategic objectives. The board's prior experience working with Mr. Thaman in the chairman position strongly supported its conclusion that the company and its stockholders would be best served with Mr. Thaman leading Owens Corning as its chairman and CEO. The board of directors further determined that it was appropriate to have a structure that provided strong leadership among the independent directors of the board. Mr. John D. Williams has served as lead independent director since April 2015.

Corporate Governance

Mr. Williams has served as director of the company since 2011 and has experience serving as chairman of the audit committee and governance and nominating committee. Additionally, the board, which consists entirely of independent directors other than Mr. Thaman and Mr. Chambers, exercises an independent oversight function. Each of the board committees is comprised entirely of independent directors. Regular executive sessions of the independent directors are held and each year, an evaluation of the chairman and CEO in several key areas, is completed by each of the independent directors.

Following the Annual Meeting, Mr. Thaman holds the position of executive chair, Mr. Williams retains the position of lead independent director for another two-year term, and Mr. Chambers assumes the role of president and CEO. Mr. Thaman remaining as executive chairman allows for an orderly transition and lends stability to the CEO succession process. Mr. Thaman's breadth of board management experience and executive knowledge continues to help the board meet its responsibilities, as he also serves as a valuable mentor and advisor to Mr. Chambers in his new CEO role.

Prior to his position as president and chief operating officer, Mr. Chambers served as president of the Roofing business. Overall, he has 15 years of management experience with Owens Corning in a variety of positions, including roles with the company's Composites and Building Materials businesses. The board believes that Mr. Chambers' depth of experience and positive results will enable his success as chief executive officer and will complement proven board leadership from Mr. Thaman and Mr. Williams.

The board of directors has complete access to the company's management and believes that its ongoing ability to review the leadership structure of the board and to make changes as it deems necessary and appropriate gives it the flexibility to meet varying business, personnel, and organizational needs over time.

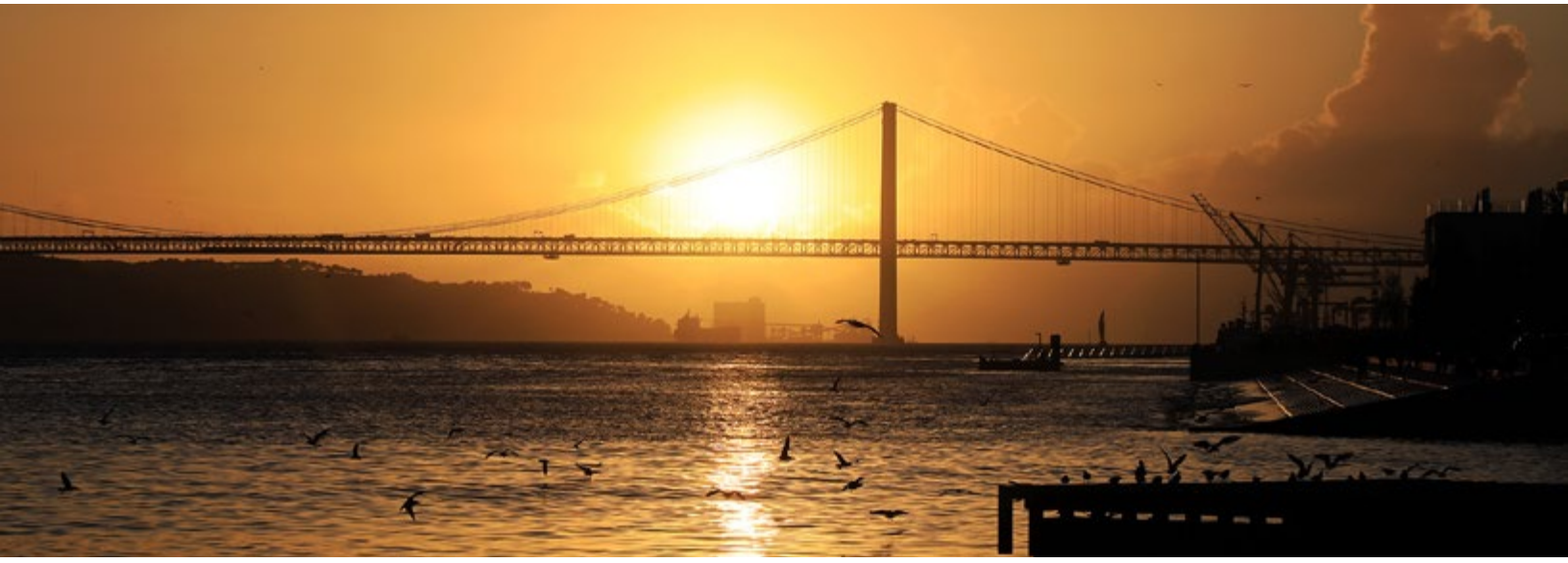


PHOTO CREDIT:
Jyrki Männikkö | Helsinki, Finland
Taken in Lisbon, Portugal

Corporate Governance

PHOTO CREDIT:
Gianfranco Romano | Besana, Italy
Ciliegio Briosco

All board members, other than our chairman and our CEO, are independent under all applicable legal, regulatory, and stock exchange requirements ("independent directors"). Six board members have relevant experience in our GICS level 1 sector. Average tenure on the board is currently 7.5 years. The board believes that the current and future leadership structure is appropriate for Owens Corning considering our company's governance structure, current needs, and business environment, as well as the unique talents, experiences, and attributes of the individuals in those roles. For more details on the individual board members and their competencies, please see our 2019 Proxy Statement.

During 2018, the board met five times. The average attendance rates of the meetings of the board and board committees were 99%. In addition, the board held five executive sessions (i.e., meetings of only non-management directors) in 2018, in accordance with our corporate governance guidelines.

BOARD COMMITTEES

The board has five committees:

1. Audit Committee
2. Compensation Committee
3. Governance and Nominating Committee
4. Executive Committee
5. Finance Committee

Read more in the Board and Committee Membership section of our 2019 Proxy Statement or on the Owens Corning website.

NOMINATION AND SELECTION OF QUALIFIED BOARD MEMBERS

The board of directors is responsible for nominating candidates for election to the board (by stockholders) and for filling vacancies that may occur between annual meetings of stockholders.

We have formal procedures for selecting and nominating potential board members. The governance and nominating committee is authorized to recommend only those director candidates that meet our Director Qualification Standards. Nominees for director are selected based on, among other things: experience, knowledge, skills, expertise, mature judgment, acumen, character, integrity, diversity, ability to make independent analytical inquiries, understanding of the company's business environment, and willingness to devote adequate time and effort to board responsibilities. As outlined in our bylaws, each board member is elected individually on an annual basis and must receive the majority of the votes. All our current non-executive directors have fewer than four additional mandates to public boards, as required by our qualification standards.

The governance and nominating committee examines principle skills when evaluating the director's experience and qualifications to serve as a director. With respect to sustainability, the committee assesses experience in or management responsibility for furthering sustainable business practices that address environmental, social, or ethical issues. Six of our current board members demonstrate this skill.

We believe board diversity enhances the board's ability to manage and direct the affairs and business of the company. In identifying director nominees, the committee considers diversity as required by its charter and the corporate governance guidelines. The effectiveness of this process is assessed annually by the full board as part of the board self-evaluation process.

Corporate Governance

Recent additions to the board demonstrate the company's commitment to diversity. Since 2012, four of the last five non-executive directors to join the board were either ethnic minorities or female. The board currently features 40% gender and ethnic diversity.

Our director qualification standards incorporate the independence requirements of the New York Stock Exchange corporate governance listing standards. The standards include strict guidelines for directors and their immediate families with respect to past employment or affiliation with our company or its independent registered public accounting firm. With the assistance of the governance and nominating committee, the board determines whether a director has a material relationship with the company other than as a director, which would preclude the director's independence.

BOARD EDUCATION

We provide new directors with a director orientation program to familiarize them with, among other things, our company's business; strategic plans; significant financial, accounting, and risk management issues; compliance programs; conflict policies; code of business conduct and ethics; corporate governance guidelines; principal officers; internal auditors; and independent auditors. The orientation process for new directors is designed to make them knowledgeable about our company and includes briefings by the CEO and management.

After the orientation process, directors are expected to continue to learn about our business and business-related issues to ensure that they maintain the necessary expertise and competency to perform their responsibilities as directors. They continue their learning in a number of ways, including by talking with our executive officers; reviewing materials provided to them; visiting our offices and plants; and participating in third-party educational programs. The governance and nominating committee periodically receives updates on environmental, social, and governance issues.

BOARD AND COMMITTEE EVALUATION

Each year, as specified in our corporate governance guidelines, the governance and nominating committee evaluates the effectiveness of the board, its five committees, the chairman and CEO, and committee charters. The board and its committees complete annual self-assessment questionnaires and have individual discussions with the lead independent director to evaluate effectiveness in several areas, including board composition, structure, and process. The completed questionnaires are submitted directly to a third-party law firm, which summarizes the results. The governance and nominating committee circulates the summarized results to all directors, except for results related to evaluation of the chairman and CEO. Those are sent only to the independent directors, to be discussed in an executive session of the non-management directors. Results are also factored into the compensation committee's performance evaluation of the chairman and CEO.

Conflicts of Interest

We have several written policies and procedures in place related to avoiding, managing, and disclosing conflicts of interest by directors, officers, employees, and members of their immediate families.

As indicated in our directors' code of conduct, a director who has an actual or potential conflict of interest must disclose to the chairman of the board and the chairman of the governance and nominating committee (1) the existence and nature of the actual or potential conflict of interest and (2) all facts known to him or her regarding the transaction that may be material to a judgment about whether to proceed with the transaction. The director may proceed with the transaction only after receiving approval from the governance and nominating committee.

In our annual proxy statement, we disclose transactions between board members and their immediate families. For related party transactions (RPTs) that are subject to

Corporate Governance

FASB Accounting Standards Codification (ASC) Topic 850, we comply with additional disclosure requirements. We also disclose with suppliers and other stakeholders all other conflicts of interest, such as the existence of controlling shareholders, cross-board membership, and cross-sharing.

Remuneration Policies

Owens Corning continually monitors the evolution of compensation best practices, and reviews the relationship between company performance and compensation and the goals and targets we set. Individual goals and targets are designed to ensure Owens Corning as a whole meets its financial and environmental goals while operating as an ethical company.

Overall corporate governance compensation decisions are based on the core philosophy that compensation must align with and enhance long-term, sustainable growth for our stockholders. Approximately 80% of pay for executive officers is variable, contingent, and directly linked to individual and company performance. Generally, company performance is measured based on financial goals, and individual performance is measured based on objectives related to environment and safety, financial objectives, talent management, reputational risks, compliance and risk management, and other factors appropriate for the individual role.

For a detailed discussion on executive compensation, including ways we apply internal and external financial success metrics, please see the section on Executive Compensation in our 2019 Proxy Statement. Our proxy statement also includes details on potential termination payments and recoupment of compensation (clawback) paid to named executive officers. CEO pay ratio is reported on page 51 of our 2019 Proxy Statement.

Stakeholder Consultation and Communication

To better understand our stakeholders' expectations and priorities, we proactively engage and consult with individuals, groups, and organizations that are impacted by our business operations. As described more fully under Stakeholder Engagement & Material Issues and in our annual proxy statements, we rely on stakeholder guidance and direction to choose our business strategies and priorities, and to learn what's working and what's not. We reach out to stakeholders, and we invite them to communicate with us, on any economic, environmental, and social topic related to our business. The collective stakeholder input is crucial to the board's fulfillment of its duties and responsibilities. It directly informs the board's identification and management of economic, environmental, and social matters and their impacts, risks, and opportunities.

PHOTO CREDIT:
Yana Liu | Shanghai, China
Yana's son, Tiger Xu, is curious about the world.

Corporate Governance

We also invite all our stockholders and other interested parties to communicate with our board on any critical concerns they might have about our business. Interested parties may communicate with the lead independent director or any other non-management director by sending an email to non-managementdirectors@owenscorning.com. Our senior vice president and general counsel and/or the vice president, internal audit promptly reviews all such communications for evaluation and appropriate follow-up. A summary of all communications (other than "spam" or "junk" messages unrelated to the board's duties and responsibilities) is reported to the non-management directors.

In addition, stakeholders and other interested parties may communicate with the vice president (VP) and chief sustainability officer (CSO) via his email address, his assistant, the sustainability email address provided on our website, or telephone. All business-appropriate inquiries are handled by the VP and CSO directly, or passed on to corporate communications, legal, or other company function for appropriate action or response. Communications considered to be advertisements, or other types of spam or junk mail messages, are discarded without further action.

Communications alleging fraud or serious misconduct by directors or executive officers are immediately reported to the lead independent director. Complaints regarding business conduct policies, corporate governance matters, accounting controls, or auditing are managed and reported in accordance with Owens Corning's existing audit committee complaint policy or business conduct complaint procedure, as appropriate.

Sustainability Governance Structure

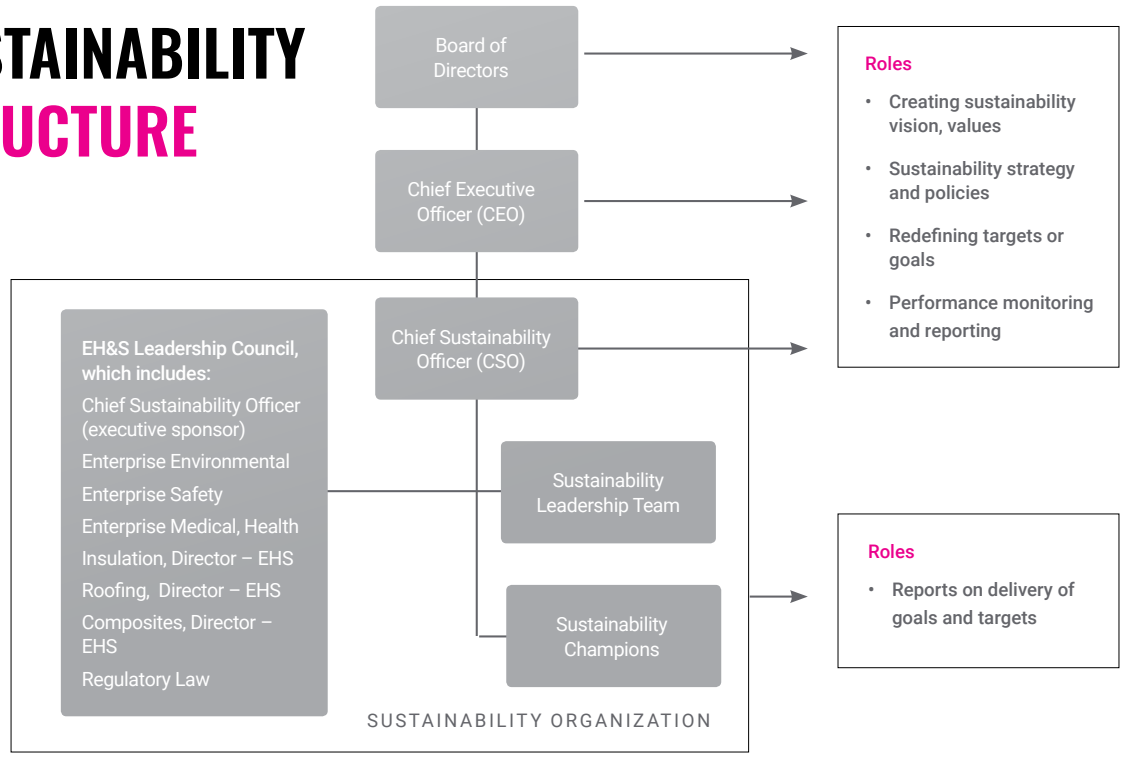
Owens Corning has a governance structure for evaluating and making decisions on all aspects of sustainability, including economic, environmental, and social topics. The sustainability governance structure includes key roles for the board of directors, our CEO, and our entire sustainability organization.

Our sustainability governance structure ladders up to the board and includes delegation of responsibilities to senior executives and other employees. The directors' code of conduct states that directors are expected to provide oversight, guidance, and direction on sustainability issues and opportunities that have potential impact on the reputation and long-term economic viability of the company. These issues include personal safety; environmental compliance; product stewardship; and the environmental and social impact of our global operations and the products we make and sell. Specifically, the audit committee reviews the impact of significant and proposed regulatory changes, and accounting or reporting developments, including significant reporting developments related to the principles of sustainability. Our VP and CSO reports directly to the CEO and is accountable for our company's sustainability strategy and compliance with both legal and company requirements related to the environment, safety, health, and sustainability. The CSO heads a sustainability organization of approximately 40 employees that is charged with product stewardship; product, supply chain, and environmental sustainability; reporting and analytics; and safety, medical, health, and wellness at the enterprise level.

We continually measure the success of our sustainability efforts. The sustainability leadership team holds regular meetings to review sustainability initiatives such as performance against metrics, debate current trends in the market, evaluate the level of transparency of our product attributes and information needed to satisfy customers, and understand increasing stakeholder expectations. These reviews ensure we are focused on the programs that matter most to our stakeholders and to the world.

Corporate Governance

SUSTAINABILITY STRUCTURE



Risk Oversight, Management Framework, and Process

Optimal risk management and disclosure are high priorities for Owens Corning. We identify and manage risks through a robust framework that comprehensively scans risks across economic, environmental, and social domains. We pursue a forward-looking and holistic approach to enable business decisions, and take calculated risks to build long-term financial goals and shape a successful future.

The audit committee of the board has primary responsibility for facilitating board oversight and management of key risks and financial exposures. Pursuant to its charter, the audit committee's responsibilities include:

- Reviewing annually, and receiving periodic updates on, our company's identification of its key risks, major financial exposures, and related mitigation plans;
- Overseeing our company's management of key risks and major financial exposures that fall within the audit committee's specific purview, and ensuring that the board and its committees oversee management of risks and exposures within their respective purviews;
- Ensuring that the board and its committees oversee our company's management of key risks and major financial exposures within their respective purviews; and
- Evaluating periodically the effectiveness of the above-referenced process of oversight.

The compensation, finance, and governance and nominating committees of the board all review and evaluate risks associated with their respective areas. Each board committee provides reports concerning its respective risk management activities to the board, and the board considers and discusses such reports.

Corporate Governance

Owens Corning also has a risk committee that is responsible for overseeing and monitoring our company's risk assessment and mitigation-related actions. The risk committee is not a board committee. It is a cross-functional corporate committee that includes members from the corporate audit, finance, legal, security, treasury, and business functions. It is the internal mechanism for identifying risks and mitigation strategies, plus providing key updates to executive officers and the audit committee of the board.

The risk committee's responsibilities and activities include the following:

- **Reviewing the Owens Corning Risk Register developed by the business functions.** Risks are prioritized based on their placement on a register that considers financial impact and probability of occurrence, as well as whether the level of exposure is acceptable, and if mitigation plans are actively in place or improved risk mitigation is needed.
- **Aligning on key mitigation programs.** Based on the risk register outputs, the risk committee identifies the various mitigation actions necessary and takes a planned approach toward implementing these same actions through the businesses.
- **Reviewing the risk register with the executive committee.** All risk assessment results and outputs are reviewed with the executive committee, and feedback is incorporated into the risk register and reflected in mitigation planning.
- **Meeting semiannually as a committee.** The risk committee meets twice each year to review emerging risks and their potential impact on Owens Corning, as well as to review the existing risk aspects, add any new risks being identified from internal or external sources, and update any risks no longer considered applicable to the businesses. The risk committee also reviews the mitigation actions and outputs for the annual cycle.
- **Providing an annual update to the audit committee of the board.**

Owens Corning follows several integrated and multidisciplinary processes for managing risks:

IDENTIFICATION AND ASSESSMENT

Owens Corning's business units use risk maps to proactively analyze risks and create business-specific risk registers. The risk registers are, in turn, used by the risk committee to create the corporate-level risk register. This enables business units and the risk committee to facilitate strategic and operational planning processes, while mitigating sustainability risks.

PRIORITIZATION

Our company prioritizes risks based on their placement in the risk register: the Y-axis is a measure of potential financial impact and the X-axis represents the measure of probability of occurrence. For instance, a risk located at the upper left of the risk map is indicative of high financial impact with a low probability of occurrence. We also use color coding to place additional emphasis on potential risks.

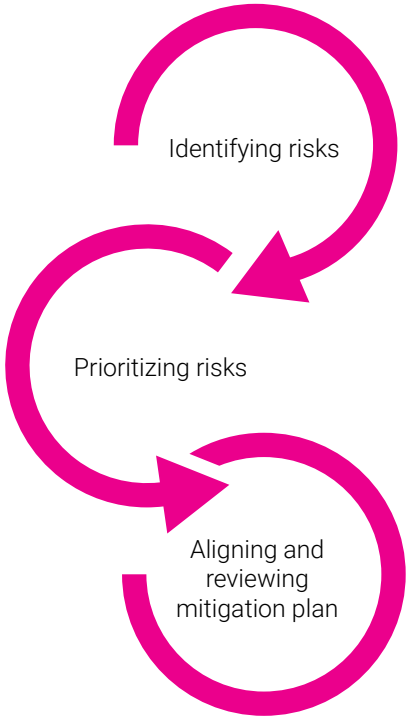
REVIEW AND ALIGNMENT OF RISK MITIGATION PLAN

To identify new risks and update risks no longer considered relevant, the risk committee reviews results and outputs of risk assessments twice annually. This enables the committee to implement a robust mitigation plan across businesses as well as corporate functions. Our enterprise risk management (ERM) process is updated and reviewed annually by the executive committee and the audit committee of the board to ensure that it remains relevant and proactive.

Our board confirmed the effectiveness of our risk management processes for 2018. The board will assess the effectiveness of our processes again next year.

Corporate Governance

Risk Mitigation Framework



Summary of Key Risks

Owens Corning is subject to many diverse risks, including cyber threats, loss of key facilities due to natural catastrophes, significant regulatory changes, competitive threats, supply chain and energy constraints, loss of key talent, theft of intellectual property, product liability, IT infrastructure failures, loss of a key customer, and global political risks.

Risks vary in terms of importance and likelihood. We use a correlation analysis to assess the likelihood of an event occurring within a specific period and then develop strategic plans and prioritize accordingly. We apply this analysis to our key external business drivers such as housing starts, hurricane and other severe weather conditions, and aspects like wind-power growth rates. For example, this analysis has indicated that the insulation business is highly correlated to new home starts. Based on actual and forecasted home starts, the business builds its strategic plan and makes the appropriate tactical maneuvers to right-size capacity and the workforce. Additionally, energy, commodity, and foreign currency hedging programs are routinely evaluated to provide inputs to our correlation analysis.

For an in-depth discussion of our quantitative and qualitative risks and our approach for managing them, please see our 2018 Annual Report on Form 10-K, and for a discussion on our climate change risks, management of those risks, and related opportunities, please see our CDP Climate Change 2019 Report.

Some of the key risks that directly impact our operations include:

- Low levels of residential, commercial, or industrial construction activity can have a material adverse impact on our business and results of operations.
- We face significant competition in the markets we serve and we may not be able to compete successfully.
- Our sales may fall rapidly in response to declines in demand because we do not operate under long-term volume agreements to supply our customers and because of customer concentration in certain segments.
- Worldwide economic conditions and credit tightening could have a material adverse impact on the company.
- Our level of indebtedness could adversely impact our business, financial condition, or results of operations.
- Adverse weather conditions and the level of severe storms could have a material adverse impact on our results of operations.
- Our operations require substantial capital, leading to high levels of fixed costs that will be incurred regardless of our level of business activity.

