## 2020 ENVIRONMENTAL FOOTPRINT REDUCTION GOALS

### Primary Energy

**2020 Goal:** Reduce primary energy intensity by 20% from the 2010 baseline

**2018 Progress:** 31% intensity reduction

### Consumed Energy

**2018 Progress:** 18% intensity reduction

### Greenhouse Gas Emissions

**2020 Goal:** Reduce greenhouse gas emissions intensity by 50% from the 2010 baseline

**2018 Progress:** 48% intensity reduction

### Fine Particulate Matter (PM2.5)

**2020 Goal:** Reduce PM2.5 emissions intensity by 15% from the 2010 baseline

**2018 Progress:** 29% intensity reduction

### Toxic Air Emissions (TAE)

Combination of hexavalent chromium, formaldehyde, manganese, polycyclic aromatic compounds and ammonia emissions

**2020 Goal:** Reduce TAE intensity by 75% by 2020 from the 2010 baseline

**2018 Progress:** 43% absolute reduction in TAE, 59% reduction in toxic air intensity
2020 ENVIRONMENTAL FOOTPRINT REDUCTION GOALS

Waste to Landfill
2020 Goal: Reduce waste to landfill intensity by 70% from the 2010 baseline
2018 Progress: 6% intensity reduction

Water Consumption
2020 Goal: Reduce water intensity by 35% from the 2010 baseline
2018 Progress: 42% intensity reduction

PRODUCT SUSTAINABILITY

Priority: Implement continuous improvements
Goal/KPI: Our products will be preferred for applications in sustainable projects and we will not be deselected from projects due to product attributes not meeting sustainable program criteria.
2018 Progress: Launched the first formaldehyde-free perimeter fire containment system in North America. This system relies on our Thermafiber®, Firespan®, and Safing™ mineral wool insulation. It offers architects and specifiers a way to meet green building requirements without compromising on fire safety.

We also made progress in 2018 by 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.

Priority: Create pipeline of sustainable products, and increase the value through sustainability in the innovation process by 2020
Goal/KPI: We are committed to evaluating each of our innovation programs for their net sustainability gains or losses vs. existing products, measuring the results through our sustainability mapping tool. By 2020, we have committed that 85% of our new products and 85% of our new applications will have net sustainability gains.
2018 Progress: 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 re-use 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.

SUPPLY CHAIN SUSTAINABILITY

**Priority: Set clear expectations for sustainability progress by our suppliers**

**Goal/KPI:** 100% of suppliers in compliance with our Supplier Code of Conduct annually

**2018 Progress:** 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. Those that could not say they were in compliance are listed as high risk and follow-up management is in place.

Owens Corning also surveys suppliers about their sustainability and safety policies and goals. In 2018, 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.

**Priority: Use leading-edge sourcing practices**

**2018 Progress:** 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.

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.

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.

**Priority: Measure and disclose performance**

**2018 Progress:** In 2018 we contacted 990 suppliers from around the world to complete our annual survey, and 455 responded – 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. This was one of the key findings in 2018 from our annual supplier sustainability survey. Additional results are:

- We found that 83% of suppliers have organizational goals and policies for safety.
- Additionally, 77% of those surveyed have goals for sustainability. Many of the companies report on their goals and policies internally and externally, and some publish their data at least annually.
- 66% of suppliers surveyed in 2018 have policies explicitly prohibiting forced or child labor.

Additionally, 36 supplier audits were conducted 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.
Priority: Expand our training on sustainability to meet the needs of our global sourcing organization

Goal/KPI: 100% of our global sourcing organization will be trained on sustainability through OC Sourcing Way, developed in 2015, and will be required to recertify annually thereafter on the practices and expectations by 2018.

2018 Progress: In 2015, we created a playbook called the OC Sourcing Way, that standardizes the way we create, communicate, and execute commodity strategies. All global commodity leaders received a 2 – 3-day training which included competitive analytics. In 2016 other functional areas such as downstream supply chain, quality, and R&D were trained. The following year, in 2017, Owens Corning completed phase 2 of The OC Sourcing Way along with updates to phase 1, which were rolled out to all employees in global sourcing in calendar year 2018. Phase 2 included the addition of sustainability to the creation of strategies and the maintenance of sustainability.

These additional steps require commodity leaders to assure that suppliers have appropriate paperwork in place for suppliers when developing strategies prior to presenting to management. The OC Sourcing Way has been rolled out to all global sourcing employees. Each of the category leaders are provided in-depth training on key sustainability categories as part of the roll-out. Also, each global sourcing member will be re-certified annually and education will continue either through online training or classroom.

