

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Cadence is a leader in electronic design, building upon more than 30 years of computational software expertise. Our Intelligent System Design™ strategy provides the technologies necessary for our customers to develop and optimize a complete and functional electronic product. Our products and services are designed to give our customers a competitive edge in their development of integrated circuits (“ICs”), systems-on-chip (“SOCs”), and increasingly sophisticated electronic devices and systems. Our products and services do this by optimizing performance, minimizing power consumption, shortening the time to bring our customers’ products to market, improving engineering productivity and reducing their design, development and manufacturing costs. Our customers create and sell electronic products at differing levels of end-product completeness. Our electronic systems customers deliver entire devices, such as smartphones, laptop computers, gaming systems, automobiles and autonomous driving systems, servers, cloud data center infrastructure, artificial intelligence (“AI”) systems, aerospace and defense, medical equipment and networking products. These systems companies internally develop, or externally purchase, the sub-components for their products, including printed circuit boards (“PCBs”), which interconnect all the hardware components, ICs, which are often referred to as computer chips, and software at various levels which runs on the hardware. Our semiconductor customers deliver ICs, which include subcategories such as memory chips, systems-on-chip (SoCs) , analog chips, processors and other types of chips. We offer software, hardware, services and reusable IC design blocks, which are commonly referred to as intellectual property (“IP”). Systems customers use our offerings to develop and integrate software that is key to the functionality of their products, as well as to design their ICs and PCBs. Our semiconductor customers use our offerings to design, configure, analyze and verify ICs. Additionally, some customers license our IP, which accelerates their product development processes by providing pre-designed and verified circuit blocks for their ICs.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1 2020	December 31 2020	No	<Not Applicable>

C0.3

(C0.3) Select the countries/areas for which you will be supplying data.

- Brazil
- Canada
- China
- Finland
- France
- Germany
- Hungary
- India
- Ireland
- Israel
- Italy
- Japan
- Malaysia
- Poland
- Republic of Korea
- Russian Federation
- Singapore
- Sweden
- Taiwan, Greater China
- United Kingdom of Great Britain and Northern Ireland
- United States of America

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Board-level committee	Our Board through its Corporate Governance and Nominating Committee oversees our corporate social responsibility program and the progress of our environmental, social and governance issues, including climate-related risks and opportunities.

C1.1b

(C1.1b) Provide further details on the board’s oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – all meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action	<Not Applicable>	Our Board through its Corporate Governance and Nominating Committee oversees our corporate social responsibility program and the progress of our environmental, social and governance issues, including climate-related risks and opportunities. The Corporate Governance and Nominating Committee formally reviews our environmental, social and governance efforts at every regular meeting, and oversees our policies and practices regarding our corporate social responsibility and sustainability program, including environmental/climate-related, social and governance matters and initiatives, and report at least annually on such program. In 2020, the Corporate Governance and Nominating Committee held three meetings.

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Other C-Suite Officer, please specify (General Counsel & Secretary)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Half-yearly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

Our Sr. Vice President and Chief Legal Officer is the highest management-level position with responsibility for climate-related issues. Our Senior Group Director of Corporate Social Responsibility is responsible for assessing climate-related risks and opportunities and reports to the Associate General Counsel, who in turn reports to the Chief Legal Officer.

Our Chief Legal Officer is briefed regularly on our ESG program and initiative progress, reviews and accepts new proposals, and approves major actions. The Senior Group Director of Corporate Social Responsibility reports to the Board of Directors Corporate Governance and Nominating Committee on climate-related issues at least half-yearly.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	Facilities managers and some members of their teams are considered for incentives linked to the management of climate-related issues such as energy reduction and efficiency projects and behavior change.

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Facilities manager	Non-monetary reward	Energy reduction project Efficiency project	Facilities managers and some members of their teams are considered for non-monetary incentives based on achieving goals that relate to energy reduction and efficiency projects.
Facilities manager	Monetary reward	Energy reduction project Efficiency project	Facilities managers and some members of their teams are considered for monetary incentives based on achieving goals that relate to energy reduction and efficiency projects.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	3	We consider a short-term horizon for climate-related issues up to three years in the future.
Medium-term	3	5	We consider a medium-term horizon for climate-related issues between three and five years in the future.
Long-term	5	10	We consider a long-term horizon for climate-related issues between five and ten years in the future.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Substantive financial or strategic impact on our business is defined based on the concept of materiality. An event or set of circumstances would be considered material (and therefore substantive) if the impact of the event would, in light of surrounding circumstances, make it probable that the judgment of a reasonable person in determining whether to buy or sell Cadence common stock would be changed or influenced by the event.

More specifically for the purposes of climate-related risks, we define substantive or strategic impact as any event that could have a material, adverse effect on our business including: our ability to deliver on our commitments to clients, our ability to operate our research & development activities which result in the development of new or improved existing products, our financial condition, results of operations, cash flows, and the trading price of our common stock. Quantitative indicators may include whether or not the event or set of circumstances was substantive enough to be disclosed in our filings with the United States Securities and Exchange Commission.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

Annually

Time horizon(s) covered

Short-term

Medium-term

Description of process

Process(es) for identifying, assessing and responding to climate-related risks and opportunities in our direct operations are integrated into our multi-disciplinary company-wide risk management process. Potential risk and opportunity factors are identified by many groups within Cadence, including the cross-functional ESG Team. When potential climate-related risk and opportunity factors are identified, we assess the potential impact they may have on our operations and whether or not the identified risk may have the potential to impede our ability to develop new or improved existing products, deliver on our commitments to clients, or harm our reputation. Case study describing processes for identifying, assessing and responding to climate-related physical and transitional risks in our operations Situation: As part of our multi-disciplinary company-wide risk management processes, we consider climate-related risks. Increasingly, setting a GHG reduction target is considered part of being a good corporate citizen and essential to our commitment to sustainable innovation. Our process identified the lack of a GHG reduction target as a missed opportunity for innovation in how the company consumes energy and a potential reputational risk. Task: Our task then became to assess the potential impacts of not having a GHG reduction target, to look at opportunities for innovation and energy efficiencies and to determine how to respond appropriately. Actions: The Cadence multi-disciplinary ESG Team took a number of steps to determine the best course of action to formulate a GHG reduction strategy that would achieve a science-based GHG reduction target. These actions included: understanding our current GHG footprint, conducting benchmarking including understanding commonly acceptable approaches, assessing our options for GHG reductions within our operations, and conducting financial analysis on reduction paths. Result: In 2020 we formally adopted a plan of action and publicly announced a reduction target of 15% in Scope 1 and 2 emissions for our owned and leased properties by the year 2025 over the 2019 baseline.