Corporate Governance

- We may be exposed to cost increases or reduced availability of energy, materials, or transportation, which could reduce our margins and have a material adverse impact on our business, financial condition, and results of operations.
- Our results of operations in a given period may be impacted by price volatility in certain wind-generated energy markets in the U.S.
- We are subject to risks relating to our information technology systems, and any failure to adequately protect our critical information technology systems could materially affect our operations.
- We are subject to risks associated with our international operations.
- The company's income tax net operating loss and U.S. foreign tax credit carryforwards may be limited and our results of operations may be adversely impacted.
- Our intellectual property rights may not provide meaningful commercial protection for our products or brands and third parties may assert that we violate their intellectual property rights, which could adversely impact our business, financial condition, and results of operations.
- Our hedging activities to address energy price fluctuations may not be successful in offsetting increases in those costs or may reduce or eliminate the benefits of any decreases in those costs.
- Downgrades of our credit ratings could adversely impact us.
- Increases in the cost of labor, union organizing activity, labor disputes, and work stoppages at our facilities could delay or impede our production, reduce sales of our products, and increase our costs.
- We could face potential product liability and warranty claims, we may not accurately estimate costs related to such claims, and we may not have sufficient insurance coverage available to cover such claims.
- We may be subject to liability under and may make substantial future expenditures to comply with environmental laws and regulations.
- We will not be insured against all potential losses and could be seriously harmed by natural disasters, catastrophes, theft, or sabotage.
- We depend on our senior management team and other skilled and experienced personnel to operate our business effectively, and the loss of any of these individuals or the failure to attract additional personnel could adversely impact our financial condition and results of operations.
- We are subject to various legal and regulatory proceedings, including litigation in the ordinary course of business, and uninsured judgments or a rise in insurance premiums may adversely impact our business, financial condition, and results of operations.
- Our efforts in acquiring and integrating other businesses, establishing joint ventures, expanding our production capacity, or divesting assets are subject to a number of risks.
- Our ongoing efforts to increase productivity and reduce costs may not result in anticipated savings in operating costs.
- Significant changes in the factors and assumptions used to measure our defined benefit plan obligations, actual investment returns on pension assets, and other factors could have a negative impact on our financial condition or liquidity.
- If we were required to write down all or part of our goodwill or other indefinite-lived intangible assets, our results of operations or financial condition could be materially adversely affected in a particular period.

CLIMATE CHANGE RISKS

Climate change risks and opportunities are fundamentally driven by three factors: regulations, physical climate factors, and other climate-related variations. In the spirit of transparency, Owens Corning voluntarily discloses these risks in our CDP Climate Change 2018 Report. Our CDP Climate Change 2019 Report will be published in the third quarter on our sustainability website.

ETHICS

PHOTO CREDIT:
Gianfranco Romano | Besana, Italy
Taken near the Otranto Lighthouse

Our Ethics efforts align with the following UN SDG:

Strategy and Approach

Conducting business ethically is an expectation and responsibility of every employee. The high value that Owens Corning places on integrity is reflected in everything from the products we make, to the way we make them, to how we interact with our business partners and others.

The Owens Corning Code of Conduct is a powerful mechanism for assuring a sustainable, respected company. Our code applies to every single person at Owens Corning, regardless of location, position, or seniority. By living up to high standards and expectations, we show our stakeholders that we respect them, we respect Owens Corning, and we respect the value of ethical business conduct.

As part of our comprehensive corporate ethics and compliance program, we have specific policies that apply to our chief executive, senior financial officers, members of the board of directors; and other business conduct policies that apply to all employees on specific compliance topics and serve to support the code of conduct. The code of conduct and these policies can be found and reviewed in:

- Code of Conduct
- Ethics Policy for Chief Executive and Senior Financial Officers
- Directors' Code of Conduct
- Equal Opportunity
- Non-harassment
- Human Rights Policy
- Data Privacy Policy (internal only)

Ethics

In addition to following our code of conduct and the supporting business conduct policies, we are also responsible for following the laws and regulations that apply to our work. We are always mindful of legal requirements, and our policies support compliance. We are committed to conducting business ethically, in accordance with applicable laws, rules, regulations, and high standards. We are also committed to full and accurate financial disclosure in compliance with applicable law.

Code of Conduct

Our code of conduct is an extension of our corporate values, and guides how we conduct business. It contains 10 guiding principles for ethical business conduct, which are designed to ensure that employees act with integrity and in an ethical manner, avoiding even the appearance of illegality or impropriety. Each principle is supported by one or more business conduct policies that detail compliance expectations. Our code of conduct and guiding principles are inspired by and aligned with the United Nations Global Compact (UNGC), the Universal Declaration of Human Rights, the U.S. Foreign Corrupt Practices Act (FCPA), the UK Bribery Act, and the Organisation for Economic Co-operation and Development (OECD) Anti-Bribery Convention.

Areas covered by the code of conduct and business conduct policies include, without limitation, the following:

- Corruption and bribery
- Discrimination, including non-harassment
- Confidential information
- Data privacy
- Antitrust/anticompetitive practices
- Insider trading/dealing
- Environment, health, and safety
- Whistleblowing
- Human rights

In addition, the code of conduct includes expectations for integrity in business dealings, including gifts and entertainment, business travel, computer use, and social media, as well as the use of company assets.

10 Guiding Principles for Ethical Business Conduct

1. Value human health and our environment
2. Act with integrity
3. Treat others respectfully
4. Compete vigorously but lawfully
5. Honor trade restrictions
6. Create a no-conflicts culture
7. Keep accurate records
8. Respect and preserve confidential information
9. Ensure that commitments are properly made
10. Properly use company electronic systems

Training is one of the core tenets of Owens Corning's compliance program. One hundred percent of staff employees, including those at joint ventures and other legal entities in which Owens Corning has a majority interest (more than 50% ownership), are trained on and provide written acknowledgement of the code of conduct and anti-corruption and anti-bribery policy. All staff employees are required to take an annual refresher training course and to certify that they have reviewed, understand, and comply with the code. They are also expected to disclose any nonconformance or conflicts of interest. New employees are automatically enrolled in the training course and code compliance takes effect the next business day after their hire date. In 2018, Owens Corning recorded approximately 6,400 hours of this training for our staff employees, which are approximately 33% of our total employee workforce, in addition to a variety of instructor-led risk mitigation training and other communications to employee groups globally.

> The code of conduct and policies are provided to all employees and posted on our intranet and website, and the code of conduct is available in 16 languages through our internal network.

Ethics

The code of conduct applies to Owens Corning and employees all the time, with no exceptions. The code of conduct and policies are provided to all employees and posted on our intranet and website, and the code of conduct is available in 16 languages through our internal network. We also expect all our facilities to display materials that highlight these guiding principles. In the case of acquisitions, the integration team will distribute physical copies of the code of conduct to the new staff, as they do not have access to Owens Corning systems immediately.

Owens Corning's business conduct council and compliance committee have oversight and responsibility for worldwide compliance with these policies. Owens Corning's general counsel and corporate secretary sit on both the business conduct council and the compliance committee. The assistant secretary to the board sits on the compliance committee. Both groups report results to the audit committee of the board, which provides oversight.

Senior Officer Policies

Owens Corning's chief executive officer, chief financial officer, and corporate controller (together, "senior officers") are held to additional legal and ethical standards. They not only must comply with applicable laws and other requirements, but must also proactively engage in and promote honest and ethical conduct, including, for example, the ethical handling of actual or apparent conflicts of interest between personal and professional relationships. These are specific corporate policies that apply to our senior officers:

- Ethics Policy for Senior Officers: Senior officers are bound by our ethics policy for senior officers, which sets forth policies to guide the performance of their duties as chief executive officer, chief financial officer, and corporate controller.
- Reporting on Violations: Senior officers are required to report any suspected legal and ethical violations to legal operations or corporate audit services or to any member of our business conduct council (BCC). We also maintain a confidential reporting system, the business conduct helpline, and other mechanisms for receiving advice and concerns from our employees, as described in more detail later in this section.
- Conflicts of Interest: No senior officer shall make any investment, accept any position or benefits, participate in any transaction or business arrangement, or otherwise act in a manner that creates or appears to create a conflict of interest with the company, unless the senior officer makes full disclosure of the facts and circumstances to, and obtains the prior written approval of, the governance and nominating committee of the board of directors. Conflicts of interest requirements also apply to members of our board of directors.

Directors' Code of Conduct

The directors' code of conduct, adopted by the board, assists directors in fulfilling their duties to Owens Corning. The directors are entrusted with responsibility to oversee management of the business and affairs of Owens Corning. As the company's policymakers, the directors set the standard of conduct for all directors, officers, and employees. Each director is required to use due care in the performance of his or her duties, be loyal to Owens Corning, and act in good faith and in a manner the director reasonably believes to be in or not opposed to the best interests of our company.

Based on the directors' code of conduct, a director should:

- Use reasonable efforts to attend board and committee meetings regularly;
- Dedicate sufficient time, energy, and attention to Owens Corning to ensure diligent performance of his or her duties, including preparing for meetings and decision-making by reviewing in advance any materials distributed and making reasonable inquiries;
- Be aware of and seek to fulfill his or her duties and responsibilities as set forth in our company's certificate of incorporation, bylaws, and corporate governance guidelines; and
- Seek to comply with all applicable laws, regulations, confidentiality obligations, and corporate policies.

Read the Owens Corning Directors' Code of Conduct.

Ethics

Full and Accurate Public Disclosures

It is Owens Corning's policy to make full, fair, accurate, timely, and understandable disclosure, in compliance with all applicable laws, rules, and regulations, in all reports and documents that the company files with, or submits or furnishes to, the U.S. Securities and Exchange Commission (SEC) and in all other public communications made by Owens Corning.

Open Reporting Process and Internal Investigations

In addition to making sure that all employees know and understand our code of conduct, other company policies, and applicable laws, Owens Corning makes robust use of an open reporting process, through which employees may report a concern of suspected misconduct. Employees are actively encouraged to report critical concerns, and to cooperate in any investigation of wrongdoing – without fear of retaliation, which is strictly prohibited by Owens Corning.

All employees are encouraged to report suspicions of violations of the law or policy and are expected to cooperate in any investigation of wrongdoing. Owens Corning has a strict nonretaliation policy. No hardship, loss of benefits, nor penalty may be imposed on an employee as punishment for filing a good-faith complaint of discrimination or responding to a complaint of discrimination, appearing as a witness in the investigation of a complaint, serving as an investigator, or otherwise cooperating in a workplace investigation. Retaliation or attempted retaliation is a violation of company policy and anyone who engages in retaliation may be subject to discipline. This expectation is reinforced with senior business and HR leadership during a quarterly compliance review.

Employees are encouraged to report their concerns first to their manager, a member of human resources, or a member of legal operations. Employees may also submit their concerns through a confidential helpline or web portal, which are operated by a third-party service provider. Employees also have access to report their concerns to a designated email address and by postal mail to a dedicated mail box. There are several ways to submit a report or question:

- via a 24/7 confidential business conduct helpline (1-800-461-9330) or a web portal managed by a third party (anonymously, if desired);
- to a designated email address (ethicalbusinesscomplaints@owenscorning.com);
- to a dedicated mail box for written correspondence; or
- in person, to a member of the legal department, the business conduct council, to any manager, or through human resources.

Owens Corning takes all reports of misconduct seriously. Any concern brought to the company's attention is thoroughly reviewed and investigated by the Owens Corning business conduct council, which is a global team accountable for the management and oversight of the company's internal investigations protocol and escalation of concerns, where appropriate.

Owens Corning makes every effort to ensure that investigations are consistent, comprehensive, and confidential to the extent possible, and follow applicable laws. If a report is substantiated, the company will respond as it deems appropriate or necessary, consistent with the law, and will act swiftly to correct the problem and deter future occurrences. Depending on the circumstances, this may include training and/or disciplinary action up to, and including, termination. Individuals may also be subject to civil or criminal prosecution for violating the law. All breaches of our business conduct policies are reported to the audit committee of the board of directors. We also disclose any breach as applicable by law.

Internal investigations are reviewed for trends and opportunities at least once a quarter and further discussed with senior business leaders. A periodic report is provided to the audit committee of the board of directors along with an update of the compliance program in general, including any breach of applicable law. Annually, the general counsel and director, global compliance report significant highlights from the open reporting process to all employees at a town hall meeting

Ethics

hosted by the CEO. At the meeting, employees are told the number of reported concerns received, the number of substantiated concerns, the percentage of anonymous reports, and the number of employees who were terminated for such concerns.

In 2018, the majority of reported concerns reviewed were employee-related matters and a smaller number of business integrity reports. Fewer than 20% of the reports resulted in a finding of a substantiated policy violations, but even if not substantiated, many of the remaining reports presented opportunities for improvement in management systems. Identified trends led to enterprise-level changes including policy updates, targeted training, and communication. From these reports, no critical concerns were identified. As the concerns reported in 2018 were not critical, no concerns went through our escalation process, nor was the board of directors called upon to respond. After extensive review, we have found no record of any fair competition breaches in our company's history. We have also had no legal actions for anti-competitive behavior or monopoly practices.

Equal Opportunity and Nondiscrimination

Owens Corning seeks to maintain a highly productive organization of individuals representing differences in viewpoints, cultures, races, and gender, and embracing good ideas produced by that diversity. To provide equal employment and advancement opportunities to all individuals, employment decisions are based solely on merit, qualifications, and abilities. Accordingly, it is Owens Corning's policy to provide employment opportunities without regard to race, color, religion, national origin, age, disability, veteran or military status, pregnancy status, gender, gender identity, sexual orientation, genetic information, or any other characteristic protected by applicable law.

In 2018, the business conduct council reviewed and investigated four reported equal opportunity concerns, none of which were found to violate the law. Addtionally, Owens Corning responded to five legal actions and 13 complaints registered with a local agency. Read the Owens Corning Equal Opportunity Policy.

Non-harassment

It is Owens Corning's intent that all employees will work in an environment free from harassment on any basis including, but not limited to, harassment based on race, color, sex, age, national origin, veteran or military status, pregnancy status, sexual orientation, gender identity, cultural affiliation, religion, genetic information, physical or mental disability, personal characteristics or circumstances, or any other characteristic protected by applicable law.

Employees at all locations worldwide and at all levels of our company have the responsibility to avoid any act or actions, implied or explicit, that may suggest any form of harassment of any other person within the workplace or in a work setting. This includes contractors, vendors, consultants, customers, and other nonemployees, such as visitors, who have reason to be engaged in business with Owens Corning. Our company actively investigates any allegation of harassment, evaluates the conduct and the context of the alleged behavior, and takes appropriate action.

In 2018, the business conduct council reviewed and investigated seven reports of harassment, none of which were found to be substantiated. Read the Owens Corning Non-harassment policy.

Human Rights, Including No Child or Forced Labor

Owens Corning does not and will not employ child or forced labor. In addition, Owens Corning will not knowingly engage a supplier or distributor, or enter into a joint venture with an organization that employs or subcontracts child or forced labor. Owens Corning defines "child labor" as work or service extracted from anyone under the age of 16, and defines "forced labor" as any work or service not voluntarily performed and extracted from an individual under threat of force. Read the Owens Corning Human Rights Policy.

Ethics

Industrial Relations

Owens Corning makes use of a variety of formal and informal processes to address and resolve labor practices at each facility. All labor practice concerns raised by employees are resolved, typically through a peer review or grievance process at the local level. Occasionally, local grievances require additional input at the divisional or corporate level, and if still not resolved, are definitively decided by a neutral arbitrator. Although the company does not compile the number of grievances or complaints filed by employees/unions at each plant each year, it is not unusual for each facility to resolve dozens of such labor concerns each year. In 2018, we had five total labor concerns across Owens Corning's U.S. operations that required the use of an arbitrator to reach a final disposition (i.e., grievance withdrawn, granted, or settled).

In the unfortunate circumstance that one of the above mechanisms of resolution is unsuccessful, an employee may choose to proceed with legal action or file a complaint with a local agency. These are handled through Owens Corning's legal department following the same guidelines of investigation, remediation, and non-retaliation policies described above. Read more in the Owens Corning Equal Opportunity Policy.

Anticorruption

Owens Corning uses many safeguards to avoid corruption related to our business – corruption by any of our employees, members of our board of directors, and business partners. Our anticorruption policies align with applicable anticorruption laws, including but not limited to the U.S. Foreign Corrupt Practices Act of 1977 (FCPA), the UK Bribery Act, and the OECD Convention on Combating Bribery.

In 2018, our anticorruption efforts resulted in the following outcomes:

- 100% of the members of our board of directors received communication, and completed training, on our anticorruption policies and procedures;
- 100% of our employees received communication on our anticorruption policies and procedures, and 100% of staff employees, which is 33% (6,432) of all employees, completed training;
- 100% of our suppliers received our supplier code of conduct, which includes anticorruption expectations.
- In addition to our supplier code of conduct, Owens Corning conducted an internal corruption risk assessment of suppliers and customers by region. As a result of this analysis, Owens Corning identified China, India, and Brazil as countries that would benefit from targeted outreach and trainings. Owens Corning identified and engaged over 800 suppliers and customers in these regions as a result of this analysis.
- 100% of Owens Corning's business was assessed for corruption risks, per an annual assessment cycle. Significant risks identified and assessed include customers, independent third parties (including facilitation payments), direct and indirect interactions with government officials (including gifts and entertainment), anti-money laundering, politically exposed persons, and bribery.
- Owens Corning received no fines, penalties, or settlements in relation to corruption in 2018. Furthermore, no employees were disciplined or dismissed due to noncompliance with anti-corruption policies in 2018. There were no confirmed incidents of corruption; termination of contracts with business partners; or public legal cases against Owens Corning or its employees related to corruption.

Political Contributions

Owens Corning makes political contributions through our Owens Corning Better Government Fund. The fund is a voluntary, nonprofit, unincorporated committee operating as a separate, segregated fund of Owens Corning.

The purpose of the fund is to provide our employees and shareholders with an opportunity to take part in the American political process. The fund provides a convenient way for these stakeholders to join a program of political giving so that they may have a united and constructive voice for better government. The fund prohibits direct or indirect contributions from Owens Corning or any other corporation or political action committee.

In 2018, the Owens Corning Better Government Fund contributed approximately $76,000 toward political candidates and organizations. Owens Corning has contributed no corporate funds or dollars to any political institution. Additional information on the Better Government Fund's contributions can be found at www.fec.gov.

ABOUT THE REPORT

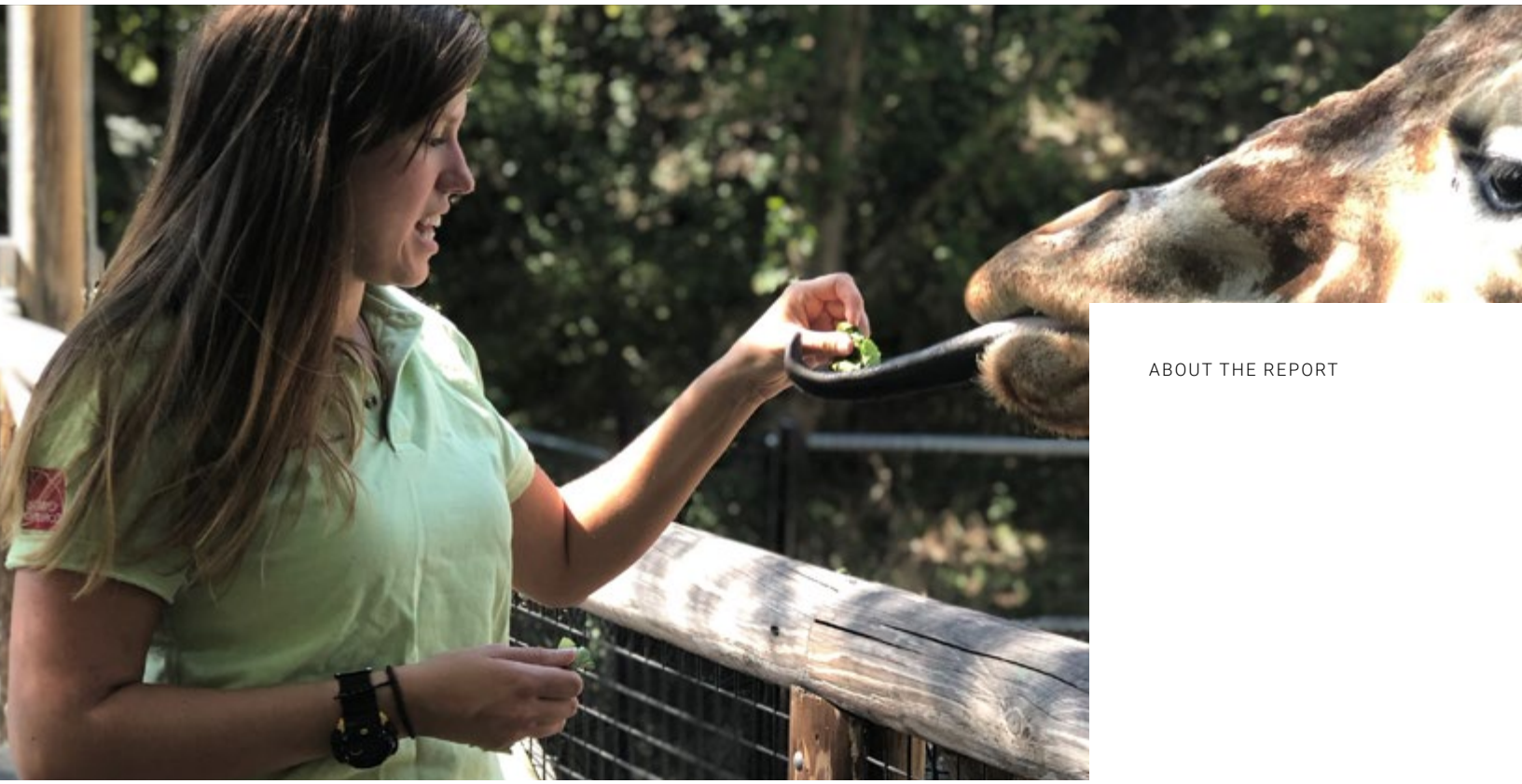


PHOTO CREDIT:
Katy Platek | Concord, North Carolina, U.S.

Katy (Concord Composites plant) with a giraffe at the Memphis zoo, after donating materials to Hose2Habitat.

PHOTO CREDIT:
Jennifer Payne | Tennessee, U.S.
Columbine in the Colorado Rockies

ABOUT THE REPORT

This report, Owens Corning's 13th annual sustainability report, reflects the reporting period January 1, 2018 to December 31, 2018. Our report was published in May 2019. Our previous report was published in May 2018. We appreciate the opportunity to explain our deep commitment to, and positive impact on, the environmental, social, and governance issues that are material to our business and important to stakeholders.

This is our second report prepared in accordance with the GRI Standards: Comprehensive option. Additionally, it is designed to address disclosures and material issues related to CDP, Dow Jones Sustainability Index, United Nations Sustainable Development Goals (SDGs), United Nations Communication on Progress, and other stakeholders' requests. This approach enables us to provide an integrated, comprehensive view of our sustainability and social responsibility commitments, progress, and activities.

We are focused on creating robust business and reporting strategies that align effectively with the needs and priorities of our company and stakeholders. We do this by investing substantial time and effort in understanding, prioritizing, and addressing material topics, as well as reporting on them effectively. As such, our materiality matrix was carefully developed to take into consideration different stakeholder needs and our involvement with impacts of material topics. To stay in lock-step with the changing business context, stakeholder requirements, and emerging trends, we regularly review and update, when appropriate, our list of material topics and their relative priority. For a list of our material topics and our materiality matrix, plus a discussion of our ongoing stakeholder engagement, please see pages 14-16.

