

# Corporate-Wide Sustainability Goals for Wolfspeed

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April 21, 2021

Masters project proposal submitted in partial fulfillment of the requirements for the Master of Environmental Management degree in The Nicholas School of the Environment of Duke University

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## Executive Summary

As sustainability is gaining traction, stakeholders and investors are increasingly asking businesses to report their environmental social governance (ESG) impact and initiatives. Wolfspeed (formerly Cree) is a semiconductor company that manufactures radiofrequency (RF) devices and power products that accelerate the transition to electric vehicles, 5G, and renewable energy. This Master's Project aims to help Wolfspeed develop corporate-wide sustainability goals for its ESG programs. To create meaningful and achievable goals, the team conducted a competitor analysis and formal stakeholder interviews, also referred to as program owner interviews, that informed and directed the drafting of sustainability goals. Through its research, the team identified the UN Sustainable Development Goals (SDGs) as a framework of best practice, so the project team used the SDGs as guidance in goal creation. The team recommended eighteen sustainability goals that were organized into four main categories based upon Wolfspeed's sustainability pillars: 1) People First, People Always; 2) Absolute Commitment to Integrity and Transparency; 3) Processes that Protect the Environment and Products that Improve it; and 4) Responsible Business Practices and Innovation for a Better Future. To create ownership of sustainability at Wolfspeed, the team created a charter for a Wolfspeed sustainability committee that will implement, track, and communicate the goals in the future. To aid adoption of the sustainability goals, Wolfspeed will develop an internal and external communication plan. The internal communication plan can help Wolfspeed unify employees around sustainability and promote a green culture. An external communication plan will help to guide the communications team on messaging, while also allowing Wolfspeed to collaborate openly with leaders in the industry, share best practices, and be recognized for progress.

## Introduction

### Background

Cree, Inc. (Cree), founded in Durham, NC in 1987, is an innovator in power and radio frequency (RF) semiconductors, and lighting class Light Emitting Diodes (LEDs).<sup>i</sup> Cree introduced the world's first blue LED in 1989 and released the world's first commercial silicon carbide wafer in 1991.<sup>ii</sup> Cree's LED product families focus on blue and green LED chips, high and low brightness LEDs, and video displays for transportation and signage.<sup>iii</sup> According to the annual report of 2020, the products from LEDs and Wolfspeed each accounted for 50% of total revenue.<sup>iv</sup> Since its foundation, Cree has focused on innovating with silicon carbide (SiC) efficiency, enabling operation at higher temperatures and power levels.<sup>v</sup>

In 2015, Cree, Inc. recognized that power and radio frequency were areas of growth, while lighting was stagnant, so the company acquired Arkansas Power and Electronics International (APEI) and created Wolfspeed to focus on power and RF.<sup>vi</sup> The Wolfspeed product line includes silicon carbide (SiC) materials, power-switching devices, and RF devices for electric vehicles, fast charging, inverters, power supplies, telecommunications, the military, and aerospace.<sup>vii</sup> In 2018, Cree committed to the RF power business by acquiring Infineon Technologies.<sup>viii</sup> To create a more focused, powerhouse semiconductor company, Cree, Inc. sold its lighting business (Cree Lighting) in 2019 to IDEAL INDUSTRY, INC. for \$310 million.<sup>ix</sup> Cree's liquidation of their LED operations allowed the company to strengthen its leadership position in RF. To expand its SiC capacity for expected market growth, Cree decided in 2019 to build a new manufacturing facility in New York.<sup>x</sup> The shift in Cree operations, becoming a semiconductor company with core strengths in power and RF products, has allowed the company to position itself as a catalyst in the electric vehicle (EV) movement.<sup>xi</sup>

Cree, Inc. is in the process of transitioning the organization name to Wolfspeed, so the company will be referred to as Wolfspeed for this Master's Project.

## **Sustainability Trends in Business**

Corporate sustainability focuses on the ethical, social, environmental, cultural, and economic dimensions of doing business.<sup>xii</sup> A growing collection of evidence demonstrates that companies that set and make authentic progress towards achieving sustainability-focused goals create higher long-term stakeholder value.<sup>xiii</sup> Due to the fast-changing society and degrading environment, people have become more cognizant of sustainability issues and are willing to invest more in companies that spend more effort on addressing these issues.<sup>xiv</sup> GreenBiz sustainability reporting analysis indicated that nearly 6,000 companies in 26 countries that are reporting on more than 90 ESG practices by 2020.<sup>xv</sup> Companies in the United States are leading the charge, with 56% and 34% of U.S. 250 largest companies by revenue reporting their GHG emissions and water use, respectively.<sup>xvi</sup> According to the analysis, these U.S. companies also have a much higher coverage of climate risk disclosure than global companies. Besides the better performance in environment-related reporting, U.S. companies also showed leading ratings for corporate governance.<sup>xvii</sup>

As more companies are reporting on corporate sustainability metrics, the demand for more accurate and sufficient data concerning sustainability issues is also increasing. In addition, companies typically tend to report objectives rather than address sustainability issues, and such imbalance makes corporate sustainability goals less effective at creating change.<sup>xviii</sup> Furthermore, there is a substantial gap between “board aspirations and the capacity of their boards and firms to deliver” when it comes to the diverse opinions and conflicts on ideology issues.<sup>xix</sup>

The following actions can help a company set their own sustainability standards: 1) Conducting “benchmarking” analysis to have a general understanding of peer groups’ performance and determine the company’s own standards.<sup>xx</sup> However, data inconsistency poses issues for tracking progress aligning metrics with best practices on sustainability reports introduced by the World Economic Forum, which focuses on governance, environment, equity and health, and corporate finance.<sup>xxi</sup> 2) Taking control of the ESG data narrative by proactively shaping disclosure instead of being overwhelmed by survey requests. 3) Implementing dynamic materiality models to identify the influential issues in all sustainability topics and communicating with stakeholders and the public in a more efficient and understandable way.<sup>xxii,xxiii</sup>

## **Sustainability at Wolfspeed**

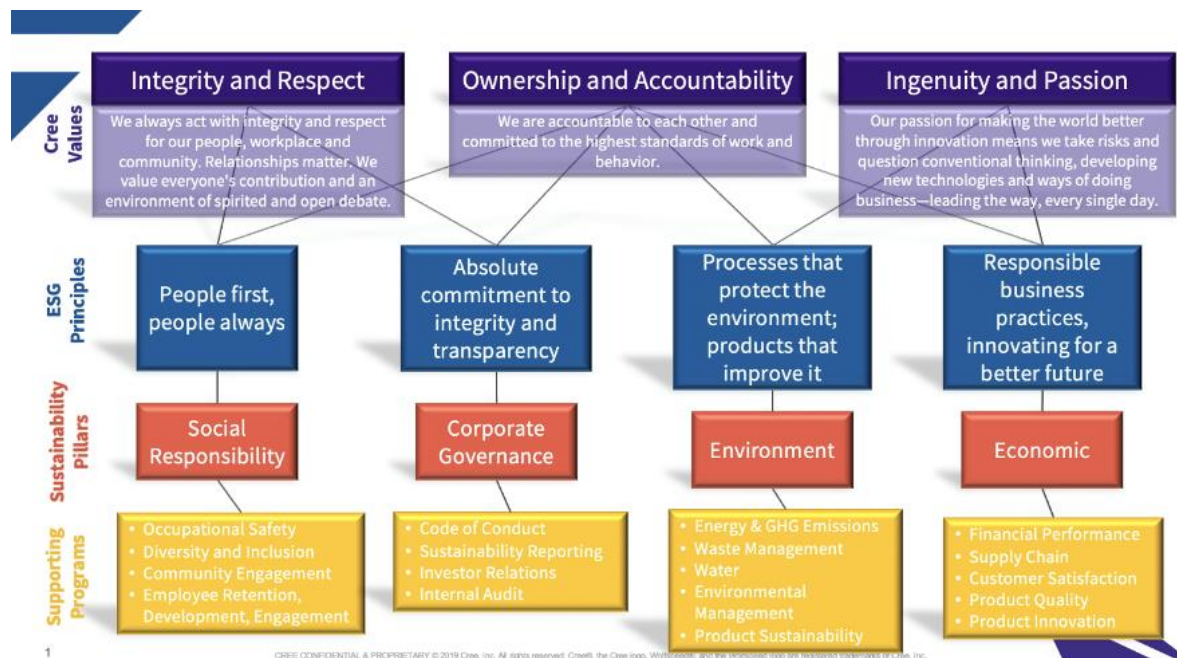
Cree, Inc. began focusing on their sustainability efforts in 2015 when they adopted a corporate-wide EHS policy and had multiple sites become ISO 14001-certified.<sup>xxiv</sup> The company set their first waste reduction target and reported GHG emissions in 2016 and has achieved reductions in waste and emissions since 2017. In 2017 and 2018, Cree, Inc. developed programs focused on their ESG efforts including their first employee engagement initiative, a formal enterprise survey, Thank You program, energy productivity goals (EP100 goals), Employee Resource Groups, and an internship program focused on recruiting people from underrepresented populations.<sup>xxv</sup>

Cree’s ESG Principles were developed in 2020 in response to guidance from Cree’s Board of Directors and describe Cree’s mission to promote sustainable business practices within their organization (Figure 2). The ESG principles are categorized into 4 areas: Social Responsibility, Corporate Governance, Environment, and Economic (Figure 2).

