CREE™ Wolfspeed™

SUSTAINABILITY REPORT | **2018**

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LETTER TO STAKEHOLDERS

Dear Stakeholders,

Born in a lab at NC State University in Raleigh, N.C. in 1987, Cree now has offices around the world and a more than 30-year history of delivering technology solutions that enable our customers and society to do more with less. From young and ambitious roots, we have grown into a world-renowned commercial supplier of the fastest, most efficient semiconductor components ever available, enabling greater efficiency and performance, smaller systems and lower costs. We offer our customers both the advantages of working with a large enterprise, leveraging Cree's industry-leading brand, global footprint, financial stability, scale, expertise and people, as well as the advantages of working with a nimble, fast-moving growth company.

We relentlessly pursue the development and commercialization of the technologies and products that enable other industry pioneers to dream bigger and bring their visions to life. In fact, our technologies are at the heart of today's biggest industry transformations, including the move to electric vehicles and autonomous driving, wireless infrastructure that will unlock the potential of smart cities and the pursuit of ubiquitous power storage that will enable the broader use of alternative energy. To that end, our commitment to corporate social responsibility helps guide our global team through ethical standards, policies and practices.

As we execute our vision, Cree is dedicated to processes that are best for our environment, our community and our employees. Over the past year, we have implemented organizational changes across the company aimed at streamlining our procedures for a more productive future. We are dedicated to sustainable practices that enhance economic value for ourselves, as well as our customers, including environmental stewardship and social responsibility initiatives.

For example, our products enable customers to deliver solutions that significantly reduce greenhouse gas emissions by displacing fossil fuel usage in transportation and energy generation and storage. In 2017, our lighting, LED, power, and radio frequency products produced will save approximately 420 million MWh and 210 million metric tons CO_2 equivalents over their lifetimes compared to less efficient alternatives.

In our manufacturing operations, we strive to minimize resource use and reduce the environmental impact of our production processes. To better inform our customers, we are committed to transparency of our GHG emissions, waste generation, and water and energy consumption. In fact, Cree doubled its manufacturing energy productivity from 2011 to 2014, and pledged to double it again by 2020 through EP100. We met that goal three years ahead of schedule in 2017. We measure our energy productivity in terms of our product output: lumens produced per unit of energy consumed during manufacturing. As we look ahead, a new company-wide energy productivity goal that includes all of our semiconductor products in addition to LED and lighting products is currently being developed.

We consider the health and well-being of each individual associated with the Cree community as our primary responsibility. Cree's products are innovatively designed and undergo extensive testing to protect the health and safety of our customers, and we consistently execute programs that ensure the health and safety of our employees. With more than 6,000 employees from over 60 countries, our workforce is valued and critical to our success. We have established stringent rules for material sourcing, supplier selection, and employee health and safety, while also promoting community engagement and education programs.

Within our communities, Cree directs our employee efforts and financial support to events and organizations that directly promote the increased adoption of energy-efficient technologies. Our national initiative with Habitat for Humanity provides an ongoing employee volunteer program and has provided more than 150,000 LED lights to Habitat homes nationwide.

Sustainability requires continued evaluation, assessment and action to unlock the potential of today's science in helping to achieve greater worldwide sustainability. Cree is prepped and ready to pursue the necessary solutions to global efficiency challenges. At Cree, there is no finish line. There is only the future, and we will continue to pursue it for all.

We appreciate your interest in Cree and hope you find this information useful.

Sincerely,

Gregg A. Lowe
President and CEO

SUSTAINABILITY | **2018**

SUSTAINABILITY REPORTING

Cree's sustainability report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core Option. Cree's Health & Safety information has been reported using guidance from the Center for Safety & Health Sustainability. Refer to the GRI Content Index at the end of this report for more detailed GRI Standards information. Refer to the Materiality Assessment below to learn more about how the content of this report was developed. Unless otherwise noted, this sustainability report focuses on Cree's manufacturing operations in the US and China.

CREE CORPORATE PROFILE

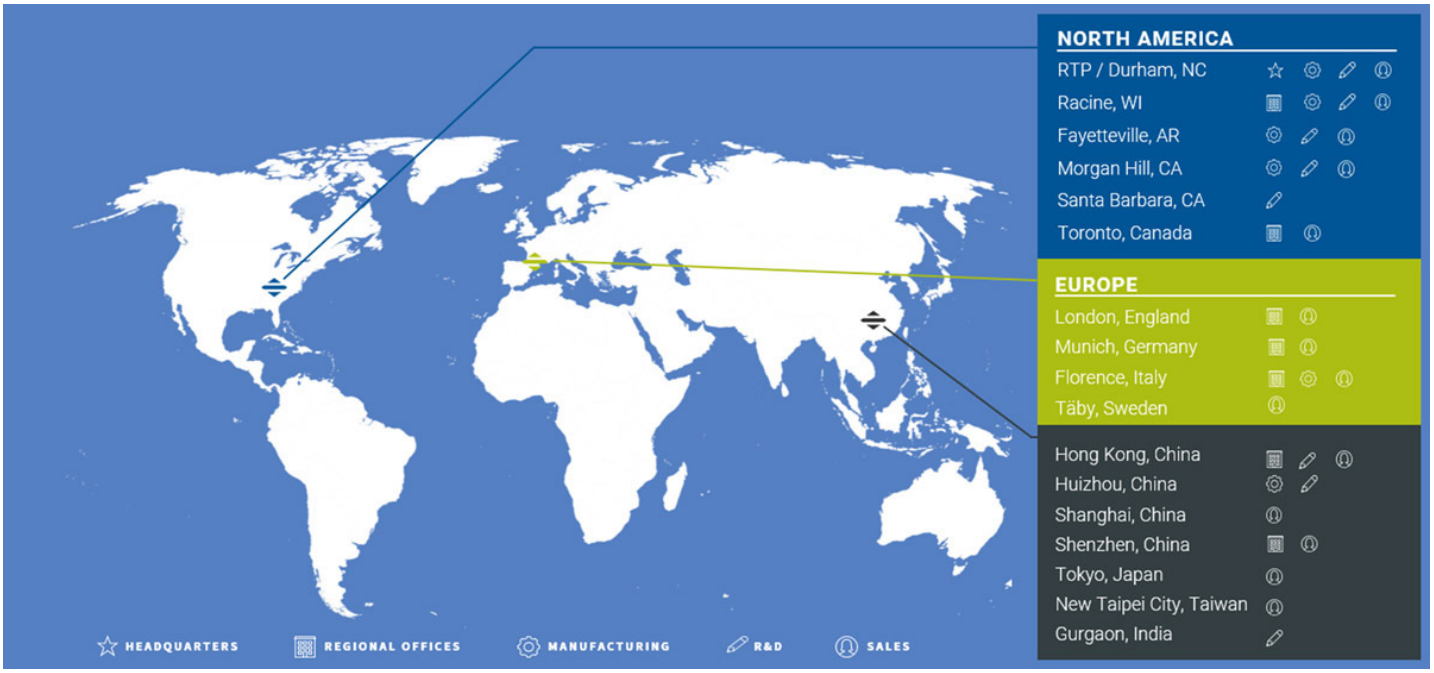
Cree is an innovator of Wolfspeed™ power and radio frequency (RF) semiconductors, lighting class LEDs and lighting products. Cree's Wolfspeed product families include silicon carbide (SiC) materials, power-switching devices and RF devices targeted for applications such as electric vehicles, fast charging, inverters, power supplies, telecom and military and aerospace.

Cree's LED product families include blue and green LED chips, high-brightness LEDs and lighting-class power LEDs targeted for indoor and outdoor lighting, video displays, transportation and electronic signs and signals. Cree's LED lighting systems and lamps serve indoor and outdoor applications.

Our Products and Applications

Lighting 48% of Total Revenue	**LED** 37% of Total Revenue	**Wolfspeed** 15% of Total Revenue
PRODUCTS Indoor Lighting, Outdoor Lighting, Smart Technology Lighting	**PRODUCTS** LED Chips, XLamps LEDs, High Brightness LEDs, Integrated Lighting Solutions	**PRODUCTS** Materials, Schottky Diodes, MOSFETs, Power Modules, Broadband Transistors, MMICs
APPLICATIONS Automotive, Petroleum, Industrial Warehouse Buildings & Office Space, Healthcare, Parking	**APPLICATIONS** General Lighting, Specialty Lighting, Video Screens, Automotive, Gaming, Wearables	**APPLICATIONS** EVs, EV Charging Infrastructures, Solar Energy Storage, Data Centers, Wireless Infrastructure, Radar, Mil/Aero

Where We're Located



Industry Awards and Recognition

Industry Award Winner INDUSTRY AWARD WINNER, FIVE CONSECUTIVE YEARS: 2012- 2016	**Passive Components & Discrete Semiconductors** 2016, ECN- IMPACT AWARD
LED Chips and Modules 2016, SELECTED FOR INCLUSION IES PROGRESS REPORT	**Finalist for LEDs Magazine** 2017, SAPPHIRE AWARDS
Finalist for LEDs Magazine 2017, SAPPHIRE AWARDS	**Wide Bandgap Automotive Traction Inverter** R&D 100 AWARD, 2016
Next Generation Luminaries 2016, DOE	**Editor's Choice Connected LED Bulb** 2015, C | NET

CORPORATE GOVERNANCE

Cree's Board of Directors sets high standards for our employees, officers and directors. Visit our **Corporate Governance page** on **cree.com**.

2017 SUSTAINABILITY MILESTONES

MAY 2017

Joined EP100 and pledged to double our energy productivity in terms of lumens produced by our products per kWh consumed in manufacturing by 2020.

SEPTEMBER 2017

Began estimating Cree's Scope 3 GHG emissions for the first time.

OCTOBER 2017

Cree Huizhou installed a new water recycle system, which recycles an average of 211,000 gallons of water per day.

DECEMBER 2017

Lighting production facility in Racine achieves 86% waste diverted from landfill.

MATERIALITY ASSESSMENT

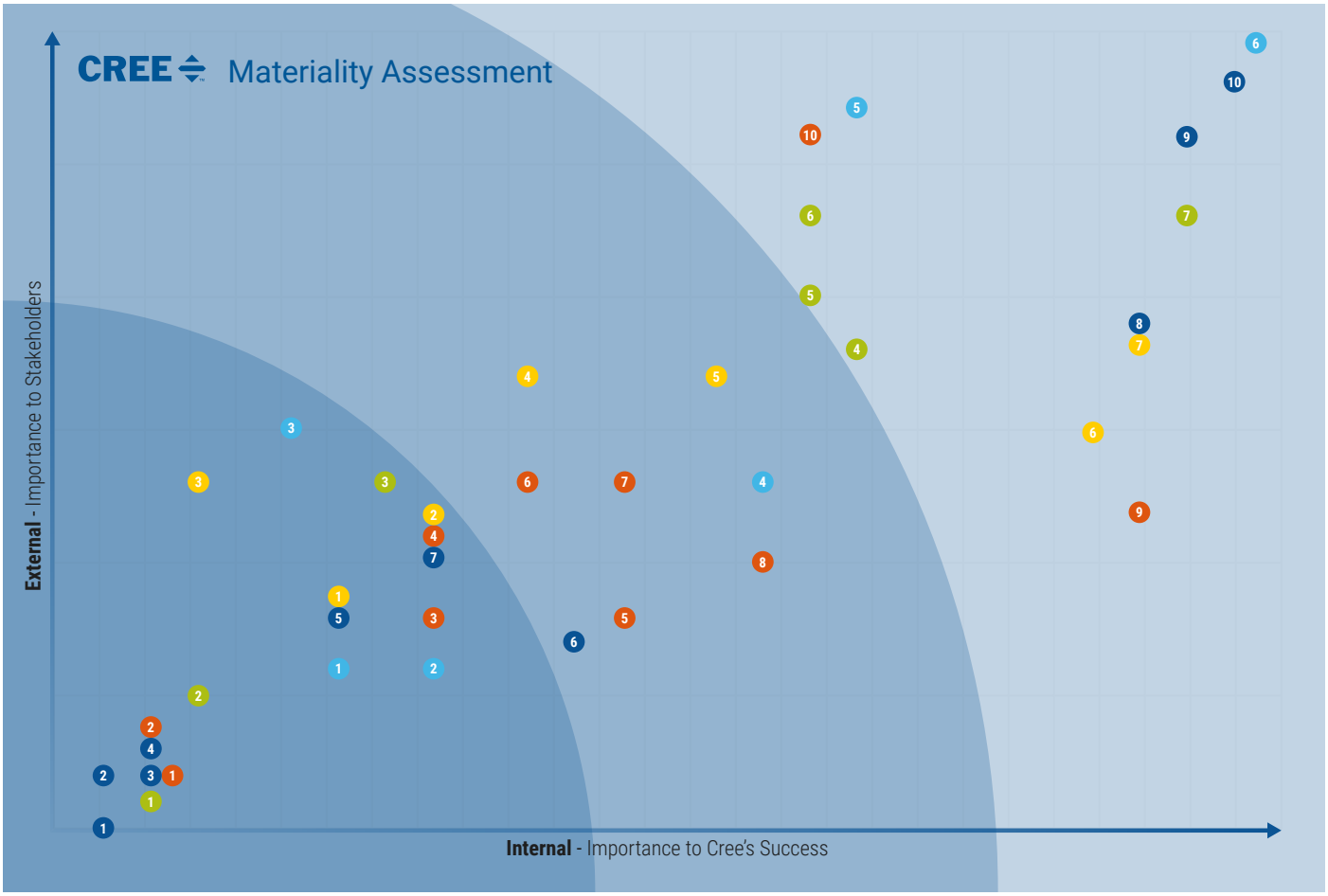
To better understand which environmental, social, and economic topics are material to Cree, we engage with our internal and external stakeholders.

Our internal stakeholders involved in our materiality assessment included employees of different departments within Cree. For our external stakeholder analysis, Cree reached out to suppliers, distributors, contract manufacturers, customers, investors, and trade associations. Other Cree stakeholders who were not involved in the materiality assessment include insurers, competitors, government agencies, community members, and dependents/family of Cree employees.

