

C0. Introduction

C0.1

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

Synopsys, Inc. provides products and services used by designers across the entire silicon to software spectrum, from engineers creating advanced semiconductors to software developers seeking to ensure the security and quality of their code. We are a global leader in supplying the electronic design automation (EDA) software that engineers use to design and test integrated circuits (ICs), also known as chips. We also offer semiconductor intellectual property (IP) products, which are pre-designed circuits that engineers use as components of larger chip designs rather than designing those circuits themselves. We provide software and hardware used to validate the electronic systems that incorporate chips and the software that runs on them. To complement these offerings, we provide technical services and support to help our customers develop advanced chips and electronic systems. We are also a leading provider of software tools and services that improve the security and quality of software code in a wide variety of industries, including electronics, financial services, media, automotive, medicine, energy and industrials.

Synopsys has global operations, with more than 14,000 employees working in more than 30 countries. Synopsys' largest environmental impact stems from the operation of our facilities and data centers. To achieve the greatest possible reduction of these impacts, we are implementing energy efficient practices at our facilities as well as procurement of clean energy to power our data centers.

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 2019	December 31 2019	Yes	1 year

C0.3

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

- Armenia
- Australia
- Belgium
- Canada
- Chile
- China
- China, Hong Kong Special Administrative Region
- China, Macao Special Administrative Region
- Denmark
- Finland
- France
- Germany
- Hungary
- India
- Ireland
- Israel
- Italy
- Japan
- Malaysia
- Netherlands
- Poland
- Portugal
- Republic of Korea
- Russian Federation
- Singapore
- Sri Lanka
- Sweden
- Switzerland
- Taiwan, Greater China
- United Kingdom of Great Britain and Northern Ireland
- United States of America
- Viet Nam

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	Oversight of climate-related issues occurs at the highest level of the company. The Corporate Governance and Nominating Committee (CGN) of the Synopsys Board of Directors has direct oversight of our Corporate Social Responsibility (CSR) program, the scope of which includes climate-related issues. The CGN Committee Charter directs the Committee to "review and assess Synopsys' policies and practices regarding CSR and sustainability performance, including environmental, social and governance matters."
Chief Executive Officer (CEO)	Management oversight of climate-related issues occurs at the highest level of our company. Synopsys' co-founder, chairman and co-CEO is actively involved in overseeing our CSR program, including our greenhouse gas (GHG) emissions reduction programs. During 2019 he participated in several meetings with our CSR leadership team and external advisors to review the results of our GHG measurement, to discuss strategies for reducing and offsetting emissions and to review and approve our carbon neutrality commitment as well as our new GHG reduction goal.

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 – some meetings	Monitoring implementation and performance of objectives Monitoring and overseeing progress against goals and targets for addressing climate-related issues	<Not Applicable>	The increasing relevance of our CSR performance and commitments has been discussed with the Corporate Governance and Nominating Committee (CGN) of the Synopsys Board of Directors. These discussions were led by the Synopsys General Counsel who chairs our internal CSR Leadership Committee. The Charter for the CSR Leadership Committee directs this Committee to provide an annual update to the CGN Committee. In the most recent update to the CGN Committee, the Synopsys General Counsel outlined plans and progress towards mitigating our carbon footprint, including the establishment of a new science-based greenhouse gas reduction goal, and employee engagement activities including education on our carbon neutrality commitment and the initiation of a Global Green Team program. The CGN played a guiding role in establishing a science-based GHG emissions goal to reduce our total scope 1 and 2 emissions by 25% by 2024 (2018 baseline).

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)	<Not Applicable >	Managing climate-related risks and opportunities	<Not Applicable>	Quarterly
Corporate responsibility committee	<Not Applicable >	Other, please specify (Guides CSR strategy (including in relation to our GHG emissions) and advances implementation of a CSR roadmap)	<Not Applicable>	Annually

**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).**

The Synopsys Corporate Social Responsibility Leadership Committee (the "CSR Leadership Committee") has been formed to drive the integration of social, environmental, and governance goals across our business and as such is the highest-level Committee with direct responsibility for climate-related issues.

The Committee provides CSR leadership to ensure responsible and sustainable business practices and to identify and address emerging risks and opportunities. The Committee is chaired by our General Counsel who reports to our Chairman and Co-Chief Executive Officer and provides senior level direction of our CSR program. The CSR Leadership Committee comprises Vice President and Director level leaders representing Real Estate and Facilities, Information Technology, Human Resources, Investor Relations and Legal. Through this cross-functional representation, we ensure that the groups with the most influence over the environmental, social and governance issues of highest relevance to our business are actively engaged in our CSR efforts at a senior level.

The CSR Leadership Committee Charter sets out the responsibilities of this Committee: to guide CSR strategy, advance implementation of a CSR roadmap, determine key metrics for the success of the CSR program, build stakeholder awareness of CSR and drive our related disclosure efforts, as well as oversee special projects. The Committee meets three times per year and provides an annual update to Synopsys' Corporate Governance and Nominating Committee (CGN). Additionally, the General Counsel provides a quarterly update to this Committee.