## Objective

The objective of this project was to develop corporate-wide sustainability goals for Wolfspeed that are in line with the ESG Sustainability Principles established in 2020 (Figure 2). To achieve this objective, the team researched common trends and best practices in the industry by doing a competitor analysis. Once the competitor analysis was performed, the team conducted structured interviews with Wolfspeed key stakeholders, referred to as program owners, who would be critical to the success of the corporate-wide sustainability goals. The purpose of meeting with these program owners was to identify past successes and lessons learned, understand current priorities, and use their input to shape Cree’s new sustainability goals. The Environmental Health and Safety (EHS) team at Wolfspeed served as the liaison between the master’s project group and Wolfspeed, and they facilitated the scheduling of stakeholder interviews with program owners.

**Figure 2.** Wolfspeed ESG Principles



The information from the competitor analysis and stakeholder interviews was used to create a set of draft goals. Once draft goals were created, we had a second round of interviews with program owners to get feedback. After the interviews, the Duke team then worked with the Wolfspeed EHS team to incorporate feedback to create the final goals. After the goal-setting process, the team developed a sustainability team charter for Wolfspeed who will define a process for to monitor and evaluate progress towards achieving their sustainability goals.

Key deliverables of the project included the following:

- An analysis of the sustainability practices employed by Cree's major competitors
- A list of overarching sustainability goals to be achieved by the corporation
- A charter describing goals and responsibilities of the Wolfspeed Sustainability Team

## Methods

### Program Owner Interviews

The team interviewed fourteen program owners within Wolfspeed to understand how sustainability is perceived and acted upon within the organization. This included understanding the priorities, past accomplishments, challenges, and future aspirations each department had regarding sustainability. The team further informed these stakeholders about the common trends and best practices regarding sustainability in the industry. This exchange of information helped the team recommend more meaningful, relevant, and achievable corporate-wide sustainability goals for Wolfspeed. All interviews were recorded with the consent of the interviewees to create transcriptions, using Temi, an automatic audio to text transcription service. The transcriptions helped the team create summaries of each interview, eventually leading to a final synopsis of the whole exercise. Each summary was created by the students who led the program owner interview, while the synopsis was created by the group collectively. The synopsis, along with



individual summaries, were also shared with the liaison at Cree to create shared understanding of the insights and results of the exercise.

## Competitor Analysis and Maturity Curve

A total of ten competitors were selected for the competitor analysis based upon Wolfspeed’s 10K annual report from FY2020.<sup>xxvi</sup> The Cree/Wolfspeed team originally provided us a list of twenty companies to perform the analysis based on competitors they find most relevant to their products and they compete with the most. This list was narrowed down from feedback from the Cree/Wolfspeed team. Only one company within the LED sector was selected and all other competitors were eliminated. Since Wolfspeed in the future will only be focused on power and RF products, we wanted to focus more of the analysis on competitors in these industries to evaluate whether competitors are creating goals specific to their products or more general, company-wide goals. Through discussions in the program owner interviews, as well as consulting the Senior Vice President of Global Sales and Marketing, the final ten competitors were selected based upon what companies were of most interest to the key stakeholders within Wolfspeed (Table 1).

**Table 1.** List of Competitors Assessed for Competitor Analysis

Segment	Competitors
Silicon Carbide and GaN Materials	II-VI Advanced Materials, SiCrystal, Showa Denko
Power Devices	Infineon, Mitsubishi Electric Corporation, ON Semiconductor, Rohm Co. Ltd., STMicroelectronics
RF Devices	Ampleon, Mitsubishi Electric Corporation, Qorvo Inc.
LED Products (LED Chips and LED Components)	Samsung LED Company

Once the list was finalized, each team member analyzed two to three competitors as well as Wolfspeed itself based on information publicly available. First, team members would search if competitors had sustainability or corporate responsibility reports available and would search if the report contained information regarding their efforts within the 16 underlying categories within Wolfspeed's sustainability pillars (Figure 2). The next step was seeing if there was information available on the company's website on explaining their sustainability efforts. Results would range from no information available to extensive web pages dedicated to each of the underlying categories. Finally, the team would conduct a search by putting "(company name) sustainability" through a search engine and see if there were publications from well-known newspapers or journals describing sustainability efforts and accomplishments from the company. To ensure no bias was created, the team analyzed Wolfspeed with the same methodology as the competitors to analyze them based on public information and not including additional information provided internally from Wolfspeed.

While team members analyzed competitors and their achievements, the team researched into different models and approaches for creating a maturity curve as well as definitions for the different levels of maturity. Creating a maturity curve gives Wolfspeed a clear view of how they succeed or lack efforts in comparison to their competitors in the different underlying categories. The team conducted research to define levels of maturity for the curve. The team used *Assessment of Sustainability Maturity Models for Business Transformation* within Materiality Materials for creating the structure of levels for the maturity curve.<sup>xxvii</sup>

**Table 2.** Levels of Maturity Definitions

<b>Definitions</b>	
<b>Level 0- No Action</b>	Company has no acknowledgement or any publicly available documents to acknowledge the issue.
<b>Level 1- Acknowledge</b>	Company recognizes and acknowledges the need to address sustainability but is not currently doing anything
<b>Level 2- Initiate</b>	Company has a sustainability sponsor, has assessed industry trends, is building awareness and base lined current operational footprint.
<b>Level 3- Bolted On</b>	Company has created a sustainability function, developed a sustainable strategy and is piloting some eco-efficiency initiatives. They have "bolted on" some sustainable adjustments such as changing out light bulbs or hiring a few people from a diverse background, but no high initiative to make incremental or disruptive change. Doing it where it is convenient
<b>Level 4- Incremental</b>	Company has engaged the business units who have integrated sustainability into their business strategy, processes and performance measurement to continuously improve it. Have initiatives to begin making incremental changes in their sustainable initiatives, but it will take time till long term change is seen.
<b>Level 5- Embedded</b>	Company has fully embraced sustainability as a way of doing business, sustainability initiatives drive innovation that in turn drives the overall business strategy, business model transforms into a zero-impact market leader. They create disruptive change by providing solutions or creating large investments in their efforts to significantly reduce their impacts and provide a solution for both themselves and for other businesses to embed sustainability in their practices. They provide radical transparency to increase expectations for other businesses.

To create our definitions for the different levels of maturity, the team heavily relied upon *Net Positive: The Future of Sustainable Business* which explained the differences in companies that work to reduce their environmental impacts versus a company that works to have a net positive impact and create a shift in how other businesses approach sustainability.<sup>xxviii</sup> *An Explanation on Embedding Sustainability* was also used to create our definitions which gave a great explanation of what it means for sustainability efforts that are “bolted on” and the key

differences between a company's that has creating incremental changes in their sustainability efforts versus a company that fully embeds sustainability into their business's practices.<sup>xxix</sup> This information helped us formulate the definitions we generated for our maturity curve as well as the type of goals Wolfspeed wants to achieve in the future. The levels ranged from level 0- No Action to level 5- Embedded (Table 2). Level 0- No Action was given to companies that no information could be found on them taking action within that sustainability category (Table 2). Level 1- Acknowledge is where the company may make a statement on how they acknowledge an issue is occurring, such as climate change, but there is no indication they are doing any work within that category (Table 2). Level 2- Initiate is where a company is working on creating baselines and an understanding of where they need to be working to tackle the issue (Table 2). Level 3- Bolted On is where the company is starting pilot programs or tackling "low hanging fruit" or tasks where convenient, but not creating any incremental or disruptive change (Table 2). Level 4- Incremental has companies working on integrating sustainability into their business strategy that is seeing incremental changes in their initiatives, but it will take a longer period of time to see the impact of their efforts (Table 2). Level 5- Embedded is where a company fully embraces sustainability and they not only work on creating large changes within their own company but influences other businesses to take action on sustainability to expand the breadth of impact outside of their organization (Table 2).

With these levels of maturity, the team members would rank the competitors and Wolfspeed in each of the sixteen sustainability categories from Wolfspeed's sustainability pillars (Figure 2). As the sustainability goals will be generated around these sustainability pillars, it was found best to measure these categories to give different program owners an understanding of where they stand compared to their competitors. As the competitor analysis was finalized, each

team member would assign the score that reflected the maturity of the company's sustainability strategy. Once the first round of scores were assigned to a company, a second team member reviewed the first team member's analysis and score assigned to evaluate whether they agree or disagree with the score assigned to the company. If the second team member agreed with the score given, the company will keep that score for the underlying category. If the second team member disagreed for a level difference greater than 1 from the first person's analysis, the second and first evaluator would meet and discuss their reasoning for their scoring for the company and come to a consensus of what score should be assigned. If the two team members could not come to an agreement, then a third person would evaluate and be the tie breaker for the final level score given for that category. A final overall score was assigned to each competitor by summing up their total score from each of their assigned values for each of the underlying categories. For example, if a company was assigned a Level 4 in 4 different categories and Level 3 in 12 different categories, it would create an overall score of 52. This overall score was used to show where the competitors and Wolfspeed fell on the maturity curve.