For stakeholder groups that Cree did not reach out to or if Cree did not receive responses from a stakeholder group during the materiality assessment, Cree referred to the Sustainability Accounting Standards Board's (SASB) standard for the semiconductor industry to ensure that our material topics chosen during our assessment are consistent with the semiconductor industry.

The results of the materiality assessment help us to better prioritize our areas of focus. The material topics shown in the top right-hand corner of the materiality matrix are reported on in greater detail per the Global Reporting Initiative (GRI) Standards.

Materiality Assessment Report



Environmental

1. Water Scarcity
2. Climate Change
3. Raw Material Resource Scarcity
4. **Water and Wastewater Management**
5. **Air Emissions**
6. **Waste Management**
7. **Energy Efficiency of Operations**

Social

1. Employee Diversity and Equal Opportunity
2. Community Engagement (Local & Global)
3. Sourcing of Conflict Materials
4. Code of Conduct
5. Labor and Employment Practices
6. **Employee Attraction/Development/Retention**
7. **Occupational Health and Safety**

Economic

1. Contribution to Regional/Local Development
2. Indirect Economic Impacts
3. Growth in Emerging Markets
4. Mergers and Acquisitions
5. **Supply Chain/Sourcing Issues**
6. **Financial Performance**

Corporate Governance

1. Political Activity/Lobbying
2. Geo-political Issues
3. International Trade Regulations
4. International Standards Compliance (REACH, RoHS, ISO 14001)
5. Risk Management
6. Stakeholder Dialogue/Transparency
7. Corporate Governance
8. Regulatory Compliance
9. **Intellectual Property Security (Cyber & Data Security)**
10. **Ethical Business Practices**

Product

1. Packaging Contains Recyclable Materials
2. Recognition/Awards
3. Customer Health and Safety
4. Product End-of-life Disposal
5. Product Compliance
6. Energy Efficiency of Products
7. Product Affordability
8. **Customer Satisfaction**
9. **Product Innovation**
10. **Product Quality**

Material topics are indicated in bold.

ECONOMIC | **2018**

ECONOMIC

Cree operates at the highest ethical standards and actively manages risks inside and outside of the organization to ensure long-term financial performance. Cree adheres to the policies outlined in the Code of Conduct and requires our suppliers to adhere to strict social and environmental standards.

The majority of the data included in this report is on a calendar year basis (January to December). Financial data is reported on a fiscal year basis (June to July). Cree's financial data for FY2017 can be found in our **2017 Annual Report** on **cree.com**.

Cree at a Glance

$1.47B FY17 Revenue

REVENUE

Lighting $701M

LEDs $550M

Wolfspeed $221M

QUICK FACTS

Strong Balance Sheet

$600M in Cash and short-term investments

Global Revenue

56% North America, 10% Europe, 30% Asia, 4% Other

Patents

5,300+ Issued Patents

Locations

18 Global locations

Careers

6,000+ Employees

Innovation

30+ Years of Tech Leadership

CUSTOMER SATISFACTION

MISSION STATEMENT

The mission of Cree's Customer Service function is to always convey a passion for the customer and to consistently deliver the best service experience.

VISION STATEMENT

Delivering Customer Satisfaction is about providing timely, responsive service with integrity, simplicity and a passion for excellence while meeting or exceeding the customer's expectations

STATEMENT OF WORK

Customer Service is any activity provided by a Cree employee that enhances the ability of a customer to realize the full potential value of a Cree product or service before and after the sale is made, thereby leading to Customer Satisfaction and repurchase.

CUSTOMER SERVICE PRINCIPLES

- Recognize the importance of all customers and the role every Cree employee plays in influencing the customer's perceptions. While impacting these perceptions, be professional, reliable, credible, responsive and friendly.
- Communicate promptly and honestly and via the customers' choice of medium. Try to be brief and clear.
- Be a voice for the customer. When rules and policies don't make sense to our customer, challenge the way Cree does business and seek opportunities for improvement.
- When a problem arises, which is inevitable, view the problem as an opportunity to improve. Solving problems will enable us to raise the quality of our products and services.
- Listen well, be responsive and demonstrate a sense of urgency. Understand that how something is said has a significant influence on how it is received. Under promise and over deliver.
- Strive to make it easy for the customer to do business with Cree to ensure that Cree remains its preferred supplier.

PRODUCT INNOVATION

At Cree, we relentlessly pursue disruptive technologies that change industries. In nearly three decades, Cree has led by converting new science into market-changing products, one breakthrough after another. To learn about Cree's track record of firsts visit our **History & Milestones** page on **cree.com**.

PRODUCT QUALITY

Ensuring the quality of our products is our top priority. Cree's quality policy is to meet the needs and expectations of our customers, be dedicated to continual improvement, and ensure a full commitment to Cree's corporate values.

DURHAM SITE

- ISO 9001: 2015
- ISO/TS 16949: 2009

RESEARCH TRIANGLE PARK SITE

- ISO 9001: 2008
- ISO/TS 16949: 2009

RACINE SITE

- ISO 9001: 2008

HUIZHOU SITE

- ISO 9001: 2008
- ISO/TS 16949: 2009

FLORENCE SITE

- ISO 9001: 2015

SUPPLY CHAIN

Supplier Management

We conduct our activities in a manner that reflects our Code of Conduct and Values, which include being a good corporate citizen, dealing fairly in business, behaving ethically, supporting basic human rights and a safe and healthy workplace, doing business in an environmentally responsible manner, and complying with applicable laws. We expect our suppliers to adhere to the same high standards and we are committed to ensuring that our supply chain reflects our values and beliefs through our Supplier Code of Conduct. Refer to the **Cree Supplier Information** page on **cree.com** to access our Supplier Code of Conduct and Purchase Order Terms. Refer to our **Small Business Program** page on **cree.com** to learn about Cree's commitment to maximizing opportunities for small businesses.

CONFLICT MINERALS

Cree, Inc. Conflict Minerals Policy

Cree offers a diverse portfolio of products which are manufactured with inputs provided by thousands of suppliers, all of which make up Cree's complex global supply chain. At Cree, we strive to act in an environmentally and socially responsible manner that complies with applicable laws and meets the needs of our customers and shareholders.

Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"), among other things, obligates regulated companies like Cree to report their use of tin, tantalum, tungsten, and gold ("Conflict Minerals") extracted in the Democratic Republic of Congo and adjoining countries ("DRC region"). Cree supports the stated goal of the Dodd-Frank Act of preventing armed groups in the DRC region from profiting from the sale of Conflict Minerals. Cree is concerned with the use of these Conflict Minerals and supports efforts to source responsibly and to increase supply chain transparency. Greater transparency is available through audit and certification initiatives such as the Conflict Free Smelter Initiative (CFSI) program.

Cree is focused on the ethical sourcing of minerals used in our products and is committed to complying with the Dodd-Frank Act requirements. Cree continues to assess, with input from our suppliers, whether our products contain Conflict Minerals derived from sources which have been identified as "Conflict-Free."

Cree expects its suppliers to develop internal Conflict Mineral policies, due diligence frameworks, and management systems that meet the minimum requirements of the OECD guidelines. Suppliers' Conflict Minerals programs must be designed to identify and eliminate from use in products sold to Cree any Conflict Minerals which are known to come from sources funding armed groups in the DRC region. Cree is committed to working with its suppliers on ways in which they can increase the transparency regarding the origin of these minerals contained in products sold to Cree. In order to further enhance transparency, Cree requires its direct suppliers to source Conflict Minerals from smelters and refiners whose due diligence practices have been validated by an independent third party audit program, such as the CFSI or a mutually agreed equivalent.

Cree fully expects our suppliers to cooperate with us and to provide information to support these efforts, even if the supplier is not directly subject to the Dodd-Frank Act. Any Cree suppler that does not provide us complete and accurate information in an acceptable format for the applicable reporting period or that provides material from sources known to fund armed groups in the DRC region will be required to implement corrective action measures. Suppliers that do not reasonably comply with Cree's Conflict Mineral Policy will be reviewed by Cree's supply chain management to assess whether Cree will conduct business with those suppliers in the future.

SOCIAL RESPONSIBILITY | **2018**

SOCIAL RESPONSIBILITY

We consider the health and well-being of each individual associated with the Cree community as our primary responsibility. We have established stringent rules for material sourcing, supplier selection, and employee health and safety, while also promoting community engagement and education programs.

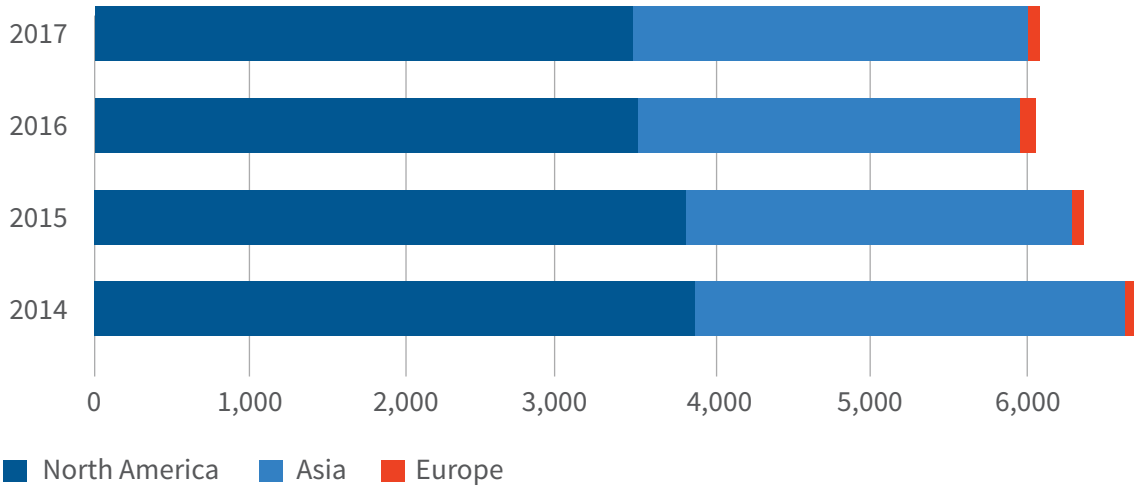
CREE EMPLOYEES

Over **6,000** global employees

64 countries represented by employees

$784,000 given to employee tuition over the past 5 years

Cree's Global Employees by Region



Our employees are valued and critical to our success. Cree is an Equal Employment Opportunity (EEO) and Affirmative Action (AA) employer, and employs regular full and part-time employees, as well as temporary and contract employees as necessary.

Cree offers a benefit package designed to promote the physical and emotional well-being and financial health of our employees. Unless otherwise noted, the following benefits are offered to all Cree US employees who work more than 30 hours per week. Cree employees working outside of the US are eligible for country specific benefits, which include statutorily mandated benefits and supplemental programs.

HEALTH AND WELLNESS

- Medical, Dental, Vision Insurance
- Life and Accidental Death & Dismemberment Insurance
- Flexible Savings Plans
- Short & Long-Term Disability
- Employee Assistance Program
- Wellness programs
- On-Site Cafeteria (Durham, NC and Huizhou, China)
- Fitness Centers (Durham, NC and Racine, WI)
- Fitness Center Reimbursement Program (All other Cree US locations)

COMPENSATION

- Bonuses Based on Company and Individual Performance
- Employee Stock Purchase Plan (full-time employees only)
- Employee Referral Bonuses

EDUCATION AND TRAINING

- Education Reimbursement
- On- and Off-Site Training Opportunities

GENERAL

- Retirements Savings Plans
- College Savings Plan

TIME OFF

- Paid Time Off (Vacation) and Paid Holidays
- Leave Programs (Parental, Military)

We are committed to offering an environment in which employees are ensured equal job opportunities and have a chance for advancement. Approximately 70% of Cree employees receive performance and career development reviews at least once per year and many employees receive one-on-one performance feedback on a quarterly basis. At Cree, we constantly strive to learn. We offer a variety of training and growth opportunities through on-site and off-site classes to support employee development, and reimburse eligible employees for specified job and company-related educational courses.

HEALTH AND SAFETY

Cree's products are innovatively designed and undergo various testing to promote the health and safety of our customers. Cree's Occupational Health and Safety and wellness programs ensure the health and safety of our employees and contractors.

OUR EMPLOYEES AND CONTRACTORS

The safety, health, and overall well-being of our employees and contractors is integrated into the way we do business.

Health and Safety Philosophy

CREE AIMS TO PROVIDE A SAFE AND HEALTHY WORK ENVIRONMENT BY:

- Fixing accountability for health and safety performance with line management, just as it is for productivity, quality, and other business performance metrics
- Hiring, developing and retaining a team of health and safety professionals dedicated to assisting line management fulfill its mission of every employee going home as well as or better than how they arrived
- Recognizing, identifying and evaluating operations or processes which could negatively affect employee and contractor health
- Evaluating health and safety incidents to prevent recurrence
- Providing contractors information regarding EHS risks and relevant precautions and periodically reviewing contractor ratings to evaluate if they continue to meet safe and adequate performance standards
- Setting acceptable levels of risk based on government regulation or industry best practice
- Designing control measures for those operations or processes which are found to be potentially harmful
- Providing training to affected individuals
- Monitoring the effectiveness of Cree's Occupational Health and Safety (OHS) programs and services to ensure the highest level of quality and support is being achieved

EHS and Code of Conduct Policies

Cree's Environmental Health & Safety (EHS) Policy outlines our approach to continuous improvement.

Our Code of Conduct describes standards of conduct for our employees and directors in performing their duties and it applies throughout Cree and all its subsidiaries. In addition to including specific core principles relating to Occupational Health and Safety, it also provides examples of policy violations in the areas of employee health and regulatory compliance.

Our Supplier Code of Conduct requires that all Cree suppliers comply with applicable health and safety laws and regulations to create safe working conditions and a healthy work environment for all workers.