About the Report

Scope and Boundaries

For this report, we developed the content and determined the boundaries of material topics based on where the impacts (on the economy, environment, and/or society) for each material topic occur. We are reporting on: 1) ways that we have caused or contributed to impacts for material topics, and 2) ways that our activities, products, and services are directly linked to these impacts through our business relationships. This includes business relationships with entities that we do not control and might not have leverage to effect change in their impacts.

In summary, the boundary of all these aspects covers our entire global operations including Asia Pacific, Europe, Latin America, and North America. Internal boundary includes all Owens Corning plants and offices that are owned and leased. External boundary includes supplier locations, communities, and customer locations where Owens Corning has control.

Significant Changes in Scope

In 2018, we acquired Paroc, adding 19 locations (nine manufacturing, nine mining concessions, and one office) to our Insulation business. In separate transactions, we also acquired the Guangde mineral wool plant in China and the Blythewood non-wovens plant in South Carolina. In accordance with World Resources Institute (WRI) protocols, we collected or estimated their utility and production data back to our base year of 2010 or the year they opened. All locations are included in the environmental baseline and metrics provided in this report with the exception of scope 3 emissions. Social and economic metrics from the acquired sites are set from 2018 forward with the exception of corporate philanthropy and supply chain. This change in scope is applicable across all material topics addressed in our report. The boundaries of our material topics have not otherwise changed.

There have been no material restatements of information provided in this report.

Precautionary Approach and Alignment with Other UN Initiatives

Owens Corning has been a signatory to the United Nations Global Compact (UNGC) since 2010. The UNGC is a strategic, voluntary policy initiative for businesses that are committed to aligning their operations and strategies with 10 universally accepted principles in the areas of human rights, labor, environment, and anti-corruption. By doing so, business, as a primary driver of globalization, can help ensure that markets, commerce, technology, and finance advance in ways that benefit economies and societies everywhere.

Principle 7 of the UNGC states that "businesses should support a precautionary approach to environmental challenges." The Precautionary Principle or approach was originally introduced by the UN in the 1992 Rio Declaration of Environment and Development. Principle 15 of the Rio Declaration explains that "where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."

The precautionary approach calls upon us to diligently assess and manage environmental, health, and safety risks, so that we take appropriate actions to prevent harm. We ensure that our products and technology comply with or exceed all applicable laws, regulations, and approval standards to protect the environment and human life and health. In addition, our product stewardship programs are designed to ensure the integrity of our products and the processes used to develop, produce, and manage them. Owens Corning is confident that these efforts are consistent with and meet the expectations of the precautionary approach. Read more in our Environmental, Health, Safety, and Product Stewardship Policy.

As shown throughout this report, we align our activities with the UN's 17 SDGs.

In addition, Owens Corning publicly states our support for the UN Universal Declaration of Human Rights. The creation of the 30 articles in 1948, which make up the Universal Declaration, was a watershed moment in the history of international human rights. As one of the primary driving forces behind the UNGC, the Universal Declaration of Human Rights is as relevant and impactful as ever. Owens Corning is committed – in both belief and action – to the 10 principles of the Global Compact and the 30 articles of the Universal Declaration of Human Rights. This commitment extends beyond making our products and operations more sustainable. It involves embracing the broader objectives of sustainability, as we balance economic growth with social

About the Report

External Initiatives

Initiative	Adoption Date	Where Applied	Stakeholder Development	Required by Law/ Voluntary
UN Global Compact	2010	Companywide	Multi-stakeholder approach to development	Voluntary
UN Environment Programme	2010	Companywide	Supplier Code of Conduct	Voluntary
Universal Declaration of Human Rights	2010	Companywide	Supplier Code of Conduct	Voluntary
International Labour Organization	2010	Companywide	Supplier Code of Conduct	Voluntary
Supplementary Convention of the Abolition of Slavery, the Slave Trade, and Institutions and Practices Similar to Slavery	2010	Companywide	Supplier Code of Conduct	Voluntary
Protocol to Prevent, Suppress and Punish Trafficking in Persons Especially Women and Children, supplementing the United Nations Convention against Transnational Organized Crime	2010	Companywide	Supplier Code of Conduct	Voluntary
UN Sustainable Development Goals	2016	Companywide	Multi-stakeholder approach to development	Voluntary

progress and environmental stewardship. In short, we believe that what is good for people and good for our planet is also good for Owens Corning. Our human rights policy was updated and expanded in December 2016 and informs our supplier code of conduct, all in accordance with the principles of the UNGC and the Universal Declaration of Human Rights.

Reporting Methodology

Owens Corning follows the World Resources Institute (WRI) Corporate Accounting and Reporting standard for defining and accounting its baseline structure. In 2018, we had over 100 facilities, which are included in the scope and boundary of our reporting. The data for divested facilities are excluded from our company environmental footprint; however, the data for closures are included in our reporting.

Given the guideline of baseline adjustments by WRI, we review all structural changes such as mergers, acquisitions, and divestments on an annual basis. Per the stated protocol, the data of mergers or acquisitions greater than 50% are reviewed for accuracy and integrity and then integrated into our reporting inventory from base year to current year. This process of updating the baseline is completed for both the numerator (aspect) and denominator (sales or production) of our calculations. This approach was implemented to ensure a meaningful and consistent comparison of emissions over time, including for the current year.

Please note that numbers have been rounded. Some totals have been affected as a result.

Defining Workers

For the purposes of this report, Owens Corning defines "workers" as our employees globally across all facilities in which we operate. Within the Living Safely section of this report, we additionally report on contractors over whom we have direct supervision as well as those for our large capital projects.

Environmental Methodology

For the organizational and geographical boundaries of the inventory, we have used owned and leased facilities globally under Owens Corning's operational control.

The physical infrastructure, activities, and/or technologies of the inventory are understood as:

- Offices, distribution centers, warehouses, manufacturing facilities, fleet vehicles, corporate jet, and employee travel.
- Emissions resulting from explosives, fire extinguishers, refrigerants, and welding gases have been excluded as *de minimis*.

About the Report

The GHG sources identified are purchased electricity, heat, steam, cooling, natural gas, diesel, jet fuel, gasoline, propane, and blowing agents.

All greenhouse gases declared in the Kyoto Protocol (CO_2, CH_4, N_2O, SF_6, HFCs, PFCs, NF_3) are included in the evaluation.

Verification of Data

Invoices are entered electronically into our system and subjected to a number of audits to check both data completeness and data validity. Before data are made available in our Schneider Electric Resource Advisor Solution, invoices are reviewed for missing data, potential overlaps or collisions with existing data, and whether the data should be tracked by a third party. Once posted, the invoice data are reviewed in the context of the surrounding account to verify data entry, charge accuracy, and the overall trend in cost and consumption. Invoices with suspect data are elevated for further review and resolution, also by the third party.

Data that are put into our system go through two variance tests. The first is to check if the currently entered value is >2 standard deviations over the average value entered (the period for the average is 12 months prior to the current month and 12 months after the current month). The second variance test is to check for consistency in the unit of measure (consistent unit of measure used month over month).

In addition to the measures associated with invoice- and user-provided data, our third-party partner provides 24 hours per month of support for data management and quality assurance of global sustainability data. The purpose of this ongoing quality assurance/quality control is to identify anomalies when reviewing long-term trending and analyses in a further effort to ensure data accuracy and integrity.

These boundaries are applicable to all GRI Standards topics, including:

- General Disclosures
- Management Approach
- Economic
- Environmental
- Social

External Assurance

Owens Corning understands the importance of transparency in disclosure on all its matrices, KPIs and mechanisms of assurance to enhance the reliability of reported data. As we move forward, we will externally assure additional topics, prioritizing based on availability of data and importance to stakeholders as observed through our materiality assessment.

SCS Global Services performed the assurance of the Owens Corning 2018 Sustainability Report against the AA1000 Assurance Standard (2008). In addition, SCS Global Services evaluated the Report against the Global Reporting Initiative's (GRI) Standards for reporting. Specific performance data were assessed utilizing internationally recognized standards including:

- ISAE 3000 (Revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information
- WRI's Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition), March 2004 along with Scope 2 and Scope 3 Guidance
- ISO 14064-3:2006 Specification with guidance for the validation and verification of GHG assertions

To view the assurance statement, please see pages 225-227.

For additional information on the economic and social metrics verified through SCS Global Services, see: https://www.owenscorning.com/corporate/sustainability/docs/2019/2018-Owens-Corning-RobecoSAM-Verification-Statements.pdf

Questions about the Report

Any questions regarding our reporting processes or this report can be directed to our chief sustainability officer:

Mr. Frank O'Brien-Bernini
Vice President and Chief Sustainability Officer
Phone: 1.419.248.8000
Email: sustainability@owenscorning.com

APPENDICES

PHOTO CREDIT:
Jyrki Männikkö | Helsinki, Finland
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Appendix A — Awards

Awards and Distinctions

January 2018

- Recognized as one of the **world's most sustainable companies** for the fifth consecutive year by sustainability investment specialist RobecoSAM. For the fifth straight year, RobecoSAM also named Owens Corning the Building Products Industry Leader, with the company scoring highest in 13 of the 22 categories.

February 2018

- Named one of the **2018 World's Most Ethical Companies® by the Ethisphere Institute**, a global leader in defining and advancing the standards of ethical business practices. This was the first time Owens Corning received this recognition, and we were one of only three honorees in the Construction & Building Materials industry.

March 2018

- Showcased the power of composites to "**Make Impossible Things" at the JEC World 2018** composites show. Owens Corning composites experts and business leaders were on hand throughout the event to discuss the company's entire array of industry-leading solutions.

May 2018

- **Ranked No. 3 on Corporate Responsibility Magazine's 100 Best Corporate Citizens List,** moving up from 25 in 2017.
- Ranked 350 among 500 of **Forbes' list of America's Best Employers.**
- Awarded **Environmental Leader's Top Product of the Year 2018** for three types of insulation independently certified by SCS Global Services as made with renewable energy and reduced embodied carbon.
- Earned placement on **Mogul's Top 1000 Companies Worldwide for Millennial Women.**

June 2018

- Earned the **2018 Women's Choice Award, Recognizing America's Most Recommended™ Roofing Products by Women**, which recognizes the brand behind America's Most Recommended™ Roofing Products.
- Listed on the ***Fortune* 500®** list for the 64th consecutive year.
- Ranked second among large organizations on IDG's Computerworld list of the **"2018 Best Places to Work in IT,"** an annual ranking of the top 100 work environments for information technology professionals. This was the company's second consecutive year at No. 2.
- Presented our portfolio of **building enclosure solutions designed to help architects achieve resilient high-performing buildings** at the American Institute of Architects (AIA) Conference on Architecture 2018 in New York City.

July 2018

- Recognized with a **"Partners of Choice" Award from David Weekley Homes**, the largest privately-held U.S. home builder. This marked the second time Owens Corning Insulating Systems, along with its network of contractors and distributors, successfully achieved the elite "A,A" honor and the sixth time the company was recognized by David Weekley Homes.
- Earned a spot on the **Supplier Engagement Leader Board by CDP**, the non-profit global environmental disclosure platform. Owens Corning was among the 2% of organizations to be awarded a position on the leader board, in recognition of its actions to reduce emissions and lower climate-related risks in the supply chain.

September 2018

- Earned placement for the ninth year in a row in the **Dow Jones Sustainability World Index** (DJSI World) for its sustainability performance. For the sixth straight year, named the Industry Leader for the DJSI World Building Products group.

Appendix A — Awards

October 2018

- Introduced the **first and only mineral wool formaldehyde-free perimeter fire containment system** available in North America. This advanced solution made with Thermafiber® Firespan®, and Safing™ mineral wool insulation delivers tested and proven fire resistance performance to help commercial architects, specifiers, and contractors build safer and energy-efficient buildings.
- Owens Corning's **internship program ranked among the top 50 in the U.S.** for the 3rd year in a row, according to Vault.com. To compile the 2018 ranking, Vault surveyed 12,000 interns across the U.S., covering quality of life, compensation and benefits, career development, and full-time employment prospects. Owens Corning also ranked #2 in technology and engineering internships.

December 2018

- Named one of 139 global companies on **CDP's "A List" for climate.** This achievement recognizes actions completed in 2017 to manage environmental risks, cut carbon emissions, and enhance water stewardship.
- Ranked 82 on ***The Wall Street Journal's* Management Top 250 list.** The WSJ Management Top 250, as ranked by the Drucker Institute, is based on corporate effectiveness, defined as "doing the right things well." The measure assesses how well a company follows a core set of principles.
- Received a **perfect score of 100% on the Corporate Equality Index (CEI)**, a national benchmarking survey and report on corporate policies and practices related to lesbian, gay, bisexual, and transgender (LGBT) workplace equality, administered by the Human Rights Campaign Foundation.

2018 OWENS CORNING INTERNAL AWARDS

Our employees are driven to make a difference, and we celebrate their accomplishments through our internal awards programs, which are open to all Owens Corning employees. We're proud to recognize those who go beyond the expected in innovation, environment, healthy living, and safety.

2018 Innovation Awards

The winning projects represent innovation that accelerates growth and productivity, and the awards are a well-earned recognition of achievement.

Beyond the stated award criteria, the Science and Technology Leadership Council considers each nominated project for creativity, impact, and technical achievement. Only the most exceptional nominations become finalists, and winning an Innovation Award is a true mark of distinction.

SLAYTER AWARDS

There were three key people associated with the invention of "commercial" glass fibers that spawned our company -- Games Slayter, Jack Thomas and Dale Kleist. Slayter recognized the opportunity for small-diameter, low-cost glass fibers – namely, thermal insulation. Dubbed the "Father of Fiberglas," Slayter became the first Vice President of R&D in 1938, and was inducted into the National Inventors Hall of Fame in 2006 along with Thomas and Kleist.

Advancing Fundamental Science

Major contribution based on deep scientific or technical work that drives significant learning for the company.

Composites Fatigue Performance Predictive Model | Johanna Beguinel, Eric Carlier, Gideon van den Broek, François Vinet

Appendix A — Awards

The goal of this project was to create a model that can predict the outcome of tests used to understand how new materials will perform. By building a deeper understanding of the fundamental science, and using that to build a model, the team successfully created a tool that reduces testing time from 10 days to two hours.

Roofing Model | Robert Camm, Chris Ehemann, Julia Faeth, Mike Franzen, Jonathan Verhoff

To meet the need to more quickly evaluate different materials for roofing shingles and underlayments, this team created a model using data science.

Early Career Innovation

Novel solutions from professionals with less than five years of work experience after their last academic graduation.

Improved Wind Resistance | Kevin Click

Kevin's observation of standard tests for shingle product peformance led to an idea that would strengthen wind resistance in shingles.

Speed to Commercialization

Achievement of both speed and business impact, relative to the nature (incremental versus disruptive) of the project.

Hybrid Fabrics/Ultrablade™ X | Georg Adolphs, Chloé Bertrand, John Nelis, Samuel Solarski

The team's solution, which enables Owens Corning to continue selling glass for even the longest wind blades, is a hybrid glass-carbon fabric that lets customers use the same manufacturing technique to make a stronger blade. The team delivered this solution within 18 months.

Next Generation Titanium® PSU 30 | Ron Boisvert, Ashutosh Dixit, Jason Dulaney, Tracey Hall, Brian Shaeffer

In less than four months, the team solved several complex technical challenges, worked with external partners and customers, and enabled Owens Corning to produce Titanium PSU on existing self-adhered synthetics manufacturing equipment. The project significantly reduced cost and improved margin, improved inventories, and doubled sales of this premium product.

Sustainability

Project enabled Owens Corning to accelerate meeting or surpassing its 2020 sustainability goals.

Wabash Dragline Shot Recycling | Eric Hamm, John Hoffman, Tyler Kidner, Michele Mazza, Penny Ruppert

The project team worked with a third-party partner to find end-use applications for the Wabash, Indiana, mineral wool plant's waste. Together, they found an application for the plant's largest waste stream: pieces of glass ("shot") that are tangled in the waste fiber ("dragline waste"). When the shot is separated, it can be used as an effective, safer alternative to sand and other abrasive blast media that contains crystalline silica. Read more about this project on page 142.

AL MARZOCCHI INTELLECTUAL PROPERTY AWARDS

The intellectual property award is named after Al Marzocchi, the all-time Owens Corning record patent holder. The Marzocchi Award is presented for achievements in invention that result in milestone numbers of patents and trade secrets: 15 for Bronze, 20 for Silver, 25 for Gold, 30 for Platinum, 35 for Rhodium and 40+ for Diamond. The following individuals were honored for reaching one of these milestones in 2018:

35 patents or trade secrets – Rhodium | Robert O'Leary and Bert Elliott

These prolific inventors have each earned this milestone quickly. Robert's 35+ patents in just 13 years with Owens Corning earned the Rhodium level award in 2018. His patents have been primarily in insulation technology, including loosefill, AttiCat® machine, and air sealing. Bert reached the previous milestone of 30 just last year. His patents have been solely focused in the area of shingle design and performance, including the design of the SureNail® tape/strip for the Duration® shingle.

Appendix A — Awards

30 patents or trade secrets – Platinum | Larry Grubka

Larry started in Composites, working on innovations in bushing technology; he moved to Roofing in the mid-1990s. His patents focus on shingle and component design and manufacture.

20 patents or trade secrets – Silver | Anthony Rockwell

Anthony's inventions have been on insulation accessory products and improving air sealing capabilities in attics and walls.

15 patents or trade secrets – Bronze | Harry Alter and Frank Macdonald

Harry earned this milestone for patents focused on insulation accessory products and improving air sealing capabilities in attics and walls. Frank's patents have been in composites technology related to Performax® textile and fabrics as well as manufacturing improvements for Roofing shingle production.

SPECIAL 2018 MARZOCCHI AWARD

Xiaojuan Zhang was granted a special award for her work as the key inventor on a new binder: the only no-added-formaldehyde binder solution for high-density board.

Environmental and Operations Sustainability Awards

We understand the influence our business and products can have on the environment and look to our employees to help manage our impact.

For 2018, we will recognize nominees and award winners in the following categories:

Environmental Leadership

This award recognizes an individual who demonstrates exceptional environmental leadership. Nominees for this award are passionate about the environment and go above and beyond their expected roles and responsibilities. They may work to raise environmental awareness or actively participate in community environmental programs or initiatives. They may mentor smaller facilities, colleagues, customers, or vendors in environmental leadership. These nominees lead and inspire others to continuously improve Owens Corning's environmental performance.

Environmental Impact Improvement

This award is given to an individual, team, or site having implemented new environmental processes or technology delivering significant footprint or compliance risk reduction. Nominees for this award have completed a project, or established a practice, that addresses a specific environmental problem in a new or innovative way. Improvements are sustainable and support enterprise and business strategic goals.

2018 Healthy Living Awards

We're proud of the way our facilities have embraced the commitment to healthy living. Individuals and the wellness teams can make a difference for all employees, and the winning facilities in 2018 demonstrate the impact that is possible. Program elements common to both facilities leading to outstanding results include: creating a competitive employee environment, plant leadership involvement on the local wellness teams, incorporating wellness objectives into the annual plant goals, sharing progress against plant wellness metrics with all employees on a regular basis, including wellness goals into plant variable incentive pay (VIP) program for employees, granting time off for employees to participate in community engagement events, and dynamic plant leaders driving employee motivation and engagement in unique and visible ways.

Concord, North Carolina, U.S.

The wellness champions and site leadership at Concord ensured that plant employees received training and

Appendix A — Awards

support in all six of the Healthy Living pillars. The Concord team holds an all employee meeting monthly with safety and wellness training as part of its regular agenda. Quarterly safety training also reserves one of the sessions for a wellness learning. Beyond this commitment to a Healthy Living culture, the site also tracks Tier Two metrics, and has a robust dashboard that makes it easy to review progress.

Ridgeview, South Carolina, U.S.

With high participation in biometrics screenings, high enrollment and participation in the Virgin Pulse program, and long-standing traditions at the plant for various wellness initiatives, Ridgeview demonstrates commitment and leadership to Healthy Living. The plant's employees also enthusiastically participate in a number of community events, which reflects a culture of caring that goes beyond the workday.

2018 Safety Awards

Ricky Mansfield (SDS, Inc.), Fred Hammonds, Manish Dalvi, Byron Hulls, Peter Forsberg (Amec Foster Wheeler), Max Oliveras (Foster Wheeler), Michael Harper, Mike P. Day, Claudio Crestale, Naresh D Musale, Brian Ables, Michael Trotto: Taloja, India

This team introduced Owens Corning safety culture to an area not accustomed to rigid safety standards, and provided training and certificates of completion for local EHS Resources. The project maintained a commendable safety record while working in inhospitable conditions (monsoons, extreme heat, etc.). The approach to executing this project was "safety first, safety always" during pre-construction as well as onsite execution. The project was complex, with contractors deployed from multiple countries, speaking different languages, and possessing different safety cultures.

Richard Kingham: Liversedge, U.K.

Rick has developed and designed a number of solutions at Liversedge in response to the need to mitigate risk. Two of his projects improved risk scores dramatically: in one, he removed the last significant risk of serious injury in a specific process; in the other, he eliminated the requirement to enter a confined space on a weekly basis. Rick is commended for his can-do attitude and thorough approach to understanding the problem and managing the implementation of solutions.

Freek Schreuder, Sander Hagens, Tieme Zwaan, Rob Elskamp, Twan Jansen, Hans Berkman, Dick Berends: Apeldoorn, Netherlands

The team reformulated a product to remove a raw material that had been the focus of employee health complaints, despite previous efforts to resolve the issue. The team seized the opportunity to work with sales and customers to eliminate that ingredient. Trials of the new product have been successful. The work points to a great collaboration between the manufacturing plant and the sales organization, leading to an improved environment for the production staff.

Woods Kong, John Teng, Howard Hao, Dongyue Wang, Darl Li, Eric Yin (Yantai), Tim Fan, Chuanxin Song: Yantai, China

To reduce the confined space risk and improve ergonomics, the team designed a mobile vacuum to collect dust. The new equipment frees employees from a manual process to rake the dust out of the equipment and use a spade to move it into collecting bags. The vacuum can collect the dust by the suction inlet and transport it directly to the bags, and there is a dust control unit near the discharge gate so no dust can escape into the air. Due to the reduction of work intensity, the risk of heat stroke was significantly reduced, especially in summer.

Appendix A — Awards

Yatao Cui, Weimin Fu, XuJin Tu, Lei Liu, Rojer Shou, Tim Xue, Xindi Chen, Jeff Watkins, Todd M. Baughman, Grady Whatley, Honggang Wang, Candice Kou, Guohua Song: Multiple Locations in China and U.S.

This regional team from Building Insulation facilities in China developed a design to eliminate working-from-height tasks involved in manually loading product onto trucks. With information provided by safety colleagues in U.S. plants, the XiAn TPM focused improvement (FI) team and working-from-heights committee embarked on a project to unitize the glass wool rolls so they can be loaded with forklifts onto customer trucks. This eliminates fall hazards from a common process.

Landy Chen, Dengfeng Liu, Yingdi Hu (Ling Hang), Steve Dong: Novia/Jiaobei, China

The safety team designed and tested air-hydraulic-driven machinery to unload heavy rolls of product from the weaving looms. This innovation removed the need for operators to manually pull the rolls forward and off the looms, and then lift the rolls to the ground. In addition to eliminating a strenuous manual task, the new machinery reduced operation times, improved work efficiency, and eliminated hand-pinch risk from the task.

Charles Underhill: Granville, Ohio, U.S.

Charles is the human and organizational performance safety leader for the Granville prototyping and mimic lab, and he coaches other units in their HOP sessions. In 2018, he led and implemented HOP learning actions that reduced work movements by 60%, lifting by 80%, and increased the efficiency of the lab's most common work. His efforts significantly reduced potential for sprains and strains, and eliminated hazards related to human error.