Value chain stage(s) covered

Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

Annually

Time horizon(s) covered

Short-term

Medium-term

Description of process

Process(es) for identifying, assessing and responding to climate-related risks and opportunities downstream in our value chain are integrated into our multi-disciplinary company-wide risk management process. Downstream climate-related opportunity factors are identified by the marketing and account management teams that support our customers. When climate-related opportunities are identified, we assess the potential impact they may have on our revenues against the cost and benefits of addressing the opportunity in order to make decisions on how to respond. Downstream climate-related risks are identified and assessed by the cross-functional ESG Team at Cadence. Case study describing processes for identifying, assessing and responding to climate-related opportunities downstream with customers Situation: Today's applications processors are not equipped to handle the complex embedded imaging and vision digital signal processing functions needed in the mobile handsets, drone, automotive, robotics, surveillance, and augmented reality (AR) / virtual reality (VR) markets. Task: Create a much-needed breakthrough in terms of energy efficiency and performance that enables applications never before possible in a programmable device. Action: Vision DSPs provide the perfect balance of power and performance. From applications targeted for mobile handsets and surveillance cameras to advanced AI in Autonomous Vehicles, Drones, and Robotics. The Tensilica Vision DSP family also offers outstanding performance while running AI. By choosing the right DSP, customers can maintain the functionality needed for their computer vision design without sacrificing performance or power. Results: Tensilica Vision P6 DSPs provide customers like Kneron with up to 2X faster performance for computer vision and neural network processing compared to its prior-generation SoC, while delivering the power efficiency crucial for edge AI. Offering up to 3.8X more power efficiency than CPUs alone and 1024 giga-operations (GOPS) of processing power, the Tensilica Vision P6 DSP serves as a powerful offload engine, efficiently processing vision and AI workloads to meet the demands for accurate detection and identification of objects. Tensilica Vision P6 DSP enabled Toshiba to execute complex algorithms for accurate detection and identification of a wide range of objects while consuming very low power, which is crucial for today's automotive applications.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Risks relating to current and emerging regulations are integrated into our multi-disciplinary company-wide risk management process. Since we are headquartered in San Jose, California, we include state-wide regulations in our climate-related risk assessments.
Emerging regulation	Relevant, always included	Risks relating to current and emerging regulations are integrated into our multi-disciplinary company-wide risk management process. Given our status as a technology company with a global presence, we consider climate-related risks relating to emerging legislation in our risk assessments. Although regulations around carbon reductions are emerging throughout the world, our current focus is on emerging regulations resulting from the United States re-joining the Paris Agreement because we are listed on the Nasdaq and have a significant presence in the United States.
Technology	Relevant, always included	Technology risks are integrated into our multi-disciplinary company-wide risk management process. Our offices in the United States and in other countries around the world may be adversely impacted by natural disasters, including fires, earthquakes, flooding and other climate change-related risks, or actions by utility providers, as well as other catastrophic events such as an actual or threatened public health emergency. If a catastrophic event occurs at or near any of our offices, or utility providers or public health officials take certain actions (e.g., shut off power to our facilities or impose travel restrictions), our operations may be interrupted, which could adversely impact our business and results of operations. If a catastrophic event impacts a significant number of our customers, resulting in decreased demand for their and our products, or our ability to provide services and maintenance to our customers, our business and results of operations could be adversely impacted. For example, the continued spread of the corona virus and related public health measures could result in further disruptions to our operations and those of our customers. As part of our risk assessments, we consider potential climate-related risks involving the data centers and digital infrastructure our business often relies on.
Legal	Relevant, always included	Legal risks are integrated into our multi-disciplinary company-wide risk management process. As part of our risk assessments, we consider potential exposure to legal risks of overstating the climate-related benefits of our energy optimization products and services; one such energy optimization product is Tensilica Vision DSP.
Market	Relevant, always included	Market risks are integrated into our multi-disciplinary company-wide risk management process. Our offices in the United States and in other countries around the world may be adversely impacted by natural disasters, including fires, earthquakes, flooding and other climate change-related risks, or actions by utility providers, as well as other catastrophic events such as an actual or threatened public health emergency. If a catastrophic event occurs at or near any of our offices, or utility providers or public health officials take certain actions (e.g., shut off power to our facilities or impose travel restrictions), our operations may be interrupted, which could adversely impact our business and results of operations. If a catastrophic event impacts a significant number of our customers, resulting in decreased demand for their and our products, or our ability to provide services and maintenance to our customers, our business and results of operations could be adversely impacted. For example, the continued spread of the corona virus and related public health measures could result in further disruptions to our operations and those of our customers. Further, since our business is highly dependent on electricity, we consider climate-related market risks of gradual or sudden changes in electricity pricing and supply.
Reputation	Relevant, always included	Reputation risks are integrated into our multi-disciplinary company-wide risk management process. We consider climate-related reputational risks in our risk assessments, and proactively look for ways to reduce our carbon footprint. Additionally, we conduct benchmarking to ensure that our programs are in-line with best practices to mitigate potential reputational risks.
Acute physical	Relevant, always included	Acute physical risks are integrated into our multi-disciplinary company-wide risk management process. Our offices in the United States and in other countries around the world may be adversely impacted by natural disasters, including fires, earthquakes, flooding and other climate change-related risks, or actions by utility providers, as well as other catastrophic events such as an actual or threatened public health emergency. In particular, we assess the risk of acute physical risk from seismic activity and wildfires and how these may affect our headquarters in San Jose, California as part of our climate-related risk assessments. If a catastrophic event occurs at or near any of our offices, or utility providers or public health officials take certain actions (e.g., shut off power to our facilities or impose travel restrictions), our operations may be interrupted, which could adversely impact our business and results of operations. If a catastrophic event impacts a significant number of our customers, resulting in decreased demand for their and our products, or our ability to provide services and maintenance to our customers, our business and results of operations could be adversely impacted. For example, the continued spread of the corona virus and related public health measures could result in further disruptions to our operations and those of our customers.
Chronic physical	Relevant, always included	Chronic physical risks are integrated into our multi-disciplinary company-wide risk management process. Our offices in the United States and in other countries around the world may be adversely impacted by natural disasters, including fires, earthquakes, flooding and other climate change-related risks, or actions by utility providers, as well as other catastrophic events such as an actual or threatened public health emergency. Because of our sizable operations in India, we consider acute physical risk from extreme heat and how these may affect our operations in India as part of our climate-related risk assessments. If a catastrophic event occurs at or near any of our offices, or utility providers or public health officials take certain actions (e.g., shut off power to our facilities or impose travel restrictions), our operations may be interrupted, which could adversely impact our business and results of operations. If a catastrophic event impacts a significant number of our customers, resulting in decreased demand for their and our products, or our ability to provide services and maintenance to our customers, our business and results of operations could be adversely impacted. For example, the continued spread of the corona virus and related public health measures could result in further disruptions to our operations and those of our customers.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

No

C2.3b

(C2.3b) Why do you not consider your organization to be exposed to climate-related risks with the potential to have a substantive financial or strategic impact on your business?