Occupational Health and Safety Programs

THE FOLLOWING OHS PROGRAMS HAVE BEEN IMPLEMENTED WITHIN CREE:

- Chemical Safety
- Contractor Safety
- EHS Teams
- Ergonomics
- Incident Management
- Occupational Health
- Process Safety / Risk Management
- General Safety

The Health and Safety portion of the Environment, Health and Safety Management System (EHSMS) is based largely on the US ANSI/AIHA/ASSE Z10-2012 Occupational Health & Safety Management Systems standard. Each program having a regulatory driver is tracked within our Environment, Health and Safety Management System and thoroughly reviewed at an appropriate frequency. These reviews aim to ensure the program has considered any new regulations or best practices, is being implemented effectively within the affected business unit, is being supported financially by line management and is producing desired results overall. Capital investments are subject to our management of change program which aims to minimize potential adverse impacts on employees, consumers, property, or the environment arising from process, operational or facilities change. The triggers or thresholds for EHS involvement along with examples are described in our internal management of change program.

Employee Involvement in OHS

Employee involvement in OHS takes many forms including EHS Teams, EHS Point-of-Contact interaction in the production areas, Lean Kaizen events, and Management of Change processes. Cree's EHS training is connected to a learning management system and the on-boarding process for a new or transferred employee. Training is developed and tracked for all regulatory mandated programs and effectiveness is measured by observations, incident evaluations, team walk-throughs and audits or inspections.

Employee Health and Well-Being

Cree supports the well-being of our employees through programs that support a healthy lifestyle. We are committed to offering benefits to employees and their families to assist in improving health and lifestyle choices. Programs throughout Cree's operations are tailored to the needs of the employees in the region and include many health-related benefits. In our international locations, Cree adheres to regulatory benefits and health and wellness requirements. In our US locations, we offer programs such as our Bright Choices wellness program, which is designed to encourage employees and their families to adopt healthy lifestyle habits. This program provides options for employees to receive annual biometric screenings for important health markers, on-line classes, health coaches, and incentives for preventive health care. Employee benefits include medical and dental insurance, health and retirement savings accounts, fitness centers at some locations, paid time off, and family leave programs. Employee assistance programs provide professional counseling to help resolve personal issues.

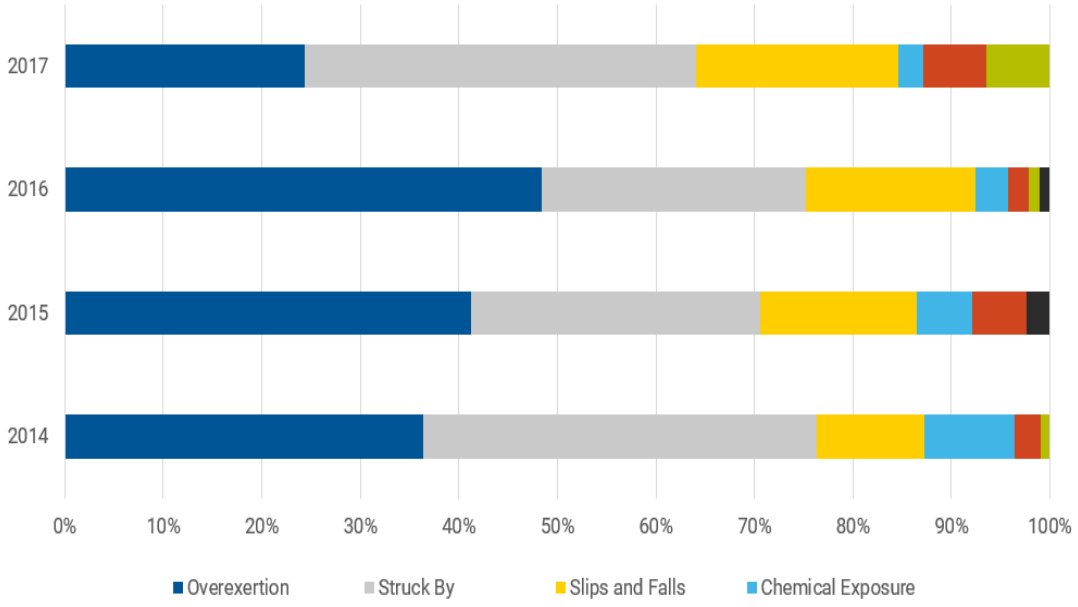
OHS Metrics

Cree tracks all work-related injuries and illnesses and works to improve the safety of our workplace through evaluation and prevention measures. We have a comprehensive program to address workplace safety issues. Cree has had no work-related fatalities since our business began operations in 1987. We are not aware of any occupational exposure issues in our manufacturing processes that would increase an individual's risk of any specific disease.

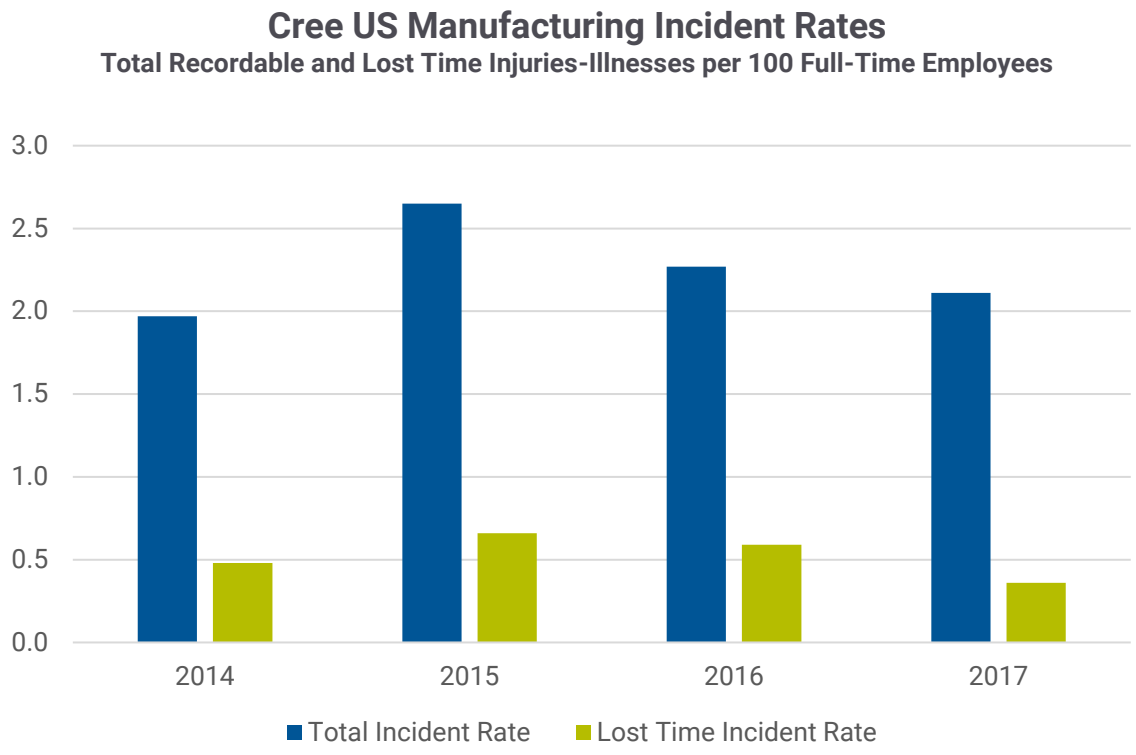
Cree's Global Manufacturing Incident Rates

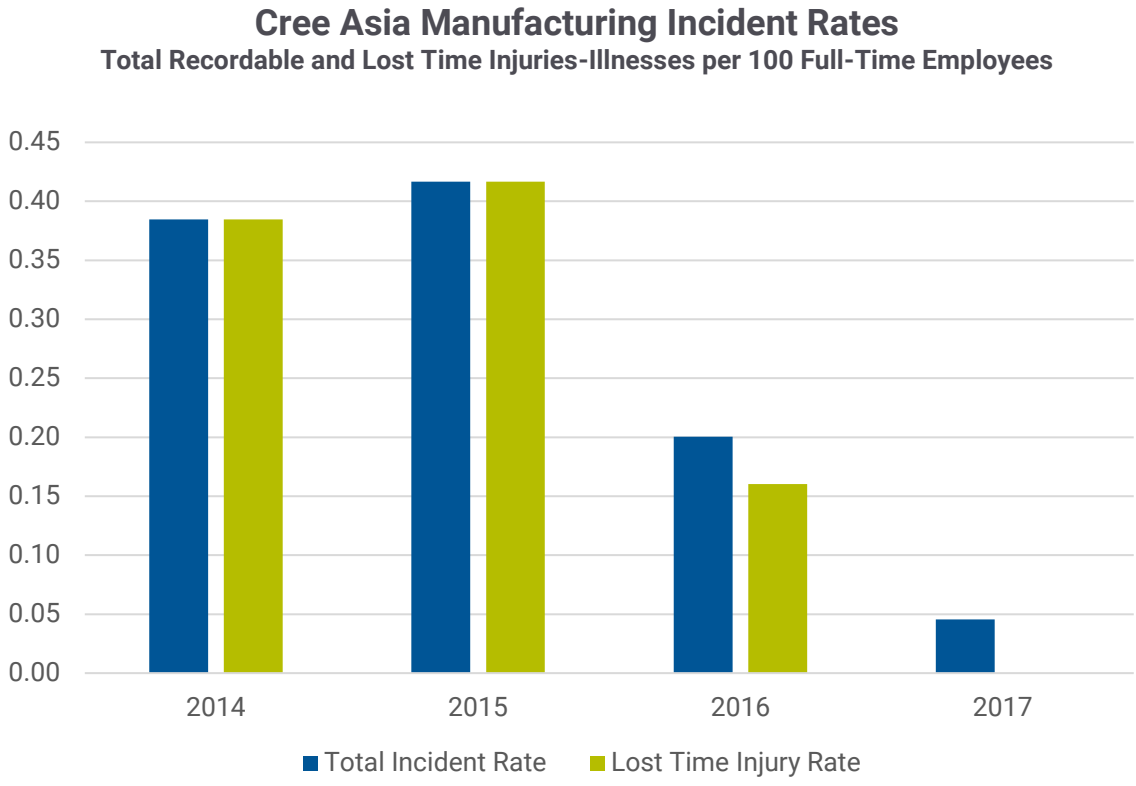
Total Recordable and Lost Time Injuries-Illnesses per 100 Full-Time Employees