Amber Seaman: Gastonia, North Carolina, U.S.

The Gastonia plant is a leader in implementing the new SIF program. Amber, an operations technician, is a confined space trainer and one of the most active members of the confined space team. All front-line leaders in Gastonia are now HRC certified because of Amber's work, and they can now review and authorize risk mitigation for high risk tasks. Her behavior sets an example for everyone in Gastonia, and because of her, technicians in the Aiken, Concord, and Blythewood facilities also work more safely.

Appendix B — Workforce Data

Employee Data

2018 Workforce Composition (Gender and Age)+

	Position	Female	Male
Number of employees in the age group <30 years by gender within employee categories	Manager	19	48
	Primary	323	2,792
	Staff	269	371
<30 Total		**611**	**3,211**
Number of employees in the age group 30-50 years by gender within employee categories	Manager	311	842
	Officer	10	20
	Primary	1,129	6,544
	Staff	885	1,482
30-50 Total		**2,335**	**8,888**
Number of employees in the age group 50+ years by gender within employee categories	Manager	84	417
	Officer	2	22
	Primary	373	2,861
	Staff	386	765
50+ Total		**845**	**4,065**
Number of employees in minority groups by gender within employee categories*	Manager	25	80
	Officer	0	5
	Primary	330	1,880
	Staff	113	237
Minority Total		**468**	**2,202**

**U.S. sites only*

Minority Representation*

Percentage of workforce that is considered to be a member of a minority group	32%
Percentage of management considered to be a member of a minority group	13%

**U.S. sites only*

Percentage of 2018 U.S. Hires (Staff and Primary) Who Were from Minority Groups

All 2018 Hires	2018 Minority Hires	Percentage of Minority Hires
1,545	606	39 %

The social data in this chapter marked with a + sign were independently assured to a moderate level by SCS Global Services. For more information or to see the verification statement, please go to page 178 in the About the Report section.

Appendix B — Workforce Data

2018 Ethnic Background of U.S. Employees

Ethnic Background	% of Employees
White	68.2%
Black	15.4%
Hispanic	12.6%
Asian	2.4%
Two or More Races	0.8%
American Indian/Alaskan	0.4%
Native Hawaiian/Other Pacific Island	0.1%
Not Specified	0.1%

Number of Employees by Employment Contract (by Gender and Region)

Region	Female Regular	Female Temporary	Male Regular	Male Temporary
Asia Pacific	813	0	3,422	0
Europe	752	3	3,762	1
Latin America	390	0	1,824	0
North America	1,833	0	7,155	0
Total	**3,788**	**3**	**16,163**	**1**

Number of Employees by Employment Type (by Gender)

	Female	Male
Full Time	3,710	16,119
Part Time	81	45

Appendix B — Workforce Data

2018 Workforce Composition (Gender and Country)+

Country	Female	Male
Austria	1	2
Belarus	2	3
Belgium	71	387
Brazil	28	507
Canada	103	471
Chile	16	47
China	724	1,538
Czech Republic	36	211
Denmark	2	7
Estonia	2	8
Finland	70	262
France	109	581
Germany	27	71
Hong Kong	1	1
India	57	1,522
Italy	22	286
Japan	4	17
Korea, Republic of	20	306
Latvia	3	5
Lithuania	64	232
Mexico	346	1,270
Netherlands	12	160
Norway	0	6
Poland	75	625
Russian Federation	124	375
Singapore	7	38
Slovakia	0	2
Spain	29	44
Sweden	83	388
Switzerland	8	12
United Arab Emirates	1	1
United Kingdom	14	95
United States	1,730	6,684
Total	**3,791**	**16,164**

Employee Training by Gender (Hours, Count, Hours Avg.)+

	HOURS SUM		COUNT		HOURS AVERAGE		TOTALS		
Category	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Hours**	**Count**	**Total Hours Average**
Officer	37	214	12	39	3	5	251	51	5
Manager	3,397	11,241	359	1,141	9	10	14,637	1,500	10
Staff	8,073	12,716	1,301	2,219	6	6	20,788	3,520	6
Primary	11,637	86,510	675	4,722	17	18	98,148	5,397	18
Total	**23,144**	**110,680**	**2,347**	**8,121**	**10**	**14**	**133,824**	**10,468**	**13**

Appendix B — Workforce Data

Number of Employees Joining the Organization (for the first time) in 2018

Total Employees	2017	2018	2018 Rate*
	4,291	4,236	21%
By Age Group			
<30 Years	1,707	2,256	59%
30 to 50 Years	2,012	1,743	16%
>50 Years	572	237	5%
By Gender			
Female	940	858	23%
Male	3,351	3,378	21%
By Region			
North America	2,009	1,651	18%
Latin America	576	614	28%
Europe	968	549	12%
Asia Pacific	738	1,422	34%

**The rate for Number of Employees Joining the Organization is not an internal Owens Corning metric. It is calculated based on GRI Standards requirements.*

Number of Employees Leaving Employment in 2018

Total Employees	2017	2018	Rate
	2,787	3,294	17%
By Age Group			
<30 Years	908	1,093	29%
30 to 50 Years	1,303	1,488	13%
>50 Years	576	712	15%
Unallocated	0	1	0%
By Gender			
Female	636	678	18%
Male	2,151	2,615	16%
Unallocated	0	1	0%
By Region			
North America	1,408	1,581	18%
Latin America	564	532	24%
Europe	185	457	10%
Asia Pacific	630	724	17%

Total Employee Turnover Rate+

	2015	2016	2017	2018
Total employee turnover rate	13%	15%	17%	17%

Appendix B — Workforce Data

Safety Data

Injury By Type+

	2014	2015	2016	2017	2018
Asia Pacific					
Female					
Arms/Hands	0	0	0	3	0
Back/Shoulders	0	0	0	0	0
Head/Face/Eyes	0	0	0	0	0
Legs/Feet	1	0	1	0	0
Multiple/Other	0	0	0	0	0
Female Total	**1**	**0**	**1**	**3**	**0**
Male					
Arms/Hands	4	4	9	9	8
Back/Shoulders	1	0	0	2	0
Head/Face/Eyes	0	2	0	1	1
Legs/Feet	0	1	1	1	3
Multiple/Other	0	2	1	0	0
Male Total	**5**	**9**	**11**	**13**	**12**
Unspecified					
Arms/Hands	2	0	6	2	2
Back/Shoulders	0	0	0	0	0
Head/Face/Eyes	0	0	0	0	0
Legs/Feet	0	0	0	0	0
Multiple/Other	0	0	0	0	0
Unspecified Total	**2**	**0**	**6**	**2**	**2**
Asia Pacific Total	**8**	**9**	**18**	**18**	**14**
Europe					
Female					
Arms/Hands	2	1	2	0	0
Back/Shoulders	0	0	0	0	0
Head/Face/Eyes	0	0	0	0	0
Legs/Feet	0	1	0	2	0
Multiple/Other	0	0	0	0	0
Female Total	**2**	**2**	**2**	**2**	**0**
Male					
Arms/Hands	5	7	8	3	12
Back/Shoulders	0	1	0	1	0
Head/Face/Eyes	0	1	1	1	1
Legs/Feet	1	3	3	5	3
Multiple/Other	0	0	0	2	0
Male Total	**6**	**12**	**12**	**12**	**16**
Unspecified					
Arms/Hands	0	0	0	1	0
Back/Shoulders	0	0	0	0	0
Head/Face/Eyes	0	0	0	0	0
Legs/Feet	0	0	0	0	0
Multiple/Other	0	0	0	0	0
Unspecified Total	**0**	**0**	**0**	**1**	**0**
Europe Total	**8**	**14**	**14**	**15**	**16**

	2014	2015	2016	2017	2018
Latin America					
Female					
Arms/Hands	0	0	0	0	0
Back/Shoulders	0	0	0	0	0
Head/Face/Eyes	0	0	0	0	0
Legs/Feet	0	0	0	0	0
Multiple/Other	0	0	0	0	0
Female Total	**0**	**0**	**0**	**0**	**0**
Male					
Arms/Hands	0	2	1	1	0
Back/Shoulders	0	0	0	0	0
Head/Face/Eyes	0	0	0	0	0
Legs/Feet	0	1	2	0	0
Multiple/Other	0	0	0	0	0
Male Total	**0**	**3**	**3**	**1**	**0**
Unspecified					
Arms/Hands	0	0	0	0	0
Back/Shoulders	0	0	0	0	0
Head/Face/Eyes	0	0	0	0	0
Legs/Feet	0	0	0	0	0
Multiple/Other	0	0	0	0	0
Unspecified Total	**0**	**0**	**0**	**0**	**0**
Latin America Total	**0**	**3**	**3**	**1**	**0**
North America					
Female					
Arms/Hands	6	2	4	2	9
Back/Shoulders	4	2	0	2	7
Head/Face/Eyes	2	1	2	0	3
Legs/Feet	0	7	2	2	1
Multiple/Other	0	0	0	1	1
Female Total	**12**	**12**	**8**	**7**	**21**
Male					
Arms/Hands	21	28	24	25	40
Back/Shoulders	12	4	5	7	14
Head/Face/Eyes	11	8	9	10	8
Legs/Feet	8	4	8	9	4
Multiple/Other	10	3	3	1	2
Male Total	**62**	**47**	**49**	**52**	**68**
Unspecified					
Arms/Hands	0	1	0	2	0
Back/Shoulders	0	0	0	1	0
Head/Face/Eyes	0	0	0	1	0
Legs/Feet	0	0	0	0	0
Multiple/Other	0	0	0	0	0
Unspecified Total	**0**	**1**	**0**	**4**	**0**
North America Total	**74**	**60**	**57**	**63**	**89**
Grand Total	**90**	**86**	**92**	**97**	**119**

Appendix B — Workforce Data

Recordable Injuries

Region	Metric	2012	2013	2014	2015	2016	2017	2018
Asia Pacific	Total Man-Hours	7,195,136	6,973,776	6,059,394	6,053,150	9,174,227	11,486,549	12,566,888
	Female (count)	2	2	1	0	1	3	0
	Female (rate)	0.06	0.06	0.03	0	0.02	0.05	0
	Male (count)	6	5	5	9	11	13	12
	Male (rate)	0.17	0.14	0.17	0.30	0.24	0.23	0.19
	Unspecified (count)	2	0	2	0	6	2	2
	Unspecified (rate)	0.06	0	0.07	0	0.13	0.03	0.03
Asia Pacific Total (count)		**10**	**7**	**8**	**9**	**18**	**18**	**14**
Asia Pacific RIR		**0.28**	**0.20**	**0.26**	**0.30**	**0.39**	**0.31**	**0.22**
Europe	Total Man-Hours	3,422,277	3,217,157	3,111,340	2,616,036	3,199,705	3,567,925	8,069,125
	Female (count)	3	0	2	2	2	2	0
	Female (rate)	0.18	0	0.13	0.15	0.13	0.11	0
	Male (count)	5	11	6	12	12	12	16
	Male (rate)	0.29	0.68	0.39	0.92	0.75	0.67	0.40
	Unspecified (count)	0	0	0	0	0	1	0
	Unspecified (rate)	0	0	0	0	0	0.06	0
Europe Total (count)		**8**	**11**	**8**	**14**	**14**	**15**	**16**
Europe RIR		**0.47**	**0.68**	**0.51**	**1.07**	**0.88**	**0.84**	**0.40**
North America	Total Man-Hours	21,040,672	22,088,821	21,632,095	22,067,784	22,202,562	22,952,029	23,736,659
	Female (count)	9	9	12	12	8	7	21
	Female (rate)	0.09	0.08	0.11	0.11	0.07	0.06	0.18
	Male (count)	45	49	62	47	49	52	68
	Male (rate)	0.43	0.44	0.57	0.43	0.44	0.45	0.57
	Unspecified (count)	2	1	0	1	0	4	0
	Unspecified (rate)	0.02	0.01	0	0.01	0	0.03	0
North America Total (count)		**56**	**59**	**74**	**60**	**57**	**63**	**89**
North America RIR		**0.53**	**0.53**	**0.68**	**0.54**	**0.51**	**0.55**	**0.75**
Latin America	Total Man-Hours	1,161,467	1,135,862	1,112,313	1,316,153	1,278,027	1,263,178	1,224,252
	Female (count)	0	0	0	0	0	0	0
	Female (rate)	0	0	0	0	0	0	0
	Male (count)	2	2	0	3	3	1	0
	Male (rate)	0.34	0.35	0	0.46	0.47	0.16	0
	Unspecified (count)	0	0	0	0	0	0	0
	Unspecified (rate)	0	0	0	0	0	0	0
Latin America Total (Count)		**2**	**2**	**0**	**3**	**3**	**1**	**0**
Latin America RIR		**0.34**	**0.35**	**0**	**0.46**	**0.47**	**0.16**	**0**
Grand Total		**76**	**79**	**90**	**86**	**92**	**97**	**119**
RIR		**0.46**	**0.47**	**0.56**	**0.54**	**0.51**	**0.49**	**0.52**
Total Recordable Injuries Frequency Rate		**2.32**	**2.36**	**2.82**	**2.68**	**2.57**	**2.47**	**2.61**

Appendix B — Workforce Data

Employee Lost-Time Injury Frequency Rate (LTIFR)[+]

Region	Metric	2012	2013	2014	2015	2016	2017	2018
Asia Pacific	Total Man-Hours	7,195,136	6,973,776	6,059,394	6,053,150	9,174,227	11,486,549	12,566,888
	Female (count)	1	2	1	0	1	3	0
	Female (rate)	0.03	0.06	0.03	0	0.02	0.05	0
	Male (count)	5	3	4	4	3	9	7
	Male (rate)	0.14	0.09	0.13	0.13	0.07	0.16	0.11
	Unspecified (count)	2	0	2	0	1	0	2
	Unspecified (rate)	0.06	0	0.07	0	0.02	0	0.03
Asia Pacific Total (count)		**8**	**5**	**7**	**4**	**5**	**12**	**9**
Asia Pacific LWIR		**0.22**	**0.14**	**0.23**	**0.13**	**0.11**	**0.21**	**0.14**
Asia Pacific LTIFR		**1.11**	**0.72**	**1.16**	**0.66**	**0.55**	**1.04**	**0.72**
Europe	Total Man-Hours	3,422,277	3,217,157	3,111,340	2,616,036	3,199,705	3,567,925	8,069,125
	Female (count)	3	0	1	2	2	2	0
	Female (rate)	0.18	0	0.06	0.15	0.13	0.11	0
	Male (count)	2	9	3	10	9	11	12
	Male (rate)	0.12	0.56	0.19	0.76	0.56	0.62	0.30
	Unspecified (count)	0	0	0	0	0	1	0
	Unspecified (rate)	0	0	0	0	0	0.06	0
Europe Total (count)		**5**	**9**	**4**	**12**	**11**	**14**	**12**
Europe LWIR		**0.29**	**0.56**	**0.26**	**0.92**	**0.69**	**0.78**	**0.30**
Europe LTIFR		**1.46**	**2.80**	**1.29**	**4.59**	**3.44**	**3.92**	**1.49**
North America	Total Man-Hours	21,040,672	22,088,821	21,632,095	22,067,784	22,202,562	22,952,029	23,736,659
	Female (count)	3	5	4	9	6	3	6
	Female (rate)	0.03	0.05	0.04	0.08	0.05	0.03	0.05
	Male (count)	13	25	26	24	22	24	29
	Male (rate)	0.12	0.23	0.24	0.22	0.20	0.21	0.24
	Unspecified (count)	1	0	0	1	0	1	1
	Unspecified (rate)	0.01	0	0	0.01	0	0.01	0.01
North America Total (count)		**17**	**30**	**30**	**34**	**28**	**28**	**36**
North America LWIR		**0.16**	**0.27**	**0.28**	**0.31**	**0.25**	**0.24**	**0.30**
North America LTIFR		**0.81**	**1.36**	**1.39**	**1.54**	**1.26**	**1.22**	**1.52**
Latin America	Total Man-Hours	1,161,467	1,135,862	1,112,313	1,316,153	1,278,027	1,263,178	1,224,252
	Female (count)	0	0	0	0	0	0	0
	Female (rate)	0	0	0	0	0	0	0
	Male (count)	2	0	0	2	3	0	0
	Male (rate)	0.34	0	0	0.30	0.47	0	0
	Unspecified (count)	0	0	0	0	0	0	0
	Unspecified (rate)	0	0	0	0	0	0	0
Latin America Total (Count)		**2**	**0**	**0**	**2**	**3**	**0**	**0**
Latin America LWIR		**0.34**	**0**	**0**	**0.30**	**0.47**	**0**	**0**
Latin America LTIFR		**1.72**	**0**	**0**	**1.52**	**2.35**	**0**	**0**
Grand Total		**32**	**44**	**41**	**52**	**47**	**54**	**57**
Lost-Time Injuries Frequency Rate (LTIFR) - Employees								
Total Man-Hours		**32,819,552**	**33,415,616**	**31,915,142**	**32,053,123**	**35,854,521**	**39,269,681**	**45,596,924**
LTIFR		**0.98**	**1.32**	**1.28**	**1.62**	**1.31**	**1.38**	**1.25**

Appendix B — Workforce Data

Lost Work Day Rate (LWD)+

	2014	2015	2016	2017	2018
Asia Pacific	**6,059,394**	**6,053,150**	**9,174,227**	**11,486,549**	**12,566,888**
Female (Lost Work Days Count)	20	0	28	253	0
Female (LWD Rate)	0.66	0.00	0.61	4.41	0.00
Male (Lost Work Days Count)	92	266	269	702	363
Male (LWD Rate)	3.04	8.79	5.86	12.22	5.78
Unspecified (Lost Work Days Count)	139	0	11	0	42
Unspecified (LWD Rate)	4.59	0.00	0.24	0.00	0.67
Asia Pacific Total Work Days Lost	**251**	**266**	**308**	**955**	**405**
Asia Pacific LWD Rate	**8.28**	**8.79**	**6.71**	**16.63**	**6.45**
Europe	**3,111,340**	**2,616,036**	**3,199,705**	**3,567,925**	**8,069,125**
Female (Lost Work Days Count)	13	27	23	42	0
Female (LWD Rate)	0.84	2.06	1.44	2.35	0
Male (Lost Work Days Count)	82	469	411	305	566
Male (LWD Rate)	5.27	35.86	25.69	17.10	14.03
Unspecified (Lost Work Days Count)	0	0	0	31	0
Unspecified (LWD Rate)	0	0	0	1.74	0
Europe Total Work Days Lost	**95**	**496**	**434**	**378**	**566**
Europe LWD Rate	**6.11**	**37.92**	**27.13**	**21.19**	**14.03**
Latin America	**1,112,313**	**1,316,153**	**1,278,027**	**1,263,178**	**1,224,252**
Female (Lost Work Days Count)	0	0	0	0	0
Female (LWD Rate)	0	0	0	0	0
Male (Lost Work Days Count)	0	1,241	83	0	0
Male (LWD Rate)	0	188.58	12.99	0	0
Unspecified (Lost Work Days Count)	0	0	0	0	0
Unspecified (LWD Rate)	0	0	0	0	0
Latin America Total Work Days Lost	**0**	**1,241**	**83**	**0**	**0**
Latin America LWD Rate	**0.00**	**188.58**	**12.99**	**0**	**0**
North America	**21,632,095**	**22,067,784**	**22,202,562**	**22,952,029**	**23,736,659**
Female (Lost Work Days Count)	754	1,156	1,118	359	416
Female (LWD Rate)	6.97	10.48	10.07	3.13	3.51
Male (Lost Work Days Count)	4,033	1,937	1,747	1,628	2,262
Male (LWD Rate)	37.29	17.56	15.74	14.19	19.06
Unspecified (Lost Work Days Count)	0	1	0	1	5
Unspecified (LWD Rate)	0	0.01	0	0.01	0.04
North America Total Work Days Lost	**4,787**	**3,094**	**2,865**	**1,988**	**2,683**
North America LWD Rate	**44.26**	**28.04**	**25.81**	**17.32**	**22.61**
TOTAL WORK DAYS LOST	**5,133**	**5,097**	**3,690**	**3,321**	**3,654**
TOTAL LWD RATE	**32.17**	**31.80**	**20.58**	**16.91**	**16.03**

Appendix B — Workforce Data

Occupational Illness Frequency Rate (OIFR) – Employees+

	Metric	2012	2013	2014	2015	2016	2017	2018
Occupational Illness	Total Man-Hours	32,819,552	33,415,616	31,915,142	32,053,123	35,854,521	39,269,681	45,596,924
	Count	0	0	1	1	3	0	3
	Rate	0.00	0.00	0.03	0.03	0.08	0.00	0 .07

Occupational Illness by Region*+

Region	Metric	2015	2016	2017	2018
Asia Pacific	Total Man-Hours	6,053,150	9,174,227	11,486,549	12,566,888
	Male (count)	1	1	0	0
	Male (rate)	0.03	0.02	0	0
	Female (count)	0	0	0	0
	Female (rate)	0	0	0	0
North America	Total Man-Hours	22,067,784	22,202,562	22,952,029	23,736,659
	Male (count)	0	2	0	2
	Male (rate)	0	0.02	0	0.02
	Female (count)	0	0	0	1
	Female (rate)	0	0	0	0.01

**There were no occupational illnesses in Latin America or Europe in the last four years*

LWIR - (Lost Work Day Injury Rate): Lost Work Day Cases X 200,000 / Total Man-Hours
LTIFR - (Lost Time Injuries Frequency Rate): Lost Work Day Cases X 1,000,000 / Total Man-Hours
RIR - (Recordable Incidence Rate): Number of Injuries X 200,000 / Total Man-Hours
OIFR - (Occupational Illness Frequency Rate): Number of Illnesses X 1,000,000 / Total Man-Hours
TRIFR - (Total Recordable Injury Frequency Rate): Number of Injuries X 1,000,000 / Total Man-Hours
LWD - (Lost Work Day Rate): Lost Work Days x 200,000 / Total Man-Hours

Appendix B — Workforce Data

Contractor Safety Statistics+

Business	Metric	2015	2016	2017	2018
Building Materials Asia Pacific	Recordables	0	0	0	1
	Total Man-Hours	122,539	128,788	140,399	191,203
	Number LWD Cases	0	0	0	1
	LWIR	0	0	0	1.05
	RIR	0	0	0	1.05
	Fatalities	0	0	0	0
Composites	Recordables	1	4	1	3
	Total Man-Hours	977,116	675,226	1,348,648	3,855,821
	Number LWD Cases	0	0	0	1
	LWIR	0	0	0	0.05
	RIR	0.20	1.18	0.15	0.16
	Fatalities	0	0	1	0
Insulation	Recordables	4	2	7	3
	Total Man-Hours	324,752	571,739	400,628	408,086
	Number LWD Cases	0	0	3	1
	LWIR	0	0	1.50	0.49
	RIR	2.46	0.70	3.49	1.47
	Fatalities	0	0	0	0
Roofing	Recordables	0	1	1	1
	Total Man-Hours	137,307	185,498	127,557	150,216
	Number LWD Cases	0	0	0	1
	LWIR	0	0	0	1.33
	RIR	0	1.08	1.57	1.33
	Fatalities	0	0	1	1
All	Recordables	5	7	9	8
	Total Man-Hours	1,561,714	1,561,251	2,017,232	4,605,326
	Number LWD Cases	0	0	3	4
	LWIR	0	0	0.30	0.17
	RIR	0.64	0.90	0.89	0.35
	Fatalities	0	0	2	1

LTIFR - Contractors+

	2015	2016	2017	2018
Contractor Man-Hours	1,561,714	1,561,251	2,017,232	4,605,326
Lost Work Day Cases	0	0	3	4
LTIFR Contractors	0	0	1.49	0.87
Data Coverage: % of total contractors	100	100	100	100

Appendix C — Environmental Data

The energy and scope 1 and scope 2 emissions data in Appendix C were independently assured to a high level by SCS Global Services. Other data in Appendix C were independently assured to a moderate level by SCS Global Services. For more information or to see the verification statement, please go to page 178.