The Committee is kept informed about CSR issues, including those related to climate, through various channels including Synopsys' membership of trade associations and various industry groups, including the Sustainability Roundtable, the Responsible Business Alliance and ITI. The committee held three meetings during the reporting year, during which management of climate related aspects and specifically our carbon neutrality initiative and GHG goal development were discussed. We also retain the expertise of specialist sustainability consulting firms and maintain subscriptions to regulatory databases that help us to keep up to date with CSR-related risks and opportunities relevant to our business.

**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	

**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
All employees	Non-monetary reward	Other (please specify) (Matching gift program: Charitable financial donations and/or volunteer time with NGOs related to environmental causes )	The Synopsys Foundation makes donations to eligible NGOs worldwide to match charitable, financial contributions and/or tracked volunteer time from employees. The total amount of matching donations from the Foundation related to environmental causes in CY2019 was \$5,565USD to 27 different non-profits.
Other, please specify (North America Employees)	Non-monetary reward	Emissions reduction project Behavior change related indicator	The Synopsys Transportation and Ridesharing (STAR) program is a valuable resource for all North America employees who commute and want to find alternatives to driving solo to work each day. STAR offers several services, including the Commuter Spending Account (CSA) program, to help facilitate environmentally friendly, cost-effective ways to get to work. The Commuter Spending Account (CSA) lets employees set aside pretax money from their paycheck to pay for qualified transportation expenses incurred while traveling to and from work.

**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?**

No

**C2.1a**

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

	From (years)	To (years)	Comment
Short-term	0	2	
Medium-term	2	5	
Long-term	5		

**C2.1b**

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

We have not yet defined substantive financial or strategic impact on our business as it relates to climate change specifically. This will be defined as part of the climate risk assessment we intend to complete over the next two years. Climate risks will be reviewed and rated as part of the annual company-wide prioritization of risks faced by our business. This prioritization process informs our understanding of which risks present the most substantive financial or strategic implications for Synopsys.

**C2.2g**

**(C2.2g) Why does your organization not have a process in place for identifying, assessing, and responding to climate-related risks and opportunities, and do you plan to introduce such a process in the future?**

	Primary reason	Please explain
Row 1	We are planning to introduce a climate-related risk management process in the next two years	As we make progress towards formalizing our CSR program, we are examining the relative significance of CSR issues including climate-related risks and opportunities for our business and stakeholders. In 2018, we completed a CSR materiality analysis to inform our priorities. Through this process we determined that climate change and GHG emissions are of moderate-high concern to our stakeholders. In 2019, we joined the Responsible Business Alliance (RBA) as an Affiliate Member and in doing so we have committed to operate our business in accordance with the RBA Code of Conduct. This includes requirements for a risk assessment process to identify relevant environmental, social and governance risks and their relative significance. The RBA Code Environmental section includes Energy and GHG Emissions, and these issues are captured within the RBA related risk assessment we completed in 2019. As part of our business continuity program, we conduct risk and vulnerability assessments for our physical locations. We focus our attention on our business-critical sites and will scale to all other locations as our program matures. The assessments consider a range of risk factors including natural disasters, climate-driven events, man-made threats, utility reliability, technological vulnerability and threats. In the next year, we intend to add climate related risks to our annual company-wide prioritization of risks faced by our business, the results of which are reported to the Board.

**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	Our business may face risks related to climate change including i) business continuity risks due to physical changes such as increased frequency and severity of severe weather events, flooding and wildfire ii) stakeholder pressure on corporate climate engagement and iii) potential for regulations as well as increased energy costs due to carbon pricing. As we build out our CSR program, we are evaluating the relevance and significance of climate change to our business and whether any related risks would be considered 'substantive' for Synopsys. Within the next year, we intend to add climate related risks in our annual company-wide prioritization of risks faced by our business, the results of which are reported to the Board.

**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**

Opp1

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Energy source

**Primary climate-related opportunity driver**

Use of lower-emission sources of energy

**Primary potential financial impact**

Returns on investment in low-emission technology

**Company-specific description**

With emerging policies aimed at placing a price on fossil fuels and incentivizing the expansion of clean and renewable forms of energy, we anticipate that the cost of carbon-intensive forms of energy will continue to increase relative to lower emissions energy sources. As a key component of our ongoing carbon neutral commitment, Synopsys has publicly announced a goal to reduce our scope 1 and 2 emissions by 25% between 2018 and 2024. As a technology company, almost 90% of our scope 1 and 2 emissions results from the electricity that we use in our global offices and data centers. The US and India are particular regions of focus. We are working to identify and implement projects that will reduce our energy consumption and increase our use of clean and renewable forms of energy. Looking ahead, we expect that policies that place a carbon price on fossil fuels and/or directly incentivize energy efficiency and clean and renewable energy generation will assist us to build the financial case for investing in projects to deliver our GHG emissions reduction goal. We expect that as we make our business more energy efficient and invest in clean sources of energy which have reached or are forecasted to reach price parity or better with more carbon intensive power sources, we will see our operating costs reduce. This will be driven both by a reduction in the direct cost of the energy we purchase to run our business as well as a reduction in the volume of carbon credits we must purchase to deliver our carbon neutral commitment.