Cree's Global Manufacturing Injury-Illness Types

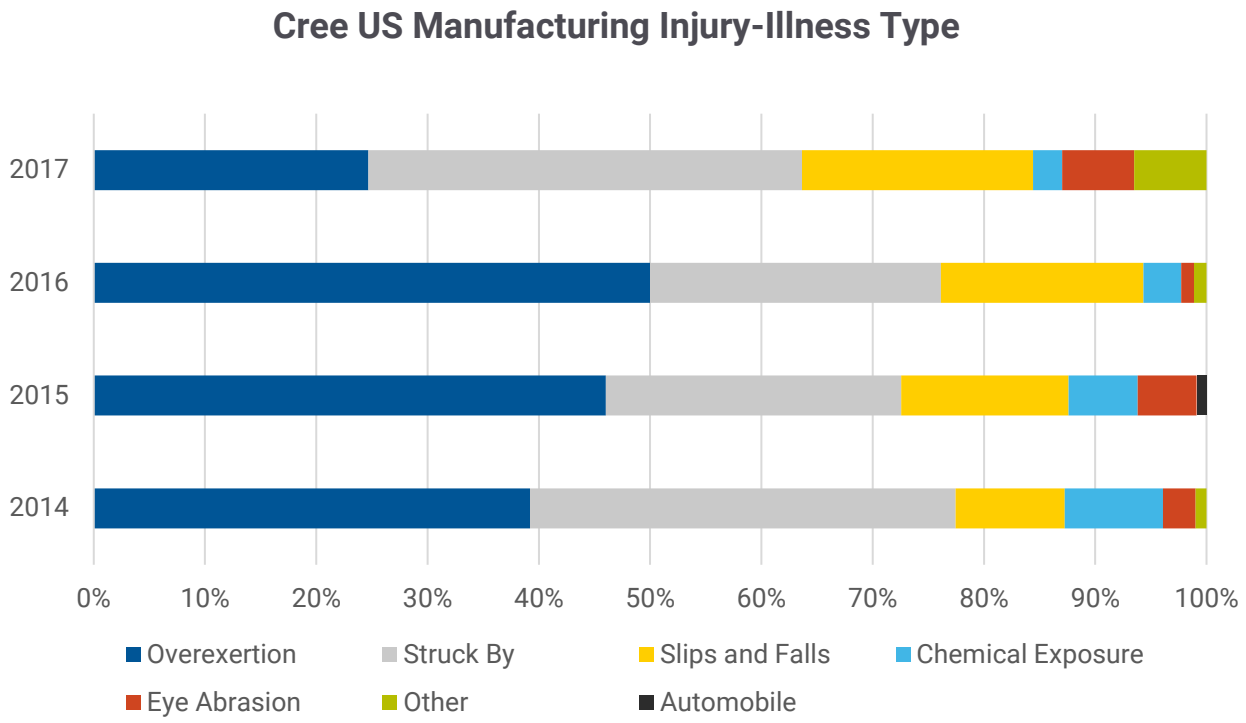


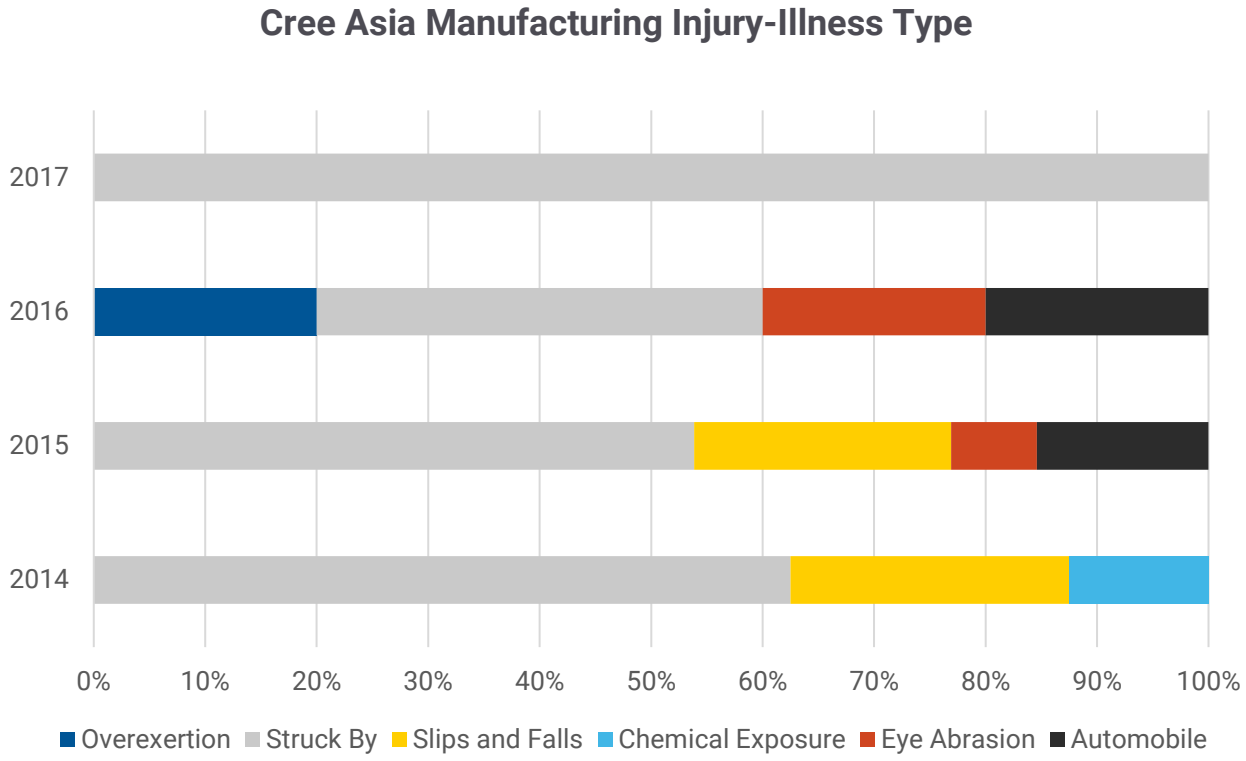
Incident Rate by Region



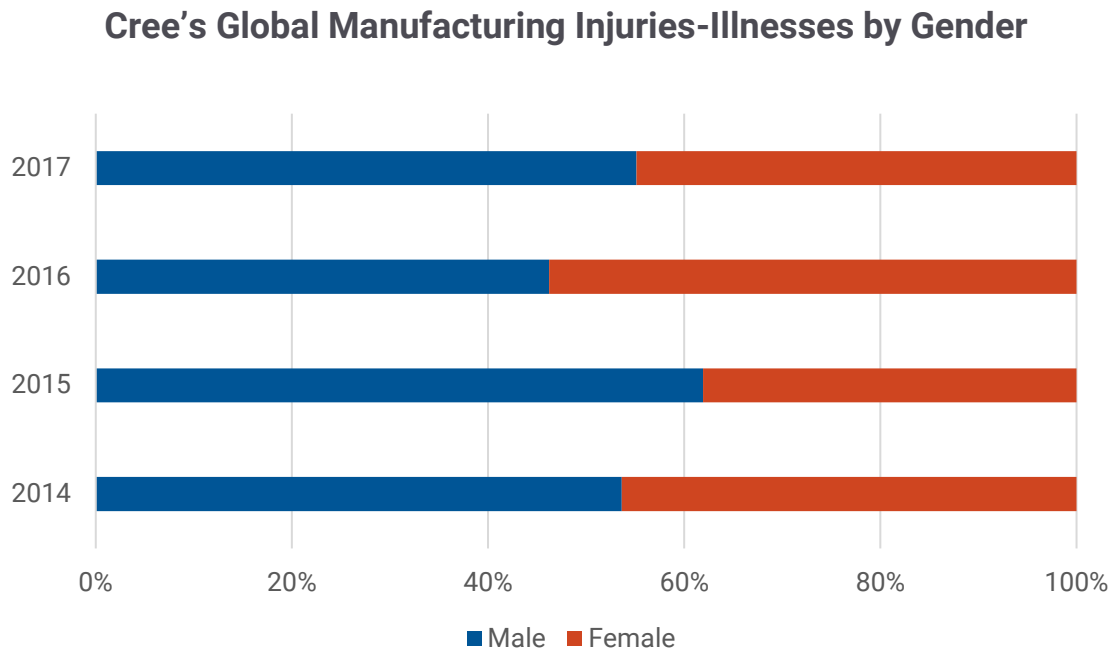


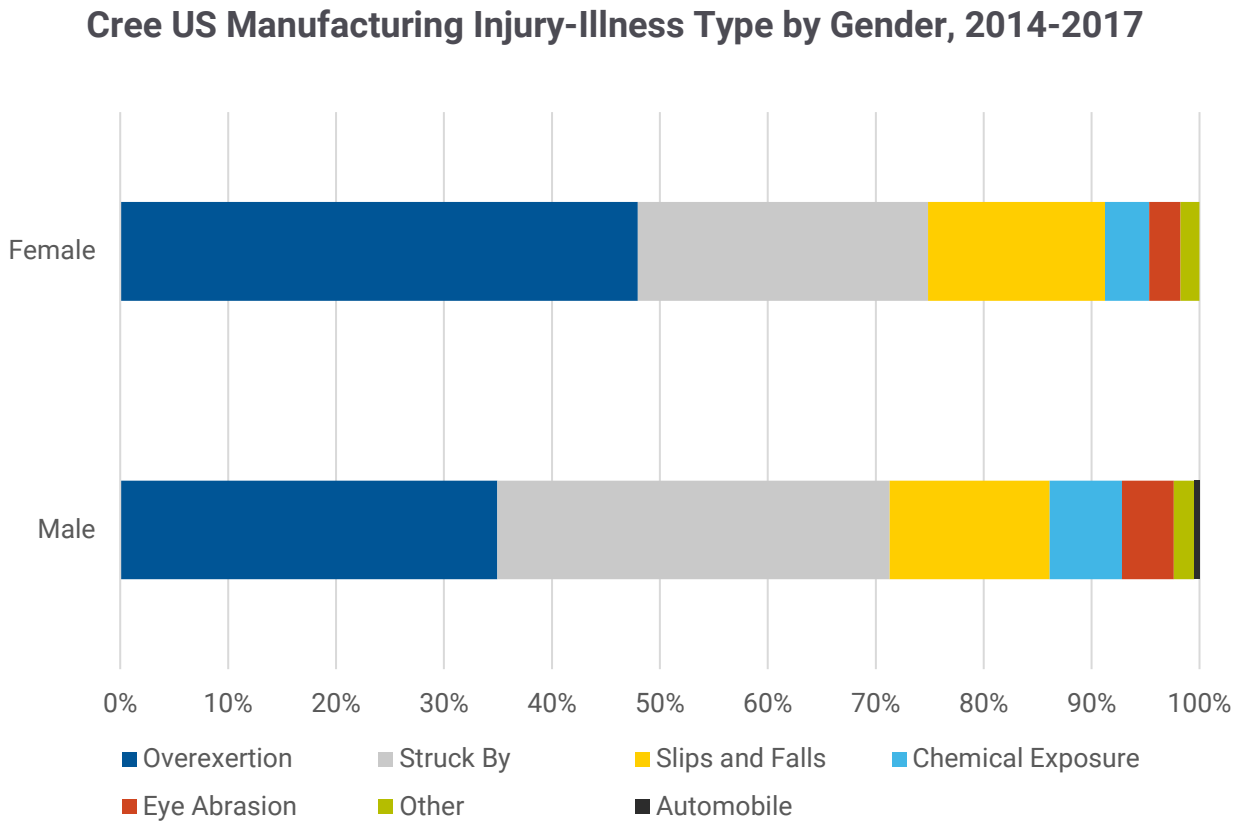
Injury-Illness Type by Region



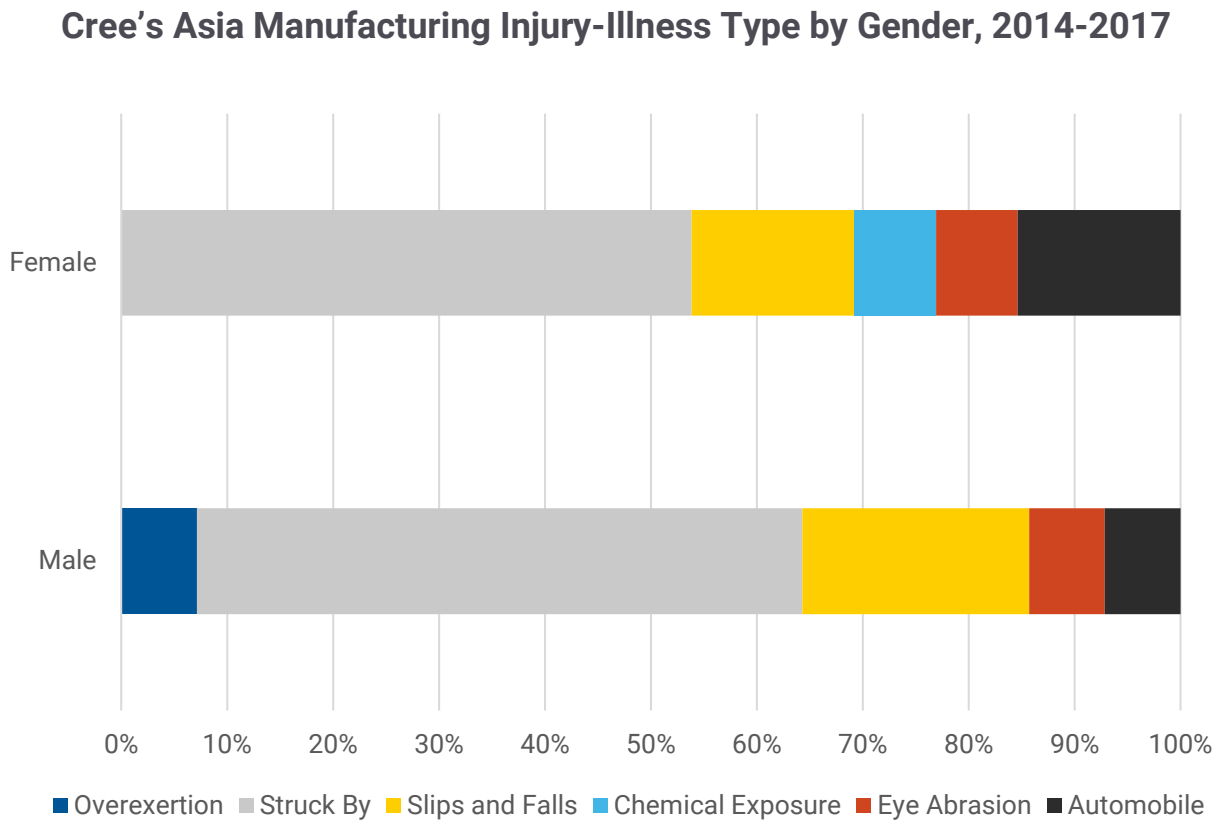


Injuries-Illnesses by Gender



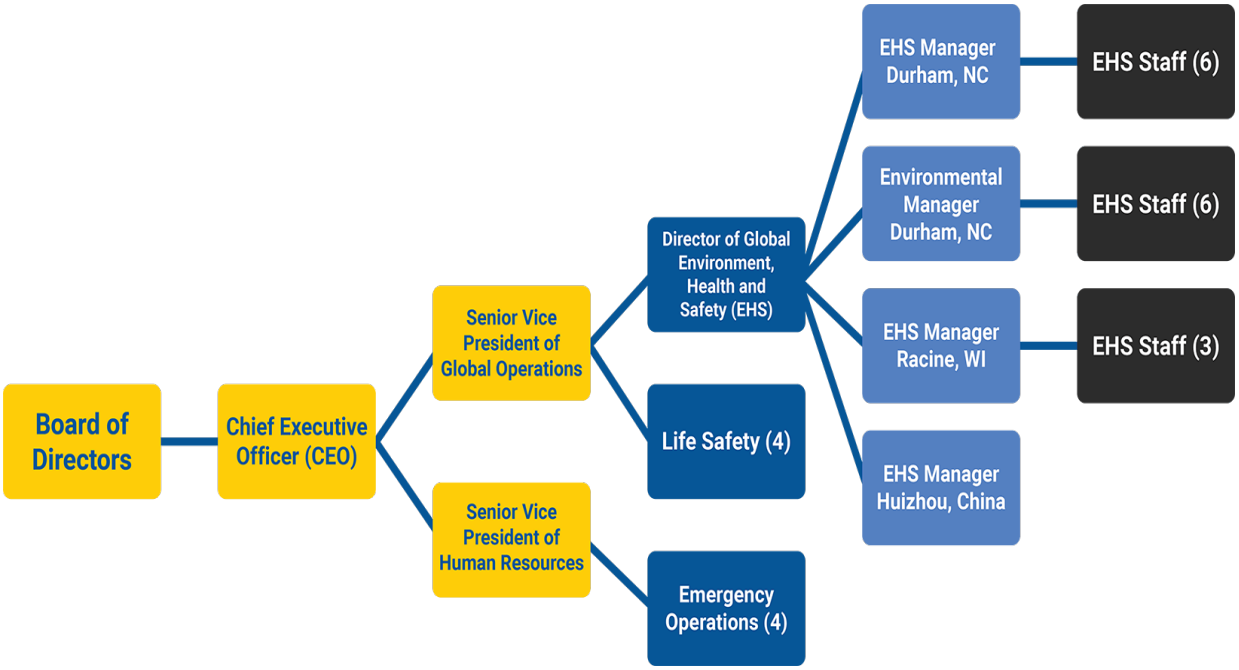


Injuries-Illnesses by Gender



EHS Organizational Structure

Cree has dedicated staff to implement EHS programs:



OUR CUSTOMERS AND PARTNERS

We design and test our products to ensure the health and safety of our customers and partners.

Reduced Risk of Falls

When comparing Cree's LED revolutionary lighting to traditional lighting technologies, a safety benefit is the reduced risk of falls and other mishaps to our customers and partners. Installers, facilities personnel and even homeowners have significantly reduced risk of falling from heights due to the fewer fixture changes and less maintenance. Watch to learn more about how our ZR RK Series Retrofit lighting product simplifies installation and reduces ladder time.

