CREE | *Wolfspeed*

SUSTAINABILITY REPORT | **2019**

CONTENTS

LETTER TO STAKEHOLDERS

Dear Stakeholders,

For more than 30 years, since the company's beginnings in a lab at NC State University in Raleigh, N.C., Cree | Wolfspeed has been innovating and delivering technology solutions that enable our customers and society to do more with less. Now a world-renowned commercial supplier of the fastest, most efficient semiconductor components ever available, our solutions enable greater efficiency and performance, smaller systems and lower costs.

Who we are and where we're heading

We are on a mission to transform the semiconductor market with the adoption of silicon carbide. Our continued innovation and commercialization of silicon carbide and GaN enable other industry pioneers to develop products that are the next generation in energy efficiency. Wolfspeed® technologies are at the heart of today's biggest industry transformations, including the move to electric vehicles, wireless infrastructure that will unlock the potential of smart cities, and ubiquitous power storage that will enable the broader adoption of alternative energy.

Over the last year or so, more than $350 billion in investments have been announced in the electric vehicle market, and we're committed to driving this technology adoption over the coming decade. Silicon carbide is accelerating the EV revolution, enabling greater range, faster on- and off-board charging, and smaller batteries, as well as superior performance. Our team has done a remarkable job of rapidly increasing capacity to meet market demand. In 2018, we doubled our silicon carbide materials manufacturing capacity. Our recent announcement of a $1 Billion expansion will increase our silicon carbide and GaN wafer fabrication capacity by 30-fold, enabling customers to more rapidly develop the next generation of energy-efficient applications.

Employee health, safety, wellness and education

We are committed to creating and sustaining a culture where all employees are engaged and can contribute to their full potential. Our culture fosters an inclusive workplace, and our hiring efforts develop employees from the communities where we operate. This year, we committed to significant changes in our people strategy as we aligned the team around our new business strategy. Our peoples' daily experience and ability to do their best work is our top priority. They are the heart of the company, and their commitment and engagement in our business will drive our continued success.

We hire the best available talent, develop our employees and promote from within. We fuel long-term growth opportunities for our employees through an internal mobility practice that combines ongoing workforce development, leadership training, education assistance and career path planning. In 2018, we converted more than 500 temporary employee positions to full-time and increased the starting wage for entry-level employees. To support our future expansion, we plan to partner with state and local community and four-year colleges to develop training programs to prepare our workforce for the long-term, high-quality employment and growth opportunities the new facilities will present.

In 2018, we also introduced an annual internship program. Since the launch of the program, we have more than doubled the intern population, extended the program internationally and increased the diversity rate by 25%.

In parallel, we refreshed our corporate values. Hundreds of employees participated in focus groups, which culminated in the creation of values the entire team can support. With the input from those focus groups and simply because it's the right thing to do, we have been steadily improving our benefits programs to more closely align with employees' needs. From new

parental leave and adoption assistance programs, to enhanced time off and education assistance, we offer best-in-class amenities for employees.

Community engagement

We have developed and deployed a company-wide philanthropic program with a mission to help our communities ensure our neighbors have a roof over their heads, enough to eat and an opportunity to excel. We have enhanced partnerships with local food banks, STEM organizations and Habitat for Humanity in the communities where we operate, and continue to live our values through direct impacts that improve access to food, education and housing for our neighbors. The company's Women's Initiative, our first employee resource group, is dedicated to empowering our women and continuously hosts programs and events to cultivate and celebrate the rich diversity of thought, perspectives and life experiences so critical to our success.

Product sustainability and protection of the environment

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. Our mission is to lead the innovation and commercialization of silicon carbide and GaN, replacing silicon as the default technology, and subsequently, enabling designers to invent systems for electric vehicles, renewable energy, energy storage, communications infrastructure and other industrial uses. In 2018, our lighting, LED, power and radio frequency products produced will save approximately 440 million MWh and 220 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. We recently announced a "Zero-Defect Mindset" to transform our quality, culture and behaviors. This includes key partnerships with operations, business, and sales to keep quality as one of our competitive advantages. This mindset will reduce waste, improve raw material usage, as well as increase customer satisfaction and help us meet the highest standards required by our target industries.

Sustainability requires continued focus, evaluation, assessment and action to unlock the potential of today's science and technology to achieve greater worldwide impact. We are committed to do our part to enable the solutions to global efficiency challenges. At Cree | Wolfspeed there is no finish line. There is only the future, and we will continue to pursue a more energy-efficient, responsible future for all.

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

Sincerely,

Gregg A. Lowe
President and CEO

SUSTAINABILITY | **2019**

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 38% of Total Revenue	LED 40% of Total Revenue	Wolfspeed 22% 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

Locations

NORTH AMERICA
RTP / Durham, NC	☆ ◎ ✎ ⓘ
Fayetteville, AR	◎ ✎ ⓘ
Chandler, AZ	✎
Morgan Hill, CA	◎ ✎ ⓘ
Racine, WI	▦ ◎ ✎ ⓘ
Toronto, Canada	▦ ⓘ

EUROPE
London, England	▦ ⓘ
Munich, Germany	▦ ⓘ
Florence, Italy	▦ ◎ ⓘ
Kista, Sweden	▦ ◎ ✎ ⓘ

ASIA
Hong Kong, China	▦ ✎ ⓘ
Huizhou, China	◎ ✎
Shanghai, China	ⓘ ✎
Shenzhen, China	▦ ⓘ
Gurgaon, India	✎
Tokyo, Japan	ⓘ
Suwon, Korea	▦ ⓘ
New Taipei City, Taiwan	ⓘ

☆ HEADQUARTERS   ▦ REGIONAL OFFICES   ◎ MANUFACTURING   ✎ R&D   ⓘ SALES

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
All-SiC Modules for High Voltage Applications 2018, DEVICE DESIGN AND PACKAGING AWARD	

CORPORATE GOVERNANCE

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

CREE VALUES

Our values are a simple, yet powerful, reflection of who we are and how we act; they are in all that we say, do and achieve for Cree. They reflect both our great history of disruptive innovation and set the tone for the exciting future ahead. We do amazing things in a human way.

Cree employees from around the world across every business function shared their thoughts about our values through focus groups, emails and conversations. As a result, we've established principles that represent what we want the experience to be for our employees as well as the customers, partners and communities we serve.

INTEGRITY and RESPECT

We always act with integrity and respect for our people, workplace and community. Relationships matter. We value everyone's contribution and an environment of spirited and open debate.

We do the right thing, and we say, "Thank You."

OWNERSHIP and ACCOUNTABILITY

We are accountable to each other and committed to the highest standards of work and behavior.

We succeed or fail together.

INGENUITY and PASSION

Our passion for making the world better through innovation means we take risks and question conventional thinking, developing new technologies and ways of doing business—leading the way, every single day.

We do what others say can't be done.

2018 SUSTAINABILITY MILESTONES

JANUARY 2018
- One year of no loss time at Lighting production facility in Racine, WI.
- Achieved EP100 goal for LED and LED Lighting products.

MARCH 2018
- Added electric vehicle charging stations at headquarters.

MAY 2018
- All of Cree's major manufacturing sites become certified to the ISO 14001:2015 standard.
- Cree's first intern program welcomed 50 students from colleges across the nation.

JUNE 2018
- Cree's North Carolina manufacturing sites become members of the NC Environmental Stewardship Initiative.

OCTOBER 2018
- Added electric vehicle charging stations at our Research Triangle Park (NC) site.
- Began conducting Cree's first formal employee engagement survey.

NOVEMBER 2018
- Launched Cree's first Women's Initiative.

DECEMBER 2018
- Cree North Carolina facilities achieve goal to reduce waste to landfill by 10%. Lighting production facility in Racine, WI achieves 90% waste diverted from landfill.
- Our EV chargers used by employees during 2018 avoided 7,480 kg of greenhouse gas emissions, equivalent to planting 192 trees and letting them grow for 10 years.

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 GRI Standards.