**Time horizon**

Medium-term

**Likelihood**

Very likely

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

700000

**Potential financial impact figure – maximum (currency)**

1400000

**Explanation of financial impact figure**

The range reflects analysis completed by our Finance group to estimate the net present value (NPV) that could result from our participation in a 12-year virtual power purchase agreement for US generated wind energy. The lower end of the NPV range is based on the historical market price (at a 90% confidence rate) while the upper end of the NPV range is based on a forecasted market price over a 12- year term.

**Cost to realize opportunity**

180000

**Strategy to realize opportunity and explanation of cost calculation**

In 2019 we announced that Synopsys had become a CarbonNeutral® certified company. Additionally, in 2019 we formed a cross functional taskforce with representatives from our Legal, IT, Facilities and Finance teams to develop a GHG emissions reduction goal for the company. In working to develop the goal, the taskforce forecasted business as usual emissions and identified the reductions needed in key regions such as the US and India to deliver a meaningful, science-based reduction in emissions in the face of continuing business growth. The Synopsys CEO has committed the company to this reduction goal, which targets a 25% reduction in our total scope 1 and 2 emissions by 2024 relative to a 2018 baseline. Through our carbon neutrality commitment to offset our annual emissions through the purchase of renewable energy certificates and carbon offsets, we have placed an internal price on carbon. This in turn serves to increase the cost of electricity we use that is not sourced from renewable energy and creates an internal incentive to invest in lowering our energy consumption and switching to renewable energy. We are taking this internal price, as well as forecasted market prices for renewable power into account as we evaluate possible opportunities to participate in power purchase agreements for renewable electricity. The annual costs to realize this opportunity include the costs of purchasing renewable energy certificates for our North America operations as part of our carbon neutrality commitment (approximately \$100,000). The costs also include external expertise, including consulting services and membership of a sustainability consortium, that we are leveraging in support of our GHG accounting emissions reduction initiatives and carbon neutrality commitment (approximately \$80,000). As we make progress towards making our business more energy efficient and transitioning to clean and renewable forms of power, we expect the annual costs to purchase renewable energy certificates to reduce.

**Comment**

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**Identifier**

Opp2

**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

The tech industry has tremendous potential to minimize energy consumption through the design and integration of more energy-efficient silicon chips. The future of Smart Everything depends on silicon chips running faster, scaling down to fit into smaller devices, integrating more capabilities, and processing massive amounts of data—all while consuming less power. Synopsys has more than 25 years of low-power design and verification technology leadership and has contributed extensive technical input to industry groups advancing standards on this topic. Our advanced silicon chip design technologies directly enable our customers to optimize power consumption—for example, by extending battery life or reducing heat generated or adding cooling structures—as they develop their next generation products. We have received several accolades and industry awards for our product innovations that optimize power efficiency. For example, we received a 2018 World Electronic Achievement Award (WEAA) for our Artificial Intelligence (AI) Solution. WEAA honors companies and individuals who have made outstanding contributions to the innovation and the development of electronics industry worldwide. Our AI solution comprises several proven products and technologies and the combination of these products has enabled several AI SoC companies to achieve maximum efficiency for chip architecture and software performance. These recognitions and our involvement in standards development in collaboration with industry groups such as Acellera and IEEE, provide external validation of our power efficiency credentials and help to build our reputation for leadership on this topic in the marketplace.

#### Time horizon

Medium-term

#### Likelihood

Likely

#### Magnitude of impact

Medium

#### 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

#### Cost to realize opportunity

#### Strategy to realize opportunity and explanation of cost calculation

Our strategy to realize this opportunity includes direct investment in research and development of high-efficiency products, participation in industry partnerships and collaborations, contributing to technical standards on power efficiency through industry trade associations, and publishing technical as well as non-technical communications about our work in this area. For example, a 2019 Synopsys press release describes our customer Juniper Networks successful deployment of Synopsys' innovative IC Compiler II place-and-route solution with Advanced Fusion technologies. This deployment has facilitated provision of additional power and reliability for Juniper Network's next-generation networking design that is comprised of billions of transistors. Through the specific application of several IC Compiler II technologies, Juniper Networks achieved a 14% power savings with no negative impact on performance. In addition to software, we incorporate power efficiency into our hardware products. For example, our ZeBu Server 4 (ZS4) consumes an estimated 1/10th the power compared to the main competitor product for equivalent capacity. Projecting more than a 5-year product lifetime of a 10 billion gates emulation system, ZS4 would consume approximately 30 million kwh less power, equivalent to around 20,000 metric tons of avoided CO2 emissions. We expect that our continued dedication to energy efficiency innovations will allow us to differentiate from our competitors, facilitating increased demand for our products and services.