Minimizing Light Pollution

When Cree LED lighting products are utilized, public spaces are also made safer because of the improved lighting quality. Cree outdoor lights are also designed to be dark-sky friendly, minimizing the effects of light pollution. Cree dutifully measures the lighting performance of each product prior to launching into the marketplace to ensure our customers receive a quality end product, when installed within recommended practices, that provides a safe and uniform distribution without introducing light trespass, glare, or wasted energy.

Reduced Flickering

Cree's LED lighting products are designed to eliminate Temporal Light Modulation (Flicker). Flicker has been a concern among the LED lighting community for a number of reasons: negative health effects on people susceptible to epileptic seizures and headaches, making rotating equipment appear stationary, and an increase in fatigue among other issues associated with a visual change in perception of the environment.

Tested for Safety and Durability

Cree's lighting products undergo product safety testing (UL/ETL) to ensure that our products are installed and operated in a safe manner, and will continue to do so throughout the products' lifetimes. Any failures of our products that affect our customers' health and safety are rigorously investigated; corrective and preventative actions are then implemented to eliminate potential safety and reliability issues. Cree maintains its own accredited compliance labs to perform product testing under both normal and abnormal conditions, which ensures the safety and durability of our products.

EXAMPLES OF THE TESTING PERFORMED INCLUDE:

- Temperature Testing
- Component Faults
- Dielectric Strength
- Bonding Circuit Impedance
- Rain Testing
- Ingress Protection (IP)
- Flammability Testing
- Vibration Testing
- Photobiological
- Strain Relief
- Low Voltage Directive
- Electromagnetic Compatibility (EMC)

Guidance on Safe Use of Our Products

LED lighting products, like natural sunlight, include shorter wavelengths (blue and green light) that can still present hazards to sensitive biological tissues. Thus, Cree routinely performs either irradiance or radiance testing to provide customers and end users with guidance on how to ensure our lighting products are not used in a manner where they could damage the end user's eyes and skin.

This standardized IEC/EN testing is performed using custom equipment (i.e., no animal testing), designed to simulate the shape of the face and structure of the human eye, and includes peer reviewed and agreed to safety factors and measurement distances. Each lighting application can be unique, so consideration is also given to whether a lighting product includes a light diffuser, or focusing element, during testing.

COMMUNITY ENGAGEMENT

Our Policy

Cree directs our employee efforts and financial support to events and organizations that directly promote the increased adoption of energy-efficient LED lighting and energy-efficient technologies.

INITIATIVES: HABITAT FOR HUMANITY

- Provided over 150,000 LED lights to Habitat homes nationwide
- Sponsored the first All LED Habitat home in Durham, NC in 2010
- Sponsored three Triangle CEO Build homes
- Provided LED lighting to Habitat ReStores
- Ongoing employee volunteer programs

CREE SUPPORTS

- Durham Rescue Mission
- Ronald McDonald House
- North Carolina Museum of Natural Sciences
- Food Bank of Central & Eastern North Carolina

ENVIRONMENT | **2018**

ENVIRONMENTAL MANAGEMENT

Cree is committed to responsibly managing environmental impacts, including being in compliance with environmental legislation as a minimum, and ensuring continual improvement in our environmental performance.

CREE ENVIRONMENTAL HEALTH AND SAFETY POLICY

Cree, a leader in advanced lighting and technologies, endorses the following Corporate Environmental Health & Safety (EHS) Policy for all Cree sites.

IT IS CREE'S EHS POLICY TO:

- Design and develop products that realize energy efficiency, minimize environmental impacts, and have sustainable life cycles.
- Continually improve our EHS performance and reduce the overall impacts of our manufacturing processes.

TO ENSURE THAT CREE CAN IMPLEMENT THESE POLICIES AND STANDARDS, CREE IS DEDICATED TO:

- Providing a safe and healthy work environment for our employees
- Complying with regulatory and other requirements
- Using natural resources, energy and materials efficiently
- Substituting sustainable resources in place of non-renewable resources
- Reusing or recycling materials wherever technically possible and economically reasonable
- Minimizing waste and disposing of waste safely and responsibly
- Sourcing raw material responsibly
- Implementing specific measures to prevent and minimize hazards to humans and the environment including pollution prevention

ISO 14001

The benefits of implementing an environmental management system include improved environmental risk management, cost savings, meeting external stakeholder expectations, ensuring compliance with environmental laws, and decreasing our environmental footprint through discovering new possibilities for energy, water and waste usage reductions. In May 2016, Cree's environmental management systems became certified under the ISO 14001:2004 or the ISO 14001:2015 standard. Cree successfully certified all our facilities to the ISO 14001:2015 standard in 2018:

DURHAM SITE

RESEARCH TRIANGLE PARK SITE

RACINE SITE

HUIZHOU SITE

ENERGY AND GREENHOUSE GAS EMISSIONS

Our Products

Cree's LED, lighting, power and radio frequency products are created with energy-efficiency in mind. Not only do Cree LEDs use less energy to produce the same amount light as a traditional bulb, they also produce less heat, saving energy on air conditioning. Cree's power and radio frequency products allow other industries to develop leading energy efficient products in applications such as renewable energy, wireless communication, electric vehicles, and electric vehicle charging.

Cree continues to innovate to create the most efficient products on the market because Cree understands that saving energy also means fewer GHG emissions and more money in your pocket. The GHG emissions associated with using our products over their lifetimes represent roughly 99% of Cree's total GHG footprint. **Compared to traditional less efficient alternatives, Cree's LED, lighting, power and radio frequency products sold in 2017 will save approximately 420 million MWh and 210 million metric tons CO_2 equivalents over their estimated lifetimes.**

Our Manufacturing

Cree recognizes the future possible environmental, social, and economic impacts associated with climate change and increasing energy demands. In addition to providing energy efficient products, we strive to reduce GHG emissions and improve energy efficiency at all Cree sites.

EP100

EP100 is a global, collaborative initiative of influential businesses that pledge to double their energy productivity.

Cree has doubled its manufacturing energy productivity from 2011 to 2014, and has pledged through EP100 to double it again by 2020. We measure our energy productivity in terms of our product output: lumens produced per unit of energy consumed during manufacturing. Cree achieved its EP100 goal for lighting products in 2017. A new company-wide goal is currently being developed.

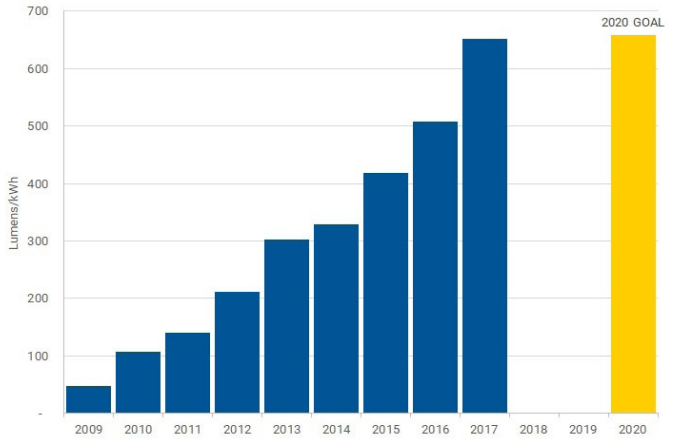
CDP

CDP runs a global disclosure system of self-reported environmental data.

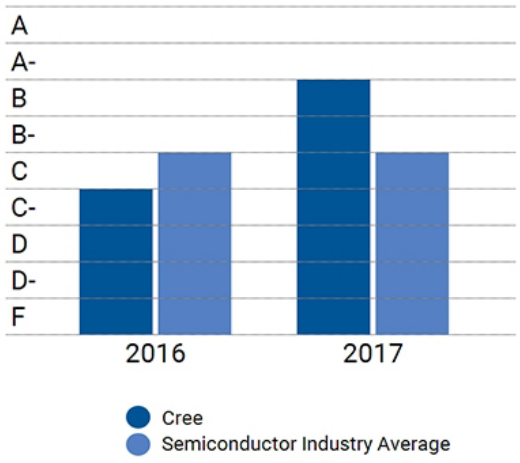
In 2016, Cree disclosed its company-wide GHG emissions and climate change risks and opportunities to CDP for the first time. We will continue calculating our GHG emissions in the future because measuring GHG emissions helps us recognize and work toward lowering our impact. Visit cdp.net to view our responses to the CDP Climate Change Survey.

Cree's EP100 Progress

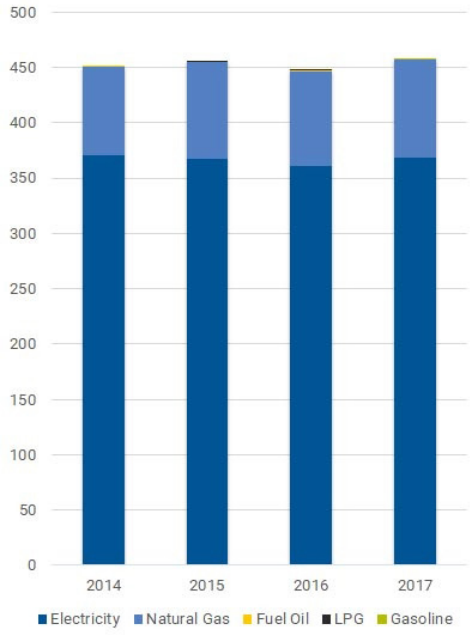
Lumens Produced per kWh Consumed in Manufacturing



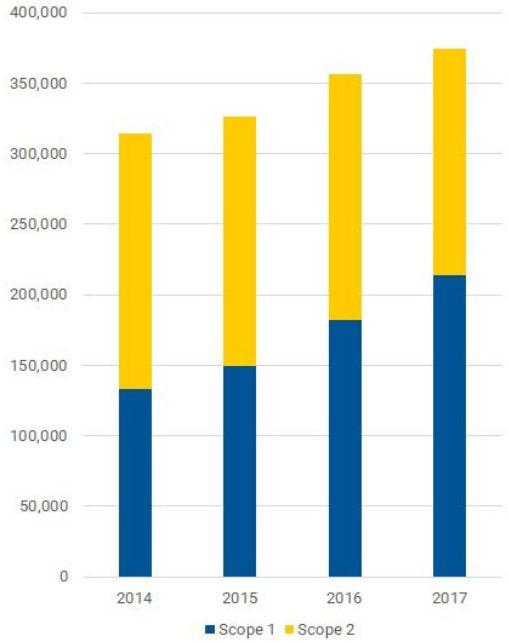
Cree's CDP Climate Change Score Progress



Cree's Global Manufacturing Energy Consumption Gigawatt Hours



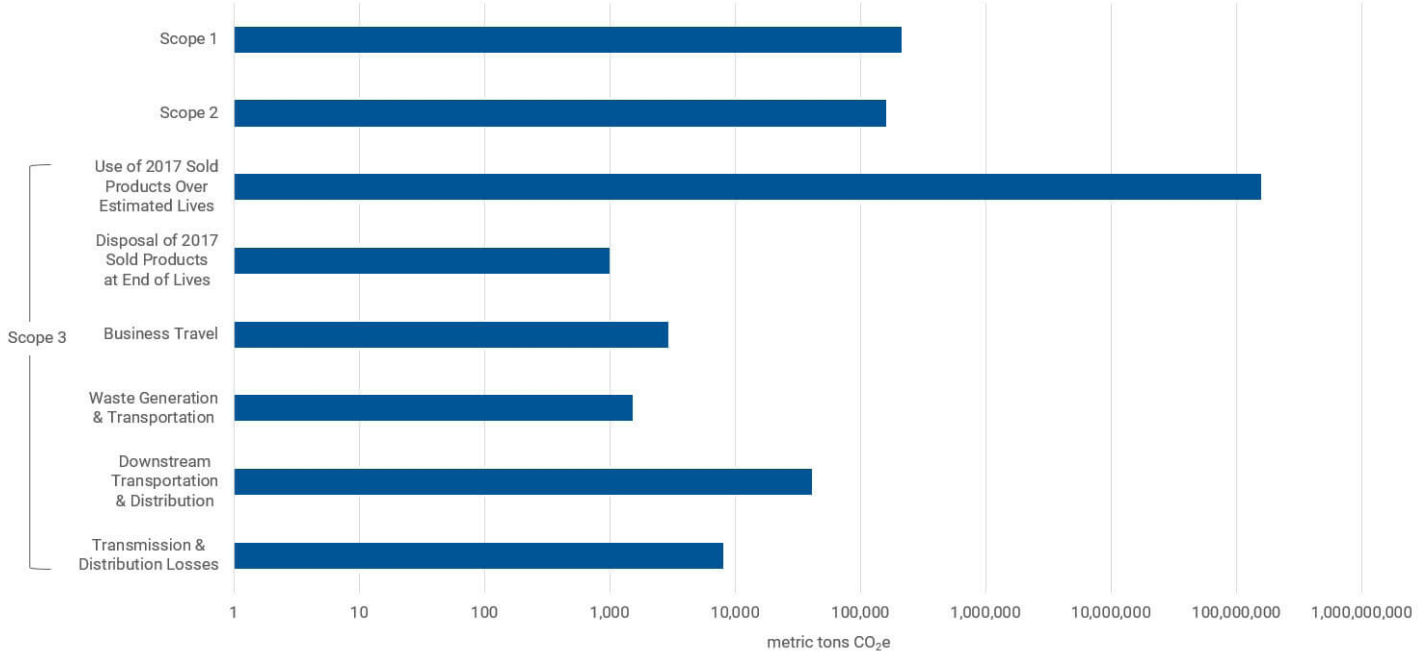
Cree's Global Manufacturing GHG Emissions in Metric Tons CO_2 Equivalents



Scope 1: Cree's Global Manufacturing GHG Emissions

Scope 2: GHG emissions from the consumption of purchased electricity at Cree's manufacturing facilities