Priority: Enhance our transportation efficiency

Goal/KPI: Convert 12% of transportation miles to natural gas or use alternative fuel savings methods by the year 2020.

2018 Progress: 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 ROI 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.
BUILDING SCIENCE

Priority: Drive net-zero energy building capabilities through building science

Building Science has been a key element in driving our product sustainability. Through sustained partnerships with customers, specifiers, architects, and builders, we hope to drive net-zero energy building capabilities, thereby achieving no net carbon releases. We also aim to expand our building science expertise to educate the building industry, engineers, contractors, and homeowners on safe and efficient building materials.

Goal/KPI: Increase the number of Owens Corning supported net-zero ready buildings year-over-year vs. 2015 baseline of 35.

2018 Progress: 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.

SAFETY

We are committed to our company value of Living Safely – both at work and at home.

Goal/KPI: While we are 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.

2018 Progress: Our total recordable incident rate (RIR) in 2018 was 0.52. 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, 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.
EMPLOYEE DEVELOPMENT

We are committed to our employee’s development and are committed to lifelong learning to help them reach their full potential.

**Goal/KPI:** For 2018, we committed to 18 hours of training per employee beyond basic compliance training.

**2018 Progress:** We recorded an average of 13 training hours per employee, focused on both quality and quantity of development beyond basic compliance training. 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.

**2019 KPI:** We have committed to an average of 20 hours of training for our primary workforce and 10 hours of training for our non-primary (salaried) workforce, per employee, beyond basic compliance training.

COMMUNITY IMPACT

**Priority: Safe and Efficient Housing - Advancing Safe & Efficient Housing in Our Communities**

**Goal/KPI:** Increase customer satisfaction and our Net Promoter Score (NPS) through 2022.

**2018 Progress:** We collected feedback from 1,445 respondents, representing a sample of our distinct customer types, contractors, and locations. The survey allows us to measure overall satisfaction and the Net Promoter Score (NPS) as well as to go into more detail across customer touch points to help drive specific improvements. In 2018, the NPS score was 47 for the company, based on an index ranging from -100 to 100.

**Social/Environmental Benefit KPI:** Increase the number of people benefiting from access to safe and efficient housing in our communities through 2022.
Social/Environmental Benefit KPI Progress: Owens Corning understands that for a variety of reasons some members of our communities find themselves unable to obtain safe and efficient housing and shelter. As a leading global producer of residential and commercial building materials we have the opportunity and expertise to aid in the effort to provide 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 unceasing effort to develop cost effective housing solutions, we are able to enhance access to safe housing and shelter for those members of our communities. Our philanthropic focus on housing and shelter aligns with each of our three identified business drivers. For example, in partnership with Habitat for Humanity, Owens Corning can donate building materials, provide financial support through the OC Foundation, and leverage employee volunteerism to provide safe and energy efficient housing for those in need in our communities.

Owens Corning has also been able to leverage key business stakeholder relationships by engaging its network of roofing contractors to benefit those in need.

One key growth initiative of our business is increasing the use of glass fiber rebar in concrete – a very green and sustainable solution for our nation’s infrastructure. Through a partnership with the Concrete Preservation Institute (CPI), a 501C3, Owens Corning is supporting the restoration of significant National Landmarks such as World War II Valor in the Pacific National Monument (Pearl Harbor). At the same time, de-enlisting members of the military are given on the job training in the concrete industry, supporting our educational opportunity strategy. Through this partnership, our business leaders have connected with key stakeholders such as thought leaders and influencers in the concrete industry while attending events and serving on advisory committees for CPI. 240 sections of glass composite rebar have been donated to aid in the restoration and preservation of World War II Valor in the Pacific National Monument and the infrastructure of Alcatraz Island.

Owens Corning measures the results and impact of each project through items such as the number of builds or renovations in our communities, the number homes that have been re-shingled or insulated through product donation, and the number of volunteer projects completed by our contractors. Through our partnership with Habitat for Humanity, Owens Corning helped to complete 47 home builds or renovations in 2018 in the United States, Canada and China, a 68% increase over 2017. Through our Roof Deployment Program, 52 veterans in need received new roofs in 2018 compared to 34 in 2017, an increase of 53%. To date, 109 veterans have benefited from the program since inception. Through product donation to Habitat for Humanity, World Vision and other charities in 2018, Owens Corning provided enough material to reroof more than 1,100 homes and insulate 142 homes for people in need. Those numbers represent a 77% increase from 2017. In India, some 2,500 families were provided with donated tarpaulin sheets (tarp) to provide basic shelter after devastating rains.