#### Comment

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#### Identifier

Opp3

#### Where in the value chain does the opportunity occur?

Direct operations

#### Opportunity type

Markets

#### Primary climate-related opportunity driver

Other, please specify (Increased stakeholder trust )

#### Primary potential financial impact

Other, please specify (Improved shareholder value)

#### Company-specific description

We see opportunities to further enhance our relationships with customers, investors and employees as societal concern and awareness about global climate change intensifies. These stakeholder groups are critical to our business success and they are showing increased interest in our climate-related commitments and performance. We will further strengthen customer relationships if we demonstrate to our customers an alignment on environmental sustainability and if we reduce our carbon footprint to help deliver on customer supply chain emissions reduction targets. Our customers who are currently showing the most interest in our climate commitments represent 14% of our annual revenue. We anticipate that this percentage will grow over time. The investor community has substantially increased its focus on the environmental, social and governance (ESG) performance of investee companies in the last year. We are seeing clear evidence that investors increasingly understand the financial risks and opportunities their investee companies potentially face as a result of climate change. Per Synopsys' 2020 Proxy Statement, BlackRock is one of our institutional investors. Climate change is the key theme in the 2020 BlackRock CEO letter to investee companies. In this letter, the BlackRock CEO signaled strongly an increased expectation for climate action among investee companies. There is growing evidence that the social and environmental credentials of employers are an important factor in talent recruitment and retention. For example, a 2018 PwC report titled "Millennials at work – Reshaping the workplace," highlights that millennials want their work to have a purpose, to contribute something to the world and they want to be proud of their employer. Within Synopsys, we have observed increased interest in environmental sustainability among our employees, as evidenced by participation in our employee-led Green Teams which we established in 2019. We expect that strengthening our customer relationships, demonstrating to our investors that we are managing climate-related risks and opportunities, and engaging our employees positively in our environmental sustainability program will all serve to strengthen our stakeholder relationships, enhance our reputation, and contribute to our financial success.

#### Time horizon

Short-term

**Likelihood**

Very likely

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

&lt;Not Applicable&gt;

**Potential financial impact figure – minimum (currency)**

&lt;Not Applicable&gt;

**Potential financial impact figure – maximum (currency)**

&lt;Not Applicable&gt;

**Explanation of financial impact figure****Cost to realize opportunity**

580000

**Strategy to realize opportunity and explanation of cost calculation**

In 2019 we established our program to manage our climate impacts, completing our first greenhouse gas inventory, achieving carbon neutral status, and setting a science-based GHG emissions reduction target. Additionally, in 2019 we completed our first full submission to the CDP Climate Change survey and we disclosed our emissions in our first CSR Report, published in early 2020 with report drafting completed in 2019. Our commitment to reducing our climate impacts starts at the top of our company. Our sustainability program has direct sponsorship and participation from the Synopsys co-founder, chairman and co-CEO. A senior-level CSR Committee, chaired by our General Counsel and Corporate Secretary, provides oversight to our program and reports out to the Nominating and Corporate Governance Committee on a quarterly basis. We are proactively communicating our commitments and progress to interested customers, investors and other stakeholders through one-to-one communications, press releases, and website communications. We are increasing internal communications about our climate action. As part of the Synopsys 2019 Vitality Spotlight video series, the Vitality in Action spotlight focused on our commitment to Corporate Social Responsibility through initiatives to advance our people, our planet, and our philanthropy. In this spotlight, we highlighted our climate change commitment by becoming carbon neutral in 2019. The annual costs to realize this opportunity comprise the approximate costs of our carbon neutrality initiative, specifically the costs to purchase renewable energy certificates and carbon offsets (approximately \$500,000), as well as external consulting services to support our CSR program (approximately \$80,000).

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

Yes

**C3.1a****(C3.1a) Does your organization use climate-related scenario analysis to inform its strategy?**

No, but we anticipate using qualitative and/or quantitative analysis in the next two years

**C3.1c****(C3.1c) Why does your organization not use climate-related scenario analysis to inform its strategy?**

We have not yet performed scenario analysis. We are initially focusing on quantifying our GHG emissions footprint in order to better understand our emissions profile, which in turn will inform scenario analysis. Additionally, climate scenario analysis is a relatively new concept for companies in our sector. We have made an internal commitment to incorporate climate risk to our company wide risk assessment process and as part of this commitment will consider how best to conduct scenario analysis.