### Draft Sustainability Goals

The Duke team first utilized the United Nations Sustainable Development Goals (UNSDGs) as guidelines to frame the sustainability goals. By identifying the targets and measurements of each UNSDGs, the team figured out what types of work an organization can do to promote these goals. The competitor analysis and the stakeholder interviews helped the Duke team and the Wolfspeed's EHS team identify the key areas of work and directed the overall goal setting process. For instance, most competitors had concrete goals for energy efficiency, water recycling, diversity and inclusion, community and employee engagement, transparency, and innovation. This helped the team understand where other competitors were focusing their

sustainability efforts on and the type of goals they were aiming for. The team then analyzed the current and past goals of Wolfspeed regarding sustainability and the different pillars of its Sustainability Principles (Figure 2). With all the information collected, the team drafted the sustainability goals based on Wolfspeed's priority issues and specified how these goals could be aligned with UNSDGs. Furthermore, the team presented these goals during the second-round of stakeholder interviews, which helped the team understand which of the draft goals stakeholders felt comfortable pursuing and which goals needed to be adjusted based on their work within the Wolfspeed's ESG programs.

Once all of this information was at hand, several workshops and brainstorming sessions were held with the Wolfspeed's ESG team to revise existing goals and come up with new potential goals around the priority issues/focal areas of work identified. Draft goal ideas were discussed and reviewed with relevant program owners to have them provide feedback in further developing goals. After meeting all the program owners who had shared some reservation on any of the goals and discussed with the marketing team about how to best frame the goals in line with Wolfspeed's messages, the team finalized an acceptable version of the corporate-wide sustainability goals for Wolfspeed.

### Draft Charter for Future Wolfspeed Sustainability Team

The team developed a charter that will be used for the Wolfspeed Sustainability Committee. The major content of the charter includes six parts:

- Purpose: Specify the reason for developing the charter within the company.
- Mandate and Main Objectives: Describe the access the Wolfspeed Sustainability Committee have in terms of managing the corporate sustainability strategy, increasing stakeholder awareness of the sustainable behavior, identifying social and environmental risks, reviewing

global regulations related to sustainability, and coordinating stakeholder dialogue with respect to social, ethical, and environmental matters.

- Selection of Sustainability Committee Members: Indicate the lower limit of the member in each business unit and the characteristics required for each member in the Sustainability Committee.
- Responsibilities of Sustainability Committee Members: mention the activities required for each member to help with corporate-wide sustainability goals under the Wolfspeed's sustainability pillars.
- Sustainability Management Process: emphasize the correct processes for sustainability management within the company.
- Terms of Service: legal agreements and disclaimer regarding the use of the charter.

## Results and Final Deliverables

### Program Owner Interviews:

The program owner interviews provided valuable insights regarding the opportunities and challenges present in the goal-setting process for Wolfspeed. One of the challenges mentioned by several program owners was the lack of systems and processes to work towards sustainability initiatives. For instance, one program owner mentioned how it was possible to extract concrete data for energy or water but significantly difficult to do the same for water (Table 3). Many owners expressed the challenge regarding achieving any short-term potential goal due to the uncertainty in the environmental efficiency of the organization as a new facility in New York is going to be on-line in 2024 (Table 3). Similarly, some program owners were sincerely keen to set internal goals related to their department but were reserved to publicize the goals (Table 3). This was due to the fear of being legally challenged by people with animosity towards the organization.

While some program owners welcomed creating quantitative goals for their departments, some preferred broader qualitative goals as not all areas of work are equally quantifiable (Table 3). An important aspect found during the exercise was the energy efficiency of the products, the products team explained how their innovative and technological advances led to exponential energy savings for their customers, enabling the world to transition towards a greener future. Some program owners shared the challenge of becoming a more sustainable organization while keeping the financials attractive to investors and shareholders. Several program owners also shared the work they are doing, which is not public yet, that can make Wolfspeed one of the leaders for some aspects of sustainability in the industry. A lot of program owners stressed the need for transparency in the organization, along with educating employees about sustainability, followed by developing a green culture in the organization. Having the program owner feedback gave the team great context in terms of what Wolfspeed felt they were capable of achieving and what they wanted to work towards with their goals.

### Competitor Analysis and Maturity Curve

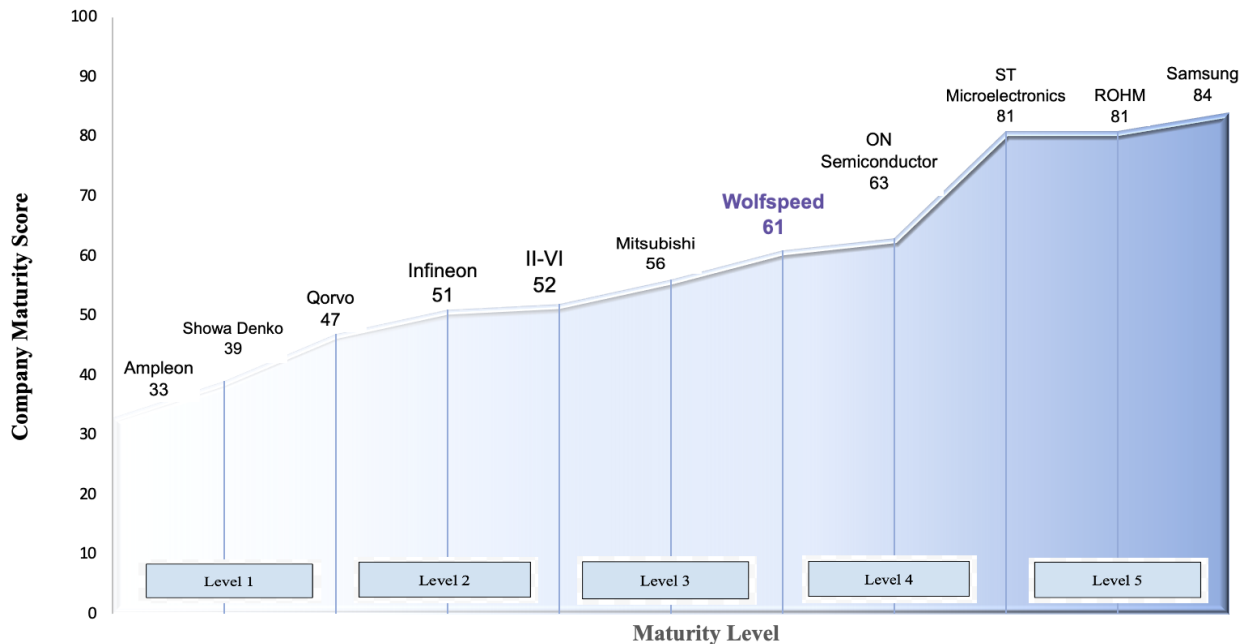
Figure 3 shows the individual scores that we assigned to each of the underlying categories for each competitor. This information was used to create Figure 4, the final result of the maturity curve created from the competitor analysis. Overall, Wolfspeed was found to be within the Level 3- Bolted-On stage in which they are doing certain actions but it is not making an incremental change in the reduction or improvement of their impacts (Table 2, Figure 4).



**Figure 3. Competitor Analysis Maturity Curve Raw Data**

Categories	Level 0- No Action	Level 1- Acknowledge	Level 2- Initiate	Level 3- Bolted On	Level 4- Incremental	Level 5- Embedded	Legend
Occupational Health & Safety			IFVI Q				<b>Legend</b> Wolfspeed Infineon ON Semiconductor Mitsubishi Electric Corporation Ampleon Samsung LED Company II-VI Advanced Materials ST Microelectronics Qorvo Inc. Showa Denko SiCrystal/ROHM Group
Diversity and Inclusion				IFVI			
Community Engagement				IFVI			
Employee Retention, Development and Engagement	IFVI Q						
Code of Conduct							
Sustainability Reporting		IFVI	Q				
Investor Relations			IFVI				
Internal Audit							
Energy & GHG Emissions							
Waste Management							
Water		IFVI					
Environmental Management							
Product Sustainability							
Financial Performance							
Supply Chain							
Customer Satisfaction							
Product Quality							
Product Innovation							

**Figure 4. Competitor Analysis Maturity Curve**



In comparison to competitors, many competitors were within Level 3-Bolted-On to Level 5-Embedded. If competitors ranked below Level 3 it was due to minimal information being

published on their websites about their efforts. Many of the competitors within the Level 4 and Level 5 categories were companies that are quite larger in size compared to Cree, such as ROHM Group and Samsung, who have more operations distributed throughout the world, more public image due to other products they produce, and more resources to push their sustainability efforts. More about how competitors performed compared to Wolfspeed is explained in the discussion section.