Materiality Assessment Report

CREE Materiality Assessment

External - Importance to Stakeholders

Internal - Importance to Cree's Success
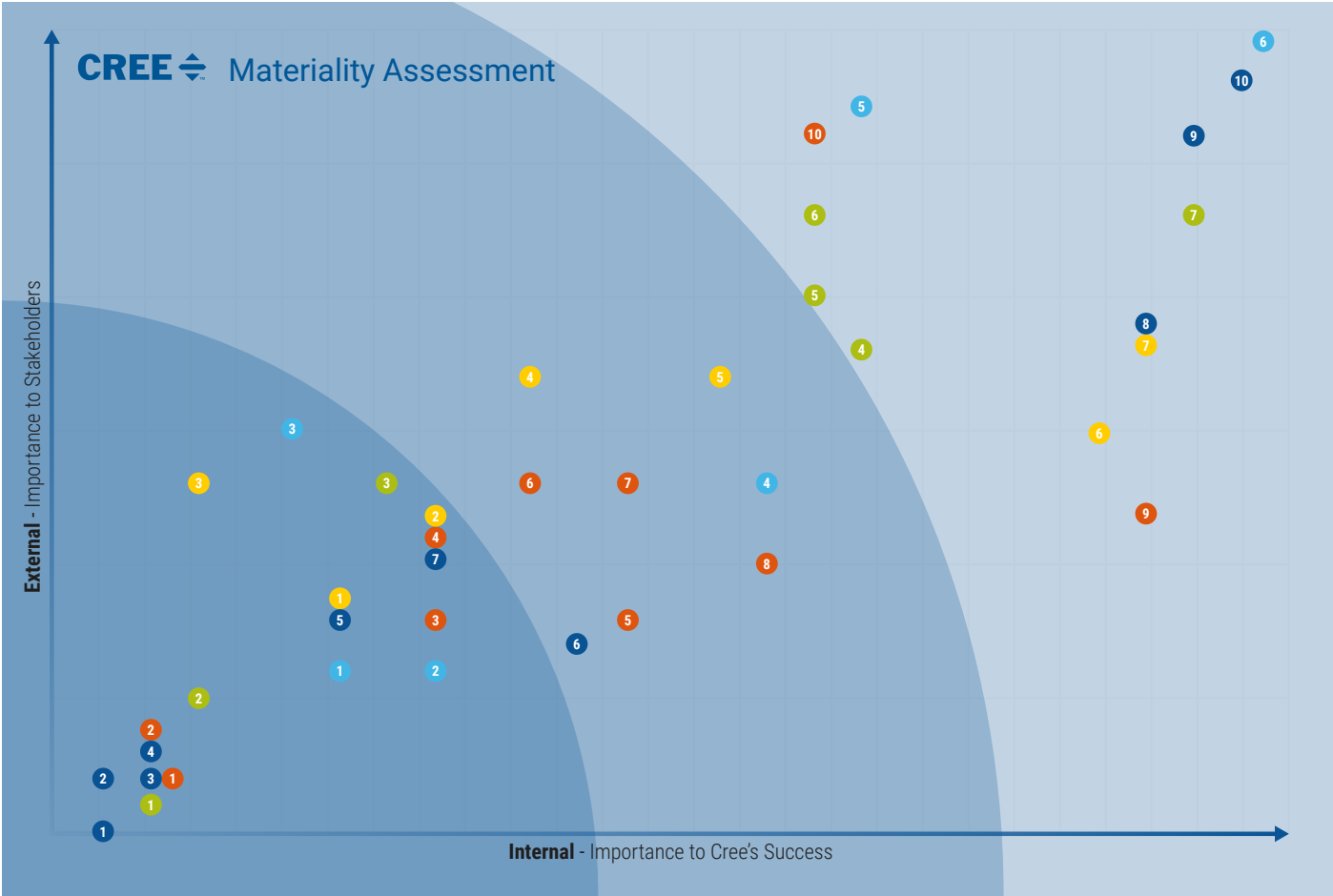
Environmental

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 | **2019**

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 FY2018 can be found in our **2018 Annual Report**.

Cree at a Glance

$1.49B FY18 Revenue

REVENUE	QUICK FACTS
Lighting $569M	Strong balance sheet
LEDs $596M	$387M in cash and short-term investments
Wolfspeed $329M	Global revenue
	46% North America, 14% Europe, 34% Asia, 6% Other

Patents	Locations	Careers	Innovation
5,500+ Issued Patents	**18 Global** locations	**6,800+** Employees	**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 (North Carolina)
- ISO 9001: 2015
- IATF 16949: 2016

Research Triangle Park Site (North Carolina)
- ISO 9001: 2015
- IATF 16949: 2016

Racine Site (Wisconsin)
- ISO 9001: 2015

Morgan Hill Site (California)
- ISO 9001: 2015

Mesa Site (Arizona)
- ISO 9001: 2015

Huizhou Site (China)
- ISO 9001: 2015
- IATF 16949: 2016

Florence Site (Italy)
- 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

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.

CONFLICT MINERALS
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 Responsible Minerals Initiative (RMI) program.

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. To further enhance transparency, Cree requires its direct suppliers to source minerals from smelters and refiners validated as conflict-free or in pursuit of conflict-free validation by an independent third-party audit program, such as the RMI or a mutually agreed equivalent.

CALIFORNIA PROPOSITION 65

The California Safe Drinking Water and Toxic Enforcement Act of 1986, commonly referred to as "Proposition 65" or "Prop 65", is a right-to-know law that is unique to the State of California. The goal of Prop 65 is to ensure that individuals in the State of California are informed about possible exposure to chemicals "known to the State of California to cause cancer and/or reproductive toxicity." Under the law, the California Office of Environmental Health Hazard Assessment ("OEHHA") is tasked with maintaining a list of chemicals and updating the list at least annually. To date, there are over 900 chemicals listed by OEHHA, which list can be found at https://oehha.ca.gov/proposition-65/proposition-65-list.

Historically, only manufacturers of end products had an obligation to notify Californians about significant amounts of chemicals in the products they purchase for their homes or workplaces. In late 2016, OEHHA adopted new regulations that went into effect on August 30, 2018. Proposition 65 now applies to suppliers of components used in end products to ensure that information about chemicals used in the components is communicated to Californians who might come into contact with the chemicals during the development, manufacture, or use of the end products.

To comply with Prop 65, businesses (including manufacturers, distributors, and retail sellers) must provide a "clear and

reasonable" warning for listed chemicals unless exposure is low enough to pose "no significant risk" of cancer or is significantly below levels observed to cause birth defects or other reproductive harm. A Prop 65 warning does not necessarily mean a product is in violation of any product-safety standards or requirements.

When one of these chemicals is present, Cree is required to disclose certain information to its customers and distributors, who in turn are required to disclose appropriate information to their customers. We have created this website to help Cree's customers and distributors identify impacted Cree products and the applicable downstream disclosures. Cree products in the component product families listed in the table below contain one or more of the chemicals identified in Prop 65. Please refer to the product data sheet for each Cree product in the impacted Cree product families for more details on the disclosures applicable to that product.

Listed Chemical	LED Products[3]			Power Products	RF Products
Diisononyl Phthalate (DINP)[1]	Packaging Only - All LED Chip Products			Packaging Only - All Power Chip Products	Packaging Only - All RF Chip Products
Lead (Pb)[2]	**LED Modules**			All Schottky and MOSFET Components	PTGA PTMA
	LMB	PCB	LMR		
	LMH	SLX			
	LED Drivers				
	LMD				

[1] Cree's semiconductor die products (excluding packaging) do not contain any chemicals that must be disclosed under California Proposition 65. However, the Cree semiconductor die products are packaged using a PVC die transfer film that contains DINP. An occupational warning must be provided to any customer that buys the Cree die for use in product development or manufacturing in the State of California. The customer in turn must prominently display a similar occupational warning at its California locations where employees and contractors will be handling the PVC die transfer film. Because the Cree die products themselves do not contain any chemicals that must be disclosed under California Proposition 65, incorporation of the die into another product will not create an obligation to include a Proposition 65 product warning on the higher-level product. However, the customer must ensure that the PVC die transfer film is properly handled and disposed of as a hazardous material after die removal.

[2] These Cree products contain Lead (Pb). The Lead is fully encapsulated in components used in the Cree products. So, unless the Lead is accidentally or intentionally exposed, there is no chance that an employee, customer, or other individual will come into contact with the Lead in Cree's products. Nonetheless, Proposition 65 requires Cree to provide its California customers and distributors with

both an occupational warning and a product warning for individuals who potentially could be exposed to the Lead in the Cree products either accidentally or intentionally. An occupational warning must be provided to any customer that buys the impacted Cree products for use in product development or manufacturing in the State of California. The customer in turn must prominently display a similar occupational warning at its California locations where employees and contractors will be handling the Cree products that contain Lead. In addition, because the Cree products contain Lead, incorporation into another product will create an obligation to include a Proposition 65 product warning on the higher-level product. Please note, the amount of Lead used in each Cree product remains below the ≤ 0.1% acceptance level in EU RoHS. In addition, these products continue to comply in accordance with EU RoHS exemptions 7A and 7C-1 for the bill of materials.

[3] Please note this website does not apply to Cree's consumer or commercial lighting products.

FOR MORE INFORMATION:

Prop 65 Link: https://oehha.ca.gov/proposition-65

Prop 65 Substance list: https://oehha.ca.gov/proposition-65/proposition-65-list

SOCIAL RESPONSIBILITY | **2019**

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

69 countries represented by employees

$137,218 given to employee tuition in 2018

Cree's Global Employees by Region

Legend: North America (gray), Asia (blue), Europe (red)
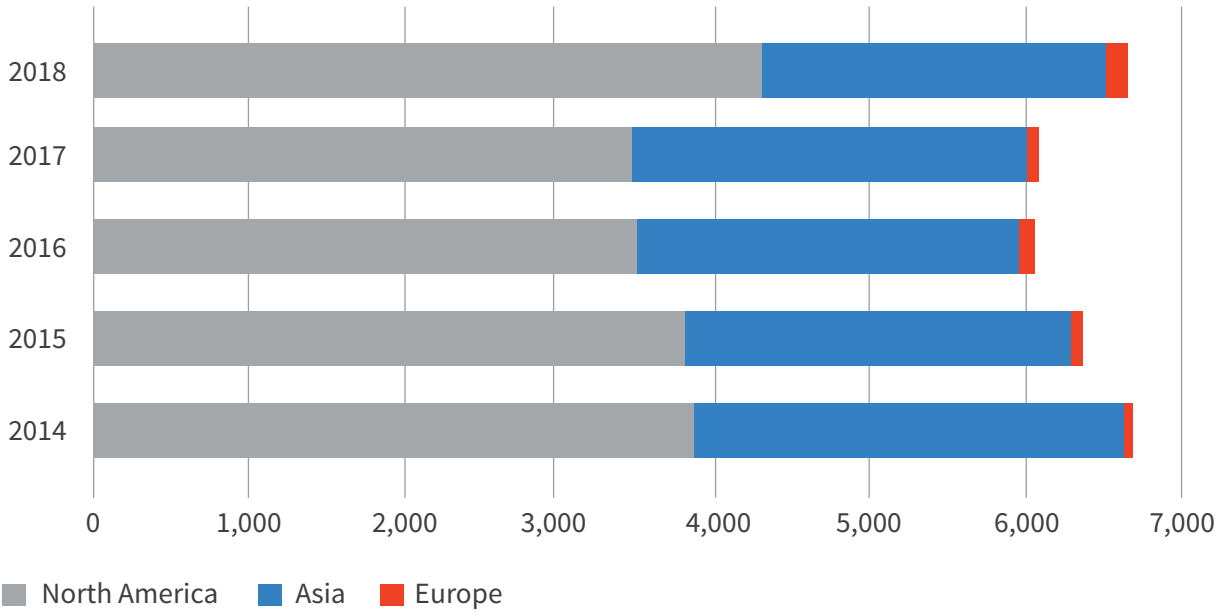
EMPLOYEE RETENTION

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 also has a rapidly-developing intern program. Learn more about what it's like to work at Cree and get to know some of our great employees on our **Careers page**!