**C3.1d**

**(C3.1d) 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	How strategy has been influenced: Designing products for low power and energy consumption optimization have long been strategic priorities for Synopsys. More recently strong semiconductor market drivers like autonomous driving and the adoption of artificial intelligence (AI) are driving global demand for larger, faster, and more energy-efficient system-on-chips (SoCs). Factors such as increased customer concern about climate change serve to intensify the focus on energy efficiency and power performance. This creates new opportunities for us to calculate and communicate the environmental benefits of our low power and energy consumption optimization focus. Case Study For example, our ZeBu Server 4 product offers 1/10th the power consumption and half the datacenter footprint of other emulation solutions, leading to the industry's lowest total cost of ownership. In 2019, we decided to calculate the avoided customer data center emissions resulting from the use of this highly energy efficient product. Our strategy is influenced over the short, medium and long term.
Supply chain and/or value chain	Yes	How strategy has been influenced. As a technology company, we recognize that the majority of our total GHG emissions arise beyond our direct operations. Recognizing the magnitude of emissions arising in our supply chain, we decided to start engaging with our suppliers on their GHG emissions as part of our new vendor onboarding process. Case Study In 2019, we added a question to our New Vendor form about whether or not vendors quantify their GHG emissions. While we do not currently require that new vendors report their GHG emissions as a condition of doing business with Synopsys, we see this as a first step in our supply chain engagement strategy and as an important signal to new vendors of the importance of emissions quantification. Our strategy is influenced over the short, medium and long term.
Investment in R&D	Yes	How strategy has been influenced: Designing products for low power and energy consumption optimization have long been strategic priorities for Synopsys' investment in research and development. These R&D investments mean that our highly efficient products help our customers to avoid emissions that would result from less efficient products. This is one of several factors that influenced our decision to establish an internal cross-functional taskforce focused on low power design. Case study In 2019, Synopsys established a new cross-functional Low Power Taskforce to advance an integrated low power platform of products for our customers to significantly reduce power consumption of their semiconductor chips. By leveraging synergies between Synopsys tools and IP portfolio, the Taskforce's work enables high-impact energy optimization from software to silicon. Our strategy is influenced over the short, medium and long term.
Operations	Yes	How strategy has been influenced: Climate-related risks and opportunities have influenced our operational strategies for our offices and data centers. These are the drivers of our scope 1 and 2 emissions and where we have the most direct control and opportunity to deliver emissions reductions. Our strategies have been influenced in several ways, including the incorporation of sustainability features to the design of new buildings, investment in energy efficiency projects at our offices and evaluation of renewable electricity purchasing opportunities. Case study We actively seek U.S. Green Building Council Leadership in Energy and Environmental Design (LEED) certifications for our office buildings and currently have seven certified sites in four countries. We project that our three newest buildings at our Northern California headquarters will use 20% less energy than comparable buildings due to the incorporation of energy efficiency features. We took the decision to seek LEED Gold certification for these new buildings. Our strategy is influenced over the short, medium and long term.

**C3.1e**

**(C3.1e) 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	Direct costs	In 2019 we committed to and achieved CarbonNeutral® certification for our operations. This commitment results in annual direct costs to purchase renewable energy certificates and carbon offsets to compensate for our emissions. This has added direct cost to our business in the short term and these costs are incorporated into our annual financial planning process.

**C3.1f**

**(C3.1f) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).**

**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**

2019

**Target coverage**

Company-wide

**Scope(s) (or Scope 3 category)**

Scope 1+2 (market-based)

**Base year**

2018

**Covered emissions in base year (metric tons CO2e)**

35891

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

100

**Target year**

2024

**Targeted reduction from base year (%)**

25

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

26918.25

**Covered emissions in reporting year (metric tons CO2e)**

35432

**% of target achieved [auto-calculated]**

5.11548856259229

**Target status in reporting year**

New

**Is this a science-based target?**

Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science-Based Targets initiative

**Please explain (including target coverage)**

In 2019, a cross functional taskforce was convened to develop a new GHG reduction goal for Synopsys. This new goal has been publicly announced and targets a 25% reduction in total scope 1 and 2 emissions between 2018 and 2024. In developing this goal, we referred to guidance from the Science Based Targets Initiative. Our goal targets a 4.2% reduction on average per year over the goal period and is aligned with a 1.5 degree Celsius warming pathway. Synopsys has taken the decision not to count the renewable energy certificates purchased as part of its carbon neutrality commitment towards this goal, in order to focus our emissions reduction investments on energy efficiency projects and initiatives that we feel confident are helping to bring new renewable power onto the electricity grid, with virtual power purchase agreements being an example.

**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	1	
To be implemented*	5	151
Implementation commenced*	0	0
Implemented*	4	476
Not to be implemented	2	

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	Heating, Ventilation and Air Conditioning (HVAC)
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**Estimated annual CO2e savings (metric tonnes CO2e)**

54

**Scope(s)**

Scope 1  
Scope 2 (market-based)

**Voluntary/Mandatory**

Voluntary

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

9000

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

73000

**Payback period**

4-10 years

**Estimated lifetime of the initiative**

6-10 years

**Comment**

Initiatives to optimize HVAC systems operation in our India and US offices.