**Table 4.** Common Trends and Goals from Competitors Based on Wolfspeed’s Sustainability Pillars

<b>Pillar</b>	<b>Common Trends and Goals</b>
<i>People First, People Always</i>	<ul style="list-style-type: none"> <li>•20% share of women in middle/senior management or engineering positions.</li> <li>•Employ people with disability beyond statutory employment rate (2.2%)</li> <li>•Active partnerships with local universities and community engineering schools.</li> <li>•Organizing tour visits to company's manufacturing sites and innovation campus.</li> <li>•Invest over \$2 million annually for more equitable access to education</li> </ul>
<i>Responsible business practices, innovating for a better future</i>	<ul style="list-style-type: none"> <li>•Active R&amp;D partnerships and close cooperation with customers</li> <li>•Provide more energy-efficient products &amp; reduce carbon footprint from user-phase</li> <li>•Create goals about % of responsible products and % of revenue from new product lines</li> <li>•Supplier diversity programs</li> <li>•Working to innovate products and material research to reduce the usage of materials such as lead</li> <li>•Implement zero-defect strategies such as statistical process control, factory defect reduction program, and robust testing strategies.</li> <li>•Certify sites for with quality management</li> </ul>

	systems by ISO Standards
<i>Processes that protect the environment; products that improve it</i>	<ul style="list-style-type: none"> <li>•Reduce CO2/GHG reductions X% since 20XX</li> <li>•Annual energy use reduction, use of renewable energy</li> <li>•Keep water consumption under ___ liters per square cm manufactured wafer</li> <li>•Reduce water usage per unit of sales</li> <li>•Increase water recycle rate</li> <li>•Achieve a 90%-99% waste diversion rate</li> <li>•Create goals about % of <b>responsible</b> products and % of revenue from <b>new product lines</b></li> </ul>
<i>Absolute commitment to integrity and transparency</i>	<ul style="list-style-type: none"> <li>•Companies with reporting best practices report to GRI, SASB, TCFD, and CDP</li> <li>•Many companies are part of the UN Global Compact</li> <li>•Code of conduct present with RBA membership</li> <li>•Supplier code of conduct present with auditing programs</li> </ul>

Table 4 shows common trends and goals that were found from performing the competitor analysis. This was critical information in terms of understanding what other competitors were targeting for their goals and in indicating if any actions taken by competitors was above and beyond what competitors were performing. This information was taken into consideration on what sort of language and targets Wolfspeed should be creating and aiming for based upon where their competitors were at.

**Final Sustainability Goals**

We proposed four final sustainability goals to be framed within Wolfspeed’s four sustainability pillars and have sub-goals framed within those pillars (Figure 2). Each of the subgoals is in alignment with UNSDGs and can help Wolfspeed improve their maturity levels in their sustainability pillars.

## *Social Responsibility Goal: People First, People Always*

Wolfspeed wants to continuously improve the performance on social engagement and employee lifecycle, so we set five goals to help support their efforts in the social responsibility pillar (Table 5.1). The majority of these goals are in alignment with the UNSDGs in regard to reducing inequalities, promoting health and well-being among communities, and providing decent work conditions for employees.

**Table 5.1.** Social Responsibility Goal: People First, People Always

<b>Goal</b>	<b>Alignment with UNSDGs<sup>xxx</sup></b>
Enterprise-wide employee engagement survey	3: Good Health and Well Being 8: Decent Work and Economic Growth
Grow the number of employees engaging in DEI programs/events	5: Gender Equality 8: Decent Work and Economic Growth 10: Reduced Inequalities
Establish STEM partnerships at all education levels where they operate	4: Quality Education
Establish & grow community partnerships where they operate	1: Reduce Poverty 2: Zero Hunger 3: Good Health and Well Being
Establish certified Occupational Health & Safety Management System across their manufacturing sites	3: Good Health and Well Being 8: Decent Work and Economic Growth

### *Corporate Governance Goal: Absolute Commitment to Integrity and Transparency*

To provide further guidance on the development of Wolfspeed’s sustainability programs, we suggested Wolfspeed establishing a sustainability committee and identified four goals promoting the engagement in sustainability across all levels of the organization (Table 5.2).

**Table 5.2.** Corporate Governance Goal: Absolute Commitment to Transparency and Integrity

<b>Goal</b>	<b>Alignment with UNSDGs<sup>xxxi</sup></b>
Establish sustainability committee	Align with all UNSDGs
Develop Enterprise Risk Management (ERM) program	3: Good Health and Well Being 8: Decent Work and Economic Growth 12: Responsible Consumption and Production
Full alignment to GRI, SASB, UNSDGs, TCFD	Align with all UNSDGs
Achieve a score of B on all CDP surveys (Climate, Water, Supply Chain)	6: Clean Water and Sanitation 7: Affordable and Clean Energy 13: Climate Action 17: Partnership for the Goals

### *Environmental Goal: Processes that Protect the Environment and Products that Improve it*

Wolfspeed is committed to responsibly managing environmental impacts and ensures continual improvement in their environmental performance. In addition, customers and investors request Wolfspeed to put more resources on environmental protection and establish more stringent environmental goals. As a result, we developed five goals to capture and minimize their

environmental footprint and support their efforts on climate, water, waste, and clean energy (Table 5.3). These goals are closely related to responsible consumption and production as well as affordable and clean energy.

**Table 5.3.** Environment Goal: Processes that Protect the Environment; Products that Improve it<sup>xxxii</sup>

<b>Goal</b>	<b>Alignment with UNSDGs<sup>xxxiii</sup></b>
Reduce direct (Scope 1 and 2) greenhouse gas emissions by 50%	7: Affordable and Clean Energy 13: Climate Action
Improve water recycling rate by 25%	6: Clean Water and Sanitation 12: Responsible Consumption and Production
Achieve 85% waste diversion rate from landfill	12: Responsible Consumption and Production
Reduce hazardous waste generation per revenue by 10%	12: Responsible Consumption and Production
Achieve 35% total improvement in energy productivity for our 2040 EP100 goal	7: Affordable and Clean Energy 12: Responsible Consumption and Production

*Economic Goal: Responsible Business Practices and Innovation for a Better Future*

Wolfspeed also wants to expand their sustainability efforts across their value chain through partnership with the suppliers and innovation of their products. We developed four goals to help them quantify their progress under this category. These goals aim to provide decent work conditions and stable economic growth by cooperating with upstream suppliers as well as spur innovation and improve the product quality under new semiconductor technology.

**Table 5.4.** Economic Goal: Responsible Business Practices, Innovation for a Better Future

<b>Goal</b>	<b>Alignment with UNSDGs<sup>xxxiv</sup></b>
Evaluate ESG risks and opportunities for 100% of suppliers*	8: Decent Work and Economic Growth 12: Responsible Consumption and Production
Implement supplier diversity program	5: Gender Equality 8: Decent Work and Economic Growth 10: Reduced Inequalities
30X increase in SiC wafer fabrication and SiC materials production	7: Affordable and Clean Energy 9: Industry, Innovation, and Infrastructure 11: Sustainable Cities and Communities
Decrease major disruption quality events by 20%	9: Industry, Innovation, and Infrastructure 12: Responsible Consumption and Production

### **Charter for the Future Sustainability Team Within Wolfspeed**

The Sustainability Committee Charter for Wolfspeed is presented in Figure 6. The charter included nine sections to ensure the effectiveness of the Sustainability Committee:

1. Purpose for establishing a sustainability committee
2. Mandate and main objectives to support the value creation for all stakeholders regarding ESG responsibility
3. Sustainability pillars and principles to further arrange the goals and incorporate the goals into business practices
4. Selection of Committee members with requirements for each business unit

5. Responsibility of chair and vice-chair and terms of service to specify their roles and work on the committee
6. Election of chair and vice-chair of the Committee
7. Duties of the members and terms of service
8. Sustainability management process to ensure there are correct processes for sustainability work including performance monitoring and stakeholder engagement
9. Conduct of periodic meeting to specify the meeting time and frequency

## Discussion

Creating corporate-wide sustainability goals for a company can be an ambitious and challenging exercise, particularly when it is done for the first time. The standard industry approach to conduct stakeholder interviews, benchmark competitors, and draft sustainability goals is a useful framework for such a project. However, each step of this process can bring new challenges and insights. Some of the challenges and insights for each of the steps are discussed below and can help those who work on a similar project in the future.