	Primary reason	Please explain
Row 1	Evaluation in process	We continue to assess and refine our evaluation processes of climate-related risks that would have the potential to have substantive financial or strategic impact on Cadence. In support of collective efforts to reduce carbon emissions globally, during the reporting year we set a "greenhouse gas reduction target of 15% by 2025 over our 2019 baseline emissions". As we work to set longer-term energy and GHG reduction targets, we are evaluating additional ways to reduce emissions, such as clean energy contracts with our utilities providers, renewable power purchase agreements, carbon offsets, renewable energy credits, operational efficiencies, and on-site solar installations.

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Please select

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of new products or services through R&D and innovation

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Cadence's Computational Software for Intelligent System Design strategy enables our customers to design innovative and differentiated electronic products. One area where we see opportunities in the short-term is the field of electric vehicles. "Electric vehicles attract strong interest with their efficiency in energy consumption and reduction of emissions. As the market for electric vehicles continues to grow, there is an increasing need to create an effective battery management system to monitor, manage and maintain high-performance batteries to power all aspects of the vehicle." Cadence is well positioned to capture opportunities in the growing electric car market through our ultra-low power design flow. With Celsius Thermal solver, our customers are able to mitigate thermal issues from chip to package to printed circuit board all the way through to system enclosures. The Cadence Celsius Thermal Solver is the first solution capable of modelling structures as small as the IC and its power distribution together with structures as large as the chassis. This view gives customers not only the opportunity to identify hot spots in design early so they can be addressed and minimize late-stage modifications, but also enables them to find opportunities for product differentiation. A holistic design approach ensures that the vehicle meets performance requirements while adhering to automotive quality, safety, and security standards early in the design cycle. Specifically, our digital full flow, including the Genus Synthesis Solution, Innovus Implementation System, Conformal Low Power, Tempus Timing Signoff Solution, and Voltus IC Power Integrity Solution, plus Xcelium Logic Simulation are in demand in the automotive design space. For example, during the reporting year, Analog Devices, Inc. (ADI) created Pinnacle, the industry's first wireless battery management system (WBMS), a new disruptive technology that solves the demand for longer range vehicles, decreased charge times and cost, and improved functional safety, with Cadence design tools. More details on this project can be found in the Cadence 2020 Sustainability Report.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Unknown

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

At this time, we are not disclosing the financial impact of these opportunities.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

Our future performance depends on our ability to innovate, commercialize newly developed solutions and enhance and maintain our current products. We must continuously re-engineer our products to solve new or increased physics challenges that arise with each successive process node and address the increase in complexity that is introduced by the resulting much larger designs. We must also keep pace with our customers' technical developments, satisfy industry standards and meet our customers' increasingly demanding performance, productivity, quality and predictability requirements. Therefore, we expect to continue to invest in research and development.

Comment

N/A

Identifier

Please select

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Other, please specify (Development of new products or services through R&D and innovation)

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Cadence's Computational Software for Intelligent System Design strategy enables our customers to design innovative and differentiated electronic products. "Cadence and our partners are paving the way for more sustainable data center design to meet rapidly growing compute and data demands at the edge and in the cloud." We see opportunities in the area of sustainable data centers in the short-term. One recent example of sustainability-driven innovation is highlighted in our work with Arm. In the reporting year, "Arm Research used the Cadence full digital implementation and verification flows to perform a physical and thermal design study using the Arm Neoverse N1 processor IP. Stacking the logic and cache chips greatly reduced wire length, which reduced Dhrystone power by 28% and maximum power by 16%." More details on

this project can be found in the Cadence 2020 Sustainability Report.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Unknown

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

At this time, we are not disclosing the financial impact of these opportunities.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

Our future performance depends on our ability to innovate, commercialize newly developed solutions and enhance and maintain our current products. We must continuously re-engineer our products to solve new or increased physics challenges that arise with each successive process node and address the increase in complexity that is introduced by the resulting much larger designs. We must also keep pace with our customers' technical developments, satisfy industry standards and meet our customers' increasingly demanding performance, productivity, quality and predictability requirements. Therefore, we expect to continue to invest in research and development.

Comment

Identifier

Please select

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Other, please specify (Development of new products or services through R&D and innovation)

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Cadence's Computational Software for Intelligent System Design strategy enables our customers to design innovative and differentiated electronic products. We have identified specific short-term opportunities for our Tensilica HiFi Digital Signal Processor (DSP) to provide fuel-efficiency in the automotive sector. Our Cadence Tensilica HiFi Digital Signal Processor (DSP) is a technology to reduce road and engine noise in the cabin of the vehicle. "Similar to noise cancelling headphones, Tensilica HiFi DSPs use underlying algorithms in conjunction with microphones and speakers to 'remove' the road and engine noise reducing the need for additional sound dampening materials to be used in the automobile. This design capability lessens the overall weight of the vehicle, providing an opportunity for more fuel-efficiency thereby saving consumers money and reducing emissions." More details on this project can be found in the Cadence 2020 Sustainability Report.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Unknown

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

At this time, we are not disclosing the financial impact of these opportunities.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

Our future performance depends on our ability to innovate, commercialize newly developed solutions and enhance and maintain our current products. We must

continuously re-engineer our products to solve new or increased physics challenges that arise with each successive process node and address the increase in complexity that is introduced by the resulting much larger designs. We must also keep pace with our customers' technical developments, satisfy industry standards and meet our customers' increasingly demanding performance, productivity, quality and predictability requirements. Therefore, we expect to continue to invest in research and development.

Comment

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?

Yes

C3.1b

(C3.1b) Does your organization intend to publish a low-carbon transition plan in the next two years?