Cree has initiatives in place to reduce our global employee turnover rates, which are monitored and reported on quarterly. Cree's strategy for employee retention includes converting contract workers to full-time Cree employees in 2018 and promoting internal mobility. Cree's goal is to ensure employees can find development and career growth without having to leave Cree. Some of Cree's employee retention initiatives include:

- Developing a culture of promoting employees from within. To provide upward mobility within Cree, our goal is for more experienced positions to be filled internally.
- Developing a Career Pathing program. The program communicates the minimum qualification required for each position level and how employees can grow in their careers.
- Posting new jobs to employees first. All employees can view and apply for jobs for a period of two weeks before Cree posts the job externally.
- Offering workshops and guidance to employees on how to enhance their resume for seeking other jobs within Cree. During these workshops, employees receive one-on-one attention from a recruiter.

Targeting the recruitment of college graduates for entry-level positions. Cree launched its first formal internship program in 2018. Learn more about our **Internship program**!

WOMEN'S INITIATIVE

In 2018, we launched the Cree Women's Initiative. The Women's Initiative was created in recognition of the value women bring to Cree and companies globally. Our goals are to attract and retain top talent, including women, and to cultivate and celebrate the rich diversity of thought, perspectives and life experiences so critical to Cree's success. Through programs and events sponsored by the Women's Initiative, we get to know each other better across organizations and functions, and promote balance and effectiveness in our professional and personal lives, as well as in service to our communities.

CREE WOMEN'S INITIATIVE
PROFESSIONAL | PERSONAL | COMMUNITY

EMPLOYEE ENGAGEMENT

In 2017, we held our first employee engagement initiative consisting of one-on-one email communication with Cree's CEO. We completed our first formal enterprise employee engagement survey in 2018, receiving more than 2,500 responses from employees. The purpose of the survey was to measure the employee experience in several key areas and to identify improvement opportunities.

THE SURVEY QUESTIONS ADDRESSED:

- Our culture change progress in light of our company values
- Effectiveness of tools and training
- Communication and collaboration
- Recognition for a job well done

- Employee awareness of the direction and strategy of the organization
- Opportunities for career growth

Results of the survey have indicated positive steps and the areas in which Cree can improve. Employee feedback has helped shaped Cree's evolving culture, resulted in updated time off and attendance policies, the creation of new training opportunities, and many other initiatives.

WE RECEIVED MORE THAN

2500 RESPONSES

18 GLOBAL LOCATIONS **RESPONDED**

AREAS FOR **Improvement**

77% RECEIVE RECOGNITION FOR A JOB WELL DONE

71% AGREE IN HAVING OPPORTUNITIES TO GROW THEIR CAREER

MOST **Positive Results**

92% ARE COMFORTABLE **asking for help**

88% AGREE THAT **employees display behaviors reflective of Cree's values**
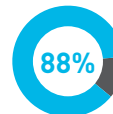
88% HAVE THE TRAINING **necessary to complete their job**
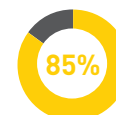
85% ARE ENCOURAGED **to voice opinions**

84% UNDERSTAND THE **company's strategy and direction**

83% HAVE THE TOOLS **necessary to complete their job**
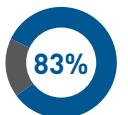
81% COMMUNICATE AND COLLABORATE **well with co-workers**

BENEFITS

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, insurance
- Life and accidental death & dismemberment insurance
- Flexible savings plans
- Short & long-term disability
- Employee assistance program
- Wellness program
- On-site cafeteria (Durham, NC and Huizhou, China)
- Fitness centers (Durham, NC and Racine, WI)
- Fitness center reimbursement program

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)

TRAINING AND DEVELOPMENT

Cree is 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.

Our educational assistance program is designed to support the skill development and knowledge that will have a direct positive impact on Cree. The program encourages self-development for a current assignment or expanded job responsibilities in the future. Employees are encouraged to seek out higher-education degree programs that will aid in their current role and better qualify them for new assignments. To take advantage of this benefit, employees must be US-based employees and have been employed with Cree for at least six months. Educational expenses that are reimbursable include professional exam costs, registration fees, tuition, required texts/books/materials, lab fees, entrance/placement exams upon completion, and other fees and materials. In 2018, Cree reimbursed employees $137,218 for their participation in educational assistance programs!

Leadership Development

Lead the Way (LTW)[1]	Training program designed for new managers of employees and is broken into three separate classes. This program helps new leaders learn about the tactical aspects of leading people.
Leadership Fundamentals[1]	Training program designed to help leaders affect culture change and develop skills to be better leaders. The program is designed around the four pillars of Cree's Culture: Lead, Support, Communicate and Trust.
Leadership Development Program[1]	Guided program where executive staff receive executive coaching and personalized developmental program to help align their skills with the culture of Cree.

Personal and Professional Development

On-The-Job Training (OJT)[2]	Program designed to help new operators develop the skills needed to perform their job functions while on-the-job. The program allows operators to work alongside an experienced operator/trainer.
Orientation II[2]	Programs designed to give employees a better understanding of what Cree does globally. During the program we explore what Cree does and how the employee fits in. We also develop basic skills with employees and help the employee integrate the skills learned into their current job function. We also expose the employee to the Cree values and our corporate culture.
Project Management[1]	Training programs designed to help the employee develop the skills needed to manage projects more effectively.
English as a Second Language (ESL)[3]	Training program focused on helping speakers of non-English languages to better their communications skills by practicing the English language. The program includes didactic and hands-on portions.
Lunch and Learns[2]	Short in-person developmental courses designed to help employees build and/or reinforce basic concepts.
Site- Specific Role Playing[2]	Program designed to help individual sites deal with issues and difficult conversations that are specific to that department or business unit.
Rotations[2]	Program designed to guide new graduates hired to Cree. The participants will rotate through various job roles within the same classification to get a well-rounded view of what that classification entails.
Wellness Workshops[2]	Program designed to focus on all aspects of our employees' wellbeing. Topics include Injury Prevention and Exercise, Stress Management, Understanding Diversity, and much more. Cree hosts Wellness Workshops every month.
Financial Workshops[2]	Program designed to focus on employees' financial wellbeing. Topics include Financial Health, Budgeting and Saving, Preparing for Retirement, and much more. Cree hosts Financial Workshops every month.

Technical Skills Development

JMP Training[1]	Training on statistical analysis software to help with mission critical calculations and analytics.
DDI Micro Courses[1]	Short web-based courses designed to help employees build and/or reinforce basic concepts.
8D Training[1]	The 8D (Eight Disciplines) Problem Solving Process is a team oriented and structured problem-solving methodology that is mainly used to identify, correct and eliminate recurring problems. The 8D Problem Solving Process focuses on the origin of the problem by determining root causes, and establishes corrective and preventive actions.
Core Tool Training[1]	Training on developing employees' skills in quality by learning quality standards. Employees also learn new tools and how utilize tools they currently have to quickly and more efficiently solve problems.

[1] Training class is offered at all Cree global sites.
[2] Training class is offered at all Cree US sites.
[3] Training class is offered at Cree Durham, NC sites.

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.

HEALTH & SAFETY — 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 on the US ANSI/ AIHA/ASSE Z10-2012 Occupational Health & Safety Management Systems and the ISO 45001:2018 standards. All employees and contractors are covered under our EHSMS. Our health and safety management system is internally audited but not externally certified. Our environmental management system is internally audited and internally certified through ISO 14001. Our raw material suppliers are not yet screened using EHSMS criteria. Our US based contractors performing potentially hazardous work on any Cree site are screened using health and safety criteria.

Each internal written OHS program describes the hierarchy of controls when identifying hazards and assessing risks. Each program having a regulatory driver is tracked within our EHSMS 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. We ensure the quality of the review processes through hiring competent, trained EHS professionals and monitor and coach them to provide feedback, training, and ongoing professional development toward their jobs. Each EHS professional is assigned periodic EHS program reviews. Any findings are recorded and tracked to completion.

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. Refer to our Cree Employees section to learn more.

Incident Management

Incident Management applies to all employees (temporary, permanent, full-time and part-time) who are involved in an incident or supervise an affected individual. If an incident involves a contract worker, contractors must refer to the Cree Contractor EHS Handbook, applicable to their service location, for guidance on incident reporting and notifications.

Cree policies require employees to immediately report incidents or when they become aware of symptoms or any indication of a work-related complaint. Any concerns regarding hazards in the workplace can be reported to the employees' supervisor, any EHS staff, by entering a non-conformance in our electronic reporting system or through our corporate whistleblower reporting platform.