### **Program Owner Interviews:**

The program owner interviews provided the opportunity to go in depth and culture of the organization. The interviews with Wolfspeed show the need for building the internal infrastructure for sustainability as one of the first steps to transition towards a long-term green future for the organization. Several program owners stressed the need for setting up new processes and systems that can enable them to track and create baselines for important sustainability metrics. Future goals around key sustainability issues can only be developed in a meaningful way if the organization has the capacity to understand its current impact on the



environment. Developing the capacity to measure organizations impact on the people and planet should be stressed as an important step for organizations that are beginning their journey towards a green future.

Another aspect stressed in the program owner interviews was the need to educate employees about sustainability and building a culture where sustainability is ingrained in the organizational fabric. This can lead to a very fruitful future as each person can point out the challenges and opportunities in the organization, from cleaning the floors to developing the product, for sustainability. Similarly, the reservation of some program owners to publicize their goals stresses the need to create an amicable environment in the field of sustainability where people are encouraged to do well, and the fear factor, along with judgement and shame is minimized.

### **Competitor Analysis and Maturity Curve:**

It was found that each of the topics can have different levels of performance on a company-to-company basis which could impact the overall score assigned. More of the focus was based on the level of detail collected from the competitor analysis to help Wolfspeed understand what goals would be at or above the industry standard. Scoring and providing detail on each of the underlying categories would provide valuable insight to the different program owners on their areas of focus.

When having discussions with program owners, details about actions occurring within Wolfspeed in terms of the amount of money invested in community programs or certifications they are in the process of receiving would be considered actions that would move Wolfspeed into Level 4 or Level 5. Although these details would have improved the score we gave them,

this information was not publicly available on their website to take this into consideration. This indicates that the sustainability team and key program owners need to work further with the marketing team in putting their efforts and accomplishments on their website. This would in turn increase their score using our levels once this information is publicly available and will increase customer satisfaction and assurance by seeing the amount of action the company is taking.

Companies such as Ampleon, Quorvo, and Showa Denko were given scores in five or more categories within Level 0 or Level 1. This does not mean that actions are not being taken by these companies to tackle these categories. Their internal efforts may not have been publicly available at the time we performed the analysis. As investors are increasingly requesting this information, these companies may publish more information regarding their efforts in the future.

Three companies that were recognized for having efforts that were considered Level 5 were STM Microelectronics, Samsung, and SiCrystal/ROHM Group (Figure 4). These companies have significantly higher revenues and have a larger variety of products they sell and distribute compared to Wolfspeed. For example, Samsung in 2020 had KRW 61.55 trillion<sup>xxxv</sup> or over \$55 billion in consolidated revenue, ROHM Group had \$3.38 billion in revenue,<sup>xxxvi</sup> and Cree/Wolfspeed had \$.885 billion in revenue.<sup>xxxvii</sup> By having a higher amount of resources to invest in these ESG efforts as well as more of a consuming facing preface, the companies have been able to take higher levels of action compared to Wolfspeed. Yet, their actions are something Wolfspeed can learn from to improve their sustainability efforts in the future.

From looking at examples from companies like Samsung and ROHM group, there are areas where Wolfspeed can improve that will help them in raising their score and gain them more credibility with their key stakeholders. The first component is clear transparency and providing

information to the public in what their efforts are and how Wolfspeed plans to increase those efforts in the future. When looking at Samsung's sustainability report, they provide clear details in terms of what their priorities are, the multiple partnerships, initiatives, and programs they are currently working, and how they achieve to be better in the future.<sup>xxxviii</sup> ROHM Group has a corporate social responsibility (CSR) website that is completely dedicated to their CSR efforts where you can see explanations of the issues they are currently facing and their strategies for mitigating them within the future on a topic by topic basis.<sup>xxxix</sup> Although it takes a lot of time and consideration to put out this information, it provides clear transparency to key stakeholders on what exactly the company is doing and be able to easily find the information. Although certain initiatives or efforts can be highlighted, having more information only brings more credibility to a company's efforts.

The second component is creating goals and objectives that will not only be beneficial for their own company but will be acting as a leader for other companies and other industries to take similar initiatives. These may be items that may be on the lower end of initiatives being evaluated but are still critical in being an ESG steward. For example, Samsung has made efforts in understanding the biodiversity impacts their operations are having, including the specific regions and type of endangered species, and understanding how their improvement activities need to be made to preserve the endangered species.<sup>xl</sup> In ROHM's Supply Chain Communication, they have events in which they have their business partners to not only outline their expectations but also give their business partners the opportunity to highlight their efforts that will help ROHM with their initiatives.<sup>xli</sup> Initiatives like these can cause a ripple effect to create a standard for other companies to take on and from leading by example. It is an opportunity for Wolfspeed to understand what it has to offer to not only create a positive impact

in their company but in other corporations as well. Taking on action within these two areas will increase Wolfspeed's credibility and showing themselves as a true leader in the industry.

## **Final Sustainability Goals**

The final sustainability goals covered the most of Wolfspeed's sustainability pillars, which included community engagement, employee lifecycle, corporate governance, environmental protection, and innovation for new technology. While Wolfspeed can significantly improve their performance and maturity level in the sustainability pillars by implementing these goals, some program owners shared concerns about goal measurement and achievement. For example, some previous goals like recruiting more self-identified people with disabilities and increasing volunteer hours from employees are difficult to track, which made the team change these goals to a general measurement of overall employees engaging in DEI programs and events rather than specific targets. Hence, it is important for the goal drafting process to understand not only the benefits of implementing the goals, but the data availability under current tracking systems.

In addition to those concerns, some stakeholders were also wary about the disclosure level of these goals: are these goals publicly available, available to customers or available only within the company? While disclosure of sustainability goals and progress is essential for sustainability reporting and also demanded by the customers, some information is related to core business strategies and may have adverse effects if published. In this situation, the goal drafting should discuss the disclosure level of each sustainability goal with relevant stakeholders, explain the benefits, and understand the concerns about disclosing the goal and metric on a case-by-case basis.

## Next Steps

To ensure on-ground implementation and progress on the recommended sustainability goals, the team suggests creating a sustainability committee along with developing an internal and external communication plan. The sustainability committee charter can be a guideline document for creating the committee, setting its scope, and establishing its standard operating procedures. Including top level executives in the committee can provide more meaning and motivation to the ones who implement the goals along with ensuring that the implementation team has the required resources for successful implementation and progress towards the goals.

Creating an internal communication plan can help Wolfspeed bring all employees together under the flag of sustainability and can signify its importance and value for the company. This can also help Wolfspeed create a green culture in the organization where each employee can add value towards sustainability and ensure that the corporate-wide sustainability goals are well-pursued and achieved. This can be complemented by developing an external communication plan, which can help Wolfspeed and other companies in the industry learn from each other, collaborate on mutual issues, share best practices, and get validation for the work well-done. Pursuing the team recommendations, Wolfspeed can establish itself as a sustainable company in due time and can improve its reputation and worth for investors, customers, and other stakeholders.

## Appendices

### Additional Figures and Tables:

#### **Figure 1.** Wolfspeed's Current Actions in their 4 ESG Pillars

***Social responsibility:*** Wolfspeed considers the health and well-being of each individual associated with the Wolfspeed community as its primary responsibility.<sup>xlii</sup> To promote Diversity, Equity and Inclusion initiatives, Wolfspeed launched various Employee Resource Groups, including the Women's Initiative and the PRIDE group. Wolfspeed also promotes one-on-one email communication with Wolfspeed's CEO which led to Wolfspeed's first formal employee engagement survey in 2018. Wolfspeed's education assistance program provides support for education and training of employees by offering education programs, education reimbursement and on- and off-site training opportunities. Wolfspeed also actively engages in community activities through various initiatives including Food Bank of Central & Eastern North Carolina and Habitat for Humanity.

***Corporate Governance:*** Wolfspeed established the Board of Directors "to serve as a prudent fiduciary for shareholders and to oversee the management of the Company's business."<sup>xliii</sup> The members constituting the Board of Directors shall range from 5 to 9 and will be elected annually by the shareholders.<sup>xliiv</sup> The Board of Directors has delegated to the Chief Executive Officer and requires that a significant majority of the directors serving at any time be independent. There shall be at least 4 regularly scheduled meetings of the Board each year, each held within the month after the release of the Company's quarterly earnings.

***Environment:*** Wolfspeed makes products that enable their customers to invent power and wireless systems for a responsible, energy efficient future. Wolfspeed's products sold in 2019 will save 350 million MWh and 140 million metric tons of CO<sub>2</sub>e, compared to other traditional alternatives. Wolfspeed developed a program in 2019 that successfully diverted 130,000 pounds of a specific material from the landfill to a recycling facility at our Durham facility.<sup>xliv</sup> Due to global water crisis, water recycling goals and recycling systems have been implemented at Wolfspeed's manufacturing facilities that use the most water. With Wolfspeed's new focus of becoming a powerhouse semiconductor company, Wolfspeed developed a new EP100 goal in 2019 to double their manufacturing energy productivity in terms of revenue per MWh of energy consumed during manufacturing from 2017 to 2040.