	Intention to publish a low-carbon transition plan	Intention to include the transition plan as a scheduled resolution item at Annual General Meetings (AGMs)	Comment
Row 1	No, we do not intend to publish a low-carbon transition plan in the next two years	<Not Applicable>	

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

Yes, qualitative and quantitative

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenarios and models applied	Details
RCP 4.5	The RCP 4.5 climate-related scenario was utilized in the scenario analysis produced for Cadence Design Systems without modification. The tool leveraged was the World Resources Institute (WRI) Water Risk Atlas, and the assumptions utilized include business as usual, optimistic, and pessimistic conditions for the period examined. This time horizon considered was 2019 through 2040 and this time horizon was deemed relevant to the organization as it is being leveraged to inform future emissions reductions targets. Our future aim is to produce a target that is approved by the Science Based Target Initiative (SBTI), and these time horizons are consistent with that methodology. In this assessment, all Cadence Design Systems operational sites were examined, including both owned and leased locations.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Our Intelligent System Design strategy enables customers to design innovative electronic products. One essential driver for the electronics industry is the desire to develop products that reduce power consumption while increasing performance. Awareness of power usage, performance, and area (PPA) in electronic design is critical. We understand these pressures & continue to innovate & provide technology to achieve the ideal combination of low power with high performance. Our short to mid-term strategy for products & services has been influenced by this demand. Case study Situation: Design teams need to identify design areas where they have to account for possible spikes or drops in voltage & fix those areas so they are optimized & more power aware. Task: Identify places in the design that can be optimized for lower power consumption while not impacting performance. Tackle the most advanced timing requirements including dynamic power reduction. Action: The Tempus Power Integrity Solution was created from an integration of the Cadence Tempus Timing Signoff Solution & the Voltus IC Power Integrity Solution. Results: Tempus Power Integrity Solution gives customers the ability to significantly lower IR drop (voltage drop) design margins without sacrificing signoff quality, improving PPA. Early use cases demonstrated the Tempus Power Integrity Solution correctly identified IR drop errors & improved the maximum frequency in silicon by up to 10%. Our previously launched Celsius™ Thermal Solver enables customers to mitigate thermal issues from chip to package to printed circuit board all the way through to system enclosures. Cadence offers this holistic view of customer products at a complete system level. This view gives opportunity to identify "hot spots" in a design & enables product differentiation opportunities. Cadence products are constantly evolving to help customers improve design optimization. Cadence offers Cloud services, which gives access to more processing power for faster turnaround times. A secondary benefit is the reduced need for customers to buy, power, & maintain specialized hardware. We provide an as needed model versus an on-premises, always-on high power consumption usage model. This reduces the number of servers customers need to purchase, power, & maintain for peak design use.
Supply chain and/or value chain	Yes	Because scope 3 emissions make up the majority of our carbon footprint, our short-term strategy around supplier engagement has been influenced. Situation: To identify and assess risks and opportunities within our value chain we need to calculate our Scope 3 emissions with more accuracy. Task: Improve data quality and timeliness of our supplier's Scope 1 and 2 emissions data. Action: In 2020, we developed a supplier questionnaire that focuses on sustainability issues, including climate change and emissions. Results: Establishing this baseline data will allow us to identify and assess risks and opportunities within our value chain in the short- and medium-term.
Investment in R&D	Yes	Cadence's Intelligent System Design strategy enables our customers to design innovative and differentiated electronic products. One essential driver for the electronics industry is the desire to develop products that continuously reduce power consumption while increasing performance. Awareness of power usage, performance, and area (PPA) in electronic design is critical. We understand these pressures & continue to innovate & provide technology to achieve the ideal combination of low power with high performance in smaller form factors. Our short to mid-term strategy including acquisition & R&D investment has been influenced by this demand. Case Study: Vision DSP Product Situation: Today's applications processors are not equipped to handle the complex embedded imaging and vision digital signal processing functions needed in the mobile handsets, drone, automotive, robotics, surveillance, and augmented reality (AR) / virtual reality (VR) markets. Task: Create a much-needed breakthrough in terms of energy efficiency and performance that enables applications never before possible in a programmable device. Action: Vision DSPs provide the perfect balance of power and performance. From applications targeted for mobile handsets and surveillance cameras to advanced AI in Autonomous Vehicles, Drones, and Robotics. The Tensilica Vision DSP family also offers outstanding performance while running AI. By choosing the right DSP, customers can maintain the functionality needed for their computer vision design without sacrificing performance or power. Results: Tensilica Vision P6 DSP provides customers like Kneron with up to 2X faster performance for computer vision and neural network processing compared to its prior-generation SoC, while delivering the power efficiency crucial for edge AI. Offering up to 3.8X more power efficiency than CPUs alone and 1024 giga-operations (GOPS) of processing power, the Tensilica Vision P6 DSP serves as a powerful offload engine, efficiently processing vision and AI workloads to meet the demands for accurate detection and identification of objects. Tensilica Vision P6 DSP enabled Toshiba to execute complex algorithms for accurate detection and identification of a wide range of objects while consuming very low power, which is crucial for today's automotive applications.
Operations	Yes	In the reporting year, we set a greenhouse gas reduction target of 15% by 2025 over the 2019 baseline scope 1 and 2 emissions. Setting this target influences our medium-term operations strategy. All of our office remodels and expansions now utilize energy efficient technologies. In 2020, we completed LED relamping at our owned facilities in San Jose and Noida. As we migrate to more collocated data centers, we will look for air-cooled data centers that can run on 100% renewable power if the local climate allows for outdoor air cooling. When we lease offices, energy efficiency is a key factor in our decision to lease. As we work to set longer-term and science-based energy and GHG reduction targets, we are evaluating additional ways to reduce emissions, such as clean energy contracts with our utilities providers, renewable power purchase agreements, carbon offsets, renewable energy credits, on-site solar installations, operational efficiencies, and flexible working arrangements. Case Study Situation: Global pandemic Task: To support the health and well-being of our employees, customers, partners and communities during the COVID-19 pandemic. Action: The vast majority of our employees worked from home during 2020, resulting in less energy consumption in Cadence offices and less emissions from daily commuting. Result: While this was in response to the specific risks of the pandemic, we are evaluating the impacts and possibilities of maintaining a more flexible work environment after the pandemic subsides. More flexible working arrangements may contribute to reduced emissions in the future.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Capital expenditures Assets	During 2020, climate-related risks and opportunities influenced our financial planning in terms of revenues, direct costs, and capital expenditures. We undertook technology upgrades and retrofits at our on-premises data centers and office space to reduce energy consumption, increase redundancy, and improve sustainability. We also converted all lighting at Cadence's owned facilities to LED fixtures. Further, planning for our new carbon reduction target of 15% by 2025 over the 2019 baseline, influenced our financial planning in the short- and medium-term as illustrated by the following case study. Situation: As we narrowed in on the carbon reduction target we believed was right for us, we needed to determine the best strategy to achieve it including how to fund the desired initiatives and capital expenditures over the medium-term, multi-year plan. Task: Determine actions, costs, and benefits of various emissions reduction options that aligned with our business and stakeholder engagement strategy and goals, as well as to make carbon reduction initiatives a key part of capital allocation decisions. Action: Evaluate emissions reduction methods for additionality and value add, then create the budget plan for initiatives spanning 2021-2025 to realize our target. Result: Funded strategy to achieve carbon reduction target and set 2021 action plan in motion.