Key Charitable Partners in 2018 were:
- Concrete Preservation Institute (U.S.)
- The Gary Sinise Foundation (U.S.)
- Habitat for Humanity China (China)
- Habitat for Humanity International (U.S.)
- World Vision (Global)
### Priority: Good Health & Well-being - Foster and Promote Health in Our Communities

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<th>Goal/KPI: Increase employee engagement and connection to company. 100% of our facilities engaged by 2022 through community projects</th>
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#### 2018 Progress: In 2018, the company surveyed approximately 900 employees and found that 95% said that it is important to them to work for a company that actively helps those in need in its communities through volunteerism and giving. Nearly 100% of our volunteers say they will volunteer again. Our employees are engaged in many forms of volunteerism and with many different charitable partners.

In 2018, our people gave 27,305 hours of volunteerism at company sponsored community events. That was up from 25,418 hours in 2017, a 7% increase. In 2016, the company set an aspirational goal of 100% facility engagement in corporate citizenship projects by 2022. In 2018, 82% of our approximately 119 sites worldwide were engaged in local community projects. While this is flat with 82% in 2017, the number of global locations grew by 9% over the previous year. (Facility engagement reached 72% in 2016 and 66% in 2015).

#### Social/Environmental Benefit KPI: Increase the number of people benefiting from access to basic health and wellness in our communities through 2022

#### Social/Environmental Benefit KPI Progress: In our most challenged communities, providing the less fortunate with access to basic health and wellness aligns with two of our business drivers by connecting us with our people and further improving our reputation locally, regionally, and globally and instilling a sense of pride in our workforce. This focus also allows us to go into new communities where our company is expanding, and make immediate positive impact.

For example, in India, in the villages near our plants, we work to provide doctor visits, nutrition, clean water, sanitation systems, and healthy activities for children in need. Our employees are highly engaged as volunteers and in some cases, the support is benefiting the children of our own migrant workforce. Across the globe, efforts to improve health reached not only our communities in India, but also Mexico, France, the United States and beyond.

#### 2018 Highlights include:

- Working with a variety of charitable partners, Owens Corning U.S. volunteers packed or served more than 190,000 meals (a 27% increase over 2017) and prepared 4,000 hygiene kits for people in need, more than triple the previous year.

- In India, Owens Corning has worked with United Way Mumbai and Habitat for Humanity India to provide basic health services, clean water facilities, and basic sanitation in villages and schools. In 2018, 205 students in these communities gained access to clean water in their school. 250 village residents gained access to basic sanitation through the installation of 50 toilet blocks in villages near Owens Corning plants. In partnership with Habitat for Humanity India, the program also provides communication and education regarding appropriate toilet use and positive hygiene practices for those families.

- For the past four years, our team in Powai has partnered with Mumbai Mobile Creches. The organization provides a safe day care facility for the children of migrant construction workers. In
2018, Owens Corning support and volunteerism brought 180 young migrant children basic health and nutrition services.

- Some 2,700 individuals were provided basic health care and 1,000 children were vaccinated in villages near Owens Corning facilities in 2018. 1,500 students participated in Owens Corning sponsored sports events to promote health and wellness while 250 attended programs promoting environmental and safety awareness. This work was supported by more than 700 hours of volunteerism by the employees of local Owens Corning facilities.

- The Owens Corning Foundation became active in Europe in 2017, partnering with charitable organizations and engaging our volunteers in several company communities. In Chambery, France, the Foundation and local employees continue to partner with Cantine Savoyarde Solidarité, an organization that provides meals for people in need. While our team of employees volunteer serving meals, 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 people in need.

- In Mexico, we partnered with the Mexican Red Cross to provide weekend health fairs in villages near our plants and to aid in the disaster recovery and rebuild after a devastating earthquake. At these events, disadvantaged residents have access to basic health services such as eye exams, blood pressure monitoring and AIDS awareness training. Other basic needs are met by distributing blankets, walkers and wheelchairs, eyeglasses and basic nutrition. In 2018, this work benefited 1,320 individuals in villages near our plants.

- In Mexico City, our team has adopted a girls’ orphanage located within walking distance of the company facility. Regular volunteer activity brings the girls and their teachers to the Owens Corning campus for sports events, plays, lunch outings and fun afternoons. 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, 46 girls ages 3-13 benefited from this volunteerism and financial support.