Cree's 2017 Carbon Footprint in Metric Tons CO_2 Equivalents



CREE'S CLIMATE CHANGE RISKS

Potential Risk	Potential Impacts	Estimated Financial Implications	Management Method
Carbon Taxes	Requires reduction in Scope 1 emissions and potentially addition of abatement technologies. Difficult to alter manufacturing inputs since our products rely on the use of very specific inputs. Changing the types and amounts of gases used in our manufacturing processes used could greatly compromise product quality.	$45 million annually	Improved yield Increasing the size of the silicon carbide wafers produced which yields more product per the same amount of input.
Change in average temperatures	Could potentially affect our manufacturing process since the control of temperature and humidity in our fabs is crucial for product quality.	$0-$100,000 annually	Currently have robust systems in place to control the fabs' temperature and humidity.
Sea level rise	Could impact the ports used for shipment of raw materials and products around the world. Offices in vulnerable locations would need to be moved. Manufacturing facilities are not considered to be at risk on a 10 year horizon.	Potential 0-10% increase in transportation costs $1-10 million if vulnerable office locations were impacted and were required to relocate.	We take information such as this into account when selecting locations for our facilities. We greatly limit the operation in vulnerable areas of the world and have risk management measures in place to cope with catastrophic events.
Fluctuating socio-economic conditions	Critical raw materials are sourced from areas of the world vulnerable to political instability because of drought and other climate changes.	Severe cost to our supply chain and business interruption. Depending on the material, it could have a significant impact.	Our dedicated staff, Cree's Supplier Code of Conduct and Conflict Minerals Policy help to manage potential risks in our supply chain.
Unsuccessful investment in new technologies	Local utilities are not adopting policies that promote the economical adoption of renewable energy sources. We also see a risk with utilities not upgrading their grid system to be able to accept and store renewable energy. Government subsidies for renewable energy are being phased out in the US.	Switching to renewable energy to supply our manufacturing electricity could result in a decrease in our electricity bill costs. We estimate that not being able to adopt renewable energy could result in us spending an extra $1-5 million in annual electricity costs. The financial implications for this risk affecting our product sales is currently unknown.	We have dedicated staff to manage our facilities' electricity systems and interactions with local utilities and policy makers.
Changes in consumer behavior	The emergence of new technologies that are more efficient than our products and/or market saturation of products could greatly affect our business.	We could potentially lose business to competing technologies, which could negatively impact the business.	We will continue to innovate for the future and develop industry-leading energy efficient products. We are constantly developing new technologies and creating new markets for our products. We invest significant resources in research and development ($158.5 million in FY2017).

CREE'S CLIMATE CHANGE OPPORTUNITIES

Potential Opportunity	Potential Impacts	Estimated Financial Implications	Management Method
Changes in consumer behavior	We believe that our LED products appeal to the growing number of eco-conscious consumers and commercial customers who want energy efficient, less-emissive, and long-lasting products. We expect an increase in demand for our power and radio frequency products. Our power and radio frequency products greatly reduce power loss, resulting in less electricity wasted (and thus fewer GHGs emitted).	We anticipate our power and radio frequency revenue to increase by a factor of four by 2022. We also expect our LED business to continue growing and anticipate our LED revenue to steadily increase by 2022.	Cree's R&D employees are responsible for developing energy efficient, long-lasting, and innovative products. We invest significant resources in research and development ($158.5 million in FY2017).
Carbon taxes and product efficiency regulations and standards	We have always focused our priorities on improving the design and energy efficiency of our products. Our LED, LED lighting, power and radio frequency products substantially reduce the amount of customer energy consumption and associated GHGs emitted. If a carbon tax system is established in the future, we will be able to provide energy efficient, less-emissive, and long-lasting products to meet customer needs. Carbon taxes may also enable us to gain new customers seeking products that emit less GHGs to lower their carbon tax payments.	We anticipate our power and radio frequency revenue to increase by a factor of four by 2022. We also expect our LED business to continue growing and anticipate our LED revenue to steadily increase by 2022.	Cree's R&D employees are responsible for developing energy efficient, long-lasting, and innovative products. We invest significant resources in research and development ($158.5 million in FY2017).
Change in average temperatures	Not only do Cree LEDs use less energy to produce the same amount light as a traditional bulb, they also produce less heat, saving energy on air conditioning.	We expect our LED business to continue growing and anticipate our LED revenue to steadily increase by 2022.	Cree's R&D employees are responsible for developing energy efficient, long-lasting, and innovative products. We invest significant resources in research and development ($158.5 million in FY2017).
Change in precipitation extremes and droughts	We see changes in precipitation extremes and droughts and how it affects crop yields as a possible opportunity for us. If more crop production occurs in controlled indoor environments, Cree can provide LEDs to support these horticulture operations.	We expect our LED business to continue growing and anticipate our LED revenue to steadily increase by 2022.	Cree's R&D employees are responsible for developing energy efficient, long-lasting, and innovative products. We invest significant resources in research and development ($158.5 million in FY2017).
Increased adoption of renewable energy	Cree is transparent regarding product efficiency and information about our products' efficiency can be found on our website. Our power products can also be used in renewable energy applications, including solar power systems. Solar power systems designed around Cree's silicon carbide (SiC) power devices offer huge efficiency gains and permit smaller system size, weight and cost.	We anticipate our power and radio frequency revenue to increase by a factor of four by 2022.	Cree's R&D employees are responsible for developing energy efficient, long-lasting, and innovative products. We invest significant resources in research and development ($158.5 million in FY2017).
Changes in consumer behavior	The emergence of new technologies that are more efficient than our products and/or market saturation of products could greatly affect our business.	We could potentially lose business to competing technologies, which could negatively impact the business.	We will continue to innovate for the future and develop industry-leading energy efficient products. We are constantly developing new technologies and creating new markets for our products. We invest significant resources in research and development ($158.5 million in FY2017).

PRODUCT SUSTAINABILITY

Our products can help you live more sustainably. Cree is committed to providing innovative and energy efficient products to our customers and responsibly managing our products from cradle to grave.

Cree maintains an active program to minimize harmful materials, including lead and cadmium, in our products. Visit our **Product Ecology** page on **cree.com** to view Cree's REACh and RoHS declarations.

PRODUCT ENERGY EFFICIENCY

Creating energy efficient products is at the core of our business. Cree LED Lighting products are designed to last as long as 100,000 hours, which is 50 times the life of a typical incandescent bulb and 5 times the lifetime of an average CFL. See below or visit more of our Case Studies on Cree.com to learn how Cree lighting products help our customers save energy and GHG emissions.

Our Wolfspeed power products are made from silicon carbide (SiC), which outperforms silicon in every way. Our components are the fastest, most efficient available, enabling greater efficiency and performance, smaller systems and lower costs. If all data centers were converted to SiC, the world could potentially save 15 trillion Watt hours of energy or an estimated 7.8 million metric tons CO_2e.

ENERGY STAR PRODUCTS

Many of Cree's LED lighting products are ENERGY STAR certified. The ENERGY STAR label ensures that the product has been independently certified, has undergone proper testing, meets specific performance standards, and will save energy and money.

Cree is proud to be one of 1,050 companies urging Congress to support the ENERGY STAR program on behalf of all Americans. Find out more **here**.

In 2010, Cree first joined the "Change the World, Start with ENERGY STAR" campaign as a pledge driver. Under this campaign, Cree has saved over 1,000,000 lbs of greenhouse gases from 2015 to 2016, and over 200,000 lbs of greenhouse gases from 2016 to 2017. Of the other ENERGY STAR pledge drivers, we were ranked 26th among all industries and 7th in the "Retailer/Manufacturer of ENERGY STAR qualified lighting" category for our greenhouse gas emissions reductions in 2015, and 19th among all industries and 7th in the "Retailer/Manufacturer of ENERGY STAR qualified lighting" category for our greenhouse gas emissions reductions in 2016.

For Cree's ENERGY STAR products, search ENERGY STAR on **cree.com**.

PRODUCT ENERGY SAVING TIPS

Tips

Did you know you can lower your energy bill even further when you use the following energy saving tips in addition to Cree LED products? Visit our **Energy Tips and FAQs** page on **cree.com**.

ENERGY SAVING CASE STUDIES

CALIFORNIA STREET LIGHTS

We're working with PG&E to bring better light to California, which includes the replacement of 150,000 street lights with energy-efficient Cree LED fixtures.

ESTIMATED ANNUAL ENERGY SAVINGS:
50 million kWh

ESTIMATED ANNUAL GHG EMISSIONS SAVINGS:
14,800 metric tons CO_2e

MCLAREN HEALTH CARE

McLaren Health Care in Michigan replaced nearly every exterior and interior light across 11 primary hospitals with 25,000 Cree LED fixtures, including over 12,000 Cree SmartCast® intelligent lighting fixtures.

ESTIMATED ANNUAL ENERGY SAVINGS:
8.2 million kWh

ESTIMATED ANNUAL GHG EMISSIONS SAVINGS:
5,800 metric tons CO_2e

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION'S (NASA)

The renovation of NASA's headquarters in Washington, D.C. included the installation of energy-efficient Cree CR22™ LED troffers with dimming technology and a lighting control system. This new system is not only bringing significant cost savings but is helping NASA meet its "green plan" objectives.

ESTIMATED ANNUAL ENERGY SAVINGS:
0.87 million kWh

ESTIMATED ANNUAL GHG EMISSIONS SAVINGS:
340 metric tons CO_2e

PRODUCT LIFE CYCLE

A Life Cycle Assessment (LCA) helps to identify the environmental impacts associated with each stage of a product's life, from raw material extraction through manufacturing, transportation, to product use and disposal.

LCAs were conducted to evaluate the environmental impacts of select Cree lighting products. The impacts were calculated using the GaBi LCA program and TRACI impact assessment methodology. The following assumptions were made for the LCA:

Manufacturing Region	North America
Product Use Region	North America - Our products are sold in other parts of the world. North America was chosen as a representative location.
Assembly Process Energy Consumption	Based on total number of luminaries produced in the factory and the total energy consumption at the factory
Product Use Energy Consumption	Based on the wattage of one of our more commonly sold versions of the lighting product
End of Life of Product Materials	90% recycle, 10% landfill

LOWEST IMPACTS: END OF LIFE PHASE

The lowest environmental impacts for all lighting products selected for the LCAs occur during the end of life phase of the product's life cycle since many components in Cree's lighting products are recyclable. View our **Product End of Life** page to learn more about how to dispose of your Cree product at the end of its useful life.

GREATEST IMPACTS: USE PHASE

The results show that for all lighting products selected for the LCAs the greatest environmental impacts occur through electricity consumption during the use phase of the product's life cycle.

The industry-leading CPY250® Canopy/Soffit luminaire's use phase impacts are included in this report as an example. More detailed results for CPY250® and all other lighting products included in the LCA can be found on our **Product Life Cycle** page.

Assuming a 20,000 hour 400W Metal Halide lamp is re-lamped at 40% of its rated life (8,000 hours), 12 Metal Halide lamps would need to be replaced over the same lifetime as CPY250:

CPY250® Canopy/Soffit luminaire

Over its lifetime the use of one 85W CPY250® luminaire can save approximately 120,000 kWh and 30 metric tons CO_2e compared to its non-LED lighting alternative (400 lamp watts/455 system watts Metal Halide).

The savings are approximately equal to:

Removing 19 passenger vehicles for one year

Annual electricity usage for 13 homes

Carbon sequestered by 2,300 trees over 10 years

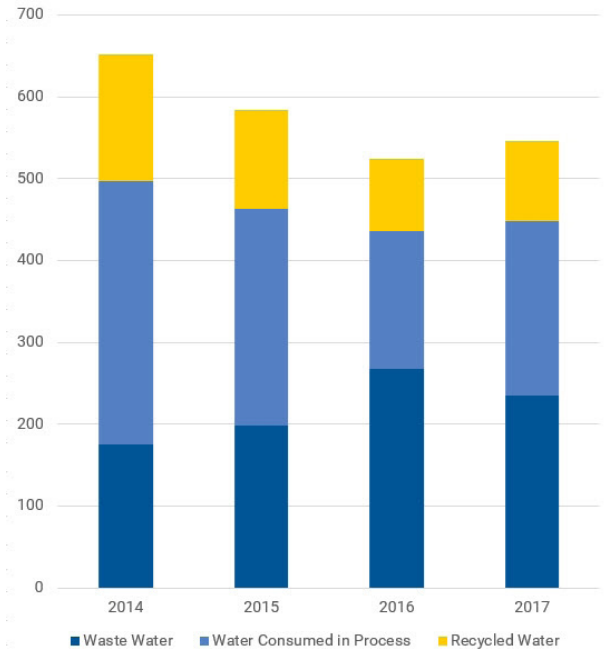
Source: ***EPA Greenhouse Gas Equivalencies Calculator***

WATER

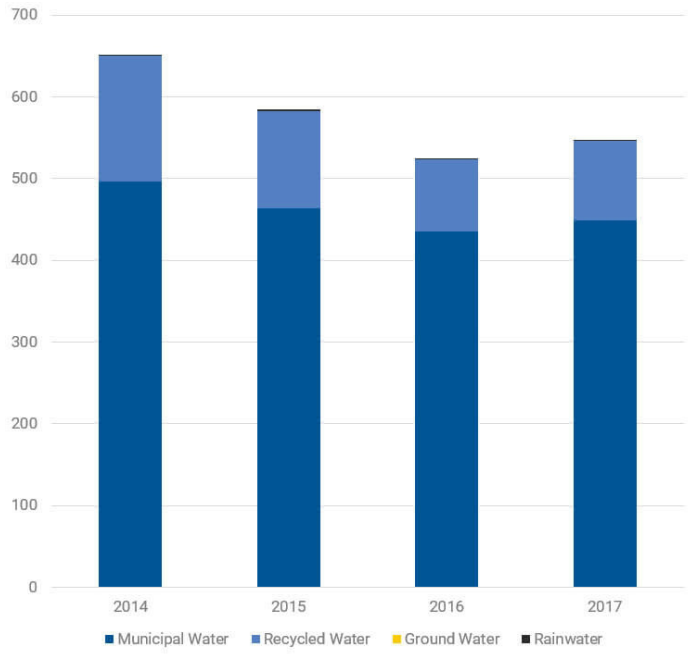
Because water quality and scarcity are growing concerns that affect all people and industries, we are committed to proper water use management practices for all Cree sites. We continuously strive to implement best management practices that conserve and recycle water and prevent and reduce water pollution:

- Cree's Durham site has been recycling process water since 2005, and we currently recycle an average of 120,000 gallons of water per day. Cree's Huizhou site installed a new water recycling system in 2017 and now recycles an average of 211,000 gallons of water per day.
- In 2007, Cree's Durham and RTP sites initiated a wastewater pre-treatment system, which prevents 22,000 pounds of fluoride each year from entering a local water supply. Cree's Racine site also has a wastewater pre-treatment system which prevents various metals from entering a local water supply.
- In 2016, Cree's Durham site implemented a new system for its cooling towers to reduce water usage, which will lead to an annual estimated savings of 4 million gallons of water.
- At all sites, Cree has implemented best management practices for control of stormwater to minimize the effects of stormwater run-off.
- Cree's Durham site is reducing the risks associated with chemical spills by using a stormwater conveyance system which allows for containment in the event of an incident.
- Cree‘s Durham site collects rainwater to supplement water used for irrigation.