C3.4a

(C3.4a) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

N/A

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Year target was set

2020

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (market-based)

Base year

2019

Covered emissions in base year (metric tons CO2e)

32677

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2025

Targeted reduction from base year (%)

15

Covered emissions in target year (metric tons CO2e) [auto-calculated]

27775.45

Covered emissions in reporting year (metric tons CO2e)

29244

% of target achieved [auto-calculated]

70.0390692740052

Target status in reporting year

New

Is this a science-based target?

No, but we anticipate setting one in the next 2 years

Target ambition

<Not Applicable>

Please explain (including target coverage)

We are pleased to announce a greenhouse gas reduction target of 15% by 2025 over our 2019 baseline emissions. The goal covers Scope 1 and 2 emissions for all of our owned and leased properties and is informed by the Science Based Targets Initiative and the 2 degree Celsius scenario.

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

No other climate-related targets

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	2	426
Not to be implemented	0	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Energy efficiency in buildings	Lighting
--------------------------------	----------

Estimated annual CO2e savings (metric tonnes CO2e)

14.8

Scope(s)

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

3700

Investment required (unit currency – as specified in C0.4)

3500

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

LED upgrades in San Jose campus headquarters

Initiative category & Initiative type

Energy efficiency in buildings	Lighting
--------------------------------	----------

Estimated annual CO2e savings (metric tonnes CO2e)

411.3

Scope(s)

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

44500

Investment required (unit currency – as specified in C0.4)

62000

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

LED upgrades in Noida

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for energy efficiency	We use a dedicated budget for energy efficiency to drive investment in emissions reduction activities.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

Level of aggregation

Group of products

Description of product/Group of products

Cadence's Intelligent System Design strategy enables our customers to design innovative and differentiated electronic products. One of the essential drivers for the electronics industry is the desire to develop products that continuously reduce power consumption while increasing performance. Awareness of power usage, performance, and area (PPA) in electronic design is critical. We understand these pressures and continue to innovate and provide technology to achieve the ideal combination of low power with high performance in smaller form factors. Examples include: The Cadence® Tensilica® Vision digital signal processor (DSP) family offers a breakthrough in terms of energy efficiency and performance. The Tensilica Vision DSP family offloads the host CPU for lower energy consumption running intensive imaging and vision apps. It offers general-purpose imaging and vision products that were designed for the complex algorithms in imaging and computer vision, including innovative multi-frame noise reduction, video stabilization, high dynamic range (HDR) processing, object and face recognition and tracking, low-light image enhancement, digital zoom, and gesture recognition, plus many more. The Tensilica Vision DSP family also offers outstanding performance while running AI. By choosing the right DSP, customers can maintain the functionality needed for their computer vision design without sacrificing performance or power. Tempus Power Integrity allows design teams to identify areas in the design where they might have to account for possible spikes or drops in voltage and fix those areas so they are optimized and more power aware. This capability greatly lowers overall power consumption, making the design more efficient while not impacting performance. Celsius™ Thermal Solver enables customers to mitigate thermal issues from chip to package to printed circuit board all the way through to system enclosures. Cadence is the only provider to offer customers this holistic view of their products at a complete system level. This view gives customers not only the opportunity to identify 'hot spots' in design early so they can be addressed and minimize late-stage modifications, but also enables them to find opportunities for product differentiation.

Are these low-carbon product(s) or do they enable avoided emissions?

Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Other, please specify (Power optimization of the design)

% revenue from low carbon product(s) in the reporting year

0

% of total portfolio value

<Not Applicable>

Asset classes/ product types

<Not Applicable>

Comment

N/A

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

6314

Comment

Our base year (2019) scope 1 emissions were 6,314 metric tons of CO2e.

Scope 2 (location-based)

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

31796

Comment

Our base year (2019) scope 2 (location-based) emissions were 31,796 metric tons of CO2e.

Scope 2 (market-based)

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

26363

Comment

Our base year (2019) scope 2 (market-based) emissions were 26,363 metric tons of CO2e.

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

The Greenhouse Gas Protocol: Scope 2 Guidance

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

5951

Start date

<Not Applicable>

End date

<Not Applicable>

Comment

Scope 1 emissions in the 2020 reporting year were 5,951 metric tons of CO2e.

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

We are reporting both location-based and a market-based Scope 2 figures.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based

28783

Scope 2, market-based (if applicable)

23293

Start date

<Not Applicable>

End date

<Not Applicable>

Comment

Scope 2 (location-based) emissions in the 2020 reporting year were 28,783 metric tons of CO2e. Scope 2 (market-based) emissions in the 2020 reporting year were 23,293 metric tons of CO2e

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, calculated

Metric tonnes CO2e

341022

Emissions calculation methodology

Emissions were calculated using the environmentally extended input/output (EEIO) methodology with the Quantis Scope 3 Evaluator. The emissions estimate reported here is based on spend that is posted for goods and services in the internal general ledger system.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

See emissions calculation methodology

Capital goods

Evaluation status

Relevant, calculated

Metric tonnes CO2e

67533

Emissions calculation methodology

Emissions were calculated using the environmentally extended input/output (EEIO) methodology with the Quantis Scope 3 Evaluator. The emissions estimate reported here is based on spend that is posted for goods in the internal general ledger system.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

See emissions calculation methodology

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Relevant, calculated

Metric tonnes CO2e

104

Emissions calculation methodology

We use energy purchase activity data as the basis for calculating emissions in this category. Upstream emissions from purchased electricity within the US are quantified using activity data and emission factors calculated. Within the U.S., T&D losses are calculated using % loss information from EPA's eGrid for Carbon Footprinting Electricity Purchases in Greenhouse Gas Emission Inventories, July 2012.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

See emissions calculation methodology

Upstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

The emissions associated with the upstream transportation and distribution goods and services are included in Scope 3 figure reported in the 'Purchased Goods and Services' category. Transportation of purchased goods is included in the purchase price and not billed separately. The spend on upstream transportation and distribution is included in the spend figure used to estimate Scope 3 emissions from purchased goods and services. The relevant data for upstream transportation and distribution is not available, therefore we are not able to report separately on this category. Further, these emissions are already accounted for elsewhere in this inventory, so they are deemed not relevant to be reported here as a separate category. Therefore, emissions from this category are estimated at zero (0) and this category is deemed to be not relevant.