Employees are protected from reprisal when reporting incidents. Our policies inform employees that they have the right to report work related injuries and illnesses and that that Cree is prohibited from discharging or in any manner discriminating against them for reporting work-related injuries or illnesses. Supervisors are also expected to create a work environment that encourages the reporting of incidents and near misses. Supervisors are required to immediately report incidents to Cree's Emergency Response Team, depending on the situation, and electronically to EHS within 24 hours so incident details can be properly evaluated and corrective actions assigned where appropriate.

Cree follows confidentiality regulations in the country of operation (e.g., Health Insurance Portability and Accountability Act (HIPAA) laws are followed at our US locations). Our information management system has audit trail capability and control on who can view employee records. Anyone who can view employee records is granted access on a need to know basis. If the incident is industrial hygiene-related, our certified industrial hygienists are bound to ethical codes of conduct through their certifications and know to maintain employee confidentiality. Certification maintenance requires ongoing ethics training. Select employees in the US take HIPAA - Privacy Rules for Business Associates training.

Once initial information about the incident is gathered and documented, EHS assesses the incident severity. The incident severity assignment will determine the type of cause evaluation required and the time required to complete it. Evaluations are then performed, usually by the supervisor of the affected employee, to develop corrective actions to prevent reoccurrence of the incident and help improve our EHSMS. The incident evaluation process includes:

- Developing and reviewing a problem statement with the incident investigation team;
- Collecting all potentially relevant data (e.g., interviewing employees involved, performing walkthroughs of the affected area, reviewing security videos recorded during the event);
- Performing a cause analysis to identify the primary and contributing causes using the 5-Why method;
- Developing and assigning corrective actions using the S.M.A.R.T. (Specific, Measurable, Attainable, Realistic, Timely) criteria method

All evaluations and corrective actions are reviewed and approved by EHS staff prior to finalizing an incident review. After an incident, operations are then monitored using our incident management system.

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 Recordable Work-Related Injury-Illness Cases[1,2]
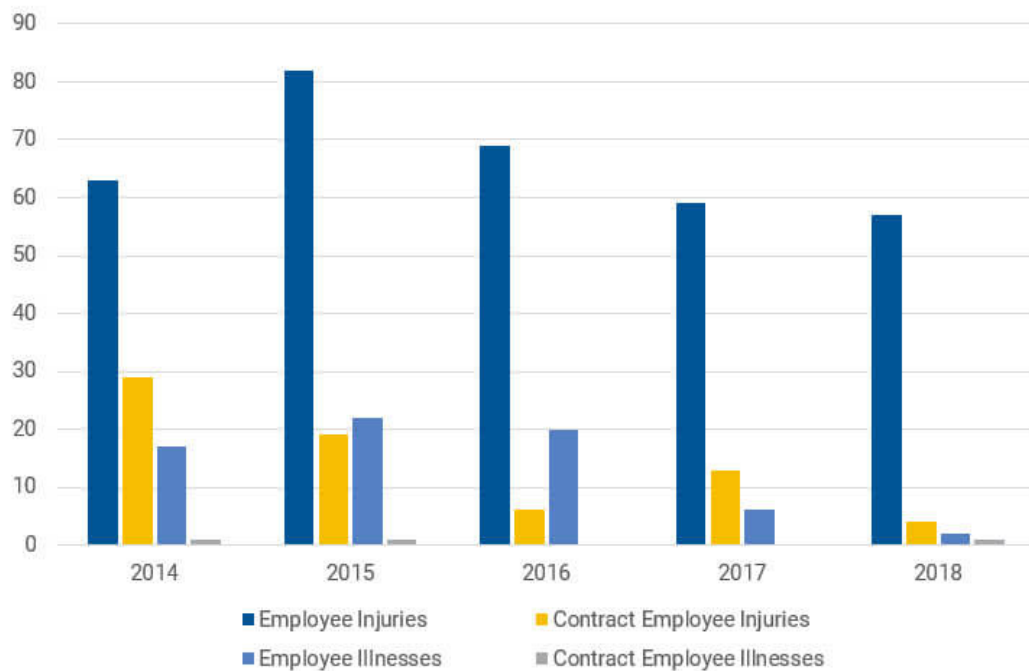
**Cree's Global Manufacturing High-Consequence
Recordable Work-Related Injury-Illness Cases[1,2,3]**

1 Case of Contract Employee High-Consequence Injury in 2014

1 Case of Employee High-Consequence Injury in 2015

1 Case of Employee High-Consequence Injury in 2016

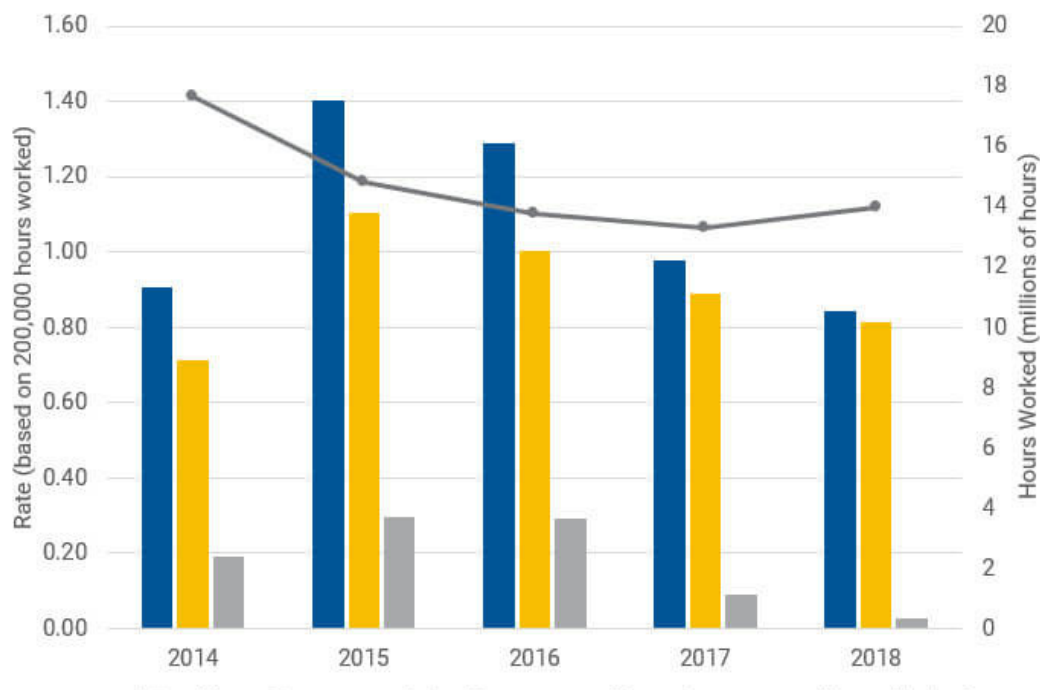0 Cases of Employee and Contract Employee High-Consequence Illness or Injury in 2017 and 2018

Cree's Global Manufacturing Recordable Work-Related Injury-Illness Rates[1,4]

Cree's Global Manufacturing Recordable Work-Related Injury-Illness Types

Legend:
- Overexertion
- Struck By
- Slips and Falls
- Chemical Exposure
- Automobile
- Eye Abrasion
- Other
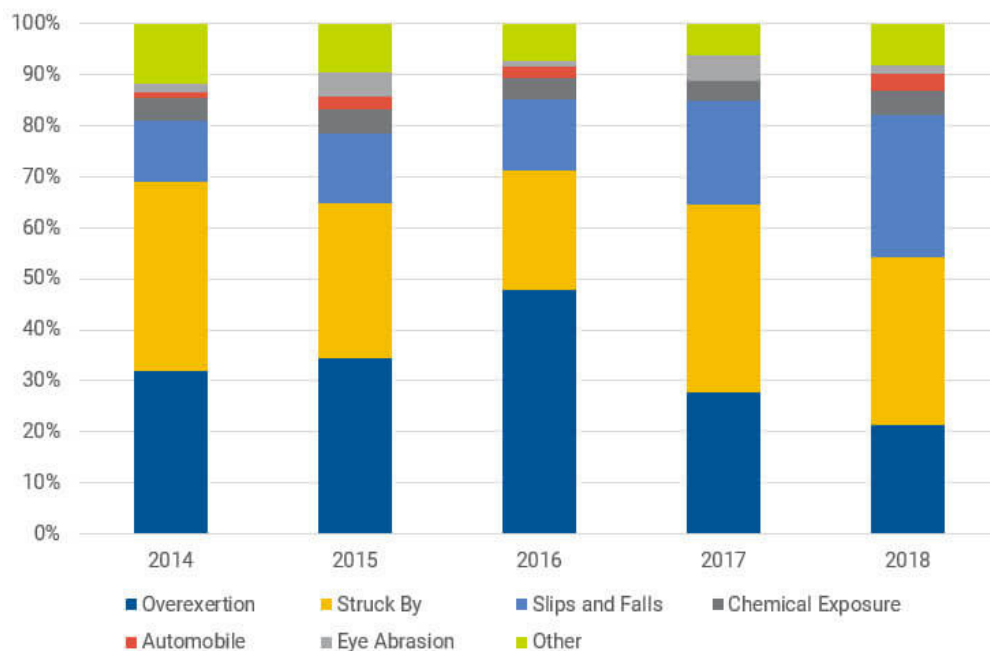
[1] Recordable Work-Related Injury-Illness = Work-related injury or ill health that results in any of the following: death, days away from work, restricted work or transfer to another job, medical treatment beyond first aid, or loss of consciousness; or significant injury or ill health diagnosed by a physician or other licensed healthcare professional, even if it does not result in death, days away from work, restricted work or job transfer, medical treatment beyond first aid, or loss of consciousness

[2] Contract Employee = Any worker who is not a Cree employee but whose manager is and whose work and workplace may or may not be controlled by Cree.