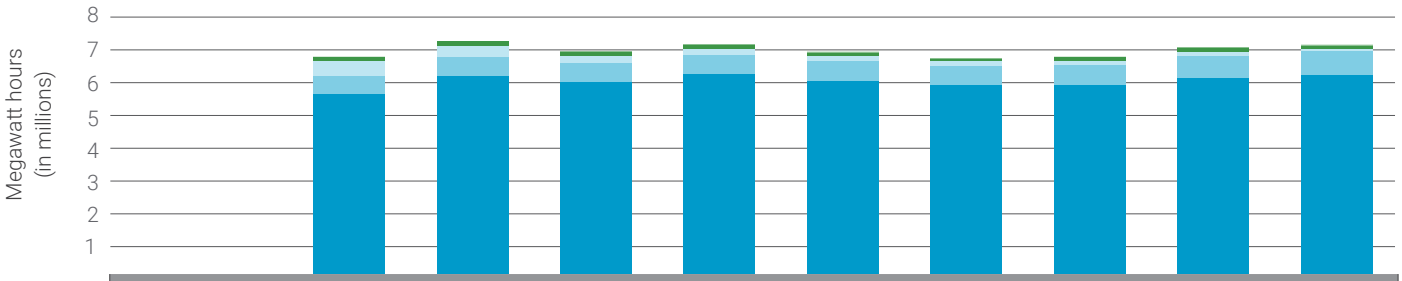
For the data in this section, baseline adjustments were made following the World Resources Institute (WRI) protocols. Read more on page 176 in About the Report.

Intensity is normalized based on MT of product produced.

Indirect energy includes electricity, heat, steam, cooling.

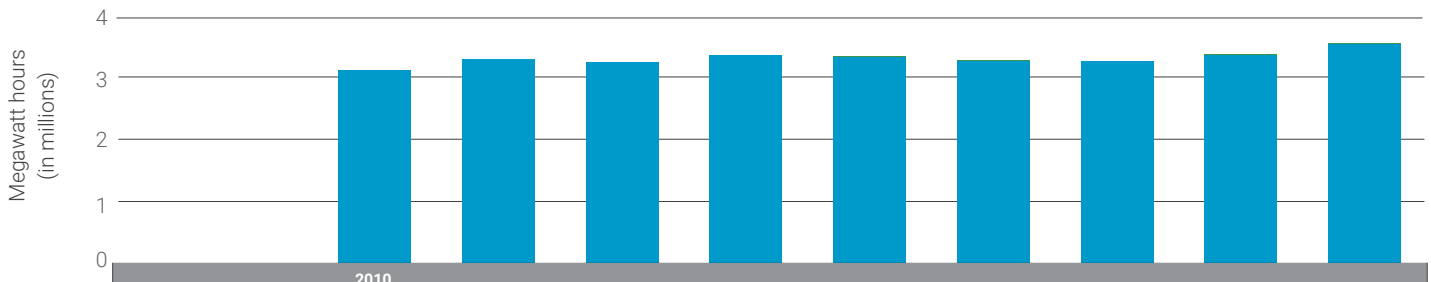
Energy

Direct Energy by Fuel Type



	2010 (baseline)	2011	2012	2013	2014	2015	2016	2017	2018
Gasoline & diesel	11,664	11,590	23,226	22,231	23,860	15,938	20,027	18,647	21,559
Jet fuel (Jet A or A-1)	14,306	14,169	12,600	15,097	12,262	13,058	15,084	14,094	12,503
Propane & LPG	132,214	125,001	117,593	121,059	116,795	83,053	110,053	130,844	119,726
Fuel oil 1, 2, 6	436,078	308,482	209,618	171,318	145,313	127,652	120,739	114,962	37,300
Coke	586,633	632,005	601,093	610,201	619,436	601,281	617,210	699,013	751,173
Natural gas	5,517,859	6,084,403	5,909,719	6,154,884	5,938,875	5,810,507	5,816,769	6,015,199	6,127,613
Total	**6,698,754**	**7,175,649**	**6,873,848**	**7,094,791**	**6,856,542**	**6,651,490**	**6,699,883**	**6,992,760**	**7,069,873**

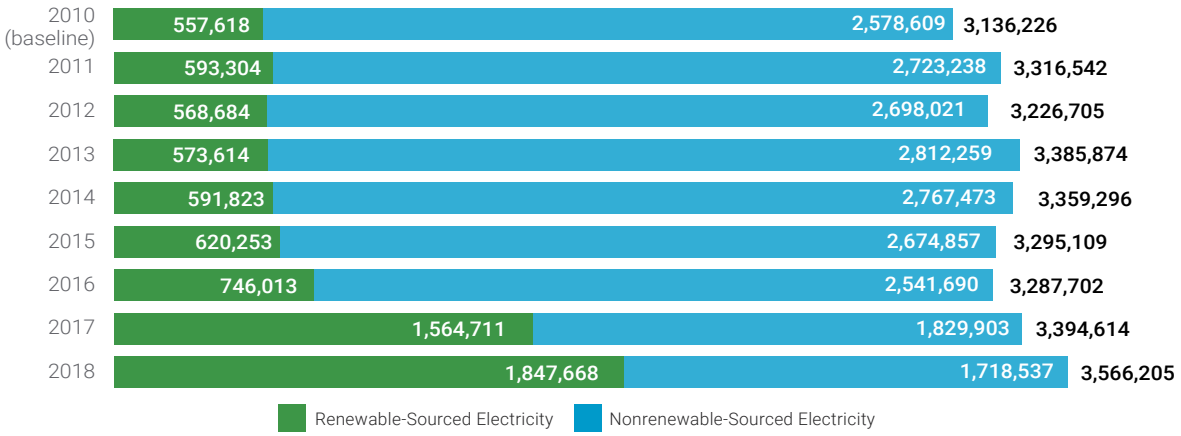
Indirect Energy by Source



	2010 (baseline)	2011	2012	2013	2014	2015	2016	2017	2018
Electricity	3,136,226	3,316,542	3,266,705	3,385,874	3,359,296	3,295,109	3,287,702	3,394,614	3,566,205
Heat, Steam, Cooling	2,061	2,123	1,849	2,194	5,011	8,651	8,696	10,005	11,489
Total	**3,138,287**	**3,318,665**	**3,268,554**	**3,388,068**	**3,364,307**	**3,303,760**	**3,296,398**	**3,404,618**	**3,577,694**

Appendix C — Environmental Data

Electricity Consumption by Source (in Megawatt Hours)



Energy Portfolio (in Megawatt Hours)

	2010 (baseline)	2011	2012	2013	2014	2015	2016	2017	2018
DIRECT ENERGY									
Nonrenewable									
Asia Pacific	1,059,825	1,167,341	1,160,516	1,101,691	969,381	888,472	873,466	855,872	777,413
Canada	330,682	330,722	296,650	296,560	304,164	301,886	260,736	245,339	257,926
Europe	1,912,926	1,969,729	1,739,335	1,795,665	1,722,538	1,720,707	1,731,446	1,809,026	1,853,012
Latin America	379,840	402,774	461,562	566,299	517,270	527,571	579,300	560,764	576,528
United States	3,015,480	3,305,082	3,215,786	3,334,577	3,343,190	3,212,853	3,254,935	3,521,759	3,604,993
Renewable	0	0	0	0	0	0	0	0	0
INDIRECT ENERGY									
Nonrenewable									
Asia Pacific	338,717	397,173	406,649	414,337	377,435	377,381	323,251	355,963	270,518
Canada	97,660	101,100	90,269	228,344	93,549	97,667	46,993	71,923	79,483
Europe	475,161	498,313	443,307	458,591	499,649	484,773	498,040	507,359	443,900
Latin America	95,353	112,237	125,748	217,972	157,635	154,990	170,719	182,303	199,840
United States	1,573,779	1,616,537	1,633,896	1,495,210	1,644,215	1,568,696	1,511,382	722,359	736,284
Renewable									
Asia Pacific	46,766	57,976	59,503	58,714	53,903	51,701	102,968	74,118	155,964
Canada	159,339	166,314	147,281	17,439	154,555	159,352	176,784	141,970	145,682
Europe	161,490	173,281	159,824	189,711	146,698	142,981	178,358	190,087	274,074
Latin America	81,276	88,789	87,779	25,916	75,467	92,474	94,584	86,574	93,981
United States	108,747	106,944	114,298	281,835	161,201	173,745	193,319	1,071,961	1,177,968
OVERALL ENERGY USAGE									
Nonrenewable	9,279,423	9,901,010	9,573,718	9,909,244	9,629,026	9,334,997	9,250,268	8,832,668	8,799,899
Renewable	557,618	593,304	568,684	573,614	591,823	620,253	746,013	1,564,711	1,847,668
TOTAL ENERGY USAGE									
Percent Energy from Renewable Sources	5.7%	5.7%	5.6%	5.5%	5.8%	6.2%	7.5%	15.0%	17.4%

Appendix C — Environmental Data

Indirect Energy - Electricity (in Megawatt Hours)

	2010 (baseline)	2011	2012	2013	2014	2015	2016	2017	2018
Nonrenewable									
Asia Pacific	338,717	397,173	406,649	414,337	377,435	377,381	323,251	355,275	269,634
Canada	97,660	101,100	90,269	228,344	93,549	97,667	46,993	71,923	79,483
Europe	473,100	496,190	441,458	456,397	494,638	476,122	489,344	498,043	433,295
Latin America	95,353	112,237	125,748	217,972	157,635	154,990	170,719	182,303	199,840
United States	1,573,779	1,616,537	1,633,896	1,495,210	1,644,215	1,568,696	1,511,382	722,359	736,284
Renewable									
Asia Pacific	46,766	57,976	59,503	58,714	53,903	51,701	102,968	74,118	155,964
Canada	159,339	166,314	147,281	17,439	154,555	159,352	176,784	141,970	145,682
Europe	161,490	173,281	159,824	189,711	146,698	142,981	178,358	190,087	274,074
Latin America	81,276	88,789	87,779	25,916	75,467	92,474	94,584	86,574	93,981
United States	108,747	106,944	114,298	281,835	161,201	173,745	193,319	1,071,961	1,177,968

2018 Energy by Region (Renewable/Nonrenewable) (in Megawatt Hours)

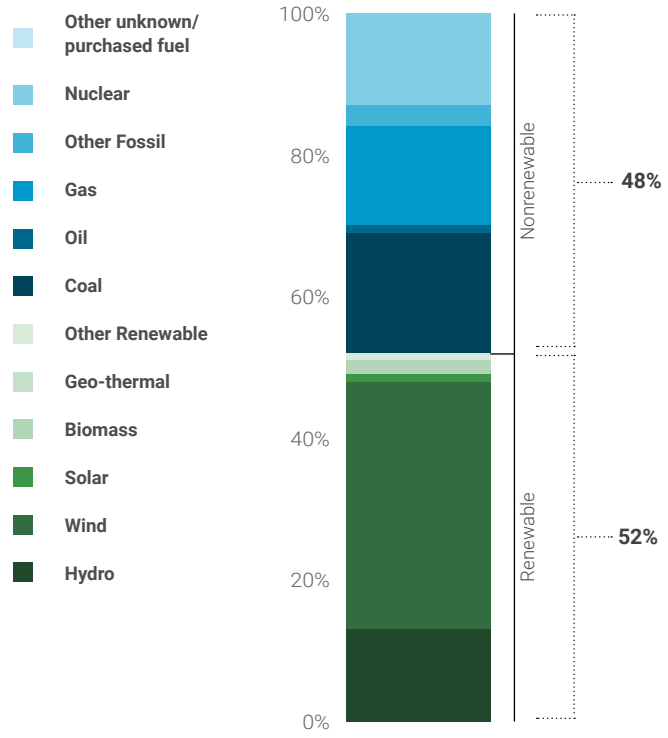
Region	Renewable	Nonrenewable	Total by Region
Asia Pacific	155,964	1,047,931	1,203,895
Canada	145,682	337,409	483,092
Europe	274,074	2,296,912	2,570,986
Latin America	93,981	776,369	870,350
United States	1,177,968	4,341,277	5,519,244
TOTAL	**1,847,668**	**8,799,899**	**10,647,567**

2018 Normalized Electric Power

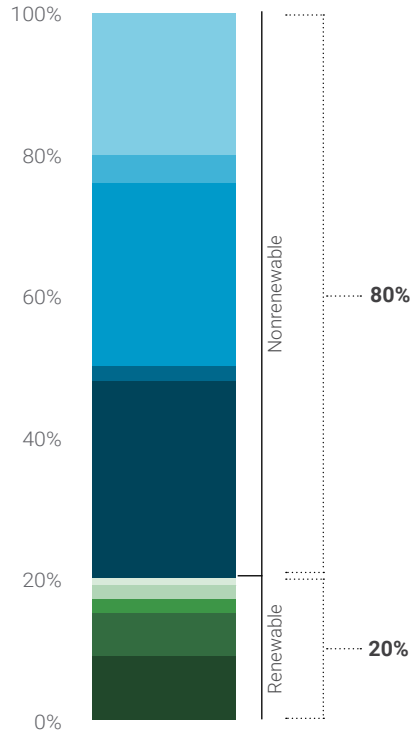
MWh	Normalized Amount
3,566,205	0.4722

Appendix C — Environmental Data

Global Electricity Mix (Market-Based)



Global Electricity Mix (Location-Based)



Category	Source	U.S.	Non-U.S.	Global
Renewable	Hydro	1%	27%	13%
Renewable	Wind	59%	7%	35%
Renewable	Solar	1%	2%	1%
Renewable	Biomass	<1%	3%	2%
Renewable	Geo-thermal	<1%	0%	<1%
Renewable	Other renewable	0%	1%	1%
Nonrenewable	Coal	13%	21%	17%
Nonrenewable	Oil	<1%	2%	1%
Nonrenewable	Gas	12%	16%	14%
Nonrenewable	Other fossil	<1%	7%	3%
Nonrenewable	Nuclear	12%	14%	13%
Nonrenewable	Other unknown/ purchased fuel	<1%	0%	<1%
	TOTAL	**100%**	**100%**	**100%**

Category	Source	U.S.	Non-U.S.	Global
Renewable	Hydro	3%	17%	9%
Renewable	Wind	5%	6%	6%
Renewable	Solar	1%	3%	2%
Renewable	Biomass	2%	3%	2%
Renewable	Geo-thermal	<1%	0%	<1%
Renewable	Other renewable	0%	2%	1%
Nonrenewable	Coal	34%	21%	28%
Nonrenewable	Oil	<1%	4%	2%
Nonrenewable	Gas	33%	18%	26%
Nonrenewable	Other fossil	<1%	7%	4%
Nonrenewable	Nuclear	20%	19%	20%
Nonrenewable	Other unknown/ purchased fuel	<1%	0%	<1%
	TOTAL	**100%**	**100%**	**100%**

Appendix C — Environmental Data

Primary Energy Calculation Sources

Type	Locations	Calendar Year	Source
Primary Energy	All facilities	All Years	U.S. EPA Better Plants: Primary Energy Accounting Methodology; revised 2/2015
Electricity	Non-U.S.	2018	International Energy Agency (IEA): CO_2 Emissions from Fuel Combustion 2018-Year 2016
Electricity	U.S.	2018	U.S. EPA eGRID 2018 (w/2016 data)
Electricity	Non-U.S.	2017	International Energy Agency (IEA): CO_2 Emissions from Fuel Combustion 2017-Year 2015
Electricity	U.S.	2017	U.S. EPA eGRID 2018 (w/2016 data)
Electricity	Non-U.S.	2016	International Energy Agency (IEA): CO_2 Emissions from Fuel Combustion 2016-Year 2014
Electricity	U.S.	2016	U.S. EPA eGRID 2017 (w/2014 data)
Electricity	Non-U.S.	2015	International Energy Agency (IEA): CO_2 Emissions from Fuel Combustion 2015-Year 2013
Electricity	U.S.	2015	U.S .EPA eGRID 2015 (w/2012 data)
Electricity	Non-U.S.	2014	International Energy Agency (IEA): CO_2 Emissions from Fuel Combustion 2011-Year 2009
Electricity	U.S.	2014	U.S. EPA eGRID 2014 v1.0 (w/2010 data)
Electricity	Non-U.S.	2013	International Energy Agency (IEA): CO_2 Emissions from Fuel Combustion 2011-Year 2009
Electricity	U.S.	2013	U.S. EPA eGRID 2014 v1.0 (w/2010 data)
Electricity	Non-U.S.	2012	International Energy Agency (IEA): CO_2 Emissions from Fuel Combustion 2011-Year 2009
Electricity	U.S.	2012	U.S. EPA eGRID 2012 v1.0 (w/2009 data)
Electricity	Non-U.S.	2011	International Energy Agency (IEA): CO_2 Emissions from Fuel Combustion 2011-Year 2009
Electricity	U.S.	2011	U.S. EPA eGRID 2010 V1.0 (w/2007 Data)
Electricity	Non-U.S.	2010	International Energy Agency (IEA): CO_2 Emissions from Fuel Combustion 2011-Year 2009
Electricity	U.S.	2010	U.S. EPA eGRID 2007 V1.1 (w/2005 data)
Leased Facilities	Warehouse	All Years	Energy Star Portfolio Manager - Energy Star Score for Warehouses in the United States; publication 7/2013
Leased Facilities	Office/ Other	All Years	Energy Star Portfolio Manager - Energy Use in Office Buildings; publication 10/2012

2018 Estimated Savings from Energy Investments by Region

Location	Estimated Annual Savings (metric tons CO_2e)	Annual Monetary Savings (USD)	Investment Required (USD)
North America	5,592	769,430	1,294,670
Outside North America	10,963	1,244,835	1,413,381
TOTAL	**16,555**	**2,014,265**	**2,708,051**

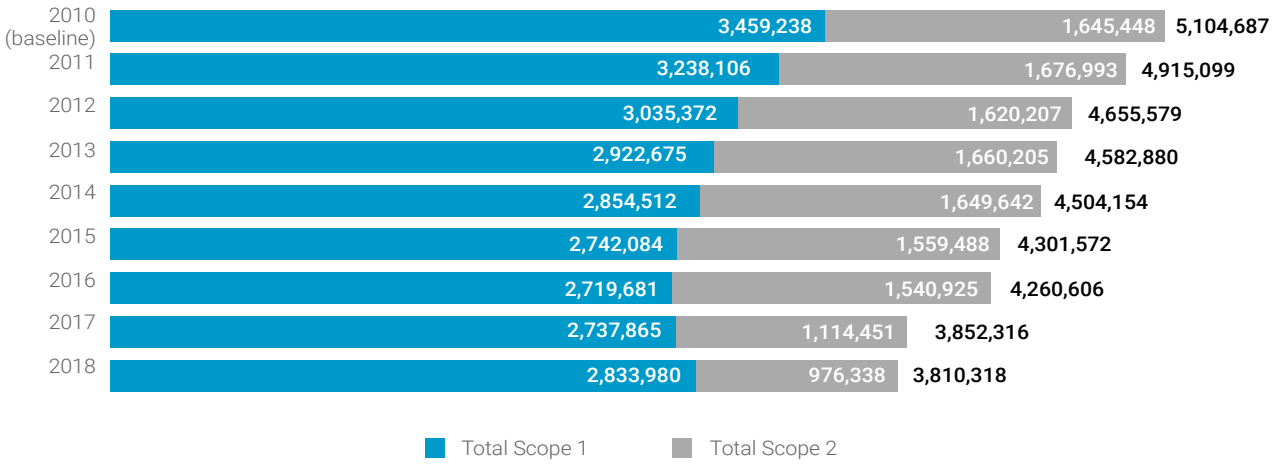
Certifications

LEED®	Gresham, OR; Gastonia, NC
ENERGY STAR®	Toledo, OH (world headquarters)
Wildlife Habitat Council	Toledo, OH (world headquarters); Granville, OH
ISO 50001	Chambéry, France

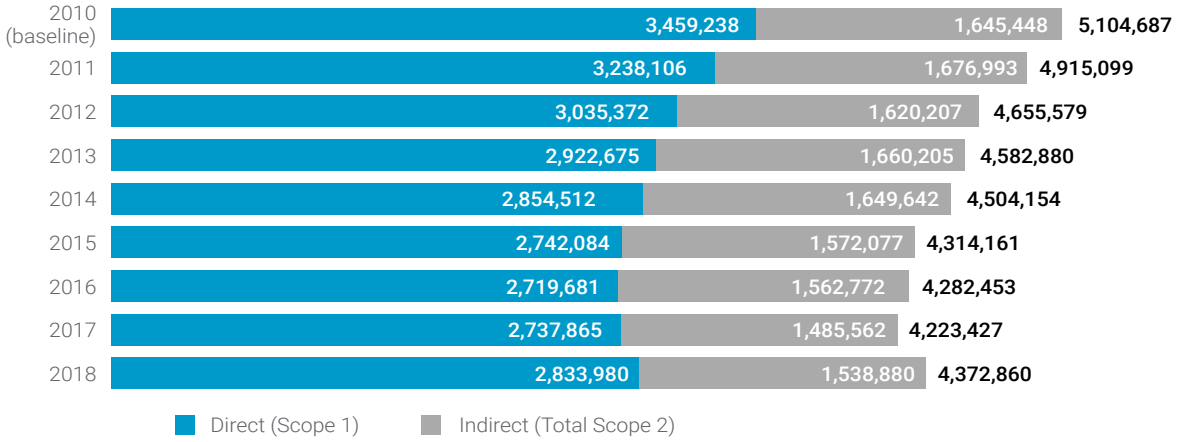
Appendix C — Environmental Data

Emissions

Direct and Indirect Emissions (Metric Tons CO_2e) – Scope 1 and 2 Emissions Using Market-Based Method

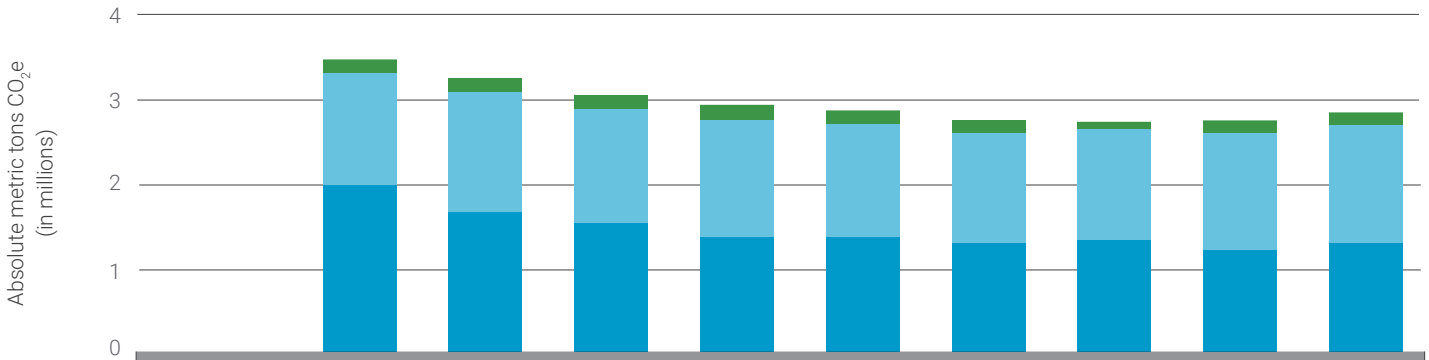


Direct and Indirect Emissions (Metric Tons CO_2e) – Scope 1 and 2 Emissions Using Location-Based Method