Waste generated in operations

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

We consider waste generated in operations to be irrelevant as Cadence Design Systems is primarily a software and IT company where the impact of the other categories like purchased goods and services is much more significant. Therefore, emissions from this category are estimated at zero (0) and this category is deemed to be not relevant.

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO2e

9683

Emissions calculation methodology

Emissions were calculated using the environmentally extended input/output (EEIO) methodology with the Quantis Scope 3 Evaluator. The emissions estimate reported here is based on spend that is posted for airfare, ground transportation and hotel stay in the internal general ledger system as well as logged for reimbursements by employees.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

See emissions calculation methodology

Employee commuting

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

3666

Emissions calculation methodology

Emissions were calculated using the environmentally extended input/output (EEIO) methodology with the Quantis Scope 3 Evaluator. Due to COVID-19, the calculations were updated to represent travel in the first quarter and 5% travel in the remaining 3 quarters. The emissions for employee commuting are estimated on the range of number of employees of the company.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

See emissions calculation methodology

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Cadence Design Systems has leased cars with associated spend data which has been included in the purchased goods and services category as there is no mileage data available to calculate the emissions from this as a separate category. Therefore, emissions from this category are estimated at zero (0) and this category is deemed to be not relevant.

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

The emissions associated with the downstream transportation and distribution goods and services are included in Scope 3 figure reported in the 'Purchased Goods and Services' category. The total spend is broken out for air and land transport where 95% is air and 5% is land. This is an update in the methodology from the previous year. The relevant data for downstream transportation and distribution is difficult to parse out, therefore we are not able to report separately on this category. Further, these emissions are already accounted for elsewhere in this inventory, so they are deemed not relevant to be reported here as a separate category. Therefore, emissions from this category are estimated at zero (0) and this category is deemed to be not relevant.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Cadence Design Systems enables customers to design electronic products by offering software, hardware, services and reusable IC design blocks, which are commonly referred to as intellectual property ("IP"). These products are not intermediate products and hence not relevant. Therefore, emissions from this category are estimated at zero (0) and this category is deemed to be not relevant.

Use of sold products

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Since, Cadence Design Systems enables customers to design electronic products by offering software, hardware, services and reusable IC design blocks, we believe that the use of sold products is a relevant category. Currently we do not have comprehensive information to calculate the emissions from this category, but we plan to in the future.

End of life treatment of sold products

Evaluation status

Not evaluated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Full data is not available for end of life treatment of sold products. Therefore this category has not yet been evaluated.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Cadence Design Systems does not have any downstream leased assets. Therefore, emissions from this category are estimated at zero (0) and this category is deemed to be not relevant.

Franchises

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Cadence Design Systems does not have any franchises. Therefore, emissions from this category are estimated at zero (0) and this category is deemed to be not relevant. Investments

Investments

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Cadence Design Systems, Inc. does not have investments. Therefore, emissions for this category are estimated at zero (0) and this category is deemed to be not relevant.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Cadence Design Systems does not have other Scope 3 emissions. Therefore, emissions from this category are estimated at zero (0) and this category is deemed to be not relevant.

Other (downstream)

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Cadence Design Systems does not have other Scope 3 emissions. Therefore, emissions from this category are estimated at zero (0) and this category is deemed to be not relevant.

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.00001091

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

29244

Metric denominator

unit total revenue

Metric denominator: Unit total

2680000000

Scope 2 figure used

Market-based

% change from previous year

22

Direction of change

Decreased

Reason for change

We reduced our energy use and Scope 1 and 2 emissions per unit dollar revenue by 22% compared to 2019. Overall our Scope 1 and 2 emissions decreased by 11% from 2019 to 2020 due in part to the COVID-19 pandemic and also due to emissions reduction initiatives listed in CDP C4.3b. Further, unit total revenue increased by 15% during the reporting period. This equates to 10.13 tons of CO2e/Million \$ or Revenue as reported in our 2020 CSR Report. Emissions intensity in metric tons CO2e per unit currency total revenue: Intensity = 29,244 (metric tons CO2e)/2,680,000,000 (US\$)= 0.00001091

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	946	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	0.54	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	0.83	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	5004	IPCC Fifth Assessment Report (AR5 – 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
Americas	2804
Asia Pacific (or JAPA)	2409
Eastern Europe, Middle East, and Africa (EEMEA)	738

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By activity

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
Stationary combustion (Natural gas)	772
Stationary combustion (Diesel)	175
Fugitive Refrigerants	5004

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
Americas	12485	6870	50855	0
Asia Pacific (or JAPA)	12196	12196	13553	3
Eastern Europe, Middle East, and Africa (EEMEA)	4103	4227	7633	0

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By activity

C7.6c

(C7.6c) Break down your total gross global Scope 2 emissions by business activity.

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Purchased electricity	28783	23293

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	No change identified
Other emissions reduction activities	426	Decreased	1	During the reporting year we converted all lighting fixtures at Cadence's owned facilities to LED fixtures.
Divestment	0	No change	0	No change identified
Acquisitions	0	No change		No change identified
Mergers	0	No change		No change identified
Change in output	0	No change		No change identified
Change in methodology	0	No change		No change identified
Change in boundary	0	No change		No change identified
Change in physical operating conditions	3007	Decreased	9	We attribute this decrease in emissions to the reduced occupancy in our office locations due to the COVID pandemic.
Unidentified	0	No change		No change identified
Other	0	No change		No change identified

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	4706	4706
Consumption of purchased or acquired electricity	<Not Applicable>	32012	40030	72042
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	3	<Not Applicable>	3
Total energy consumption	<Not Applicable>	32012	44736	76748

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Fuels (excluding feedstocks)

Natural Gas

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

4152

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

4152

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Emission factor

53.06

Unit

kg CO2e per million Btu

Emissions factor source

US EPA GHG Inventories, March 2020

Comment

GWP-AR5

Fuels (excluding feedstocks)

Diesel

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

691

MWh fuel consumed for self-generation of electricity

691

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Emission factor

2.7

Unit

kg CO2 per liter

Emissions factor source

US EPA GHG Inventories, March 2020

Comment

GWP-AR5

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	655	655	3	3
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero emission factor in the market-based Scope 2 figure reported in C6.3.