[3] High-Consequence Recordable Work-Related Injury-Illness = Work-related injury or ill health that results in an injury from which the worker cannot, does not, or is not expected to recover fully to pre-injury health status within 6 months

[4] Rates are calculated using 200,000 hours worked (Rate = cases/total hours worked * 200,000)

EHS Organizational Structure

Cree has dedicated staff to implement EHS programs:
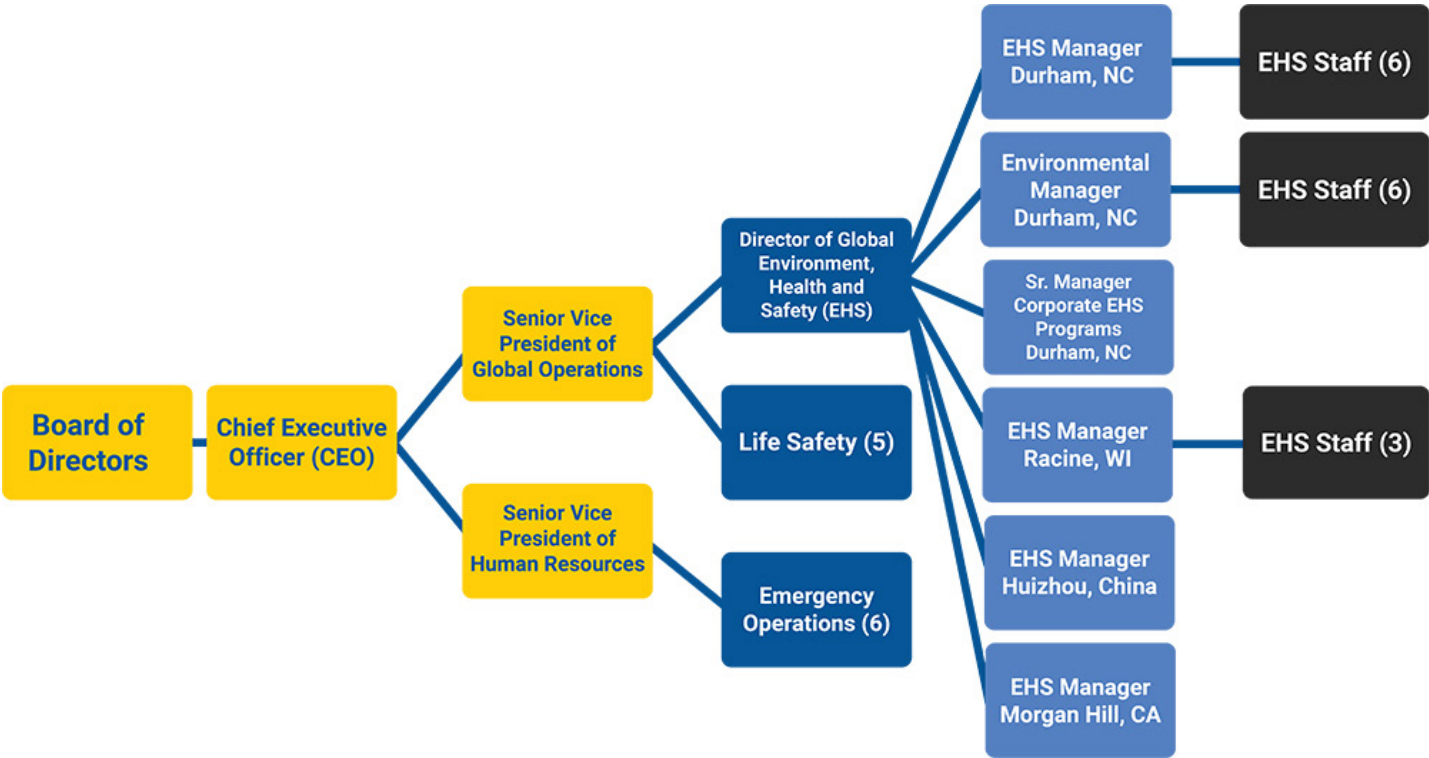
HEALTH & SAFETY — OUR CUSTOMERS AND PARTNERS

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

Electrical Isolation Testing

Electrical isolation testing is a direct current (DC) or alternating current (AC) dielectric withstand test that confirms our power products will not transfer high or hazardous voltages, thus helping safeguard our customers from electrical insulation failures.

Harsh Environments Testing

To ensure our power modules will not fail or corrode in harsh environments we perform temperature and humidity bias (THB) testing, which exposes our products to high temperature and high humidity. This testing ensures our power modules can be operated in outdoor applications, such as renewable energy and electric vehicles.

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.

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

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) light trespass, glare, or wasted energy.

HEALTH & SAFETY — OUR CUSTOMERS AND PARTNERS

Reduced Flickering

Cree's LED 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.

Guidance on Safe Use of LEDs

LED 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 LEDs 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.

Click **here** for more information about Cree's LEDs and eye safety.

COMMUNITY ENGAGEMENT

At Cree, we believe every individual should have a home, enough to eat and an opportunity to excel. Whether through corporate events and sponsorships or employee-led initiatives, we live our values by doing the right thing at work and in our local communities.

CREE SUPPORTS

- Food Bank of Central & Eastern North Carolina
- Habitat for Humanity
- STEM RTP
- North Carolina Science Olympiad
- Carolina Hurricanes
- American Heart Association

ENVIRONMENT I **2019**

PRODUCT SUSTAINABILITY

Our product sustainability goals are simple: enable our customers to invent power and wireless systems for a responsible, energy efficient future. We are committed to responsibly managing our products from cradle to grave as we lead the innovation and commercialization of Silicon Carbide and GaN.

EVS AND EV CHARGING
Wolfspeed's Gen3 Silicon Carbide MOSFETs enable faster, more efficient charging and increase power density of the electric circuits while reducing range anxiety. **Learn more here**.

5G TELECOM
Wolfspeed products allow 5G to transmit more data at faster speeds and with greater precision. GaN on Silicon Carbide has demonstrated to be a better solution overall for wireless communications because of its thermal conductivity, materials matching, efficient and total lifecycle cost.

SOLAR ENERGY
Solar power systems designed around Wolfspeed Silicon Carbide offer huge efficiency gains and permit smaller system size, weight and cost, increasing solar energy adoption worldwide.

HORTICULTURE
We help lower the cost of LED-assisted greenhouses, meaning a competitive advantage for growers, especially in Europe and other colder climates. The ability to grow crops in a more controlled greenhouse environment may also reduce the need for pesticides and other expensive and potentially dangerous chemicals.

DATA CENTERS
Silicon Carbide based products are expected to result in 620 billion kWh of energy savings for US data centers from 2010 to 2020, which is equivalent to powering 560 million homes in the US for one year.

LED SPECIALTY APPLICATIONS
Cree LEDs are optimized for indoor and outdoor, full-color video screens and billboards, providing super-bright light from little power.

Cree LEDs are incorporated into the first complete high definition (HD) LED array solution for automotive lighting systems. Compared to other HD systems, the module is easier to integrate into all vehicle classes due to its smaller size and weight.

LEADING THE WAY TO A SUSTAINABLE FUTURE

Compared to alternatives, our products sold in 2018 will save approx:

220 mil METRIC TONS OF CO₂e over their lifetimes, which is **EQUAL TO:** the CO₂ savings from **46,620** wind turbines running for one year
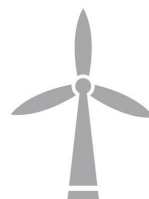
PRODUCT ECOLOGY

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

PRODUCT END OF LIFE

Recommendations for End-of-Life treatment of Cree products

Even though Cree's products have a long life, all good things do come to an end of their useful life. How should our products be disposed of when removed from service?

All Cree power devices, RF devices, LED chips and LED components are electronic components and should be considered for electronics recycling when feasible. Disposing of electronic waste in landfills is banned in many locations. In some areas of the world, depending on the recycle vendors available, individual LEDs and power and RF devices may not be able to be recycled due to their small size and product composition. You are encouraged to check your local regulations or with your local recyclers for advice on disposal of these components.

Most components in Cree's lighting products are recyclable. We recommend recycling all of these components:

- Aluminum: separate if possible and recycle as aluminum metal
- Plastic Components: separate if possible and send for plastics recycling
- Electronic components: recycle as electronic waste

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.

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
(North Carolina)
• ISO 14001:2015

Research Triangle Park Site
(North Carolina)
• ISO 14001:2015

Racine Site
(Wisconsin)
• ISO 14001:2015

Huizhou Site
(China)
• ISO 14001:2015

NC ENVIRONMENTAL STEWARDSHIP INITIATIVE

Our North Carolina manufacturing facilities are members of the North Carolina Environmental Stewardship Initiative (ESI). ESI is a voluntary program, provided by the state of North Carolina through the Department of Environmental Quality, to encourage companies to go beyond compliance to reduce impacts on the local environment. The program requires companies to have a mature environmental management system and aggressive environmental goals. ESI has three levels of participation. Cree's North Carolina facilities entered the program in 2018 at the first level as an Environmental Partner with the goal of rising to the highest level as an Environmental Steward in the future. More information about the ESI program can be found **here**.