Appendix C — Environmental Data

Scope 1 Emissions Breakdown



	2010 (baseline)	2011	2012	2013	2014	2015	2016	2017	2018
Foam Blowing Agent Emissions	1,963,762	1,651,670	1,524,274	1,354,752	1,349,009	1,285,889	1,320,643	1,202,968	1,283,946
Fossil Fuel Combustion	1,330,577	1,413,609	1,346,211	1,383,340	1,343,636	1,301,289	1,311,724	1,378,081	1,393,675
Process Emissions	158,083	166,058	158,647	177,659	155,714	148,525	80,293	150,346	150,229
Leased Corporate Fleet	3,255	3,240	3,102	3,165	3,102	3,133	3,268	2,967	3,048
Leased Corporate Aircraft	3,562	3,528	3,138	3,759	3,052	3,248	3,752	3,503	3,081
TOTAL	**3,459,238**	**3,238,106**	**3,035,372**	**2,922,675**	**2,854,512**	**2,742,084**	**2,719,681**	**2,737,865**	**2,833,980**

Total Direct GHG Emissions (Scope 1) — Market-Based (Metric Tons CO_2e)

	2015	2016	2017	2018
Total Direct GHG Emissions (Scope 1)	2,742,084	2,719,681	2,737,865	2,833,980
Data Coverage (% of units of production)	100	100	100	100

Total Indirect GHG Emissions (Scope 2) — Market-Based (Metric Tons CO_2e)

	2015	2016	2017	2018
Total Indirect GHG Emissions (Scope 2)	1,559,488	1,540,925	1,114,451	976,338
Data Coverage (% of units of production)	100	100	100	100

Appendix C — Environmental Data

2018 Normalized Indirect Emissions — Market-Based

	Metric Tons CO_2e	Normalized Amount
Indirect Emissions	976,338	0.129278

2018 Normalized Methane Emissions — Market-Based

	Metric Tons CO_2e	Normalized Amount
Methane Emissions	819	0.000108

2018 Methane Emissions — Market-Based (Metric Tons)

	North America	Outside North America	Total
Methane	287	532	819

2018 Direct CO_2 Emissions (Metric Tons)

	North America	Outside North America	Total
Direct CO_2 Emissions	789,511	759,661	1,549,172
Normalized Emissions	—	—	0.2051

2018 Indirect CO_2 Emissions — Market-Based (Metric Tons)

	North America	Outside North America	Total
Indirect CO_2 Emissions	379,424	594,729	974,153
Normalized Emissions	—	—	0.1290

2018 Direct GHG Emissions (Metric Tons CO_2e)

	North America	Outside North America	Total
Direct GHG Emissions	1,636,672	1,197,308	2,833,980
Normalized Emissions	—	—	0 .3752

2018 Indirect GHG Emissions — Market-Based (Metric Tons CO_2e)

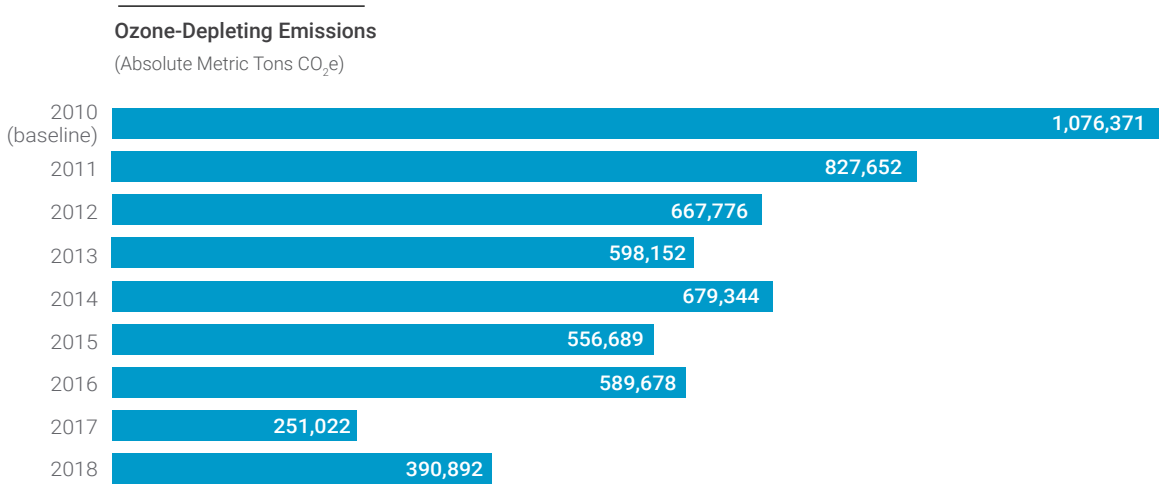
	North America	Outside North America	Total
Indirect GHG Emissions	379,881	596,458	976,338
Normalized Emissions	—	—	0 .1293

Intensity is normalized based on MT of product produced

Appendix C — Environmental Data

OZONE-DEPLETING EMISSIONS

In 2018, our absolute ozone-depleting emissions were 64% lower than the 2010 baseline due to a formulation change in XPS foam plants in North America.



Appendix C — Environmental Data

Emissions Across the Value Chain

SUPPLIERS

Purchased Goods and Services

To determine the impact from purchased goods and services, we use insight gained from our manufacturer-specific product life cycle assessments (LCA). Annual production data are combined with life cycle modules that represent raw material, and that is used to calculate the GHG emissions for manufacture of products across our portfolio. The category of purchased goods and services is interpreted as the cradle-to-supplier-gate global warming potential impact of the representative raw material inputs used to manufacture Owens Corning products. The data used to model these impacts were from Owens Corning's manufacturer-specific product LCA studies.

Capital Goods

The category of capital goods represents the GHG emissions generated from our assets, which include manufacturing and construction equipment and land. We determine the representative industry sector associated with each asset class's economic activity. GHG emissions are calculated using the annual expenses incurred within the asset class and the GHG emissions generated per unit of economic activity within its industry sector.

Determination of Scope 3 emissions associated with capital goods was performed using an EIO-LCA-based method and was calculated using the EIO-LCA online tool developed by Carnegie Mellon University. Primary data were collected internally on 2018 total spend for capital expenditure.

Fuel- and Energy-Related Activities

In fuel- and energy-related activities, we aim to quantify the GHG emissions that occur both upstream and downstream of electricity generation. Upstream emissions, which are cradle-to-generation in scope, include those from activities required to generate electricity such as the extraction, processing, and transportation of fuels. Downstream emissions, which are generation-to-consumption, include those produced from additional electricity generation that is needed to compensate for line losses that occur during transmission and distribution.

In our calculation for Scope 3 GHG emissions for fuel- and energy-related activities, upstream impacts were determined using life cycle impact assessment factors, calculated using geographic-specific unit processes for high voltage production from ecoinvent v3.4 and combined with emission rate data from U.S. EPA's eGRID for U.S. facilities, and IEA for non-U.S. facilities. For U.S. facilities, data for downstream transmission and distribution line losses were calculated using eGRID. For non-U.S. facilities, we used IEA datasets for the calculation.

Upstream Transportation and Distribution

We recognize that transportation is a significant source of GHG emissions when sourcing raw materials for product manufacturing as well as in the distribution of finished goods. Using data from our sourcing and logistic analysts, we determine the annual costs associated with each major transportation mode. After determining the GHG emissions per unit of economic activity within the unique industry sector representing each transportation mode, we can estimate the GHG emissions generated from the upstream and downstream transportation of materials.

Primary data were collected internally from Owens Corning logistic analysts for 2018 total spend associated with the inbound transportation of all purchased materials. We categorized spend data and calculated the total spend for each of the three transportation modes (truck, water, and passenger ground).

Business Travel

Rental car mileage and commercial air travel miles and emissions were received from our travel vendor. For employee vehicle reimbursement related to business mileage, Owens Corning utilized an extract of miles from our travel system and determined emissions based on a standard emission rate provided by the U.S. EPA Greenhouse Gas Emissions from a Typical Passenger Vehicle guide.

Appendix C — Environmental Data

Employee Commuting

Owens Corning used a simplified version of the Scope 3 GHG Protocol's average-data method to calculate employee commuting emissions. We used the U.S. EPA's guide to determine an estimate of grams of CO_2 per mile, and used the average number of days worked per year to estimate employee commuting. We believe this estimate is overstated because our calculations did not take into account telecommuting, public transportation, carpooling, business travel days that would be accounted for separately, or other methods of commuting.

Downstream Transportation and Distribution

Primary data were collected internally from Owens Corning logistic analysts for annual total spend associated with the outbound distribution and transportation of finished goods. Transportation spend data were allocated entirely to truck transportation as the mode of distribution for a more conservative approximation. Total transportation spend was used as the indicator of economic activity and used as the input in the EIO-LCA online tool.

Processing of Sold Products

Many of our products do not require additional processing or energy sources to perform their function; these include our asphalt roofing shingles as well as our wide range of insulation solutions. Additional downstream processing, however, is common with intermediate products such as our reinforcement glass fiber, which is often used in reinforced plastic composites. To determine the GHG emissions from this category, we correlate the revenue generated from our Composites business to the GHG emissions of industry sectors that represent our glass-fiber reinforced plastic (GFRP) customers.

Scope 3 emissions were calculated and determined for Owens Corning's Composites business only, which primarily manufactures intermediate products, using the eiolca.net tool.

End-of-Life (EoL) Treatment of Sold Products

While asphalt roofing shingles and GFRP materials have increasingly more innovative applications for recycling at their end of life, we recognize that the end-of-life of insulation products is, more often than not, waste-to-landfill. Scope 3 EoL emissions were determined for Owens Corning insulation manufacturing operations, and, more specifically, only for fiberglass and XPS insulation. We determine the impact of this category by calculating the GHG emissions generated when all the glass wool and XPS foam produced by our North American facilities for 2018 is sent to landfill.

EoL emission factors were determined from cradle-to-grave EPDs, and the LCAs upon which they are based, on Owens Corning fiberglass insulation and XPS insulation. The third-party verified LCAs were internally conducted for these products in 2012 and 2013, respectively. These factors were used in conjunction with 2018 production volumes for these two insulation materials to determine the Scope 3 emissions when the production volume quantities are disposed as waste to landfill.

CUSTOMERS

Buildings contribute about 40% of GHG emissions in the world today, so they are an essential target for reducing emissions. Given that building and construction is one of our main customer industries, we monitor qualitatively and quantitatively the GHG emissions from buildings in relation to their energy efficiency. Our commitment to sustainability starts with energy-saving products such as insulation and air-sealing products. We estimate that our insulation produced in North America in 2018 reduced GHG emissions for homeowners by approximately 10.2 million metric tons a year and 611 million metric tons over a 60-year building life. A typical pound of insulation saves 12 times as much energy in its first year of use as the energy used to produce it. That means the energy consumed during manufacturing is saved during the first four to five weeks of product use.

Our glass fiber composites contribute to light-weighting of vehicles for better fuel efficiency, better efficiency of wind turbines, and lower embodied energy than competing materials over the life of the part. We collaborate with customers to conduct LCAs for their products as well.

Appendix C — Environmental Data

SUPPORT SERVICES

Over the last few years, Owens Corning has increased efforts to reduce the amount of its business travel. Employees are asked to examine the need for travel and to look for alternatives. We have adopted remote desktop sharing and have greatly increased the amount of video conferencing in lieu of business travel. Many plants now have video conference rooms available, and personnel at home offices increasingly take advantage of video conferencing technologies on their personal computers. To reduce business travel costs and emissions, employees also will bundle trips and visit multiple plants in the same area rather than making separate trips. Employees are also instructed to take intermediate or compact cars on business trips to limit emissions.

2018 Scope 3 GHG Emissions (in Metric Tons CO_2e)

Purchased goods and services	1,936,670
Capital goods	136,868
Fuel-and-energy-related activities (not included in Scope 1 or 2)	416,521
Upstream transportation and distribution	182,499
Business travel	13,708
Employee commuting	34,456
Downstream transportation and distribution	530,245
Processing of sold products	438,746
End of life treatment of sold products	202,469
TOTAL	**3,892,181**

Appendix C — Environmental Data

GHG Emissions Sources

Type	Locations	Calendar Year	Source
Natural Gas	All locations	All Years	U.S. EPA MRR: Final Rule (40 CFR 98) - Industrial Sector 2013
Distillate Fuel Oil No. 1	All locations	All Years	U.S. EPA MRR: Final Rule (40 CFR 98) - Industrial Sector 2013
Distillate Fuel Oil No. 2	All locations	All Years	U.S. EPA MRR: Final Rule (40 CFR 98) - Industrial Sector 2013
Distillate Fuel Oil No. 6	All locations	All Years	U.S. EPA MRR: Final Rule (40 CFR 98) - Industrial Sector 2013
Propane	All locations	All Years	U.S. EPA MRR: Final Rule (40 CFR 98) - Industrial Sector 2013
Coke	All locations	2010-2016	The Climate Registry: 2015 Gen. Reporting Protocol - USA Industrial
Coke	All locations	2017	The Climate Registry: 2016 Gen. Reporting Protocol - USA Industrial
Coke	All Locations	2018	The Climate Registry: 2018 Gen. Reporting Protocol - USA Industrial
Diesel/Gas Oil	All locations	All Years	U.S. EPA MRR: Final Rule (40 CFR 98) - Industrial Sector 2013
Motor Gas	All locations	All Years	U.S. EPA MRR: Final Rule (40 CFR 98) - Industrial Sector 2013
Liquified Petroleum Gas (LPG)	All locations	All Years	U.S. EPA MRR: Final Rule (40 CFR 98) - Industrial Sector 2013
Liquefied Natural Gas (LNG)	All Locations	2018	The Climate Registry: 2018 Gen. Reporting Protocol - USA Transport
Liquefied Natural Gas (LNG)	All Locations	2017	The Climate Registry: 2016 Gen. Reporting Protocol - USA Transport
Liquefied Natural Gas (LNG)	All Locations	2015-2016	The Climate Registry: 2015 Gen. Reporting Protocol - USA Transport
Liquefied Natural Gas (LNG)	All Locations	2014	The Climate Registry: 2014 Gen. Reporting Protocol v2.0 - USA Transport
Liquefied Natural Gas (LNG)	All Locations	2013	The Climate Registry: 2013 Gen. Reporting Protocol - USA Transport
Liquefied Natural Gas (LNG)	All Locations	2010-2012	The Climate Registry: 2012 Gen. Reporting Protocol v1.1 - USA Transport
Kerosene	All locations	All Years	U.S. EPA MRR: Final Rule (40 CFR 98) - Industrial Sector 2013
Jet Fuel	All locations	2010-2016	The Climate Registry: 2015 Gen. Reporting Protocol - USA Industrial
Jet Fuel	All locations	2017	The Climate Registry: 2016 Gen. Reporting Protocol - USA Industrial
Jet Fuel	All Locations	2018	The Climate Registry: 2018 Gen. Reporting Protocol - USA Transport
Limestone	All locations	All Years	IPCC Mineral Industry Emissions Chapter 2 V3 publication 2006
Dolomite	All locations	All Years	IPCC Mineral Industry Emissions Chapter 2 V3 publication 2006
Soda Ash	All locations	All Years	IPCC Mineral Industry Emissions Chapter 2 V3 publication 2006
Steam: Purchased	All Locations	2010-2018	U.S. EPA MRR Final Rule (40 CFR 98) - Industrial Sector 2013
District Heating	All Locations	2010-2018	U.S. EPA MRR Final Rule (40 CFR 98) - Industrial Sector 2013
Blowing Agents	All locations	2010-2015	U.S. EPA Class II Ozone-depleting Substances
Blowing Agents	All locations	2016	IPCC Fourth Assessment Report: Climate Change 2007
Blowing Agents	All locations	2017	IPCC Fifth Assessment Report (AR): Climate Change 2008
Electricity	Non-U.S.	2018	International Energy Agency (IEA):CO_2 Emissions from Fuel Combustion 2018-Year 2016
Electricity	U.S.	2018	U.S. EPA eGRID 2018 (w/2016 data)

Appendix C — Environmental Data

Type	Locations	Calendar Year	Source
Electricity	Non-U.S.	2017	International Energy Agency (IEA): CO_2 Emissions from Fuel Combustion 2017-Year 2015
Electricity	U.S.	2017	U.S. EPA eGRID 2018 (w/2016 data)
Electricity	Non-U.S.	2016	International Energy Agency (IEA): CO_2 Emissions from Fuel Combustion 2016-Year 2014
Electricity	U.S.	2016	U.S. EPA eGRID 2017 (w/2014 data)
Electricity	Non-U.S.	2015	International Energy Agency (IEA) CO_2 Emissions from Fuel Combustion 2015-Year 2013
Electricity	U.S.	2015	U.S. EPA eGRID 2015 (w/2012 data)
Electricity	Non-U.S.	2014	International Energy Agency (IEA) CO_2 Emissions from Fuel Combustion 2011-Year 2009
Electricity	U.S.	2014	U.S. EPA eGRID 2014 v1.0 (w/2010 data)
Electricity	Non-U.S.	2013	International Energy Agency (IEA) CO_2 Emissions from Fuel Combustion 2011-Year 2009
Electricity	U.S.	2013	U.S. EPA eGRID 2014 v1.0 (w/2010 data)
Electricity	Non-U.S.	2012	International Energy Agency (IEA) CO_2 Emissions from Fuel Combustion 2011-Year 2009
Electricity	U.S.	2012	U.S. EPA eGRID 2012 v1.0 (w/2009 data)
Electricity	Non-U.S.	2011	International Energy Agency (IEA) CO_2 Emissions from Fuel Combustion 2011-Year 2009
Electricity	U.S	2011	U.S. EPA eGRID 2010 V1.0 (w/2007 Data)
Electricity	Non-U.S.	2010	International Energy Agency (IEA) CO_2 Emissions from Fuel Combustion 2011 Year 2009
Electricity	U.S.	2010	U.S. EPA eGRID 2007 V1.1 (w/2005 data)
Leased Facilities	Warehouse	All Years	Energy Star Portfolio Manager - Energy Star Score for Warehouses in the United States; publication 7/2013
Leased Facilities	Office/Other	All Years	Energy Star Portfolio Manager - Energy Use in Office Buildings; publication 10/2012

Appendix C — Environmental Data

2018 NOx, SOx, and VOC Emissions Normalized Intensity

	Intensity in Metric Tons (per unit of product produced)
NOx	0.00050
SOx	0.00047
VOC	0.00062

2018 NOx, SOx, and VOC Emissions by Business (Metric Tons)

	Composites	Other	Total
NOx	750	1,103	1,853
SOx	582	1,559	2,142
VOC	1,093	1,064	2,157

Appendix C — Environmental Data

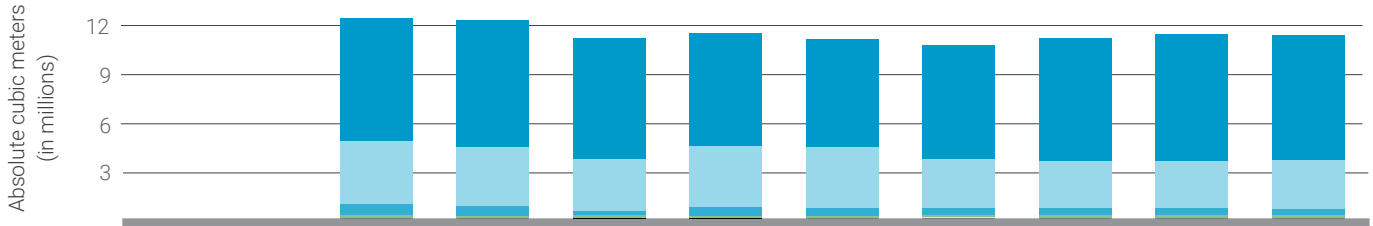
Water

Water Consumption (Cubic Meters)

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Withdrawal	12,375,895	12,247,569	11,111,202	11,408,678	11,070,589	10,671,581	11,123,578	11,340,403	11,318,080
Discharge	6,632,401	6,990,085	6,708,760	6,145,242	6,032,885	5,982,083	5,819,124	5,933,522	6,003,561
Consumption	5,743,494	5,257,484	4,402,442	5,263,436	5,037,704	4,689,499	5,304,454	5,406,881	5,314,519

Consumption is calculated as the difference between withdrawal and discharge

Water Withdrawal by Source



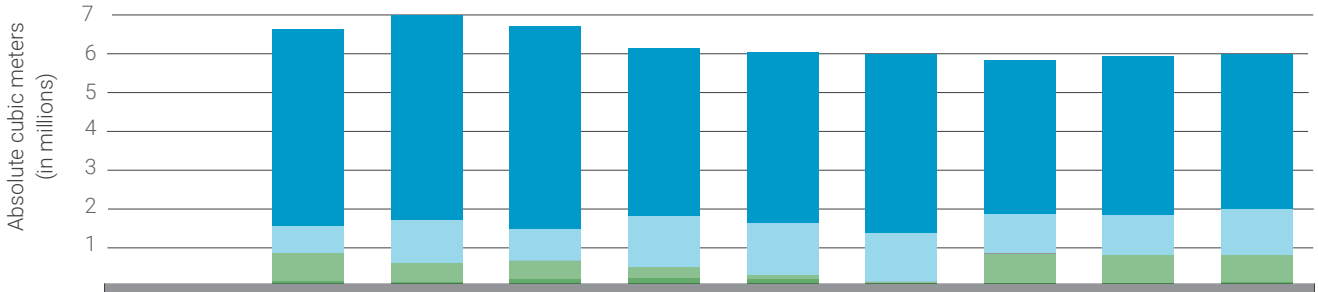
	2010 (baseline)	2011	2012	2013	2014	2015	2016	2017	2018
Municipal Water	7,575,585	7,883,242	7,436,464	6,935,545	6,675,878	7,025,539	7,621,849	7,777,424	7,708,477
Water - Well Water	3,928,605	3,573,687	3,190,997	3,757,255	3,738,321	2,982,011	2,898,329	2,934,408	3,016,300
Surface Water	683,952	610,065	282,378	540,108	473,906	415,491	371,160	394,299	367,753
Water - Third Party Supplier	150,624	177,054	160,490	162,195	174,118	184,422	182,684	179,600	182,998
Water - Stormwater	37,129	3,520	25,923	4,732	8,366	64,117	49,556	54,672	42,552
Water - Other	0	0	14,950	8,844	0	0	0	0	0
Total	**12,375,895**	**12,247,569**	**11,111,202**	**11,408,678**	**11,070,589**	**10,671,581**	**11,123,578**	**11,340,403**	**11,318,080**

Water Withdrawal by Business (Cubic Meters)

	2010 (baseline)	2011	2012	2013	2014	2015	2016	2017	2018
Composites	7,218,843	7,455,832	6,330,671	6,680,466	6,473,323	5,965,528	5,859,681	5,939,972	5,886,249
Roofing	1,196,666	1,253,221	1,169,635	1,121,491	934,131	954,772	1,195,936	1,256,546	1,241,204
Insulation	3,850,118	3,446,146	3,508,277	3,515,622	3,567,833	3,669,669	3,961,120	4,043,614	4,072,233
Corporate	110,268	92,370	102,619	91,098	95,302	81,612	106,841	100,271	118,393
Total	**12,375,895**	**12,247,569**	**11,111,202**	**11,408,678**	**11,070,589**	**10,671,581**	**11,123,578**	**11,340,403**	**11,318,080**