Key Charitable Partners in 2018 were:
- World Vision (Global)
- Habitat for Humanity India (India)
- Mumbai Mobile Creches (India)
- United Way Mumbai (India)
- Cantine Savoyarde Solidarité (France)
- Escuela Hogar Perpetuo Socorro (Mexico)
- Mexican Red Cross (Mexico)
- Cherry Street Mission (U.S.)
- Pack Shack (U.S.)
**Priority: Educational Opportunity - Drive Access to Education in Our Communities**

**Goal/KPI:** Increase employee engagement and connection to company. 100% of our facilities engaged by 2022 through community projects.

**2018 Progress:** In 2018, the company surveyed approximately 900 employees and found that 95% said that it is important to them to work for a company that actively helps those in need in its communities through volunteerism and giving. Nearly 100% of our volunteers say they will volunteer again. Our employees are engaged in many forms of volunteerism and with many different charitable partners.

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**Social/Environmental Benefit KPI:** Increase the number of people benefiting from promoting educational opportunities in our communities through 2022.

**Social/Environmental Benefit Progress:**
In our most challenged communities, providing the less fortunate with access to basic educational opportunity aligns with two of our identified business drivers by connecting us w/the community, further improving our reputation and instilling workforce pride. This also allows us to enter new communities and make a positive impact. Nearly all this activity is guided by the interest and efforts of our employee volunteers.

In India, we provide non-formal educational opportunities, computers for schools that had no previous access, and scholarships for students who excel, encouraging families to keep them in school, particularly girls. We also build restrooms for schools where they did not previously exist allowing girls to stay in school at the onset of puberty. In Taloja, India we have partnered with local organizations to provide skilled job training to unemployed young men and women while in Powai we continue to support Mumbai Mobile Creches, giving the very young children of migrant construction workers exposure to early learning they would otherwise lack. Near Tlaxcala, Mexico the Owens Corning Foundation supported the construction of a new school for deaf children while in China we continue to provide access to computers to migrant schools near our plants in a growing number of communities. In our world headquarters town of Toledo, Ohio our team regularly volunteers at inner city schools to help children in math, reading, and even in robotics competitions. Finally, the Owens Corning Foundation provides educational support in the form of college scholarships based on need and merit for the children of company employees and matches employee donations to educational institutions.

Key Highlights from 2018 include:
- In India, an additional 90 migrant children began receiving assistance through non-formal education opportunities that help them catch up with peers in reading & math. More than 1,400 students were provided access to computers in the classroom, and 35 exceptional students...
were awarded scholarships to encourage families to keep them in school.

- In 2017, the first class of 27 young men completed electrical vocational training in a program funded by Owens Corning in partnership with the Kohinoor Technical Institute in Taloja, India. The program was initiated after a community assessment determined a real need for this skillset locally. In 2018, 12 young women from local villages completed a 6-month training course in computer applications. To date, four of those young women have gained employment through the program.

- In China, the Owens Corning Foundation has partnered with NetSpring Green IT since 2014 to provide computer classrooms to migrant schools near Owens Corning facilities. Classrooms are now established in 5 cities benefiting more than 2,400 students. Company volunteers spend time with children in each of those schools.

- Construction is complete for a new school building for deaf children in Tlaxcala, Mexico. The school, literally in crumbling condition, had been adopted by plant employees, leading the Owens Corning Foundation to provide financial support for a new, safe building for the 24 students and their teacher. As word of the new building spread to neighboring villages, attendance swelled, and the school now serves 40 deaf children who otherwise would attend a public school with little attention to their special need.

- The Owens Corning Foundation began support of the Career Skills Program with the Concrete Preservation Institute in late 2016. Through that program, de-enlisting members of the military have the opportunity to gain additional skills helping to make them more employable and enjoy a smoother transition from the military to civilian life. Since our support began, 106 active military and veterans have graduated from the program and gone to work within the industry or entered post-secondary institutions.

- Employees from Owens Corning's world headquarter building in Toledo, Ohio have long volunteered in two challenged inner-city schools. In 2018, volunteers helped those children in math, reading, and other STEMM activities. The team also packed and donated 1,000 backpacks full of school supplies for children in those schools and provided all teachers with classroom supplies.

- In 2018, 13 children of employees received or renewed college scholarships based on need and merit. The Owens Corning Foundation also matched $31,208 in employee gifts to educational institutions (high school and above).

Key Charitable Partners for this area in 2018 were:

- **NetSpring Green IT (China)**
- **Mexican Red Cross (Mexico)**
- **United Way Mumbai (India)**
- **Mumbai Mobile Creches (India)**
- **Concrete Preservation Institute (U.S)**
- **Toledo Public Schools (U.S)**

The full Owens Corning 2018 Sustainability Report is available at http://www.owenscorning.com/corporate/sustainability