ENVIRONMENTAL GOALS

REDUCING WASTE TO LANDFILL

NORTH CAROLINA, USA FACILITIES

Goal: Increase solid waste percent diversionfrom landfill (average per year) by 10%
Baseline Year: 2016
Target Year: 2018
Progress Toward Goal: Goal met in 2018

Goal: Increase solid waste percent diversion from landfill (average per year) by 10%
Baseline Year: 2018
Target Year: 2020
Progress Toward Goal: In progress

WISCONSIN, USA FACILITIES

Goal: Achieve 90% of solid waste diversion from landfill
Baseline Year: 2016
Target Year: 2018
Progress Toward Goal: Goal met in 2018 and exploring zero waste to landfill certification options

WATER RECYCLING

NORTH CAROLINA, USA FACILITIES

Goal: Improve consistent water recycle rate to 4.1 million gallons per month for 6 consecutive months (based on 90% operational time).
Baseline Year: 2018
Target Year: 2021
Progress Toward Goal: In progress

HUIZHOU, CHINA FACILITY

Goal: Recurring annual goal to meet 65% water recycle rate.
Baseline Year: None
Target Year: 2018
Progress Toward Goal: Goal met in 2018

ENERGY EFFICIENCY

CREE GLOBAL FACILITIES

Goal: EP100, Double our energy productivity metric of lumens produced/kWh electricity consumed in manufacturing.
Baseline Year: 2014
Target Year: 2020
Progress Toward Goal: Goal met in 2017

NORTH CAROLINA, USA FACILITIES

Goal: Decrease electricity usage per revenue by 8%
Baseline Year: Q1 and Q2 FY 2019
Target Year: Q3 and Q4 FY 2020
Progress Toward Goal: In progress

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 2018 will save approximately 440 million MWh and 220 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 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. In 2018, our energy productivity metric for lighting products decreased because our product mix has changed. Cree's new strategic focus is to build a powerhouse semiconductor company around our power and radio frequency products. A new EP100 goal is currently being developed to reflect our more recent strategy.

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
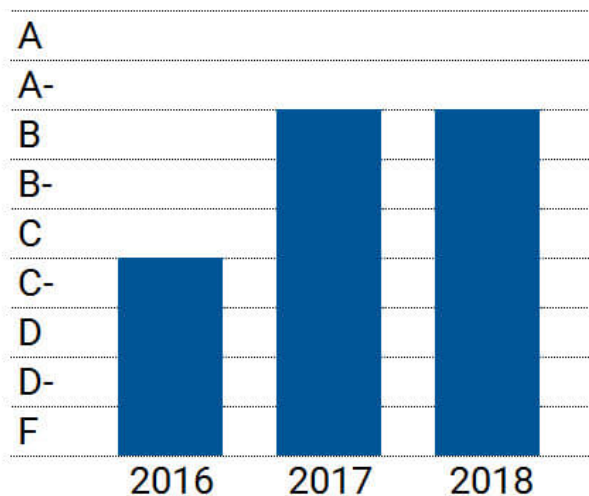
Cree's Global Manufacturing Energy Consumption in Gigawatt Hours

Legend: Electricity, Natural Gas, Fuel Oil, LPG, Gasoline, Propane
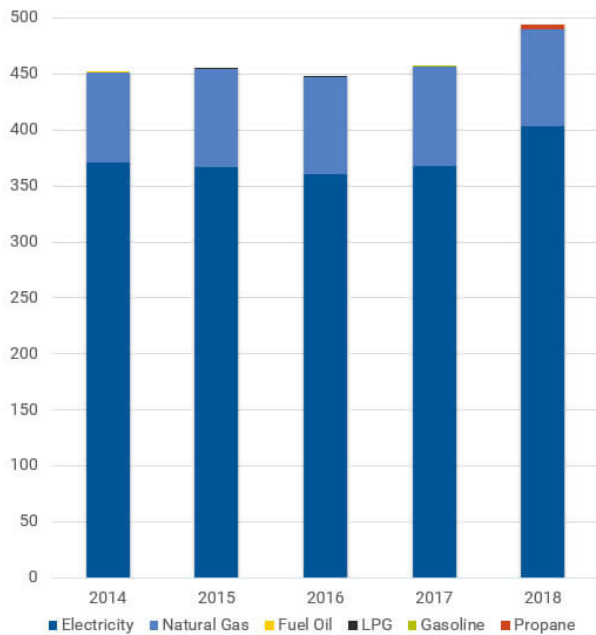
Cree's Global Manufacturing GHG Emissions in Metric Tons CO_2 Equivalents

Legend: Scope 1, Scope 2
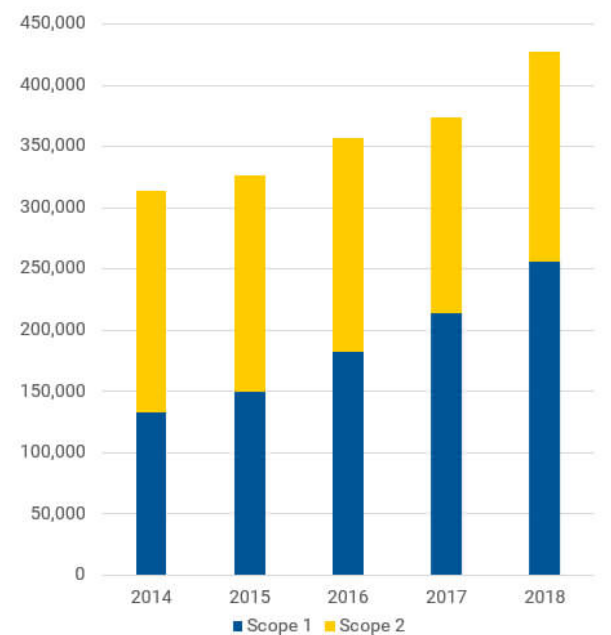
Scope 1: Cree's Global Manufacturing GHG Emissions

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

Cree's 2018 Global Manufacturing Energy Purchases

0.3%
25.1%
16.1%
58.5%

- Direct Purchases of Renewable Energy (e.g., Wind, Solar)

- Direct Purchases of Non-Renewable and Non-Carbon-Free Energy (e.g., Natural Gas, Diesel)

- Estimated Renewable Energy Purchases Based on Local Utilities' Energy Grid Mix

- Estimated Other Carbon-Free Energy (e.g., Nuclear) Purchases Based on Local Utilities' Energy Grid Mix
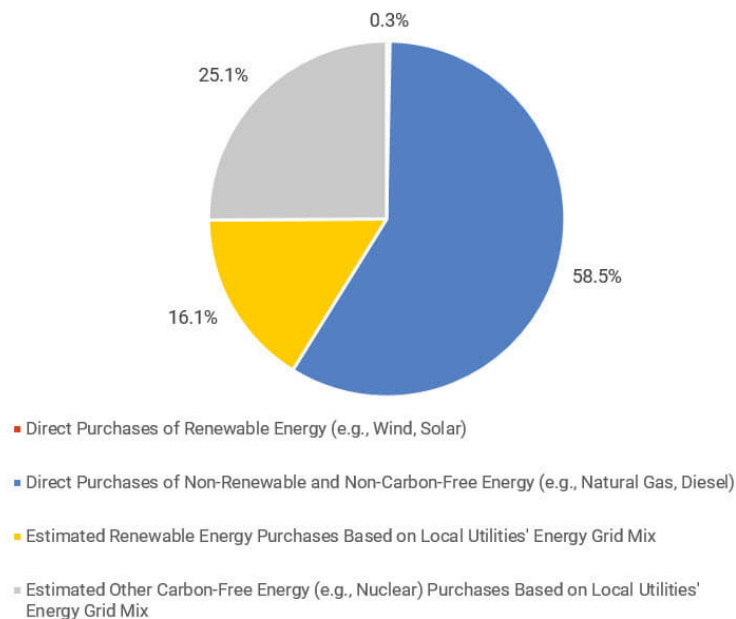
Cree's Carbon Footprint in Metric Tons CO_2 Equivalents

- 2018
- 2017

Scope 1

Scope 2

Scope 3
- Use of Sold Products Over Estimated Lives
- Downstream Transportation & Distribution
- Manufacturing T&D Losses
- Global Employee Business Travel
- Manufacturing Waste Generation & Transportation
- Disposal of Sold Products at End of Lives
- US Employee Commuting