Appendix C — Environmental Data

Water Discharge by Source



	2010 (baseline)	2011	2012	2013	2014	2015	2016	2017	2018
Wastewater - POTW	5,129,669	5,328,422	5,296,207	4,375,715	4,462,561	4,674,120	4,016,939	4,160,592	4,055,817
Wastewater - Surface Water	706,372	1,132,164	817,356	1,348,780	1,352,934	1,256,701	1,019,489	1,025,749	1,198,937
Wastewater - Stormwater	0	0	0	0	0	0	3,163	2,480	4,921
Wastewater - Other	727,747	484,773	468,150	284,406	110,931	50,322	774,520	743,729	714,419
Wastewater - Offsite Shipment	68,613	44,726	127,048	136,340	106,458	939	5,014	971	29,467
Total	**6,632,401**	**6,990,085**	**6,708,760**	**6,145,242**	**6,032,885**	**5,982,083**	**5,819,124**	**5,933,522**	**6,003,561**

Wastewater Discharge by Location (Cubic Meters)

	2010 (baseline)	2011	2012	2013	2014	2015	2016	2017	2018
North America	2,975,910	3,064,384	3,645,420	2,724,882	2,621,354	2,531,320	2,930,316	3,022,936	2,963,927
Outside North America	3,656,491	3,925,701	3,063,340	3,420,360	3,411,530	3,450,763	2,888,807	2,910,586	3,039,634
Total	**6,632,401**	**6,990,085**	**6,708,760**	**6,145,242**	**6,032,885**	**5,982,083**	**5,819,124**	**5,933,522**	**6,003,561**

Estimated Water Savings by Business (2010-2018)

	Cubic Meters	USD
Composites	6,816,361	$5,036,988
Insulation	4,194,667	$3,099,673
Roofing	1,280,036	$945,890

Appendix C — Environmental Data

WRI Extremely High Baseline Water Stress: Discharge by Destination

Discharge by Destination	Discharge (in cubic meters)
Wastewater - Offsite Shipment	0
Wastewater - Other	60
Wastewater - Stormwater	0
Wastewater - Surface Water	10,186
Water - POTW	728,965
TOTAL	**739,211**

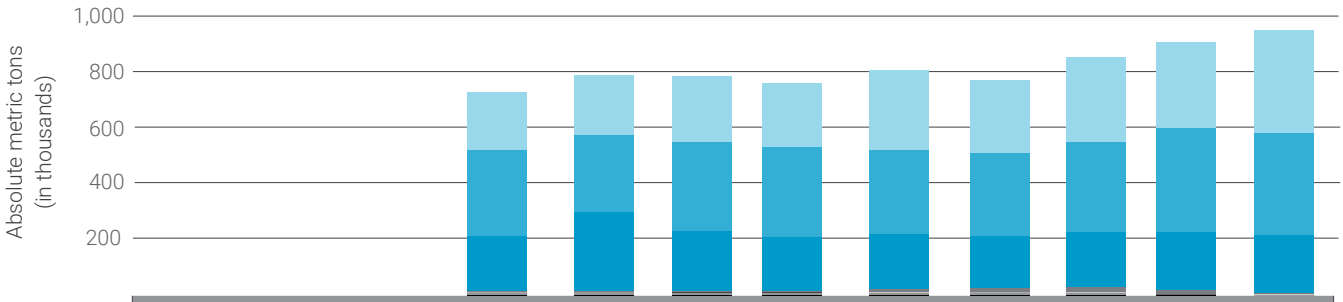
WRI Extremely High Baseline Water Stress: Withdrawal by Source

Source of Withdrawal	Withdrawal (in cubic meters)
Water - Other	0
Water - Stormwater	6,802
Water - Third Party Supplier	0
Surface Water	0
Water - Well Water	368,457
Municipal Water	1,788,776
TOTAL	**2,164,034**

Appendix C — Environmental Data

Waste

Nonhazardous Waste by Disposal Method



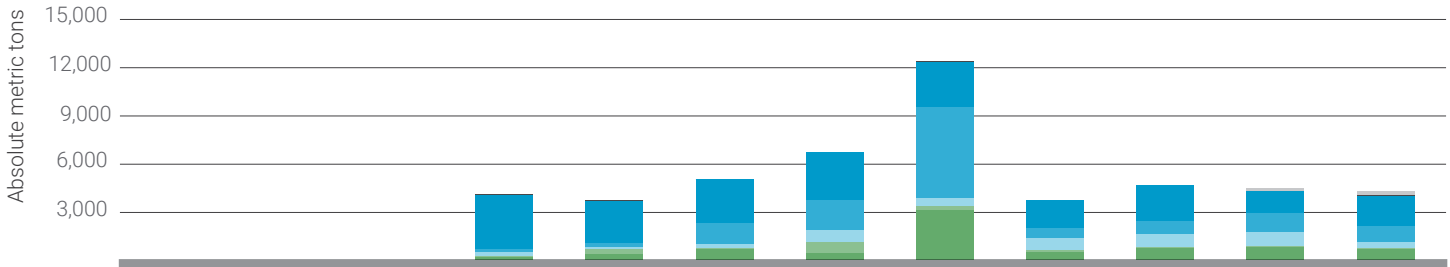
	2010 (baseline)	2011	2012	2013	2014	2015	2016	2017	2018
Recycled Internally (onsite)	204,694	211,717	233,581	230,704	285,236	261,047	302,317	307,182	367,075
Waste to Landfill	309,538	276,528	318,205	318,613	299,593	296,481	321,619	369,449	364,601
Recycled Externally (offsite)	193,886	278,334	211,367	190,707	192,326	186,300	194,192	207,231	202,907
Recultivation	5,605	5,311	5,814	6,326	13,500	12,870	19,320	11,700	4,150
Incinerated With Energy Recovery	480	641	1,575	1,333	3,169	1,411	2,184	2,205	3,649
Incinerated Without Energy Recovery	523	644	841	693	24	42	228	7	725
Controlled Confinement	0	0	0	0	0	0	0	1,200	275
Composting	8,422	8,733	8,480	8,440	7,130	8,738	7,619	1,916	72
Return to Supplier	464	759	47	141	22	12	1	4	14
Treated and Recycled	228	154	155	207	231	299	344	371	0
TOTAL	**723,839**	**782,820**	**780,064**	**757,164**	**801,231**	**767,199**	**847,826**	**901,266**	**943,467**

Nonhazardous Waste by Business (Metric Tons)

	2010 (baseline)	2011	2012	2013	2014	2015	2016	2017	2018
Corporate	1,336	1,306	1,349	1,955	1,712	1,718	1,395	1,773	1,231
Composites	222,734	253,240	199,856	204,248	191,333	194,273	208,656	213,780	208,246
Insulation	426,772	449,913	496,661	475,003	533,343	504,992	564,000	601,806	645,081
Roofing	72,997	78,361	82,198	75,959	74,843	66,215	73,775	83,909	88,909
TOTAL	**723,839**	**782,820**	**780,064**	**757,164**	**801,231**	**767,199**	**847,826**	**901,266**	**943,467**

Appendix C — Environmental Data

Hazardous Waste by Disposal Method



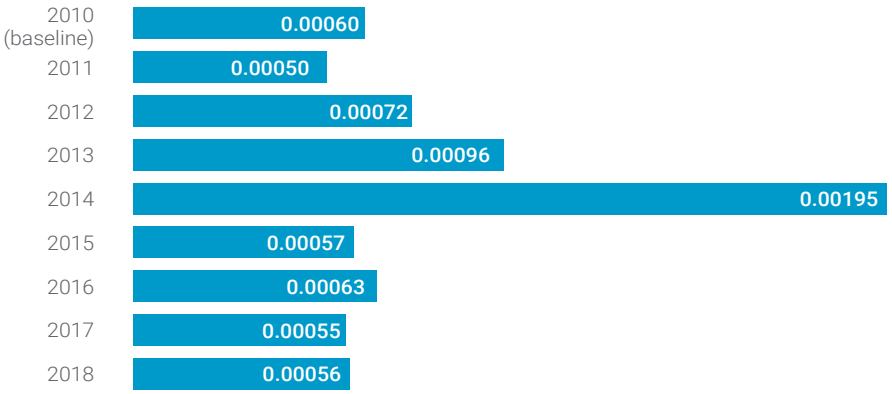
	2010 (baseline)	2011	2012	2013	2014	2015	2016	2017	2018
Controlled Confinement	0	0	0	0	0	0	0	151	255
Treated and Recycled	0	0	0	0	0	0	0	50	64
Waste to Landfill	3,352	2,680	2,768	2,980	2,836	1,719	2,213	1,391	1,862
Internally Recycled (onsite)	231	215	1,302	1,919	5,695	657	826	1,130	961
Incinerate Without Energy Recovery	230	140	247	702	494	769	832	892	422
Incinerate With Energy Recovery	35	255	62	656	249	65	25	25	34
Externally Recycled (offsite)	178	369	634	427	3,058	474	711	803	647
TOTAL	**4,027**	**3,660**	**5,014**	**6,685**	**12,332**	**3,684**	**4,606**	**4,442**	**4,246**

Hazardous Waste by Business (Metric Tons)

	2010 (baseline)	2011	2012	2013	2014	2015	2016	2017	2018
Corporate	5	13	24	21	14	19	16	33	24
Composites	2,170	2,426	2,135	3,534	5,306	1,621	1,761	2,046	1,721
Insulation	1,783	1,150	2,429	2,920	6,864	1,856	2,539	2,205	2,481
Roofing	69	70	427	210	148	188	290	158	21
TOTAL	**4,027**	**3,660**	**5,014**	**6,685**	**12,332**	**3,684**	**4,606**	**4,442**	**4,246**

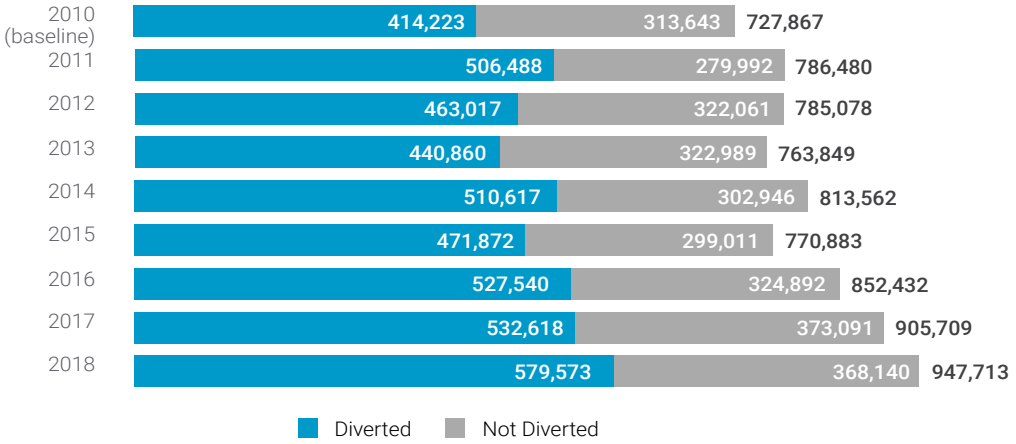
Appendix C — Environmental Data

Hazardous Waste Intensity



MT/MT of Product Produced

Diverted vs. Not Diverted Waste (Metric Tons)



Appendix D — Key Partnerships

Our Partnerships and Collaborations with Organizations/Governing Bodies

	Member only	Position in governance bodies	Participates in projects/committees	Provides substantive funds beyond routine membership	Views relationship as strategic
COMMUNITIES					
Association of Corporate Citizenship Professionals		✓		✓	✓
Gary Sinise Foundation			✓	✓	✓
Habitat for Humanity India			✓	✓	✓
Habitat for Humanity International			✓	✓	✓
King Baudouin Foundation			✓	✓	✓
Local Habitat for Humanity Affiliates		✓	✓	✓	✓
Marathon Classic (LPGA charitable tournament)		✓	✓	✓	✓
Mexican Red Cross			✓	✓	✓
Regional Growth Partnership – Northwest Ohio		✓		✓	✓
Susan G. Komen of Northwest Ohio		✓			
Toledo Metropark Foundation		✓	✓	✓	
United Way Worldwide			✓	✓	✓
United Way Local Affiliates		✓	✓	✓	✓
United Way Mumbai			✓	✓	✓
World Vision	✓		✓	✓	✓
GOVERNMENT					
U.S. Department of Energy's Better Plants Progran	✓				
EPA's Energy Star®	✓		✓		✓
EPA's SmartWay Transport Partnership	✓				✓
NON-GOVERNMENT ORGANIZATIONS					
Alliance to Save Energy					✓
American Society of Safety Professionals	✓		✓		
Building Performance Institute (BPI)	✓	✓			
Campbell Institute	✓	✓	✓		
CDP	✓				✓
International Living Future Institute (ILFI)	✓		✓	✓	✓
National Safety Council (NSC)	✓		✓		
Natural Resources Defense Council (NRDC)					✓
Powering Ohio		✓	✓		✓

Appendix D — Key Partnerships

	Member only	Position in governance bodies	Participates in projects/committees	Provides substantive funds beyond routine membership	Views relationship as strategic
Procurement Leaders	✓		✓		
Residential Energy Services Network (RESNET)		✓			✓
Rocky Mountain Institute Business Renewables Center	✓				✓
Science-Based Targets Initiative					✓
Sustainability and Health Initiative for NetPositive Enterprise (SHINE)	✓		✓		✓
U.S. Green Building Council	✓				✓
United Nations Global Compact (UNGC)	✓		✓	✓	✓
INDUSTRY ASSOCIATIONS					
Air Barrier Association of America (ABAA)	✓	✓			✓
Air Diffusion Council (ADC)					✓
American Composites Manufacturing Association (ACMA)	✓		✓		
American Institute of Architects (AIA)	✓		✓		✓
American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)	✓	✓	✓	✓	✓
Asphalt Institute	✓				
Asphalt Interlayer Association	✓				
Asphalt Roofing Manufacturer Association (ARMA)	✓	✓	✓		
Business Roundtable	✓	✓	✓	✓	✓
Carbon Leadership Forum	✓				✓
Ceilings and Interior Systems Construction Association (CISCA)					✓
Concrete Preservation Institute	✓				
Construction Specifiers Institute (CSI)	✓	✓		✓	✓
ecoEnergy Innovation Institute (ecoEII)	✓				
Energy & Environmental Building Alliance (EEBA)		✓			✓
Extruded Polystyrene Association (XPSA)	✓	✓	✓	✓	✓
Foam Sheathing Committee	✓				
Heating, Air-Conditioning & Refrigeration Distributors International (HARDI)	✓				✓
Home Innovation Research Labs			✓		✓
India Green Building Council (IGBC)	✓				
Insulation Contactors of America Association (ICAA)	✓				✓
Metal Building Manufacturers Association (MBMA)	✓				
National Association of Home Builders (NAHB)	✓	✓	✓		✓

Appendix D — Key Partnerships

	Member only	Position in governance bodies	Participates in projects/committees	Provides substantive funds beyond routine membership	Views relationship as strategic
National Association of Manufacturers (NAM)	✓	✓	✓	✓	✓
National Insulation Association (NIA)	✓				✓
National Roofing Contractors Association	✓				
North America Insulation Manufacturer Association (NAIMA)	✓	✓	✓	✓	✓
Northwest Energy Efficiency Alliance (NEEA)			✓		✓
Ohio Manufacturers Association (OMA)	✓				
Passive House Institute U.S. (PHIUS)		✓			✓
Refrigeration Engineers & Technicians Association (RETA)	✓				
Southwest Energy Efficiency Project (SWEEP)			✓		✓
EDUCATION					
BYU - Marriott School of Business			✓		✓
Construction Instruction / CI Live	✓		✓	✓	✓
Indiana University - Kelly School of Business			✓		✓
Michigan State University Supply Chain Management Association			✓		✓
Ohio State University – Fisher College of Business			✓		✓
University of Michigan-Ross School of Business			✓		✓
CHINA					
China National Household Paper Industry Association (CNHPIA)					✓
China Academy of Building Research	✓				
China Building Material Federation		✓			
China Federation of Logistics & Purchasing Cold Chain Logistics					✓
China Metallurgical Study Institute		✓			
China Ministry of Construction, Standardization Department (www.mohurd.gov.cn)	✓				
China Plastics Processing Industry Association (CPPIA)		✓			
Nanjing Fiberglas Research & Development Institute		✓			
SiChuan Fire Research Institute (SCFRI)	✓				
State-owned Assets Supervision and Administration Commission of the State Council		✓			
EUROPE					
Belgium - GlassFiberEurope - European Glass Fiber Producers Association	✓		✓		

Appendix D — Key Partnerships

	Member only	Position in governance bodies	Participates in projects/committees	Provides substantive funds beyond routine membership	Views relationship as strategic
Belgium - Isol Belgium Association of Technical Insulation on Process Industry	✓				
Denmark - Mineraluldindustriens Brancherad (MBR)		✓			
Estonia - ESTISOL, EETL, EKVU, EIEL, EKT	✓	✓			
Eurima, European Insulation Manufacturers Association	✓	✓	✓	✓	
Finland - Building Information Foundation RTS		✓			
Finland - Confederation of Finnish Industries		✓	✓		✓
Firesafe Europe	✓	✓	✓	✓	
France - NIA-National Insulation Association	✓				
Germany - GGM + OTHERS, ALL IN GERMAN	✓				
Germany - Tech-Fab Europe - European Association of Technical Fabrics producers	✓		✓		
Latvia - LATIZOL		✓	✓		
Lithuania - Mineral Wool Producers Association, Lithuanian Technical Insulation Contractors Association, Lithuanianan Green Building Council, Lithuanian Builders Association, Baltic Investors Forum	✓	✓			
Netherlands - VIB Dutch Association of Entrepreneurs in Thermal Insulation	✓				
Norway - IPF Isolasjonsprodusentenes forening, NORIMA		✓			
Poland - Polish Mineral Wool Producers Association, Polish Industrial Chamber, BCC-Polish Business Centre Club	✓	✓			
Russia - Rosizol, ANIFAS	✓	✓			
Sweden - Swedisol, SIS Swedish Standards Institute		✓	✓		✓
UK - TIMSA, TICA, ASFP	✓				

Appendix E — UN Global Compact Communication on Progress

May 15, 2019
H.E. António Guterres
Secretary-General
United Nations
New York, NY 10017

Owens Corning World Headquarters
One Owens Corning Parkway
Toledo, Ohio 43659
419.248.8000

Dear Mr. Secretary-General:

Owens Corning is proud to be a member of the Global Compact, and I am pleased to once again confirm our commitment to the ten principles. As the attached report illustrates, Owens Corning's commitment extends beyond simply making our products and operations sustainable. By building broad objectives of sustainability into the way we do business, we seek to balance economic growth with social progress and environmental stewardship. This work resonates deeply with the sense of purpose that Owens Corning employees share: our people and our products make the world a better place.

To help bring that purpose to life, we are engaged in a continuous effort to advance the same principles that are articulated in the Global Compact. Our sustainability strategy incorporates those principles and is driven by our company values, which guide the way we interact with our communities as well as our customers, suppliers, and colleagues. Through the lens of that strategy, Owens Corning has evaluated the United Nations Sustainable Development Goals and identified several that are material to our business and on which we believe we have direct impact through our core business competencies. We also identified those where we can have influence, either directly or indirectly. For those aligned with our material issues, we are already underway with active programs and reporting. This work is included in our report.

Many of Owens Corning's sustainability efforts have been recognized by organizations that evaluate our progress against high standards and industry benchmarks. For example, for the sixth consecutive year, Owens Corning earned distinction in 2018 as one of the world's most sustainable companies – within 1 percent of the top score globally – from sustainability investment specialist SAM.

This year, Owens Corning was also named to the Dow Jones Sustainability World Index for the ninth straight year, and ranked as the Building Product industry leader for the sixth consecutive year. In 2018, Owens Corning's key achievements include a percentile ranking score of 100 in all three dimensions of the Index – social, economic, and environmental. The company also earned a perfect score in the following criteria: Materiality, Climate Strategy, Environmental Reporting, Recycling Strategy, Water Related Risks, and Social Reporting.

Appendix E — UN Global Compact Communication on Progress

In addition to recognition from Dow Jones and RobecoSAM, in 2018 Owens Corning earned a position on CDP's "A List" for climate change and received an "A-" score for water. Our actions were further recognized by our placement on Corporate Responsibility Magazine's annual 100 Best Corporate Citizens list for the third consecutive year, moving up from 25 to 3.

Owens Corning became a member of the Health is Everyone's Business Action Platform of the UN Global Compact in 2018. The ambition of the Action Platform is to make health everyone's business, where SDG #3 is a corporate goal and leadership aspiration among businesses across all sectors. Owens Corning provided best practice information on our Healthy Living Platform and was interviewed by Duke University, which gathered and analyzed the state of corporate actions for wellness and well-being. We also introduced the SHINE organization to the ongoing work. The group is working toward providing a guide for corporations to use to approach health as an integrated part of their business goals and to go beyond the immediate occupational health actions to meet the goals of SDG #3.

The company's latest Sustainability Report, attached, provides details about our progress and current efforts in areas related to the ten principles of the Global Compact and more. An index is also attached, to highlight the relevant sections in the report. This is work that will never be finished, but I am proud of our accomplishments to date and pleased to reaffirm Owens Corning's commitment to the Global Compact and our dedication to conducting business responsibly throughout the world.

Brian Chambers
President and Chief Executive Officer
Owens Corning

Appendix E — UN Global Compact Communication on Progress

United Nations Global Compact Communication on Progress Index

Principle 1 - Businesses should support and respect the protection of internationally proclaimed human rights.

2018 Report Section	Page Number	Comments
Inclusion and Diversity	42	Corporate Equality Index
Human Rights	94-95	Human Rights Policy
Ethics	169-170	Code of Conduct

Principle 2 - Businesses should ensure that they are not complicit in human rights abuses.

2018 Report Section	Page Number	Comments
Inclusion and Diversity	42	Corporate Equality Index
Human Rights	94-95	Human Rights Policy
Ethics	169-170	Code of Conduct

Principle 3 - Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.

2018 Report Section	Page Number	Comments
Employee Experience	30	Labor Relations

Principle 4 - Businesses should support the elimination of all forms of forced and compulsory labour.

2018 Report Section	Page Number	Comments
Human Rights	94	Forced Labor/Child Labor
Ethics	172	Human Rights, Including No Child or Forced Labor

Principle 5 - Businesses should support the effective abolition of child labour.

2018 Report Section	Page Number	Comments
Human Rights	94	Forced Labor/Child Labor
Ethics	172	Human Rights, Including No Child or Forced Labor

Principle 6 - Businesses should support the elimination of discrimination in respect of employment and occupation.

2018 Report Section	Page Number	Comments
Inclusion and Diversity	37-43	
Ethics	169-170	Code of Conduct
Ethics	172	Equal Opportunity and Nondiscrimination

Appendix E — UN Global Compact Communication on Progress

Principle 7 - Businesses should support a precautionary approach to environmental challenges.

2018 Report Section	Page Number	Comments
About the Report	176-177	Precautionary Approach

Principle 8 - Businesses should undertake initiatives to promote greater environmental responsibility.

2018 Report Section	Page Number	Comments
Product Innovation	51-52	Sustainability-Driven Innovation
Product Sustainability	56-58	Product Sustainability Strategy and Approach
Environmental Control	148-149	Environmental Control Strategy and Approach

Principle 9 - Businesses should encourage the development and diffusion of environmentally friendly technologies.

2018 Report Section	Page Number	Comments
Product Innovation	50-52	Strategy and Approach, and Sustainability-Driven Innovation
Energy	115	Energy Conservation and Savings
Energy	117	Commitment to Renewable Energy
Energy	119	Energy-Saving Products
Emissions	121	Development of Cleaner and Greener Processes for Product Manufacturing

Principle 10 - Businesses should work against corruption in all its forms, including extortion and bribery.