**Initiative category & Initiative type**

Energy efficiency in buildings	Lighting
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**Estimated annual CO2e savings (metric tonnes CO2e)**

116

**Scope(s)**

Scope 2 (market-based)

**Voluntary/Mandatory**

Voluntary

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

18800

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

63800

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

6-10 years

**Comment**

LED Lighting upgrade projects in our India, US and Canada offices

**Initiative category & Initiative type**

Energy efficiency in buildings	Other, please specify (Equipment Upgrades )
--------------------------------	---

**Estimated annual CO2e savings (metric tonnes CO2e)**

127

**Scope(s)**

Scope 2 (market-based)

**Voluntary/Mandatory**

Voluntary

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

37300

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

29300

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

6-10 years

**Comment**

Upgrade and replacement of equipment to deliver increased efficiencies in our India offices, including UPS Replacement, new Automatic Power Factor Controller panel, new VRF systems.

**Initiative category & Initiative type**

Transportation	Employee commuting
----------------	--------------------

**Estimated annual CO2e savings (metric tonnes CO2e)**

179

**Scope(s)**

Scope 3

**Voluntary/Mandatory**

Voluntary

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

0

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

90000

**Payback period**

No payback

**Estimated lifetime of the initiative**

16-20 years

**Comment**

Installation of charging stations for electric vehicles, for use by our employees.

**C4.3c**

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

Method	Comment
Compliance with regulatory requirements/standards	We evaluate all projects first against regulatory requirements, then against best practice and optimization initiatives that have financial feasibility.
Financial optimization calculations	We evaluate all projects first against regulatory requirements, then against best practice and optimization initiatives that have financial feasibility.

**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?**

No

**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 2018

**Base year end**

December 31 2018

**Base year emissions (metric tons CO2e)**

4665.502

**Comment**

**Scope 2 (location-based)**

**Base year start**

January 1 2018

**Base year end**

December 31 2018

**Base year emissions (metric tons CO2e)**

38970.497

**Comment**

**Scope 2 (market-based)**

**Base year start**

January 1 2018

**Base year end**

December 31 2018

**Base year emissions (metric tons CO2e)**

31226.097

**Comment**

**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)

**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)**

4157.854

**Start date**

January 1 2019

**End date**

December 31 2019

**Comment**

**Past year 1**

**Gross global Scope 1 emissions (metric tons CO2e)**

4665.502

**Start date**

January 1 2018

**End date**

December 31 2018

**Comment**

**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**

**C6.3**

---

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

**Reporting year**

**Scope 2, location-based**

38145.573

**Scope 2, market-based (if applicable)**

31274.036

**Start date**

January 1 2019

**End date**

December 31 2019

**Comment**

**Past year 1**

**Scope 2, location-based**

38970.497

**Scope 2, market-based (if applicable)**

31226.097

**Start date**

January 1 2018

**End date**

December 31 2018

**Comment**

**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, 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**

## Capital goods

### 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

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

### Evaluation status

Relevant, calculated

### Metric tonnes CO2e

4480.444

### Emissions calculation methodology

Emissions were calculated for fuel-and-energy-related activities (not included in Scope 1 or 2) by totaling activity data for each Scope 1 fuel type and electricity consumption by country. These totals were multiplied by their relevant specific emission factors from UK Defra / DECC 2018 Conversion Factors for Company Reporting.

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

0

### Please explain

## Upstream transportation and distribution

### Evaluation status

Relevant, calculated

### Metric tonnes CO2e

447.548

### Emissions calculation methodology

Transportation emissions for Synopsys products are calculated based on both air and truck transit. Data is sourced from vendor reports for both the US and International transport. Both the freight weight and freight distance were calculated and multiplied by the applicable emissions factors.

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

100

### Please explain

Transportation of products from the contract manufacturer to distributors and customers.

## Waste generated in operations

### Evaluation status

Relevant, calculated

### Metric tonnes CO2e

538.367

### Emissions calculation methodology

The amount of waste is estimated using assumptions developed in relation to amount of waste generated per employee per day, number of working days per year and waste treatment/disposal methods. The GHG Protocol's scope 3 guidance was followed with use of emission factors from the UK Government GHG Conversion Factors for Company Reporting. For landfill, the factors include collection, transportation and landfill emissions ('gate to grave'). For combustion and recycling, the factors consider transport to an energy recovery or materials reclamation facility only. This is in line with GHG Protocol Guidelines, with subsequent emissions attributed to electricity generation or recycled material production respectively.

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

0

### Please explain

Waste generated in our facilities

## Business travel

### Evaluation status

Relevant, calculated

### Metric tonnes CO2e

28078.003

### Emissions calculation methodology

Business travel airmiles by haul is provided by the travel agent, Travel Leaders Corporate. Employee car miles claimed for reimbursement were totaled from the provided mileage report and an average miles per gallon figure of 24.7mpg was applied to obtain total fuel gallons. Figures are multiplied by the relevant emissions factors: EPA factors for vehicle miles and DEFRA factors with Radiative Forcing for air travel miles.

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

95

### Please explain

Business travel, including all transportation by air and global vehicle miles claimed through employee reimbursement.