**Economic:** Wolfspeed generated \$1.1 billion revenue in fiscal year of 2019 (FY19) with \$1,051.4 million in cash and short-term investments.<sup>xlvi</sup> Gross profit in FY 19 has increased to \$391 million from \$302 million in FY 18. These accomplishments result from improving customer service, innovating advanced technologies, and ensuring product quality based on standards such as ISO 9001, IATF 16949, and AS 9100D.

**Table 3.** Synthesized Notes from Program Owner Meetings

<b>Program Owner Team</b>	<b>Key Findings/Notes/Quotes</b>
<b>Environmental Team:</b>	<ul style="list-style-type: none"> <li>● Long term goals need to be made as there is uncertainty in the environmental impacts from the New York facility in 2024. Support carbon neutral goals.</li> <li>● Easier data collection for water and energy, but harder for waste.</li> <li>● Barriers: expensive to purchase renewable energy onsite/offsite, tracking environmental data from multiple sites, and unable to take out certain halogens without impacting product quality.</li> </ul>
<b>Finance Team:</b>	<ul style="list-style-type: none"> <li>● ESG is particularly becoming more important for investors and investors also wanting cleaner, more efficient products.</li> <li>● Challenges: financial obligations, not highly involved with the operations team, and benchmarks in order to create their goals.</li> <li>● Need to make large ambitious goals but can maybe find some low hanging fruit first to get some internal momentum going</li> </ul>
<b>Products Team:</b>	<ul style="list-style-type: none"> <li>● “The overarching goal was really to enable a more efficient use of energy and efficient electrification of the automotive, the energy and the industrial segments which are our three primary target markets.”</li> <li>● Find that diversity efforts within the company have strengthened the team to become more effective and better at problem solving.</li> <li>● Big goal for driving the industry transformation especially in the automotive space and for the energy and industrial markets to adopt and use more efficient semiconductor technologies.</li> <li>● Key theme: product efficiency.</li> </ul>
<b>Supply Chain and Quality Team:</b>	<ul style="list-style-type: none"> <li>● Do more with less.</li> <li>● Major challenge for setting corporate-wide sustainability goals is benchmarking. Besides, the data is not well organized or categorized for the goal setting. The engineering team could be more responsible for designing such qualitative goals.</li> <li>● Ask suppliers to do internal audits but do not track or manage it. Lisa Fritz also suggested “putting a goal as percentage of our suppliers are meeting these certain standards.”</li> </ul>

	<ul style="list-style-type: none"> <li>● Wolfspeed could work cooperatively with their suppliers on developing baselines and identifying key categories that help achieve sustainability.</li> <li>● The expectation for sustainability keeps increasing but there are also some tradeoffs that could reduce productivity and profitability. Government push to inform Wolfspeed what targets they should create in the future, especially for the EV field.</li> <li>● For product compliance, lead-free is an important target.</li> </ul>
<p><b>Supply Chain and Procurement:</b></p>	<ul style="list-style-type: none"> <li>● For material procurement, the team “haven't put a lot of effort into this factor (suppliers’ performance) in making the decisions (on which supplier should Wolfspeed choose).”[Joe]</li> <li>● Currently there is no direct incentive for suppliers’ environment or sustainable actions. Wolfspeed should also consider the business needs and suppliers’ availability when imposing these requirements or incentives.</li> <li>● “We do a lot but just have not really scoped them into a goal and metric.” [Nathan] And the next step could be putting some number on supplier quality evaluations (measure the baseline).</li> <li>● Goals don’t have to be mutually exclusive and it’s ok to double dip. Currently, there are not many sustainability goals that are developed and achieved together with suppliers. But it is possible to develop an eco-friendly project with customers.</li> </ul>
<p><b>Internal Audit Team:</b></p>	<ul style="list-style-type: none"> <li>● Main task/idea is to provide insights to management about the health of internal controls and processes. Not enough self-assessments done in the company.</li> <li>● Want to be wise friends to other departments and work like partners – not someone to judge or evaluate them all the time.</li> <li>● Currently kind of no goals set for internal audit – hence no tracking on that. But the department would want to have three things implemented: Education for the internal audit team on sustainability, self-assessments in the enterprise, followed by proper internal audit.</li> <li>● Future: a true business partner that provides valuable insights and advice, provides another set of eyes and an independent opinion to other departments, wants senior leadership to understand the impact and how important this is for the company, and to disseminate the message.</li> </ul>
<p><b>HR Team:</b></p>	<ul style="list-style-type: none"> <li>● Main focus is on new recruitments, specifically having diverse talent in internship programs so that they can join Wolfspeed after internships</li> <li>● Don’t want to set target like ‘have X% women/etc. in leadership by Y year’ because that’s hard to say right now and gives ammunition to enemies.</li> <li>● Processes and Systems are bad, getting accurate and precise data is tough.</li> </ul>



	<ul style="list-style-type: none"> <li>● We want to be considered the employer of choice for women, employer of choice for underrepresented groups, employer of choice for veterans.</li> <li>● Also working to do an employee engagement survey next year.</li> </ul>
<b>Health and Safety Team:</b>	<ul style="list-style-type: none"> <li>● We set out to develop some enterprise-wide goals for incidence evaluation and corrective action- some metrics: incidence evaluation, corrective actions, etc.</li> <li>● To measure and track, turnaround time for incidence evals and corrective action is/should be used.</li> <li>● For future: continuation of ‘plan, do, check, act’ mgt systems – there's no framework right now.</li> <li>● We'll be resetting strategy – developing three-year strategy where all stuff is laid out. Risk assessment, employee retention, etc. So, people know across sites what the standards are.</li> <li>● Furthermore, GHG goals. How our supply chain functions and how we look at suppliers and total value chain – getting metrics against those so that we know performance.</li> </ul>
<b>Marketing/Community Relations Team:</b>	<ul style="list-style-type: none"> <li>● “I think clearly what's important for us is to figure out how we measure impact and tell that story. That would be my goal.”</li> <li>● “Don't have any specific metrics to this point - don't want to measure ourselves in terms of dollars spent. What we would like to do is measure the impact that we've had with those dollars.”</li> <li>● “We have not had a way to measure or track our employee engagement to date. And now with the software that has a lot of potentials and a lot of keys that you can do your matching gifts, but you can also track your volunteers”</li> <li>● Wolfsped’s major focus with the community relations program is STEM education and opening up opportunities to those who would previously be underserved.</li> </ul>
<b>Operations Team:</b>	<ul style="list-style-type: none"> <li>● “I would be surprised if there was something we were doing that didn't have a contribution to sustainability.”</li> <li>● “I think a lot of things in the electronics industry are geared towards things like automation, simplification of processes, through that lends itself to less contamination and less greenhouse gases going into the environment.”</li> <li>● Everything, every metric under the sun is tracked... [but] there is various data they pull from different databases from different manufacturers. It's not one seamless database.</li> </ul>
<b>Facilities Team:</b>	<ul style="list-style-type: none"> <li>● “Our goal every year is to make sure that we're not responsible for shutting production down.”</li> <li>● “We have a central control system called Wonderware. The data's there, it's just not immediately apparent..... A weekly or monthly report [would be helpful] saying this is what came in.”</li> </ul>

	<ul style="list-style-type: none"> <li>● “Being leaders within the community is massive, but leaders within our own organization is also important for electronics. Our substrate alone makes us unique, so we're already under a microscope with just our technology alone.”</li> <li>● “In the workforce that we have, not many people have experience with such a broad range of equipment, but you then need to turn them into the experts of equipment that they probably never seen before.”</li> </ul>
<b>Legal Team:</b>	<ul style="list-style-type: none"> <li>● When people think of us, they think, ‘this is coming from Wolfspeed, this will speed sustainability’.</li> <li>● Work in Wolfspeed more on a complete transparency. Could be a bigger push for both environmental sides and supply chain sides.</li> <li>● Sustainability goal should be really pushing to bring together all of our independent efforts into a comprehensive kind of compliance sustainability thing that is recognizable.</li> <li>● “Retrieving data to report is just cumbersome. For everybody to gather the right people, to get them to focus on it, and to get it done.”</li> </ul>
<b>DEI Team:</b>	<ul style="list-style-type: none"> <li>● New to Wolfspeed. Our overall goal is to within the next three years to increase our number of women and underrepresented populations in leadership by 5% based on our baseline.</li> <li>● Launching an employee engagement survey... once we get that baseline... [then] we're going to develop where we would like to be in a, in [xyz year]. Employee engagement survey: for employees to provide direct feedback to leaders and managers throughout the organization and understand how engaged they are in the programs that we're creating.</li> <li>● And so, when we start looking at talent acquisition, our goal is to increase our pipeline of diverse talent. We are also looking at developing a leadership development program, which would focus on our female and underrepresented people.</li> <li>● Challenges: processes and systems. A lot of the data that we are tracking today, it's either manual or there has to be some manipulation done to turn it into trackable information.</li> </ul>

## Figure 6. Wolfspeed Sustainability Committee Charter

### Purpose

The Committee provides leadership oversight for the development, measurement, and maintenance of our sustainability initiatives. The Sustainability Committee (hereafter referred to as the Committee) promotes the adoption of the Sustainability principles and pillars across Wolfspeed.