Cree's Global Manufacturing Water Discharges in Millions of Gallons



Cree's Global Manufacturing Water Consumption in Thousands of Gallons



WASTE MANAGEMENT

Our Products

Cree LED lighting products are designed to last. By switching to long-lasting Cree LED lighting from incandescent or CFL, fewer lights need to be purchased, replaced and tossed away, thus less material will go into the waste stream, and eventually landfills.

Since Cree's innovation team is dedicated to continuously advance our technology, Cree LED lighting is efficient. That means less material is needed to produce the same product and this reduces total system cost and the amount of material that needs to be recycled or landfilled.

CFLs contain mercury, which can become hazardous to the environment if not disposed of properly. Switching to mercury-free LEDs and reducing the number of light bulbs that need to be purchased over the years, not only means reducing waste, but conserves resources and reduces emissions of mercury, a hazardous pollutant.

Our Manufacturing

The responsibility for waste generation spans from cradle to grave, and Cree is dedicated to minimizing waste and disposing of waste safely and responsibly:

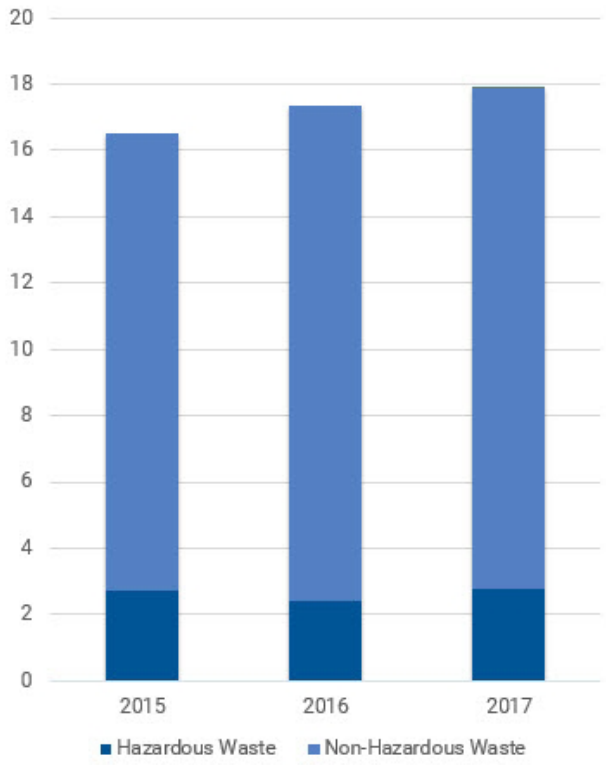
- From 2014 to 2015, Cree reduced its chemical waste generation from manufacturing by 277,000 pounds.
- Cree has actively worked to reduce the consumption of chemicals in its manufacturing processes and has been successful in reducing the use of one of its major raw materials by 70% in 2016.

In addition to reducing waste generation, Cree is dedicated to reusing or recycling materials whenever technically possible and economically reasonable. Cree values industrial ecology practices, and seeks opportunities for waste to be recycled or become a feedstock for use in other manufacturing processes. This not only lowers costs, but helps us and other manufactures to decrease virgin raw material consumption and reduce environmental impacts.

We have implemented the following practices as part of our commitment to reuse and recycle materials:

- Cree began recycling one solvent stream with a reclaimer in 2011, which saves an average of 44,000 gallons of solvent per year.
- In 2015, Cree began recycling other organic chemicals that are recovered into a commercial grade chemical to be used by other manufactures, leading to an average savings of 27,000 gallons of this organic chemical waste per year.
- Cree recycles other materials in manufacturing and office sites, including metal, plastic, paper, cardboard, wood, cans and bottles.
- In August 2016, Cree’s headquarters began composting waste at the cafeteria. The composting program is expected to divert approximately 45,000 pounds of waste from the landfill per year.
- In 2016, Cree made its first waste to landfill reduction goals. Cree’s headquarters has a goal to reduce decrease its waste to landfill rate to 25% over the next couple of years. Cree’s Racine site succeeded in meeting its waste diversion goals, achieving 82% of waste diverted from the landfill in 2016 and 86% of waste diverted in 2017.

Cree's Global Manufacturing Waste Generation in Millions of Pounds



Cree's Global Manufacturing Waste Disposal Methods 2017

Hazardous Waste

Wastewater Treated	47.1%
Recovery, including Energy Recovery	39.1%
Recycling	6.6%
Landfill	4.6%
Incineration	2.5%

Non-Hazardous Waste

Recycling	47.8%
Wastewater Treated	27.3%
Landfill	18.0%
Recovery, including Energy Recovery	3.5%
Reuse	3.0%
Composting	0.3%
Incineration	0.04%

Organizational Profile

GRI Standard	GRI Standard Description	Location	Comments
102-1	Name of the organization	Cree Corporate Profile	
102-2	Activities, brands, products, and services	Cree Corporate Profile	
102-3	Location of headquarters	Cree Corporate Profile	
102-4	Location of operations	Cree Corporate Profile	The majority of our products are manufactured at our production facilities located in the US and China. We also use contract manufacturers for certain products and aspects of product fabrication, assembly and packaging. We operate research and development facilities in the US, China (including Hong Kong), India and Italy.
102-5	Ownership and legal form	GRI Content Index	Publicly traded company
102-6	Markets served	Cree Corporate Profile 2017 Annual Report*	
102-7	Scale of the organization	Cree Corporate Profile 2017 Annual Report*	
102-8	Information on employees and other workers	Cree Employees	Cree employs over 6,000 regular full and part-time employees. We also employ individuals on a temporary full-time basis and use the services of contractors as necessary. For competitive and other valid business reasons, we do not report information at the requested level.
102-9	Supply chain	Supply Chain Supplier Code of Conduct* Conflict Minerals	

* can be found on **cree.com**

Organizational Profile (continued)

GRI Standard	GRI Standard Description	Location	Comments
102-10	Significant changes to the organization and its supply chain	GRI Content Index	In September 2017, Cree announced the appointment of Gregg Lowe as president and chief executive officer and to the Board of Directors. Cree's size, structure, ownership, and supply chain did not experience significant changes during 2017.
102-11	Precautionary Principle or approach	2017 Annual Report* Energy and Greenhouse Gas Emissions	Risk management at Cree is a process undertaken by all functions within the business, including a review of risks related to financial and market performance, operational performance, emergency preparedness and response, environmental health and safety compliance, among other areas. Cree's material risks are listed in our periodic reports filed with the Securities and Exchange Commission and in our Annual Reports. Cree's risks associated with climate change can be found on our Energy and Greenhous Gas Emissions page.
102-12	External initiatives	EHS Policy ISO 14001 Product Quality	Cree's most recent EHS Policy was adopted in December 2015 and applies to all global Cree operations. Cree's Durham, Research Triangle Park (RTP), Racine, and Huizhou sites became certified to ISO 14001 in May 2016. Our Durham, Research Triangle Park (RTP), Racine, Huizhou, and Florence sites are certified for quality standards (ISO 9001 and ISO/TS 16949).

* can be found on **cree.com**

Organizational Profile (continued)

GRI Standard	GRI Standard Description	Location	Comments
102-12	External initiatives	Energy and Greenhouse Gas Emissions	Cree joined EP100 in 2017. EP100 is a collaborative initiative of influential businesses that pledge to double their energy productivity. Cree also discloses its global manufacturing GHG emissions and climate change risks and opportunities to CDP.
		Community Engagement	Cree supports local organizations including Habitat for Humanity.
102-13	Membership of associations	GRI Content Index	Cree holds a Director position on the Alliance to Save Energy board. Cree is also a member of Southeast Energy Efficiency Alliance and Virginia Energy Efficiency Council.

Strategy

GRI Standard	GRI Standard Description	Location	Comments
102-14	Statement from senior decision-maker	CEO Message	

Ethics and Integrity

GRI Standard	GRI Standard Description	Location	Comments
102-16	Values, principles, standards, and norms of behavior	Code of Conduct* Code of Ethics for Executive Officers and Other Senior Financial Personnel*	Cree's Code of Conduct reflects our commitment to integrity and describes standards of conduct for our employees and directors. Cree's executive officers and other senior financial personnel are also subject to additional policies stated in the Code of Ethics for Executive Officers and Other Senior Financial Personnel.
102-17	Mechanisms for advice and concerns about ethics	Code of Conduct*	Cree's Code of Conduct contains our guidelines for ethical business practices, including how employees can report breaches of Cree policies.

Governance

GRI Standard	GRI Standard Description	Location	Comments
102-18	Governance structure	Board of Directors* Committee Composition*	

* can be found on **cree.com**

Stakeholder Engagement

GRI Standard	GRI Standard Description	Location	Comments
102-40	List of stakeholder groups	Materiality Assessment	
102-41	Collective bargaining agreements	GRI Content Index	The vast majority (more than 99.9%) of Cree employees are not covered by collective bargaining agreements.
102-42	Identifying and selecting stakeholders	Materiality Assessment	
102-43	Approach to stakeholder engagement	Materiality Assessment	
102-44	Key topics and concerns raised	Materiality Assessment	

Reporting Practice

GRI Standard	GRI Standard Description	Location	Comments
102-45	Entities included in the consolidated financial statements	2017 Annual Report*	
102-46	Defining report content and topic Boundaries	Sustainability Reporting Materiality Assessment	
102-47	List of material topics	Materiality Assessment	

* can be found on **cree.com**

Reporting Practice (continued)

GRI Standard	GRI Standard Description	Location	Comments
102-48	Restatements of information	GRI Content Index	N/A. This is our first report
102-49	Changes in reporting	GRI Content Index	N/A. This is our first report
102-50	Reporting period	GRI Content Index	Calendar Year 2017. The majority of the data included in this report is on a calendar year basis (January to December). Financial data is reported on a fiscal year basis (June to July).
102-51	Date of most recent report	GRI Content Index	8/31/18
102-52	Reporting cycle	GRI Content Index	The reporting cycle is annual. However, content may be updated throughout the reporting cycle. Refer to Cree's Sustainability website pages for the most recent information.
102-53	Contact point for questions regarding the report	Cree_Sustainability@cree.com	
102-54	Claims of reporting in accordance with the GRI Standards	Sustainability Reporting	
102-55	GRI content index	GRI Content Index	
102-56	External assurance	GRI Content Index	Cree has completed a limited assurance independent third-party verification of our 2017 Scope 1, 2, and 3 GHG emissions, which follows the ISO 14064-3 GHG verification protocol. All other content of this report has not been externally assured.

Financial Performance

Material Topic	GRI Standard	GRI Standard Description	Location	Comments
Economic Performance	103-1,2,3	Management approach	2017 Annual Report*	
Economic Performance	201-1	Direct economic value generated and distributed	2017 Annual Report*	
Economic Performance	201-2	Financial implications and other risks and opportunities due to climate change	Energy and Greenhouse Gas Emissions	

Energy Efficiency of Operations

Material Topic	GRI Standard	GRI Standard Description	Location	Comments
Energy	103-1,2,3	Management approach	Energy and Greenhouse Gas Emissions	No Cree locations are subject to any country, r egional, or industry regulations and policies for energy. When applicable, state air permit requirements limit the amount of fuel usage.
Energy	302-1	Energy consumption within the organization	Energy and Greenhouse Gas Emissions	All energy usage reported is purchased. Cree does not purchase energy directly from renewable fuel sources. Cree does not sell energy. Energy consumption is determined using monthly supplier invoices.
Energy	302-2	Energy consumption within the organization	Energy and Greenhouse Gas Emissions	This metric is reported in terms of Scope 3 GHG emis-sions.

* can be found on **cree.com**

Energy Efficiency of Operations (continued)

Material Topic	GRI Standard	GRI Standard Description	Location	Comments
Energy	302-3	Energy intensity	Energy and Greenhouse Gas Emissions	Through EP100, Cree has a goal to double energy productivity (lumens produced from Cree lighting products per kWh of electricity consumed in Cree's global manufacturing operations) by 2020. Cree met this goal in 2017 and is currently working to develop a new target.
Energy	302-4	Reduction of energy consumption	GRI Content Index	In 2017, third-party energy audit specialists aided with an energy audit at our main manufacturing site in Durham, NC. They helped us identify potential energy saving projects. Some of the projects are planned to be implemented in the next reporting year and are estimated to save up to 4,600 MWh of electricity.
Energy	302-5	Reductions in energy requirements of products and services	Energy and Greenhouse Gas Emissions	The values reported represent what our products sold in 2017 will save over their estimated lifetimes. Energy usage and GHG emissions from our products were compared to their less efficient alternative products to derive energy use savings. For lighting applications, our lighting and LED products were compared to non-LED lighting fixtures (e.g., metal halide lamps, fluorescent bulbs, etc.). For applications where LEDs are currently the standard choice we assumed no energy savings. Our power products, made from silicon carbide, were compared to similar products made from silicon. Our radio frequency products, made from silicon carbide, were compared to similar products made from either silicon or gallium-arsenide.