## Employee commuting

### Evaluation status

Relevant, calculated

### Metric tonnes CO2e

22883.737

### Emissions calculation methodology

Employee commute emissions are calculated based on estimated data from our largest sites, including average distance to work, and percent of employees using different transport modes (public rail transport, Synopsys operated vehicles, and motorbikes). The estimates are then extrapolated to all sites worldwide to determine global commute mileage and emissions. Extrapolated vehicle miles are based on a global average commute which is calculated from the average commute miles provided from the sites used in the analysis. The most recent EPA emission factors are used to determine emissions by mode, and then summed for total employee commute emissions.

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

#### Please explain

## 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

Upstream leased assets are included in our scope 2 emissions calculations.

## Downstream transportation and distribution

### 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

## 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

We do not sell products that are processed.

## 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

## End of life treatment 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

## Downstream leased assets

### 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

Synopsys does not own assets that are leased to other parties.

## 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

Synopsys does not have any franchises

## 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

Synopsys does not have any investments.

## 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

No Other categories identified.



**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**

No Other categories identified.

---

C6.7

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

No

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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**

0.000010542

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

35431.89

**Metric denominator**

barrel of oil equivalent (BOE)

**Metric denominator: Unit total**

3361000000

**Scope 2 figure used**

Market-based

**% change from previous year**

8

**Direction of change**

Decreased

**Reason for change**

Revenue increased, while emission decreased driven in part by energy efficiency projects implemented by our US, Canada and India offices.

---

**Intensity figure**

0.011427758

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

35431.89

**Metric denominator**

square foot

**Metric denominator: Unit total**

3100511

**Scope 2 figure used**

Market-based

**% change from previous year**

5

**Direction of change**

Decreased

**Reason for change**

Square footage increased, while emission decreased driven in part by energy efficiency projects implemented by our US, Canada and India offices.

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C7. Emissions breakdowns

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## 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 CO <sub>2</sub> e)	GWP Reference
CO <sub>2</sub>	2996.358	IPCC Fifth Assessment Report (AR5 – 100 year)
CH <sub>4</sub>	1.589	IPCC Fifth Assessment Report (AR5 – 100 year)
N <sub>2</sub> O	1.518	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	1158.388	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 CO <sub>2</sub> e)
United States of America	1576.84
China	452.78
Germany	111.45
India	232.02
Canada	205.8
Chile	29.72
Australia	0.84
China, Macao Special Administrative Region	14.06
China, Hong Kong Special Administrative Region	2.21
Republic of Korea	171.22
Malaysia	3.84
Singapore	11.92
Taiwan, Greater China	331.39
Viet Nam	48.96
Armenia	237.45
Belgium	15
Denmark	13.17
Finland	28.05
France	123.73
Hungary	3.75
United Kingdom of Great Britain and Northern Ireland	87.21
Ireland	45.79
Israel	44.82
Italy	15.1
Netherlands	27.94
Poland	44.5
Portugal	101.76
Russian Federation	28.7
Sweden	17.4
Switzerland	15
Japan	85
Sri Lanka	26.76
Romania	3.69

## 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)
Offices	4157.853
Colocated Data Centers	0

**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)
United States of America	18137.1	12805.33	77104	24544.83
China	1201.87	1201.87	1920.83	0
Germany	2447.78	536.02	5976.96	5241.37
India	8373.4	8373.4	11401.41	0
Canada	260.07	260.07	1773.31	0
Chile	111.86	111.86	256.12	0
Australia	5.42	5.42	7.27	0
China, Macao Special Administrative Region	70.4	70.4	109.78	0
China, Hong Kong Special Administrative Region	13.87	13.87	19.03	0
Republic of Korea	300.82	300.82	557.79	0
Malaysia	21.59	21.59	33.09	0
Singapore	31.79	31.79	80.16	0
Taiwan, Greater China	1922.42	1922.42	3071.06	0
Viet Nam	2474.61	2474.61	6844.11	0
Armenia	326.34	326.34	2046.01	0
Belgium	25.22	24.43	129.22	0
Denmark	15.96	57.8	113.47	0
Finland	27.23	72.9	241.67	0
France	78.87	56.72	1066.11	0
Hungary	8.09	12.26	32.34	0
United Kingdom of Great Britain and Northern Ireland	185.41	286.26	751.42	0
Ireland	147.99	252.65	394.54	0
Israel	215.13	215.13	386.18	0
Italy	38.48	63.38	130.08	0
Netherlands	100.34	128.41	240.73	0
Poland	261.37	346.9	383.47	0
Portugal	310.88	276.64	876.78	0
Russian Federation	86.9	86.9	247.33	0
Sweden	2.32	5.61	149.93	0
Switzerland	16.15	4.5	129.22	0
Japan	769.4	769.4	1467.59	0
Sri Lanka	145.57	145.57	230.6	0
Romania	10.93	12.8	31.8	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)
Offices	22457.155	19773.614
Colocated Data Centers	15688.416	11500.42