Sourcing method

Other, please specify

Low-carbon technology type

Solar

Country/area of consumption of low-carbon electricity, heat, steam or cooling

India

MWh consumed accounted for at a zero emission factor

3

Comment

In 2020, 3 MWh was generated from the solar power panel for campus periphery lights in Noida.

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Cadence Design Systems 2020 GHG Verification Opinion.pdf

Page/ section reference

p.1-3

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 market-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Cadence Design Systems 2020 GHG Verification Opinion.pdf

Page/ section reference

p. 1-3

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Cadence Design Systems 2020 GHG Verification Opinion.pdf

Page/ section reference

p. 1-3

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

Scope 3: Purchased goods and services

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Cadence Design Systems 2020 GHG Verification Opinion.pdf

Page/section reference

p. 1-3

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Capital goods

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Cadence Design Systems 2020 GHG Verification Opinion.pdf

Page/section reference

p. 1-3

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Cadence Design Systems 2020 GHG Verification Opinion.pdf

Page/section reference

p. 1-3

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Business travel

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Cadence Design Systems 2020 GHG Verification Opinion.pdf

Page/section reference

p. 1-3

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Employee commuting

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Cadence Design Systems 2020 GHG Verification Opinion.pdf

Page/section reference

p. 1-3

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

No, but we are actively considering verifying within the next two years

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

No, and we do not anticipate being regulated in the next three years

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

No, and we do not currently anticipate doing so in the next two years

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

Yes, our customers

Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Please select

% of suppliers by number

% total procurement spend (direct and indirect)

80

% of supplier-related Scope 3 emissions as reported in C6.5

70

Rationale for the coverage of your engagement

In 2020, we developed a supplier questionnaire that focuses on sustainability issues, including climate change and emissions. We will be collecting responses to this survey in 2021 for active suppliers that make up 80% of procurement spend. Establishing this baseline data will allow us to identify and assess risks and opportunities within our value chain. The primary rationale for focusing on active suppliers that represent 80% of our supplier spend is that while engaging with this amount of suppliers is manageable, the subset accounts for approximately 70% of our scope 3 emissions.

Impact of engagement, including measures of success

Our primary measure of success is improved data quality and timeliness of our supplier's Scope 1 and 2 emissions data, which will allow us to calculate our Scope 3 emissions more accurately. In line with our efforts to deepen supplier engagement around ESG issues, we have developed a Scope 3 emissions calculation methodology that uses actual emissions data from our key suppliers. The impact of our climate-related supplier engagement strategy of collecting carbon information at least annually from suppliers, is that our Scope 3 emissions are expected to decrease in the 2021 year, due to improved data quality. We expect the new methodology to produce reductions in Scope 3 emissions from purchased goods and services and capital goods categories because it takes into account the work that our valued suppliers are doing to reduce their own carbon footprints. We will continue to estimate Scope 1 and 2 emissions from suppliers that do not report actual data.

Comment

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement

Education/information sharing

Details of engagement

Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

% of customers by number

100

% of customer - related Scope 3 emissions as reported in C6.5

0

Portfolio coverage (total or outstanding)

<Not Applicable>

Please explain the rationale for selecting this group of customers and scope of engagement

Scope of engagement: We market energy optimization products, such as Conformal Low Power, Innovus Implementation, Tempus Timing Signoff, Joules RTL Power Solution, Genus Synthesis Solution, Palladium Dynamic Power Analysis, and Voltus Power Integrity Solution. During the reporting year we ran several webinars and webinar series that included information around optimized power consumption that were available to all Cadence customers. During the reporting year, we ran a number of webinars covering topics such as improving design power and performance and Cadence solutions for power analysis and optimization. Specifically, we ran a four-day webinar series on how to analyze and optimize designs to help our customers design the lowest power end-product. In our Technology Day: Adopting Effective Power Analysis Strategies from System to Silicone webinar, we covered the Cadence solutions for power analysis starting with early system-level analysis, through RTL-level architecture/ microarchitecture, and finally to silicon signoff. Power analysis is critical throughout the lifecycle of a program. Effective power analysis requires different strategies and tools depending on where you are in that lifecycle. The rationale for providing access to our webinars to all Cadence customers is that the majority of gains in low power occur in the early stages of design—in the architecture and microarchitecture levels. Being able to make effective decisions at those stages requires a combination of data and technology to accurately predict how they will translate into the final product, which traditionally has not been possible. We want to educate our customers about these possibilities.

Impact of engagement, including measures of success

One of the essential drivers for the electronics industry is the desire to develop products that continuously reduce power consumption while increasing performance. Awareness of power usage, performance, and area (PPA) in electronic design is critical. This is one of the reasons that we run these webinars. The impact of this engagement is that Cadence's Intelligent System Design strategy enables our customers to design innovative and differentiated electronic products while optimizing performance and power. The measures of success of our engagement include continued innovation providing technology to achieve the ideal combination of low power with high performance in smaller form factors.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

It is important to Cadence and to our employees and external stakeholders that we do our part to combat climate change and reduce our environmental footprint. Our key stakeholder groups include but are not limited to: current and former Cadence employees; customers; suppliers and vendors; societies and communities in which we operate; trade associations; government and regulatory agencies; and investors.

Investors are an important part of our value chain. In 2020, over 590 investors with assets of US\$110 trillion signed CDP's disclosure request. In 2020, we are submitting a full CDP climate change questionnaire response as our primary method of engagement with investors. Other methods of climate-related engagement with investors include participation in other surveys such as the ISS E&S Disclosure QualityScore, institution-to-institution meetings, and written correspondence. We also provided investors with our 2020 Sustainability Report which includes details on our climate-related strategy and carbon footprint.