metric tons CO_2e
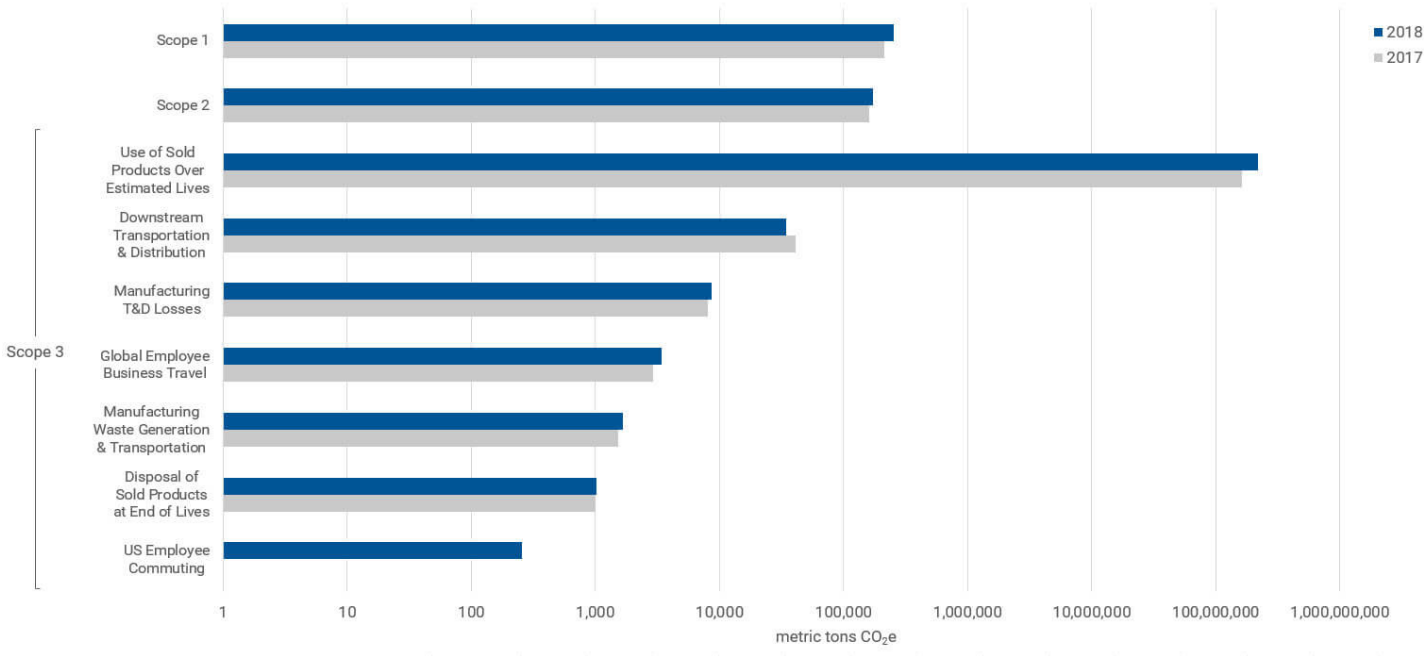
CREE'S CLIMATE CHANGE RISKS

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.	$21 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 ($164.3 million in FY2018).

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 ($164.3 million in FY2018).
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 ($164.3 million in FY2018).
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 ($164.3 million in FY2018).
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 ($164.3 million in FY2018).
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 ($164.3 million in FY2018).
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 ($164.3 million in FY2018).

WATER

Water Management

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. Both facilities have goals to improve water recycling rates.

- 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.

- In 2018, Cree installed additional rainwater collection at the Durham site, and now collects rainwater to supplement water used in the production process.

Water Withdrawals, Discharges, and Consumption

All of Cree's manufacturing facilities' water withdrawals primarily come from municipal (third-party) sources. Our other sources of water withdrawal include recycled water and rainwater, depending on the facility. All water used at Cree manufacturing sites is freshwater. Most of our water is used during electronics manufacturing including cooling tower use, but water is also used for irrigation and human consumption (i.e., drinking water, sanitary sewer and water used in locations where we have an on-site cafeteria). We work internally to ensure each department receives the water required for each step of the manufacturing process, as to not compromise product quality. We engage with our local water supply and wastewater treatment plants to plan for infrastructure needed for future water use, and have a water conservation and management plan in the event that water from local sources is reduced due to a drought. We have not yet worked with other suppliers or customers on water related issues.

Both Cree's Durham and Huizhou sites have water recycle systems to offset municipal water purchases and reduce the consumption of water. Our water recycle rate goals were developed for the sites that are Cree's largest water users. The goals were set based on the technology available, the quality of water needed as an output of the process, the availability of water in the operating region, water recycle regulations in place, and to align with our ISO 14001 environmental management systems. The goals aim to ensure each site optimizes their water recycle systems, including ensuring better operation and maintenance of the systems to reduce down time. Refer to our Environmental Goals section for more information about our water recycle goals.

All Cree facilities discharge to a municipal (third-party) waste water treatment plant and are subject to local discharge requirements. Water discharged meets local regulatory requirements for water quality, including nutrients levels, metals, pH, temperature, etc. All of Cree's manufacturing sites have wastewater permits that mandate the quality of water discharged. Cree's stormwater is also monitored to ensure it meets discharge criteria, which prevents degradation of local water supplies.

Cree's 2018 Global Manufacturing Water Usage

Source	All Facilities	Facilities in Med-High Water Stress[1] Regions	Facilities in High Water Stress[1] Regions
Water Withdrawals (millions of gallons)			
Third-Party Water	422.8	422.6	0.2
Recycled Water	132.3	132.3	0.0
Rain Water	0.1	0.1	0.0
Total Water Withdrawal	**555.2**	**555.0**	**0.2**
Water Discharges (millions of gallons)			
Third-Party Waste Water	271.9	271.6	0.2
Recycled Water	132.3	132.3	0.0
Total Water Discharge	**404.2**	**403.9**	**0.2**
Water Consumption (millions of gallons)			
Water Consumed or Evaporated in Process	**150.9**	**150.9**	**0.0**

[1] All of Cree's global manufacturing facilities were assessed for water stress using the World Resources Institute Aqueduct Water Risk Atlas. Medium to high water stress indicates the facility(ies) scored 2 to 3 out of 5 for Overall Water Risk. High water stress indicates the facility(ies) scored 3 to 4 out of 5 for Overall Water Risk. Overall Water Risk identifies regions that have a higher exposure to water-related risks and represents an aggregated measure of all indicators from the individual water risk categories of Physical Risk Quantity, Physical Risk Quality and Regulatory & Reputational Risk (Source: **WRI Aqueduct Water Risk Atlas**)

Cree's Global Manufacturing Water Consumption in Millions of Gallons
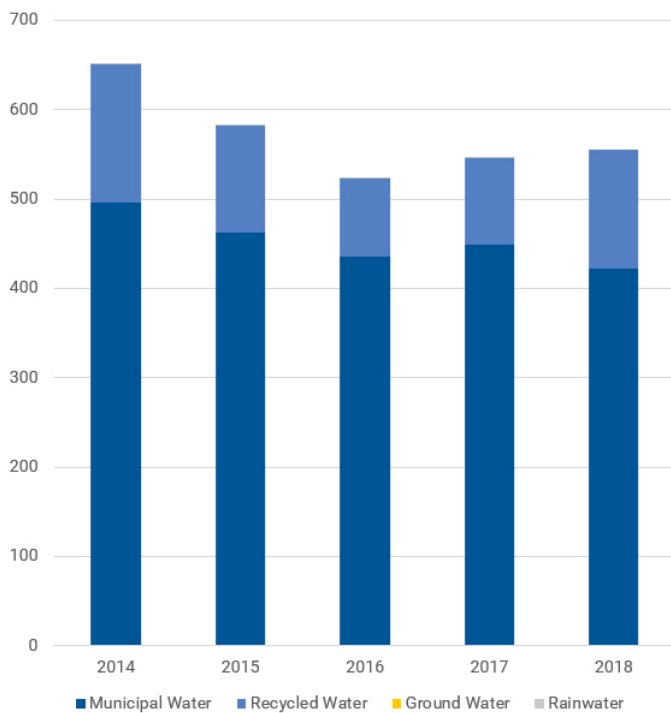
Cree's Global Manufacturing Water Discharges in Millions of Gallons
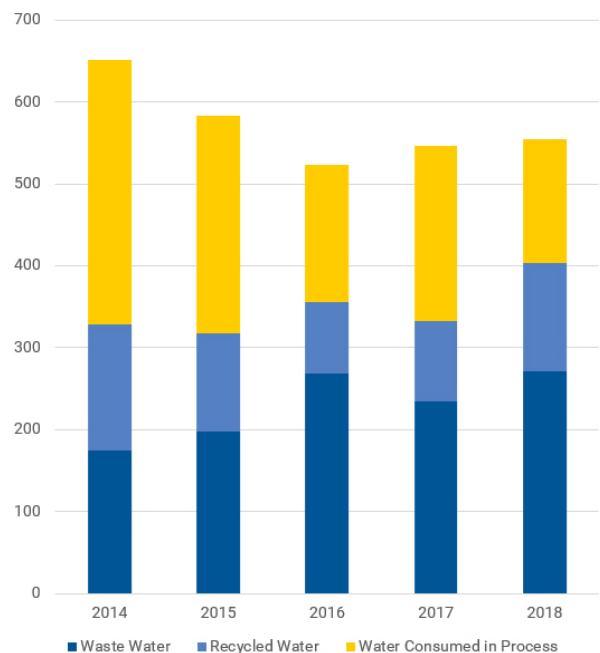
WASTE MANAGEMENT

Our Products

Our Power and RF products made from silicon carbide (SiC) outperform conventional silicon (Si) components. In many applications, fewer SiC components are required compared Si components when creating an electrical circuit with a similar output. To sustain a required current and voltage, Si components must be larger, meaning SiC components perform better with less materials required. Using less SiC components for a circuit and reducing the amount of materials in a SiC versus Si component means less materials are required to be disposed of at the end of their lives.

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.
- 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 50,000 pounds of waste from the landfill per year.
- In 2016, Cree made its first waste to landfill reduction goals. Cree had a goal to reduce its waste to landfill rate at its North Carolina sites by 10% using 2016 as a baseline. We achieved that goal in 2018 and have a new goal to reduce our North Carolina sites' waste to landfill rate by another 10% by 2020, using 2018 as our baseline. 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 Racine site achieved 90% of waste diverted in 2018.