The Committee ensures that Wolfspeed has the ability required to identify and meet the international standards and agreements in the Sustainability principles and pillars noted below.<sup>xlvii</sup>

This charter describes the management processes in sustainability through the mandate, membership, and responsibilities of the Committee.

### Mandate

The mandate of the Committee is to support value creation for all stakeholders by integrating Environmental, Social and Governance (ESG) responsibility into daily business activities as defined by our Sustainability Principles and Pillars.<sup>xlviii</sup>

### Main Objectives

- Coordinate with business units and affected sub-teams to set annual goals, assess periodic attainment status and drafting a plan for Board of Directors approval.
- Monitor, manage and coordinate the sustainable development strategy and its implementation based on annual objectives and an action plan approved by the Board of Directors.
- Collectively identify and assesses the significant ESG risks that may impair or impact the long-term business objectives.
- Stay abreast of global activities involving ESG and bring knowledge and awareness to fellow Committee members.
- Lead the represented business unit in providing data required for enterprise-wide reporting on all Sustainability goals and initiatives (performance indicators required in data collection systems, Wolfspeed's Sustainability Report, and other data needs as required.)

### Sustainability Pillars and Principles

#### Pillars

The Pillars to Sustainability align with the United Nations Sustainability Goals which are as follows (highlighted according to which Pillar we are placing our goal development and alignment Environmental, Economic, Social or Corporate Governance):<sup>xlix</sup>

1. No Poverty	2. Zero Hunger	3. Good Health and Well-Being
4. Quality Education	5. Gender Equality	6. Clean Water and Sanitation

7. Affordable and Clean Energy	8. Decent Work and Economic Growth	9. Industry Innovation and Infrastructure
10. Reduced Inequalities	11. Sustainable Cites and Communities	12. Responsible Consumption and Production
13. Climate Action	14. Life Below Water	15. Life on Land
16. Peace, Justice and Strong Institutions	17. Partnerships for the Goals	

Principles

Our Principles are used to further arrange our goals, and importantly, help determine which Business Unit Sub-Teams best contribute to the Committee.

Principle 1: People First, People Always

Principle 2: Absolute Commitment to Integrity and Transparency

Principle 3: Processes that Protect the Environment; Products that Improve it<sup>1</sup>

Principle 4: Responsible Business practices, Innovating for a Better Future

Selection of Committee Members

In addition to one Board member, each Business Unit leader is to supply the name(s) of those employees who best fit the following roles and characteristics

- Represents the sub-team within each Business Unit most likely to drive goal development in line with our Pillars and Principles [e.g., Sales and Marketing – Community Engagement; Human Resources – DEI, Legal – Corporate Governance; Global Operations – EHS, Facilities, Production, Supply Chain; Quality (Product Compliance) Research & Development; Power G&A; Materials G&A; RF G&A; and Finance – Investor Relations]
- Be passionate about the sustainable development of the company.
- Have enough authority to make decisions on behalf of their department at Committee meetings.
- Have enough authority to bring strategic matters back to the team and initiate real follow up; Has adequate time to devote to serving as the "eyes and ears" for your unit (in terms of sustainability)

Responsibilities and Terms of Service

Chair and vice-chair

The Committee has two officers: Chair and Vice-chair. The chair is an SLT member and the vice-chair is a management or employee representative.

#### Terms of service

- Chair and vice-chair will each serve a \_\_\_\_\_ term.

#### Duties of the chair

- Conduct the Committee meeting.
- Approve Committee correspondence and reports.

#### Duties of the vice-chair

- Schedule regular committee meetings.
- Develop written agendas for the meetings.
- In the absence of the chair, assume the duties of the chair.
- Perform other duties as directed by the chair.

#### Election of chair and vice-chair

The election of a new chair or vice-chair will be held during the monthly Committee meeting before the month in which the incumbent's term expires. If the chair or vice-chair leaves office before the term expires, an election will be held during the next scheduled Committee meeting; the elected Chair will serve for the remainder of the term.

#### Members

##### Terms of service

- Members will each serve a \_\_\_\_\_ term or \_\_\_\_\_.

##### Duties of the Members

- Attend periodic meetings.
- Provide feedback on policies and practices being considered by the various business units comprising the Sustainability Committee.
- Bring information on Wolfspeed's sustainability efforts back to their business units.
- Encourage sustainable practices, behaviors and policies in their business units; and
- Share business unit or sub-team successes and challenges with the Sustainability Committee.
- Work with Marketing and Legal on Wolfspeed's Annual Report, the Sustainability Website, and regular internal and external reports as needed.

#### Ex-officio Representative

The Committee includes the sitting EHS Global Director. The Director represents their staff who manage and coordinate stakeholder dialogue with respect to ESG matters. Those individuals maintain the corporate data center and act as a resource for sustainability matters on a Corporate level and handle all sustainability related questionnaires from investors and customers.

#### Sustainability management process

The Sustainability Committee focuses on measures to ensure there are correct processes for

- Aligning the sustainability principles and goals to overall corporate vision and principles.

- Identifying and managing key opportunities and challenges faced during the pursuit of sustainability goals.
- Identifying and managing the reliability and accessibility of data necessary for performance evaluation and pursuit of different sustainability goals.
- Monitoring and constantly improving the sustainability management processes and initiatives in the organization.
- Identifying and engaging with the key stakeholders.

#### Conduct of Periodic Meeting

The Committee meets periodically as needed and in consideration of members availability.

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<sup>i</sup> Cree Annual Report 2020. (2020). Retrieved September 26, 2020, from [https://www.cree.com/media/sustainability/Cree\\_Wolfspeed\\_Sustainability\\_Report\\_2020.pdf](https://www.cree.com/media/sustainability/Cree_Wolfspeed_Sustainability_Report_2020.pdf)

<sup>ii</sup> Cree Annual Report 2020. (2020). Retrieved September 26, 2020, from [https://www.cree.com/media/sustainability/Cree\\_Wolfspeed\\_Sustainability\\_Report\\_2020.pdf](https://www.cree.com/media/sustainability/Cree_Wolfspeed_Sustainability_Report_2020.pdf)

<sup>iii</sup> IBID

<sup>iv</sup> Cree Annual Report 2020. (2020). Retrieved September 26, 2020, from [https://www.cree.com/media/sustainability/Cree\\_Wolfspeed\\_Sustainability\\_Report\\_2020.pdf](https://www.cree.com/media/sustainability/Cree_Wolfspeed_Sustainability_Report_2020.pdf)

<sup>v</sup> NC State Engineering Spring 2010 Online Magazine. (2014). Retrieved September 27, 2020, from

<https://web.archive.org/web/20140115120827/http://www.engr.ncsu.edu/magazine/spring2010/cree.php>

<sup>vi</sup> Cree Announces Wolfspeed – the New Name for the Power and RF Business. (2015, September 02). Retrieved February 23, 2021, from <https://www.cree.com/news-media/news/article/cree-announces-wolfspeed-ndash-the-new-name-for-the-power-and-rf-business#:~:text=DURHAM%2C%20N.C.%20%2C%20September%20%2C,and%20RF%20di vision%20of%20Cree.>

<sup>vii</sup> IBID

<sup>viii</sup> Everything RF. (2018). Retrieved September 27, 2020, from <https://www.everythingrf.com/News/details/5773-Cree-Acquires-Infineon-s-RF-Business-for-345-Million>

<sup>ix</sup> Cree to Sell Lighting Business to IDEAL INDUSTRIES, INC. (2019, March 15). Retrieved September 30, 2020, from <https://www.cree.com/news-events/news/article/cree-to-sell-lighting-business-to-ideal-industries-inc>

<sup>x</sup> Simmons, C. (2019, September 23). Cree Announces Update to Capacity Expansion Plan - Company to Build World's Largest Silicon Carbide Device Manufacturing Facility in New York. Retrieved September 30, 2020, from <https://www.cree.com/news-events/news/article/cree-announces-update-to-capacity-expansion-plan>

<sup>xi</sup> Shepard, P. (2018, June). 1200V sic MOSFET for EV drivetrains - new industry products. Retrieved February 23, 2021, from <https://eepower.com/new-industry-products/1200v-sic-mosfet-for-ev-drivetrains/#>

<sup>xii</sup> Ashrafi, M., Acciaro, M., Walker, T. R., Magnan, G. M., & Adams, M. (2019). Corporate sustainability in Canadian and US maritime ports. *Journal of Cleaner Production*, 220, 386-397.