Water and Wastewater Management

Material Topic	GRI Standard	GRI Standard Description	Location	Comments
Water	103-1,2,3	Management approach	Water	
Water	303-1	Water withdrawal by source	Water	Water usage data is either collected from meters or water utility bills.
Water	303-2	Water sources significantly affected by withdrawal of water	GRI Content Index	Cree does not impact the sources that supply our water for manufacturing.
Water	303-3	Water recycled and reused	Water	The amount of recycled water is metered. 18% of Cree's global manufacturing water was recycled in 2017.
Effluents and Waste	306-1	Water discharge by quality and destination	Water	Water discharge data is either collected from meters or water utility bills. The recycled water is reused by Cree. Wastewater is sent to local wastewater treatment facilities. Water consumed in process refers to water that is consumed or evaporated during manufacturing. Water discharged meets local regulatory requirements for water quality.
Effluents and Waste	303-5	Water bodies affected by water discharges and/or runoff	GRI Content Index	Discharges and runoff from our global manufacturing operations do not negatively affect water bodies. The industrial wastewater discharges are all released to local wastewater treatment facilities and stormwater is monitored to ensure it meets discharge criteria, which prevents degradation of local water supplies.

Air Emissions/Pollution

Material Topic	GRI Standard	GRI Standard Description	Location	Comments
Emissions	103-1,2,3	Management approach	Energy and Greenhouse Gas Emissions	Cree is not currently subject to any country, regional, or industry regulations and policies for GHG emissions. When applicable, our US manufacturing sites are subject to local air pollution regulations for criteria pollutants (NOx, SOx, etc.) and toxic air pollutants. Our sites comply with regulations through each site's air permit requirements.
Emissions	305-1	Direct (Scope 1) GHG emissions	Energy and Greenhouse Gas Emissions	All of Cree's Scope 1 emissions were calculated using methodologies and emission factors from the US EPA Mandatory Greenhouse Gas Reporting Rule: • Global warming potentials: 40 CFR 98, Table A-1 (IPCC AR4 - 100 year) • Fuel usage emissions: 40 CFR 98 Subpart C • Electronics manufacturing emissions: 40 CFR 98 Subpart I The gases included in the calculations are CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3, and heat transfer fluids (HTFs). Cree does not emit biogenic CO_2.
Emissions	305-2	Energy indirect (Scope 2) GHG emissions	Energy and Greenhouse Gas Emissions	Cree used the 2016 EPA eGRID subregional emission factors to calculate Scope 2 emissions from the use of electricity at our US manufacturing facilities. For our manufacturing facility outside of the US, World Resources Institute/World Business Council for Sustainable Development/ Greenhouse Gas Protocol emission factors were used. Cree used global warming potentials from the US EPA Mandatory Greenhouse Gas Reporting Rule, 40 CFR 98, Table A-1 (IPCC AR4 - 100 year). Cree does not emit biogenic CO_2.

Air Emissions/Pollution (continued)

Material Topic	GRI Standard	GRI Standard Description	Location	Comments
Emissions	305-3	Other indirect (Scope 3) GHG emissions	Energy and Greenhouse Gas Emissions	Scope 3 emissions were calculated for transmission and distribution (T&D) losses, downstream transportation and distribution, business travel (all except Asia employees), use of sold products, and end of life disposal of products. Sources of emission factors include EPA eGRID, EPA GHG Emission Factors Hub, Ecoinvent, and EPA WARM. Cree used global warming potentials from the US EPA Mandatory Greenhouse Gas Reporting Rule, 40 CFR 98, Table A-1 (IPCC AR4 - 100 year).
Emissions	305-4	GHG emissions intensity	GRI Content Index	Cree's intensity ratio is 122.07 metric tons CO_2e/production metric. Scope 1 and 2 emissions are included in this metric. Refer to 305-1 and 305-2 above for more information about Cree's Scope 1 and 2 emissions calculations.
Emissions	305-5	Reduction of GHG emissions	GRI Content Index	In 2017 we optimized the operation of certain equipment used for various processes with the goal of reducing the duration and frequency of the processes, while still producing the intended output. A lower run time and fewer process runs means less fluorinated GHGs are used. Cree estimates that we saved 4,417 metric tons CO_2e from these initiatives in 2017. Cree's Scope 2 GHG emissions decreased in 2017 even though electricity usage increased. Cree used updated EPA eGRID 2016 emission factors based on plant-specific data for all US electricity generating plants. The subregion mix of fuels used to create the electricity results in less CO2e compared to previous EPA eGRID factors.

Waste Management

Material Topic	GRI Standard	GRI Standard Description	Location	Comments
Effluents and Waste	103-1,2,3	Management approach	Waste Management	
Effluents and Waste	306-2	Waste by type and disposal method	Waste Management	Waste disposal method information is provided by our waste disposal vendors. Non-hazardous wastewater is excluded from our non-hazardous waste totals.
Effluents and Waste	306-3	Significant spills	GRI Content Index	Cree did not have any significant spills in 2017.
Effluents and Waste	306-4	Transport of hazardous waste	Waste Management	Cree does not import or export hazardous waste and does not ship hazardous waste internationally. All of the hazardous waste reported on our Waste Management page is transported for treatment. We do not include waste treated for elementary neutralization on site in our hazardous waste totals.

Employee Attraction, Development and Retention

Material Topic	GRI Standard	GRI Standard Description	Location	Comments
Employment	103-1,2,3	Management approach	Cree Employees	
Employment	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Cree Employees	
Training and Education	103-1,2,3	Management approach	Cree Employees	
Training and Education	404-3	Percentage of employees receiving regular performance and career development reviews	Cree Employees	The percentage of total employees receiving regular performance and career development reviews is reported. For competitive and other valid business reasons, we do not report information at the requested level.

Occupational Health and Safety

Material Topic	GRI Standard	GRI Standard Description	Location	Comments
Occupational Health and Safety	103-1,2,3	Management approach	Health & Safety — Our Employees and Contractors	Cree's Health & Safety information has been reported using guidance from the Center for Safety & Health Sustainability.
Occupational Health and Safety	403-1	Workers representation in formal joint management–worker health and safety committees	Health & Safety — Our Employees and Contractors	There are several active EHS Teams in place for various business units which serve to foster employee participation. The exact percentage of total workforce involved in the EHS Teams is currently unknown.
Occupational Health and Safety	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Health & Safety — Our Employees and Contractors	
Occupational Health and Safety	403-3	Workers with high incidence or high risk of diseases related to their occupation	Health & Safety — Our Employees and Contractors	Cree is not aware of any occupational exposure issues in our manufacturing processes that would increase an individual's risk of any specific disease.
Occupational Health and Safety	403-4	Health and safety topics covered in formal agreements with trade unions	GRI Content Index	The vast majority (more than 99.9%) of Cree employees are not covered by formal agreements with trade unions.

Labor and Employment Practices

Material Topic	GRI Standard	GRI Standard Description	Location	Comments
Labor/ Management Relations	103-1,2,3	Management approach	Code of Conduct* Supplier Code of Conduct*	
Labor/ Management Relations	402-1	Minimum notice periods regarding operational changes	GRI Content Index	Depending on the magnitude of the change, the notification time afforded to employees is measured more in month timeframes instead of week timeframes.
Child Labor	103-1,2,3	Management approach	Code of Conduct* Supplier Code of Conduct*	
Child Labor	408-1	Operations and suppliers at significant risk for incidents of child labor	GRI Content Index	Cree maintains hiring age restrictions and health and safety standards for both employees and employees of suppliers. Cree's Supplier Code of Conduct specifically prohibits the use of child labor in violation of local laws and regulations in the country or countries in which Cree does business. Based on available information, Cree does not have any operations or suppliers considered to have significant risk for incidents of child labor or young workers exposed to hazardous work.

* can be found on **cree.com**

Labor and Employment Practices

Material Topic	GRI Standard	GRI Standard Description	Location	Comments
Forced or Compulsory Labor	103-1,2,3	Management approach	Code of Conduct* Supplier Code of Conduct*	
Forced or Compulsory Labor	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	GRI Content Index	Cree maintains standards prohibiting forced or compulsory labor for both employees and employees of suppliers. Cree's Supplier Code of Conduct specifically prohibits forced or compulsory labor by our suppliers. Based on available information, Cree does not have any operations or suppliers considered to have significant risk for incidents of forced or compulsory labor.
Human Rights Assessment	103-1,2,3	Management approach	Code of Conduct*	Per Cree's Code of Conduct, Cree policies and procedures apply to all subsidiaries. If Cree maintains the majority of the ownership of joint ventures, its policies and procedures will closely mirror those of Cree.

* can be found on **cree.com**

Labor and Employment Practices

Material Topic	GRI Standard	GRI Standard Description	Location	Comments
Human Rights Assessment	412-1	Operations that have been subject to human rights reviews or impact assessments	GRI Content Index	None of Cree's operations have been subject to human rights reviews or human rights impact assessments.
Human Rights Assessment	412-2	Employee training on human rights policies or procedures	GRI Content Index	Human rights policies are outlined in Cree's Code of Conduct. Annually, all Cree employees are required to re-read and sign off on Cree's Code of Conduct. Every other year, all non-US Cree employees undergo in person Code of Conduct training from Cree's Legal department members. All Cree US based employees are required to annually complete and acknowledge a number of compliance courses. The current topics covered are Harassment Training, Cyber Security, Code of Conduct Acknowledgement, and Health Insurance Portability and Accountability Act (HIPAA). Training topics are assigned to employees based on their role within the company. The total number of hours devoted to this training is between 2 to 4 hours per employee (over 12,100 hours total).
Human Rights Assessment	412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	Code of Conduct* Supplier Code of Conduct* Purchase Order Terms*	Cree's Code of Conduct, Supplier Code of Conduct, and Standard Purchase Order Terms and Conditions include human rights clauses. Cree requires that any supplier that works with us follows Cree's Supplier Code of Conduct. Cree is committed to abiding by human rights laws and expects our suppliers and vendors to do the same.

* can be found on **cree.com**

Ethical Business Practices

Material Topic	GRI Standard	GRI Standard Description	Location	Comments
Anti-corruption	103-1,2,3	Management approach	Code of Conduct*	
Anti-corruption	205-1	Operations assessed for risks related to corruption	GRI Content Index	Included in Cree's Code of Conduct, which applies to all Cree operations, are specific policies directed to ensure compliance with the Foreign Corrupt Practices Act (FCPA) and UK Bribery Act, among other anti-corruption statutes.
Anti-corruption	205-2	Communication and training about anti-corruption policies and procedures	GRI Content Index	Cree's Code of Conduct contains our guidelines for ethical business practices, including bribery and corruption. Annually, all Cree employees are required to re-read and sign off on Cree's Code of Conduct. Every other year, all Cree employees undergo in person Code of Conduct training from Cree's Legal department members. All Cree US based employees are required to annually complete and acknowledge a number of compliance courses. The current topics covered are Harassment Training, Cyber Security, Code of Conduct Acknowledgement, and Health Insurance Portability and Accountability Act (HIPAA). Training topics are assigned to employees based on their role within the company.

* can be found on **cree.com**

Ethical Business Practices (continued)

Material Topic	GRI Standard	GRI Standard Description	Location	Comments
Anti-competitive Behavior	103-1,2,3	Management approach	Code of Conduc*t	
Anti-competitive Behavior	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	GRI Content Index	In 2017, Cree did not have any legal actions regarding anti-competitive behavior or violations of anti-trust and monopoly legislation.

Supply Chain/Sourcing Issues

Material Topic	GRI Standard	GRI Standard Description	Location	Comments
Procurement Practices	103-1,2,3	Management approach	Supplier Code of Conduct* Purchase Order Terms* Conflict Minerals	
Procurement Practices	204-1	Proportion of spending on local suppliers	GRI Content Index	Where possible, Cree seeks to obtain goods and services from local suppliers in the locations where Cree conducts business. Cree does not currently track proportion of spending on local suppliers. We are currently updating our procurement policy to better reflect our commitment to responsible purchasing and supplier diversity.

* can be found on **cree.com**

Supply Chain/Sourcing Issues (continued)

Material Topic	GRI Standard	GRI Standard Description	Location	Comments
Supplier Environmental Assessment	103-1,2,3	Management approach	Supplier Code of Conduct* Purchase Order Terms*	
Supplier Environmental Assessment	308-1	New suppliers that were screened using environmental criteria	GRI Content Index	Cree expects all suppliers to make a clear commitment to environmental compliance through the Supplier Code of Conduct and the Standard Purchase Order Terms and Conditions.
Supplier Environmental Assessment	103-1,2,3	Management approach	Supplier Code of Conduct* Purchase Order Terms*	
Supplier Environmental Assessment	414-1	New suppliers that were screened using social criteria	GRI Content Index	Through the Supplier Code of Conduct and the Standard Purchase Order Terms and Conditions, Cree expects all suppliers to make a clear commitment to social compliance, including health and safety, labor and diversity, and ethical business practices.

* can be found on **cree.com**

Customer Satisfaction

Material Topic	GRI Standard	GRI Standard Description	Location	Comments
Customer Satisfaction *No GRI Topic Available*	103-1,2,3	Management approach	Customer Satisfaction	
Customer Health and Safety	103-1,2,3	Management approach	Health & Safety — Our Customers and Partners	
Customer Health and Safety	416-1	Assessment of the health and safety impacts of product and service categories	Product Ecology* Health & Safety — Our Customers and Partners	Cree maintains an active program to minimize harmful materials, including lead and cadmium, in our products. All changes that occur at Cree's manufacturing sites undergo a Management of Change process. During this process, changes are assessed based on a number of criteria including whether the changes will affect product safety.

* can be found on **cree.com**

Intellectual Property Security (Cyber & Data Security)

Material Topic	GRI Standard	GRI Standard Description	Location	Comments
Intellectual Property *No GRI Topic Available*	103-1,2,3	Management approach	2017 Annual Report* Licensing*	

Product Quality

Material Topic	GRI Standard	GRI Standard Description	Location	Comments
Product Quality *No GRI Topic Available*	103-1,2,3	Management approach	Product Quality	

Product Innovation

Material Topic	GRI Standard	GRI Standard Description	Location	Comments
Product Innovation *No GRI Topic Available*	103-1,2,3	Management approach	Product Innovation	

* can be found on **cree.com**