Cree's Global Manufacturing Waste Management 2017

- Composting 0.3%
- Incineration 0.4%
- Reuse 2.6%
- Wastewater Treated 30.3%
- Recovery, Including Energy Recovery 9.0%
- Landfill 15.9%
- Recycling 41.5%

Cree's Global Manufacturing Waste Management 2018

- Composting 0.5%
- Incineration 0.7%
- Reuse 3.4%
- Wastewater Treated 28.1%
- Recovery, Including Energy Recovery 11.2%
- Landfill 15.2%
- Recycling 40.9%

Cree's Global Manufacturing Waste Generation in Millions of Pounds

Legend: ■ Hazardous Waste ■ Non-Hazardous Waste
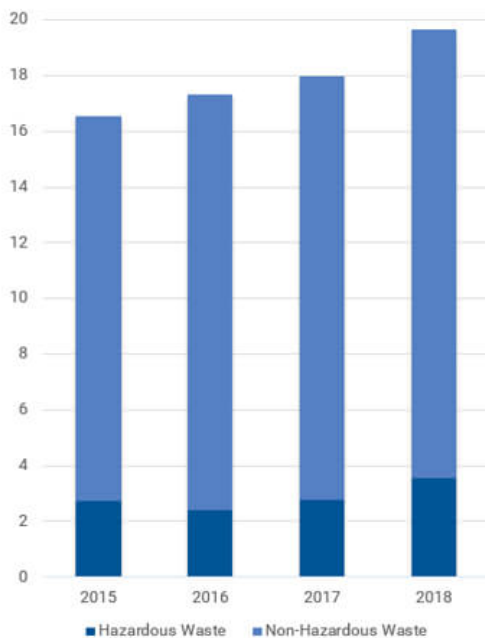
Cree's Global Manufacturing Waste Disposal Methods

Hazardous Waste	2016	2017	2018
Wastewater Treated	52.6%	47.1%	61.2%
Recovery, including Energy Recovery	21.6%	39.1%	29.1%
Incineration	17.4%	2.5%	3.6%
Landfill	5.6%	4.6%	3.6%
Recycling	2.8%	6.6%	2.5%

Non-Hazardous Waste	2016	2017	2018
Recycling	51.8%	47.8%	49.3%
Wastewater Treated	24.7%	27.3%	20.9%
Landfill	21.3%	18.0%	17.8%
Recovery, including Energy Recovery	1.8%	3.5%	7.3%
Reuse	0.3%	3.0%	4.1%
Composting	0.1%	0.3%	0.6%
Incineration	0.1%	0.04%	0.1%

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 2018 Annual Report*	
102-7	Scale of the organization	Cree Corporate Profile 2018 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. Cree also has a rapidly-developing intern program. 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 California Proposition 65	

* 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	2018 Annual Report*	In 2018, we identified our power and radio frequency division (Wolfspeed) as the primary growth driver over the next few years. During the past year some of our changes included doubling our silicon carbide (SiC) materials manufacturing capacity and acquiring the Infineon RF Power business.
102-11	Precautionary Principle or approach	2018 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 in the Energy and Greenhous Gas Emissions section.
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, Morgan Hill, Mesa, Huizhou, and Florence sites are certified for quality standards (ISO 9001 and IATF 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.
		NC Environmental Stewardship	Our North Carolina manufacturing facilities became members of the North Carolina Environmental Stewardship Initiative in 2018.
102-13	Membership of associations	GRI Content Index	Cree held a Director position on the Alliance to Save Energy board for part of 2018. At the corporate level, Cree is a member of EP100, PowerAmerica, and JEDEC Solid State Technology Association's committee JC-70 Wide Bandgap Power Electronic Conversion Semiconductors.

Strategy

GRI Standard	GRI Standard Description	Location	Comments
102-14	Statement from senior decision-maker	Letter to Stakeholders	

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	2018 Annual Report*	
102-46	Defining report content and topic Boundaries	Sustainability Reporting Materiality Assessment	
102-47	List of material topics	Materiality Assessment	

Reporting Practice (continued)

GRI Standard	GRI Standard Description	Location	Comments
102-48	Restatements of information	GRI Content Index	All content within this report has been updated to reflect 2018 operations. Any restatements of information from the last report indicates the information was still relevant to 2018 operations.
102-49	Changes in reporting	GRI Content Index	No significant changes from the last report.
102-50	Reporting period	GRI Content Index	Calendar Year 2018. 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	8/22/19
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	GRI Content Index	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 2018 Scope 1, 2, and 3 GHG emissions, which follows the Environmental Resources Trust (ERT) Corporate Greenhouse Gas Verification Guideline (CGVG). 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	2018 Annual Report*	
Economic Performance	201-1	Direct economic value generated and distributed	2018 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, regional, 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 from the local utilities' energy grid. Cree's Morgan Hill facility purchases energy directly from renewable or carbon-free sources. All other renewable energy used at Cree faciliies are based on the energy mix from the local utility. Cree does not sell energy. Energy consumption is determined using monthly supplier invoices.

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

Energy Efficiency of Operations (continued)

Material Topic	GRI Standard	GRI Standard Description	Location	Comments
Energy	302-2	Energy consumption outside of the organization	Energy and Greenhouse Gas Emissions	This metric is reported in terms of Scope 3 GHG emissions.
Energy	302-3	Energy Intensity	Environmental Goals	Our North Carolina facilities represent nearly 78% of Cree's global manufacturing electricity usage. In 2018, Cree established an energy intensity reduction goal for its North Carolina facilities. Our goal is to reduce electricity usage per revenue by 8% by 2020, using 2018 (Q1 and Q2 FY 2019) as our baseline.
			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 achieved its EP100 goal for lighting products in 2017. In 2018, our energy productivity metric for lighting products decreased because our product mix has changed. Cree's new strategic focus is to build a powerhouse semiconductor company around our power and radio frequency products. A new EP100 goal is currently being developed to reflect our more recent strategy.
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. In 2018, we implemented a number of the projects, leading to an estimated savings of 4,770 MWh of electricity.

Energy Efficiency of Operations (continued)

Material Topic	GRI Standard	GRI Standard Description	Location	Comments
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 2018 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 and Effluents	103-1,2,3	Management approach	Water	
Water and Effluents	303-1	Interactions with water as a shared resource	Water	
Water and Effluents	303-2	Management of water discharge-related impacts	Water	

Water and Wastewater Management (continued)

Material Topic	GRI Standard	GRI Standard Description	Location	Comments
Water and Effluents	303-3	Water withdrawl	Water	Water withdrawal data is either collected from meters or water utility bills. The amount of recycled water is metered. 18% and 24% of Cree's global manufacturing water was recycled in 2017 and 2018, respectively.
Water and Effluents	303-4	Water discharge	Water	Water discharge data is either collected from meters or water utility bills.
Water and Effluents	303-5	Water consumption	Water	Other than small rainwater collection tanks, Cree does not hold water in water storage facilities or reservoirs.
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	303-6	Water bodies affected by water discharges and/or runoff	Water	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), employee commuting (US employees only), 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 GHG emissions intensity ratio has been decreasing over time. Our intensity ratio was 124.1, 122.1 and 119.9 metric tons CO_2e/production metric in 2016, 2017 and 2018, respectively. 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 2018 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 390 metric tons CO_2e from these initiatives in 2018.

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 2018.
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 in our Waste Management section 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	404-2	Programs for upgrading employee skills and transition assistance programs	Cree Employees	Programs to upgrade employee skills can be found in our Cree Employees section. Cree also offers transition assistance programs. We offer outplacement services to employees terminated as a result of reduction in workforce.
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 also been reported using guidance from the Center for Safety & Health Sustainability.
Occupational Health and Safety	403-1	Occupational health and safety management system	Health & Safety — Our Employees and Contractors	
Occupational Health and Safety	403-2	Hazard identification, risk assessment, and incident investigation	Health & Safety — Our Employees and Contractors	
Occupational Health and Safety	403-3	Occupational health services	Health & Safety — Our Employees and Contractors	
Occupational Health and Safety	403-4	Worker participation, consultation, and communication on occupational health and safety	Health & Safety — Our Employees and Contractors	

Occupational Health and Safety (continued)

Material Topic	GRI Standard	GRI Standard Description	Location	Comments
Occupational Health and Safety	403-5	Worker training on occupational health and safety	Health & Safety — Our Employees and Contractors	
Occupational Health and Safety	403-6	Promotion of worker health	Health & Safety — Our Employees and Contractors	
Occupational Health and Safety	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Health & Safety — Our Employees and Contractors	
Occupational Health and Safety	403-8	Workers covered by an occupational health and safety management system	Health & Safety — Our Employees and Contractors	All Cree employees and workers who are not employees but whose work and/or workplace is controlled by Cree are covered by our occupational health and safety management system.
Occupational Health and Safety	403-9	Work-related injuries	Health & Safety — Our Employees and Contractors	
Occupational Health and Safety	403-10	Work-related ill health	Health & Safety — Our Employees and Contractors	

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 course topics vary from year to year, but regularly include human rights related subject matter. 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 course topics vary from year to year, but regularly include human rights related subject matter. 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 Conduct*	
Anti-competitive Behavior	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	GRI Content Index	In 2018, 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 California Proposition 65	
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 Social Assessment	103-1,2,3	Management approach	Supplier Code of Conduct* Purchase Order Terms*	
Supplier Social 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* California Proposition 65 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.

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	

* 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	2018 Annual Report* Licensing*	Cree has always maintained sophisticated physical and digital security measures to protect our employees, systems and data. In 2018, Cree's Security and various other teams continued to advance security controls. For example, physical security controls were further enhanced to eprevent unauthorized access to our facilities. Employees play an active role in protecting Cree's systems and data by participating in regular Information Security Awareness Trainings, supporting system updates and following security policies and procedures such as reporting suspicious activity.

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**