<sup>xiii</sup> IBID

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- <sup>xiv</sup> Ashrafi, M., Acciaro, M., Walker, T. R., Magnan, G. M., & Adams, M. (2019). Corporate sustainability in Canadian and US maritime ports. *Journal of Cleaner Production*, 220, 386-397.
- <sup>xv</sup> Singer, T., Saush, A., & Schrader, A. (2020). Sustainability Practices – Despite a pandemic: Transparency continues to increase across key sustainability issues. *The Conference Board*.
- <sup>xvi</sup> IBID
- <sup>xvii</sup> Auer, B. R., & Schuhmacher, F. (2016). Do socially irresponsible investments pay? New evidence from international ESG data. *The Quarterly Review of Economics and Finance*, 59, 51-62. doi: 10.1016/j.qref.2015.07.002
- <sup>xviii</sup> Singer, T., Saush, A., & Schrader, A. (2020). Sustainability Practices – Despite a pandemic: Transparency continues to increase across key sustainability issues. *The Conference Board*.
- <sup>xix</sup> Smith, N. C., & Soonieus, R. (2019, April 19). How Board Members Really Feel About ESG, from Deniers to True Believers. Retrieved September 27, 2020, from <https://hbr.org/2019/04/how-board-members-really-feel-about-esg-from-deniers-to-true-believers>
- <sup>xx</sup> Kotsantonis, S., & Serafeim, G. (2019, April 01). Four Things No One Will Tell You About ESG Data. Retrieved September 27, 2020, from <https://www.hbs.edu/faculty/Pages/item.aspx?num=56372>
- <sup>xxi</sup> IBID
- <sup>xxii</sup> Toward Common Metrics and Consistent Reporting of Sustainable Value Creation. (2020, January). Retrieved September 27, 2020, from <https://www.weforum.org/whitepapers/toward-common-metrics-and-consistent-reporting-of-sustainable-value-creation>
- <sup>xxiii</sup> ESG Materiality: How Clear Metrics Can Filter the Noise. (2020, May 20). Retrieved September 27, 2020, from <https://www.brighttalk.com/webcast/14001/394012/esg-materiality-how-clear-metrics-can-filter-the-noise>
- <sup>xxiv</sup> Sustainability Report 2020. (2020). Cree Sustainability report. Retrieved from [https://www.cree.com/media/sustainability/Cree\\_Wolfspeed\\_Sustainability\\_Report\\_2020.pdf#page=61](https://www.cree.com/media/sustainability/Cree_Wolfspeed_Sustainability_Report_2020.pdf#page=61).
- <sup>xxv</sup> Sustainability Report 2020. (2020). Cree Sustainability report. Retrieved from [https://www.cree.com/media/sustainability/Cree\\_Wolfspeed\\_Sustainability\\_Report\\_2020.pdf#page=61](https://www.cree.com/media/sustainability/Cree_Wolfspeed_Sustainability_Report_2020.pdf#page=61).
- <sup>xxvi</sup> Annual Report. (2020). Cree Investor Relations. Retrieved from <https://investor.cree.com/static-files/85d4d3f1-a609-496a-9512-b4238719e0e5>
- <sup>xxvii</sup> Chilik, I., Edens, K., Klusch, K., & Ralph, P. (2019). *Assessment of Sustainability Maturity Models for Business Transformation* (Doctoral dissertation, Blekinge Institute of Technology, 2019). Karlskrona, Sweden: Blekinge Institute of Technology.
- <sup>xxviii</sup> Hollender, J. (2015, April 29). Net positive: The future of sustainable Business (SSIR). Retrieved February 20, 2021, from [https://ssir.org/articles/entry/net\\_positive\\_the\\_future\\_of\\_sustainable\\_business](https://ssir.org/articles/entry/net_positive_the_future_of_sustainable_business)
- <sup>xxix</sup> Sustainable Brands. (2012, February 29). Your Next Move: From Bolt-On to Embedding Sustainability. Retrieved February 20, 2021, from [https://www.youtube.com/watch?v=Uj-xPYDndbM&ab\\_channel=SustainableBrands](https://www.youtube.com/watch?v=Uj-xPYDndbM&ab_channel=SustainableBrands)
- <sup>xxx</sup> UN sustainable development GOALS Conference: Research to action on the African continent. (n.d.). Retrieved April 22, 2021, from <http://unsdg.ucdavis.edu/>
- <sup>xxxi</sup> UN sustainable development GOALS Conference: Research to action on the African continent. (n.d.). Retrieved April 22, 2021, from <http://unsdg.ucdavis.edu/>
- <sup>xxxii</sup> Cree Annual Report 2020. (2020). Retrieved September 26, 2020, from [https://www.cree.com/media/sustainability/Cree\\_Wolfspeed\\_Sustainability\\_Report\\_2020.pdf](https://www.cree.com/media/sustainability/Cree_Wolfspeed_Sustainability_Report_2020.pdf)

- 
- <sup>xxxiii</sup> UN sustainable development GOALS Conference: Research to action on the African continent. (n.d.). Retrieved April 22, 2021, from <http://unsdg.ucdavis.edu/>
- <sup>xxxiv</sup> UN sustainable development GOALS Conference: Research to action on the African continent. (n.d.). Retrieved April 22, 2021, from <http://unsdg.ucdavis.edu/>
- <sup>xxxv</sup> Samsung. (2021, January 28). Samsung electronics ANNOUNCES fourth quarter and FY 2020 Results. Retrieved March 31, 2021, from <https://news.samsung.com/global/samsung-electronics-announces-fourth-quarter-and-fy-2020-results>
- <sup>xxxvi</sup> Macrotrends. (2020). Rohm net profit Margin 2011-2020: ROHCY. Retrieved March 31, 2021, from <https://www.macrotrends.net/stocks/charts/ROHCY/rohm/net-profit-margin>
- <sup>xxxvii</sup> Macrotrends. (2020). Cree revenue 2006-2020: CREE. Retrieved March 31, 2021, from <https://www.macrotrends.net/stocks/charts/CREE/cree/revenue>
- <sup>xxxviii</sup> Samsung Electronics. (2020). A Fifty-Year Journey Towards a Sustainable Future. Retrieved September 20, 2020, from <https://images.samsung.com/is/content/samsung/p5/uk/pdf/SustainabilityReport2019v2-en.pdf>
- <sup>xxxix</sup> ROHM Semiconductor. (2020). Inherit ROHM'S CSV from the past and continue to develop a sustainable society in the future. Retrieved March 31, 2021, from <https://csr.rohm.com/>
- <sup>xl</sup> Samsung Electronics. (2020). A Fifty-Year Journey Towards a Sustainable Future. Page 48. Retrieved September 20, 2020, from <https://images.samsung.com/is/content/samsung/p5/uk/pdf/SustainabilityReport2019v2-en.pdf>
- <sup>xli</sup> ROHM Semiconductor. (2020). Supply Chain Communication-Procurement. Retrieved March 31, 2021, <https://csr.rohm.com/supply-chain/communication.html>
- <sup>xlii</sup> Cree Annual Report 2020. (2020). Retrieved September 26, 2020, from [https://www.cree.com/media/sustainability/Cree\\_Wolfspeed\\_Sustainability\\_Report\\_2020.pdf](https://www.cree.com/media/sustainability/Cree_Wolfspeed_Sustainability_Report_2020.pdf)
- <sup>xliii</sup> Corporate Governance. (n.d.). Retrieved September 27, 2020, from <https://investor.cree.com/corporate-governance>
- <sup>xliv</sup> CREE'S CORPORATE GOVERNANCE PRINCIPLES. (2014, October 27). Retrieved September 27, 2020, from <https://investor.cree.com/static-files/07209acf-f636-4920-9b1a-e24c1486ce9e>
- <sup>xlv</sup> Cree Annual Report 2020. (2020). Retrieved September 26, 2020, from [https://www.cree.com/media/sustainability/Cree\\_Wolfspeed\\_Sustainability\\_Report\\_2020.pdf](https://www.cree.com/media/sustainability/Cree_Wolfspeed_Sustainability_Report_2020.pdf)
- <sup>xlvi</sup> Cree Annual Report 2020 Form 10-K. (2020). Retrieved September 30, 2020, from <https://investor.cree.com/static-files/85d4d3f1-a609-496a-9512-b4238719e0e5>
- <sup>xlvii</sup> AmChamTurkey Sustainability Committee. (n.d.). Retrieved April 22, 2021, from <http://www.amchamturkey.com/committees/sustainability>
- <sup>xlviii</sup> AmChamTurkey Sustainability Committee. (n.d.). Retrieved April 22, 2021, from <http://www.amchamturkey.com/committees/sustainability>
- <sup>xlix</sup> UN sustainable development GOALS Conference: Research to action on the African continent. (n.d.). Retrieved April 22, 2021, from <http://unsdg.ucdavis.edu/>
- <sup>l</sup> Cree Annual Report 2020. (2020). Retrieved September 26, 2020, from [https://www.cree.com/media/sustainability/Cree\\_Wolfspeed\\_Sustainability\\_Report\\_2020.pdf](https://www.cree.com/media/sustainability/Cree_Wolfspeed_Sustainability_Report_2020.pdf)