Situation: Institutional investors are seeking to understand companies' responses to environmental sustainability and climate change, looking for corporations to not only focus on reducing their carbon footprint but to also set targets to reduce carbon emissions aligned with the Science-Based Target Initiative and the 2°C scenario. One example of investor communication on this topic is BlackRock CEO Larry Fink's letter to CEOs early in 2020 with a call to action.

Task: To satisfy the request of our stakeholders and investors, we partnered with an external consulting team to assess our today state, calculate the emissions reduction needed over a 2019 baseline to align with a science-based target, and develop an emissions reduction strategy that supported our requirements as well as enabling Cadence to set an emissions reduction target for 2025 through investment.

Action: Various types of carbon reduction targets were considered, and our decision opted for a science-based target, set to a relatively short-term window of 2025, focused on Scope 1 and Scope 2 emissions to reach this initial goal. The resulting plan includes options of clean energy contracts with our utility providers, renewable power purchase agreements, carbon offsets, bundled renewable energy credits and on-site solar installations.

Result: A carbon reduction target was established in 2020, namely to reduce emissions 15% by 2025 over the 2019 baseline for Scope 1 and Scope 2 emissions.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

No

C12.3g

(C12.3g) Why do you not engage with policy makers on climate-related issues?

The cross-functional ESG Team at Cadence takes into account a variety of stakeholder perspectives on climate related issues, including our customers, employees, investors, and experts from the scientific community. We use this feedback to drive environmental sustainability projects, develop climate-related KPIs, and improve efficiency in our operations.

However, as an organization focused on delivery of software, hardware and IP under our Intelligent System Design™ strategy, we do not engage with policy makers on climate-related issues. At this time, our engagement in the public sector is limited to our membership of trade associations, a full list of which can be found on our company website:

https://www.cadence.com/en_US/home/alliances/industry-memberships.html

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports

Status

Complete

Attach the document

CDNS 2020 10K.pdf

Page/Section reference

Cadence 2020 10K Page 8: Corporate Responsibility (PDF page 10) Page 17: Business and Operational Risks (PDF page 19)

Content elements

Governance
Risks & opportunities
Emission targets

Comment

We announced that we set a target in our Corporate Responsibility section of our 2020 year end 10-K as follows: We believe that, in general, the best and brightest talent is inclined to build a career with a responsible organization that positively impacts society. Among our efforts to be that type of organization, we are actively investing in initiatives to help combat global climate change by reducing our environmental footprint. Using 2019 as a baseline, we have set a target to reduce our scope 1 and scope 2 emissions by 15% by 2025. We encourage you to review our 2019 Sustainability Report (located at www.cadence.com), and our 2020 Sustainability Report when released, for more information on all of our Environmental, Social and Governance ("ESG") initiatives.

Publication

In voluntary sustainability report

Status

Complete

Attach the document

Cadence 2020 Sustainability Report.pdf

Page/Section reference

Cadence 2020 Sustainability Report Page 32-37: Environmental Sustainability (PDF pages 32-37) Page 40: Board governance of CSR Program (PDF page 40)

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

Other metrics – energy consumption We are proud to share with you our sustainability report for 2020, which highlights the progress we made in our environmental, social, and governance efforts. This report shows the work that we are doing in six key areas that impact our business—innovation, workforce development, data privacy and security, environmental sustainability, governance, and supply chain management.

Publication

In voluntary communications

Status

Complete

Attach the document

CDNS 2020 CSR Microsite.pdf

Page/Section reference

Cadence CSR Microsite screen shots pages 1-5

Content elements

Governance
Strategy
Emission targets

Comment

Our CSR microsite highlights the progress we made in our environmental, social, and governance efforts. This microsite shows the work that we are doing in six key areas that impact our business—innovation, workforce development, data privacy and security, environmental sustainability, governance, and supply chain management. Regarding climate change the microsite covers our governance, strategy and emissions targets.

Publication

In voluntary communications

Status

Complete

Attach the document

cdns-2020-cdp-climate-change-report.pdf

Page/Section reference

Cadence Climate Change Report pages 1-43

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

In addition to making our 2020 CDP Climate Change Response public through the CDP website, we made this disclosure available on our Cadence website in 2020.

Publication

In mainstream reports

Status

Complete

Attach the document

Cadence Design Systems, Inc. 2021 Proxy Statement.pdf

Page/Section reference

Cadence Design Systems, Inc. 2021 Proxy Statement.pdf Page 1: Corporate Social Responsibility and Human Capital Management (PDF page 4) Page 6: Corporate Governance and Nominating Committee, Oversight and Management of Corporate Social Responsibility (PDF page 9) Page 14: Corporate Governance and Nominating Committee (PDF page 17)

Content elements

Governance
Emission targets

Comment

Corporate Social Responsibility and Human Capital Management In 2020, we continued to expand and deepen our environmental initiatives. Among our efforts to be a responsible organization that positively impacts society, we are actively investing in initiatives to help combat global climate change by reducing our environmental footprint. Using 2019 as a baseline, we set a target to reduce our greenhouse gas Scope 1 & Scope 2 emissions by 15% by 2025. In addition, Cadence continues to advance technologies that enable the design of high-performance systems with progressively lower power consumption, an essential driver for the electronics industry that ripples through our ecosystem. Environmental Sustainability Reducing our environmental footprint, including doing our part to combat climate change, is important to Cadence, our employees, and our external stakeholders. We are pleased to report a greenhouse gas reduction target of 15% by 2025 over our 2019 baseline emissions. The goal covers Scope 1 and Scope 2 emissions for all Cadence owned and leased properties and is informed by the Science Based Target Initiative and the 2°C Scenario. Scope 2 emissions are calculated based on market-based figures. Oversight and Management of Corporate Social Responsibility Our Board, through its Corporate Governance and Nominating Committee, oversees Cadence's corporate social responsibility program and the progress of our ESG efforts, matters and initiatives. The Corporate Governance and Nominating Committee formally reviews our ESG efforts and climate-related issues within the organization regularly and reports to the Board on such programs at least annually. The Board and its Compensation Committee oversee the administration of the company's employee benefits, including health and compensation plans. Corporate Governance and Nominating Committee The Corporate Governance and Nominating Committee charter was last amended in February 2021. The duties and responsibilities of the Corporate Governance and Nominating Committee include: Overseeing Cadence's policies and practices regarding corporate social responsibility and sustainability programs, including environmental / climate-related, social and governance (ESG) matters and initiatives, and reporting to the Board at least annually on such programs.

C15. Signoff

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Senior Vice President and Chief Legal Officer	Other C-Suite Officer