2018 Report Section	Page Number	Comments
Ethics	168-169	Strategy and Approach
Ethics	173	Anti-corruption

United Nations Sustainable Development Goals discussed in our report in the Executive Summary section on pages 17-23.

Appendix F —Assurance Statement

Independent Assurance Statement

To Owens Corning's Stakeholders

Owens Corning's 2018 Sustainability Report has been prepared by the management of Owens Corning who retain responsibility for its content. SCS Global Services' (SCS) responsibility was to carry out a moderate level of assurance on the report in adherence to AccountAbility's Principles of Inclusivity, Materiality and Responsiveness. In addition, SCS conducted an assurance on the reasonableness of a subset of the material performance information provided in the Owens Corning 2018 Sustainability Report.

Scope

The scope of SCS' work included Owens Corning's global operations. A Type 2 Assurance Engagement was performed to evaluate Owens Corning against the AA1000 Principles to a moderate level. In addition, SCS provided assurance on the reasonableness of specific performance data. For 2018 Scope 1 and 2 greenhouse gas emissions and energy use, a high level of assurance was conducted. A moderate level of assurance was performed for 2018 Scope 3 greenhouse gas emissions and the following 2018 performance data: water usage, waste streams, specified air pollution emissions (particulate matter 2.5 microns or less, NOX and SOX), key social performance indicators, and 2018 progress towards 2020 sustainability goals included in the Report.

Standards

SCS performed the assurance of the Owens Corning 2018 Sustainability Report against the AA1000 Assurance Standard (2008). In addition, SCS evaluated the Report against the Global Reporting Initiative's (GRI) Standards for reporting. Specific performance data were assessed utilizing internationally recognized standards including:

- ISAE 3000 (Revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information
- World Resources Institute's Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition), March 2004 along with Scope 2 and Scope 3 Guidance
- ISO 14064-3:2006 Specification with guidance for the validation and verification of GHG assertions

Assurance Team and Methodology

Our team was comprised of Tina Sentner, Dr. Gerard Mansell, Tavio Benetti, Inna Kitaychik, Vincent Katharua, and Neil Mendenhall with qualifications available online and upon request.

SCS' Assurance Team undertook the following summarized activities:

- Reviewed Owens Corning's materiality processes and systems for stakeholder engagement;
- Tested mechanisms by calling and interviewing staff and contractors responsible for collecting and responding to stakeholder concerns;
- Reviewed and analyzed material performance data collected at the corporate and site-levels to identify any material misstatements or process calculation errors;

Appendix F —Assurance Statement

- Conducted on-site interviews of management and staff at Owens Corning's Headquarters and a sample of international sites; and
- Reviewed the Sustainability Report for material misstatements and its alignment to the requirements of the Global Reporting Initiative (GRI) Standards.

Limitations

SCS conducted extensive interviews with management and staff, reviewed data, and performed limited recalculations based on internationally recognized sampling techniques. This process enables us to conclude that the Report is assured to a moderate level which reduces the risk of our conclusions being in error but does not reduce it to zero.

Conclusions

Based on the methodology and activities performed we have found that Owens Corning is adhering to AccountAbility's Principles (2008 Version). A summary of our conclusions and evidence in support of these conclusions follows:

Inclusivity: Owens Corning has effectively integrated stakeholders into the development of their products and processes as a strategy to improve performance. In 2018 Owens Corning crossed a milestone and now has more facilities and employees outside of the United States than it does inside. Going forward Owens Corning will need to take extra care to engage regional stakeholders outside the US and understand their concerns. SCS performed more on-site assurance activities abroad this year with a focus on facilities in China to affirm adherence to this Principle.

Materiality: Owens Corning's materiality assessment and matrix was not updated for the 2018 reporting year but is slated for an update by 2020 when they will finalize their new sustainability goals. The assessment team looked at the impact of acquisitions made in 2018 and the processes Owens Corning used to evaluate the impact of adding new operations. Because the new plants were largely similar to existing facilities and the acquisition of Paroc, in particular, included years of experience reporting on sustainably there was substantial evidence of operational alignment and a reasonable justification for not updating the material issues this year. However, recommendations below include agreed improvements for succeeding years.

Responsiveness: SCS reviewed a number of mechanisms in place for capturing information from stakeholders and responding to their concerns. These mechanisms were found to be effective and responsive. Evidence was available to show how reported information was acted on in a timely manner. The assurance team conducted on-site interviews and reviewed key systems to determine that this Principle is being met.

Our review of the management systems, data and calculations regarding Owens Corning's reporting of 2018 Scope 3 greenhouse gas emissions, water use, waste, air pollution, social performance indicators and 2018 progress towards 2020 sustainability goals were assured at a moderate-level and no material errors or misstatements identified in the final draft chapters of the report. Owens Corning's reported 2018 Scope 1 and 2 GHG emissions and energy use was assured at a high-level and can be considered reliable. In addition, Owens Corning's Report was found to conform to GRI Standards.

Appendix F —Assurance Statement

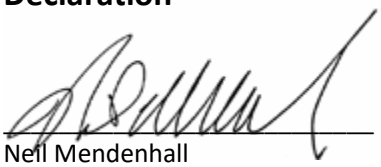
Observations & Recommendations

All identified errors and material observations were satisfactorily addressed prior to the publication of this Report. SCS recommends, however, that future stakeholder identification, outreach, and materiality analysis be more regionally focused to better identify and address regional material issues and be more responsive to local stakeholders. This will be of increasing importance with the growth of Owens Corning's international operations.

Independence

SCS Global Services is an independent and internationally accredited conformance assessment body. All members of the assurance team were internally reviewed to ensure they were free from conflicts of interest. SCS has no financial dependence on Owens Corning beyond the scope of this engagement and a limited number of independent assessments and product certifications it performs annually.

Declaration



Neil Mendenhall
Associate Certified Sustainability Assurance Practitioner (ACSAP)
SCS Global Services
Emeryville, California – April 2019

AA1000
Licensed Assurance Provider
000-246

GRI INDEX

PHOTO CREDIT:
Bradley Addison | Gastonia, North Carolina, U.S.

Taking in the beauty of Crater Lake National Park in Oregon.

GRI Index

Disclosure Number	Description	2018 Report Section	Page Number	SDG Target Linkage
GRI 102: GENERAL DISCLOSURES				
102-1	Name of the organization	About Owens Corning	11	
102-2	Activities, brands, products, and services	About Owens Corning	13	
102-3	Location of headquarters	About Owens Corning	13	
102-4	Location of operations	About Owens Corning	12	
102-5	Ownership and legal form	About Owens Corning	12	
102-6	Markets served	About Owens Corning	13	
102-7	Scale of the organization	About Owens Corning	11	
102-8*	Information on employees and other workers	Appendix B	186-189	#8 Decent Work and Economic Growth
102-9	Supply chain	Supply Chain Sustainability	69-71	
102-10	Significant changes to the organization and its supply chain	Supply Chain Sustainability; Economic Responsibility; About the Report	74; 152-153; 176	
102-11	Precautionary Principle or approach	About the Report	176	
102-12	External initiatives	About the Report	177	
102-13	Membership of associations	Appendix D	217-220	
102-14	Statement from senior decision-maker	Executive Message	5-6	
102-15	Key impacts, risks, and opportunities	Corporate Governance	166-167	
102-16	Values, principles, standards, and norms of behavior	Ethics	168-170	#16 Peace, Justice and Strong Institutions
102-17	Mechanisms for advice and concerns about ethics	Ethics	171-172	#16 Peace, Justice and Strong Institutions
102-18	Governance structure	Corporate Governance	157-160	
102-19	Delegating authority	Corporate Governance	163-164	
102-20	Executive-level responsibility for economic, environmental and social topics	Corporate Governance	163-164	
102-21	Consulting stakeholders on economic, environmental, and social topics	Stakeholder Engagement & Material Issues; Corporate Governance	16; 162-163	#16 Peace, Justice and Strong Institutions
102-22	Composition of the highest governance body and its committees	Corporate Governance	158-160	#5 Gender Equality #16 Peace, Justice and Strong Institutions
102-23	Chair of the highest governance body	Corporate Governance	158-160	#16 Peace, Justice and Strong Institutions
102-24	Nominating and selecting the highest governance body	Corporate Governance	160-161	#5 Gender Equality #16 Peace, Justice and Strong Institutions
102-25	Conflicts of interest	Corporate Governance	161-162	#16 Peace, Justice and Strong Institutions
102-26	Role of highest governance body in setting purpose, values, and strategy	Corporate Governance	158-161; 163-164	
102-27	Collective knowledge of highest governance body	Corporate Governance	161	#4 Quality Education
102-28	Evaluating the highest governance body's performance	Corporate Governance	161	
102-29	Identifying and managing economic, environmental, and social impacts	Corporate Governance	163-167	#16 Peace, Justice and Strong Institutions

GRI Index

Disclosure Number	Description	2018 Report Section	Page Number	SDG Target Linkage
GENERAL DISCLOSURES				
102-30	Effectiveness of risk management processes	Corporate Governance	164-166	
102-31	Review of economic, environmental, and social topics	Corporate Governance	164-166	
102-32	Highest governance body's role in sustainability reporting	Corporate Governance	160; 163-164	
102-33	Communicating critical concerns	Ethics	171-172	
102-34	Nature and total number of critical concerns	Ethics	171-172	
102-35	Remuneration policies	Corporate Governance	162	
102-36	Process for determining remuneration	Corporate Governance; 2019 Proxy Statement	162	
102-37	Stakeholders' involvement in remuneration	Corporate Governance; 2019 Proxy Statement	162	#16 Peace, Justice and Strong Institutions
102-38	Annual total compensation ratio	Corporate Governance; 2019 Proxy Statement	162	
102-40	List of stakeholder groups	Stakeholder Engagement and Material Issues	14-16	
102-41	Collective bargaining agreements	Employee Experience; Living Safely; Human Rights	30; 80; 95	#8 Decent Work and Economic Growth
102-42	Identifying and selecting stakeholders	Stakeholder Engagement and Material Issues	14-16	
102-43	Approach to stakeholder engagement	Stakeholder Engagement and Material Issues	14-16	
102-44	Key topics and concerns raised	Stakeholder Engagement and Material Issues	14-16	
102-45	Entities included in the consolidated financial statements	Form 10-K	—	
102-46	Defining report content and topic Boundaries	About the Report	176	
102-47	List of material topics	Stakeholder Engagement and Material Issues	14-16	
102-48	Restatements of information	About the Report	176	
102-49	Changes in reporting	About the Report	176	
102-50	Reporting period	About the Report	175	
102-51	Date of most recent report	About the Report	175	
102-52	Reporting cycle	About the Report	175	
102-53	Contact point for questions regarding the report	About the Report	178	
102-54	Claims of reporting in accordance with the GRI Standards	About the Report	175	
102-55	GRI content index	GRI Index	229-235	
102-56	Reference to the External Assurance Report	About the Report; Appendix F	178; 225-227	
MANAGEMENT APPROACH				
103-1	Explanation of the material topic and its Boundary	See report sections for each material topic	—	
103-2	The management approach and its components	See report sections for each material topic	—	
103-3	Evaluation of the management approach	See report sections for each material topic	—	

GRI Index

Disclosure Number	Description	2018 Report Section	Page Number	SDG Target Linkage
ECONOMIC				
201-1	Direct economic value generated and distributed	Economic Responsibility	155	#2 Zero Hunger #5 Gender Equality #7 Affordable and Clean Energy #8 Decent Work and Economic Growth #9 Industry, Innovation and Infrastructure
201-2	Financial implications and other risks and opportunities due to climate change	Product Innovation; Climate Change; Corporate Governance	52; 110-111; 166-167	#13 Climate Action
201-3	Defined benefit plan obligations and other retirement plans	Economic Responsibility	155-156	
201-4	Financial assistance received from government	Economic Responsibility	156	
202-1*	Ratios of standard entry level wage by gender compared to local minimum wage	Employee Experience	27-28	#1 No Poverty #5 Gender Equality #8 Decent Work and Economic Growth
202-2	Proportion of senior management hired from the local community	Economic Responsibility	156	#8 Decent Work and Economic Growth
203-1	Infrastructure investments and services supported	Community Impact	99-109	#2 Zero Hunger #5 Gender Equality #7 Affordable and Clean Energy #9 Industry, Innovation and Infrastructure #11 Sustainable Cities and Communities
203-2	Significant indirect economic impacts	Community Impact	104	#1 No Poverty #2 Zero Hunger #3 Good Health and Well-being #8 Decent Work and Economic Growth #10 Reduced Inequalities #17 Partnerships for the Goals
204-1	Proportion of spending on local suppliers	Supply Chain Sustainability	73	#12 Responsible Consumption and Production
205-1	Operations assessed for risks related to corruption	Ethics	173	#16 Peace, Justice and Strong Institutions
205-2	Communication and training about anti-corruption policies and procedures	Ethics	173	#16 Peace, Justice and Strong Institutions
205-3	Confirmed incidents of corruption and actions taken	Ethics	173	#16 Peace, Justice and Strong Institutions
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Ethics	173	#16 Peace, Justice and Strong Institutions
ENVIRONMENTAL				
301-1	Materials used by weight or volume	Product Sustainability & Stewardship	63	#8 Decent Work and Economic Growth #12 Responsible Consumption and Production
301-2	Recycled input materials used	Product Sustainability & Stewardship	63	#8 Decent Work and Economic Growth #12 Responsible Consumption and Production
301-3	Reclaimed products and their packaging materials	Product Sustainability & Stewardship	65-66	#8 Decent Work and Economic Growth #12 Responsible Consumption and Production
302-1	Energy consumption within the organization	Energy; Appendix C	116-118; 196-200	#7 Affordable and Clean Energy #8 Decent Work and Economic Growth #12 Responsible Consumption and Production #13 Climate Action
302-2	Energy consumption outside of the organization	Energy	118	#7 Affordable and Clean Energy #8 Decent Work and Economic Growth #12 Responsible Consumption and Production #13 Climate Action

GRI Index

Disclosure Number	Description	2018 Report Section	Page Number	SDG Target Linkage
ENVIRONMENTAL				
302-3	Energy intensity	Energy	118	#7 Affordable and Clean Energy #8 Decent Work and Economic Growth #12 Responsible Consumption and Production #13 Climate Action
302-4	Reduction of energy consumption	Energy	115; 118	#7 Affordable and Clean Energy #8 Decent Work and Economic Growth #12 Responsible Consumption and Production #13 Climate Action
302-5	Reductions in energy requirements of products and services	Energy	119	#7 Affordable and Clean Energy #8 Decent Work and Economic Growth #12 Responsible Consumption and Production #13 Climate Action
303-1	Interactions with water as a shared resource	Water	128-132	#6 Clean Water and Sanitation
303-2	Management of water discharge-related impacts	Water	134	#6 Clean Water and Sanitation
303-3	Water withdrawal	Water; Appendix C	131-132; 211; 213	#6 Clean Water and Sanitation
303-4	Water discharge	Water; Appendix C	134; 212-213	#6 Clean Water and Sanitation
303-5	Water consumption	Water; Appendix C	131-132; 211	#6 Clean Water and Sanitation
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Protecting Biodiversity	144-147	#6 Clean Water and Sanitation #14 Life Below Water #15 Life on Land
304-2	Significant impacts of activities, products, and services on biodiversity	Protecting Biodiversity	144-147	#6 Clean Water and Sanitation #14 Life Below Water #15 Life on Land
304-3	Habitats protected or restored	Protecting Biodiversity	144-147	#6 Clean Water and Sanitation #14 Life Below Water #15 Life on Land
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	Protecting Biodiversity	144-147	#6 Clean Water and Sanitation #14 Life Below Water #15 Life on Land
305-1	Direct (Scope 1) GHG emissions	Emissions; Appendix C	121-124; 201-203	#3 Good Health and Well-being #12 Responsible Consumption and Production #13 Climate Action #14 Life Below Water #15 Life on Land
305-2	Energy indirect (Scope 2) GHG emissions	Emissions; Appendix C	121-124; 201-203	#3 Good Health and Well-being #12 Responsible Consumption and Production #13 Climate Action #14 Life Below Water #15 Life on Land
305-3	Other indirect (Scope 3) GHG emissions	Emissions; Appendix C	123; 205-207	#3 Good Health and Well-being #12 Responsible Consumption and Production #13 Climate Action #14 Life Below Water #15 Life on Land
305-4	GHG emissions intensity	Emissions; Appendix C	121; 123; 202-203	#13 Climate Action #14 Life Below Water #15 Life on Land
305-5	Reduction of GHG emissions	Emissions	121-124	#13 Climate Action #14 Life Below Water #15 Life on Land
305-6	Emissions of ozone-depleting substances (ODS)	Appendix C	204	#3 Good Health and Well-being #12 Responsible Consumption and Production #13 Climate Action

GRI Index

Disclosure Number	Description	2018 Report Section	Page Number	SDG Target Linkage
ENVIRONMENTAL				
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Emissions	125-127; 210	#3 Good Health and Well-being #12 Responsible Consumption and Production #13 Climate Action #14 Life Below Water #15 Life on Land
306-1	Water discharge by quality and destination	Water; Appendix C	134; 212-213	#3 Good Health and Well-being #6 Clean Water and Sanitation #12 Responsible Consumption and Production #14 Life Below Water
306-2	Waste by type and disposal method	Waste; Appendix C	139-140; 214-216	#3 Good Health and Well-being #6 Clean Water and Sanitation #12 Responsible Consumption and Production
306-3	Significant spills	Waste	142	#3 Good Health and Well-being #6 Clean Water and Sanitation #12 Responsible Consumption and Production #14 Life Below Water #15 Life on Land
306-4	Transport of hazardous waste	Waste	140	#3 Good Health and Well-being #12 Responsible Consumption and Production
306-5	Water bodies affected by water discharges and/or runoff	Water	134; 212-213	#6 Clean Water and Sanitation #15 Life on Land
307-1	Non-compliance with environmental laws and regulations	Environmental Control	148-149	#16 Peace, Justice and Strong Institutions
308-1	New suppliers that were screened using environmental criteria	Supply Chain Sustainability	71-72	
308-2	Negative environmental impacts in the supply chain and actions taken	Supply Chain Sustainability	74	
SOCIAL				
401-1	New employee hires and employee turnover	Appendix B	189	#5 Gender Equality #8 Decent Work and Economic Growth
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	See Owens Corning's benefits page	-	#8 Decent Work and Economic Growth
401-3	Parental leave	Employee Experience	29	#5 Gender Equality #8 Decent Work and Economic Growth
402-1	Minimum notice periods regarding operational changes	Employee Experience	30	#8 Decent Work and Economic Growth
403-1	Occupational health and safety management system	Living Safely	79-85	#3 Good Health and Well-being #8 Decent Work and Economic Growth
403-2	Hazard identification, risk assessment, and incident investigation	Living Safely	82-84	#3 Good Health and Well-being #8 Decent Work and Economic Growth
403-3	Occupational health services	Living Safely	82-83	#3 Good Health and Well-being #8 Decent Work and Economic Growth
403-4*	Worker participation, consultation, and communication on occupational health and safety	Living Safely	79-80	#8 Decent Work and Economic Growth
403-5*	Worker training on occupational health and safety	Living Safely	81	#3 Good Health and Well-being #8 Decent Work and Economic Growth
403-6*	Promotion of worker health	Healthy Living	86-92	#3 Good Health and Well-being #8 Decent Work and Economic Growth
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Living Safely	83	#8 Decent Work and Economic Growth

GRI Index

Disclosure Number	Description	2018 Report Section	Page Number	SDG Target Linkage
SOCIAL				
403-8*	Workers covered by an occupational health and safety management system	Living Safely	79-80	#8 Decent Work and Economic Growth
403-9	Work-related injuries	Living Safely; Appendix B	83-85; 190-195	#8 Decent Work and Economic Growth
403-10	Work-related ill health	Living Safely; Appendix B	79-85; 194	
404-1	Average hours of training per year per employee	Employee Development; Appendix B	33-34; 188	#4 Quality Education #5 Gender Equality #8 Decent Work and Economic Growth
404-2	Programs for upgrading employee skills and transition assistance programs	Employee Experience; Employee Development	28-29; 32-33	#8 Decent Work and Economic Growth
404-3	Percentage of employees receiving regular performance and career development reviews	Employee Development	34	#5 Gender Equality #8 Decent Work and Economic Growth
405-1	Diversity of governance bodies and employees	Inclusion and Diversity; Corporate Governance; Appendix B	37-43; 158; 161; 186-189	#5 Gender Equality #8 Decent Work and Economic Growth
405-2	Ratio of basic salary and remuneration of women to men	Employee Experience	27-28	#5 Gender Equality #8 Decent Work and Economic Growth #10 Reduced Inequalities
406-1	Incidents of discrimination and corrective actions taken	Ethics	172	#5 Gender Equality #8 Decent Work and Economic Growth #16 Peace, Justice and Strong Institutions
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Employee Experience; Living Safely; Human Rights	30; 80; 95	#8 Decent Work and Economic Growth
408-1	Operations and suppliers at significant risk for incidents of child labor	Human Rights; Ethics	94-95; 98; 172	#8 Decent Work and Economic Growth #16 Peace, Justice and Strong Institutions
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Human Rights; Ethics	94-95; 98; 172	#8 Decent Work and Economic Growth
410-1	Security personnel trained in human rights policies or procedures	Human Rights	96-97	#16 Peace, Justice and Strong Institutions
411-1	Incidents of violations involving rights of indigenous peoples	Human Rights	94	#2 Zero Hunger
412-1	Operations that have been subject to human rights reviews or impact assessments	Human Rights	98	
412-2	Employee training on human rights policies or procedures	Human Rights	96	
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	Employee Experience; Living Safely; Human Rights	68; 72-73; 93-94; 98	
413-1	Operations with local community engagement, impact assessments, and development programs	Community Impact	99-109	
413-2	Operations with significant actual and potential negative impacts on local communities	Community Impact	104	#1 No Poverty #2 Zero Hunger
414-1	New suppliers that were screened using social criteria	Supply Chain Sustainability	71-72	#5 Gender Equality #8 Decent Work and Economic Growth #16 Peace, Justice and Strong Institutions

GRI Index

Disclosure Number	Description	2018 Report Section	Page Number	SDG Target Linkage
SOCIAL				
414-2	Negative social impacts in the supply chain and actions taken	Supply Chain Sustainability	71-72	#5 Gender Equality #8 Decent Work and Economic Growth #16 Peace, Justice and Strong Institutions
415-1	Political contributions	Ethics	173	#16 Peace, Justice and Strong Institutions
416-1	Assessment of the health and safety impacts of product and service categories	Product Sustainability & Stewardship	58-63	
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	Product Sustainability & Stewardship	63	#16 Peace, Justice and Strong Institutions
417-1	Requirements for product and service information and labeling	Product Sustainability & Stewardship	62-63	#12 Responsible Consumption and Production #16 Peace, Justice and Strong Institutions
417-2	Incidents of non-compliance concerning product and service information and labeling	Product Sustainability & Stewardship	63	#16 Peace, Justice and Strong Institutions
417-3	Incidents of non-compliance concerning marketing communications	Product Sustainability & Stewardship	63	
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Owens Corning has received zero substantiated complaints of customer data breaches	—	#16 Peace, Justice and Strong Institutions
419-1	Non-compliance with laws and regulations in the social and economic area	Environmental Control	148-149	#16 Peace, Justice and Strong Institutions

**See page 177 in About the Report for Owens Corning's definition of worker*