**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		<Not Applicable >		
Other emissions reduction activities	297	Decreased	0.8	There is a decrease of 297 MTCO2e attributable to emissions reduction initiatives including energy efficiency projects implemented by our US, Canada and India offices. The percentage decrease in emissions due to emission reduction initiatives was calculated as $(-279/35891 \text{ [S12 2018 emissions]}) * 100 = -0.8\%$
Divestment		<Not Applicable >		
Acquisitions		<Not Applicable >		
Mergers		<Not Applicable >		
Change in output	1045	Increased	3	There is an increase of 1045 MTCO2e attributable to a 10% increase in our data center electricity usage, driven by business growth. The percentage increase due to change in output was calculated as $(1,045/35891 \text{ [S12 2018 emissions]}) * 100 = 3\%$
Change in methodology		<Not Applicable >		
Change in boundary		<Not Applicable >		
Change in physical operating conditions	289	Decreased	0.8	There is a decrease of 289 MTCO2e attributable to consolidation of office space in North America. The percentage decrease in emissions due to emission reduction initiatives was calculated as $(-289/35891 \text{ [S12 2018 emissions]}) * 100 = -0.8\%$
Unidentified		<Not Applicable >		
Other		<Not Applicable >		

**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)		16528.84	16528.84
Consumption of purchased or acquired electricity	<Not Applicable>	29786.2	88417.2	118203.4
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>		<Not Applicable>	
Total energy consumption	<Not Applicable>	29786.2	104946.05	134732.25

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)**

Diesel

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

53.79

**MWh fuel consumed for self-generation of electricity**

53.79

**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**

10.243

**Unit**

kg CO2 per gallon

**Emissions factor source**

EPA, "Emission Factors for Greenhouse Gas Inventories, March

**Comment**

**Fuels (excluding feedstocks)**

Natural Gas

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

16475.05

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

16475.05

**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**

53.123

**Unit**

kg CO2e per million Btu

**Emissions factor source**

EPA, "Emission Factors for Greenhouse Gas Inventories, March 2018

**Comment**

**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	53.79	53.79	0	0
Heat	16475.05	16475.05	0	0
Steam				
Cooling				

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 (The Munich colocation data center provider provides energy from 100% renewable sources as certified by Mainova AG. )

**Low-carbon technology type**

Other, please specify (solar and wind )

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

Germany

**MWh consumed accounted for at a zero emission factor**

5241.36

**Comment**

The MWhs included are from the colocation data center we utilize in Munich Germany that is operated by our vendor on 100% renewable energy.

**Sourcing method**

Green electricity products (e.g. green tariffs) from an energy supplier, supported by energy attribute certificates

**Low-carbon technology type**

Low-carbon energy mix

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

North America

**MWh consumed accounted for at a zero emission factor**

24544.83

**Comment**

Renewable energy MWhs associated with Silicon Valley Clean Power (50% renewable) and Silicon Valley Power (32% renewable)

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	No third-party verification or assurance
Scope 2 (location-based or market-based)	No third-party verification or assurance
Scope 3	No third-party verification or assurance

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, we do not verify any other climate-related information reported in our CDP disclosure

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?**

Yes

C11.2a

---



**(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.**

**Credit origination or credit purchase**

Credit purchase

**Project type**

Forests

**Project identification**

The Rimba Raya Biodiversity Reserve is based on the southern coast of Borneo in a carbon-dense tropical peat swamp forest which is part of the Seruyan River watershed. The project was established with the primary objective of protecting the area against the threat of palm oil conversion by combining the conservation goal with community activities and commercial support. The project is protecting the area's wildlife and carbon stocks mainly through physical barriers and management regimes: the construction and operation of guard towers, fire protection plans and infrastructure, monitoring plans and orangutan care facilities. The project also works on community development activities with the 2,500 households living within the project area. The Rimba Raya project is verified and validated to the Verified Carbon Standard (VCS) and has achieved Gold Level status under the Climate Community and Biodiversity (CCB) Standard as it significantly assists communities in adapting to the impacts of climate change and displays high biodiversity benefit.

**Verified to which standard**

VCS (Verified Carbon Standard)

**Number of credits (metric tonnes CO2e)**

15558

**Number of credits (metric tonnes CO2e): Risk adjusted volume**

15558

**Credits cancelled**

Yes

**Purpose, e.g. compliance**

Voluntary Offsetting

---

**Credit origination or credit purchase**

Credit purchase

**Project type**

Other, please specify (Bioenergy)

**Project identification**

This Gold Standard CDM project distributes small-scale biogas plants to low-income rural households with livestock across the Sichuan Province of China. To support rural development and environmental protection, the biogas plants digest manure and recover the methane by-product through the process of anaerobic digestion. This offers clean and affordable energy to homes and fertilizer for agriculture. In addition to reducing greenhouse gas (GHG) emissions, the project improves indoor air quality and sanitation for rural communities. Carbon finance is used to provide financial support, totaling roughly 40% of the cost of the 395,000 biodigesters already distributed.

**Verified to which standard**

Gold Standard

**Number of credits (metric tonnes CO2e)**

15558

**Number of credits (metric tonnes CO2e): Risk adjusted volume**

15558

**Credits cancelled**

Yes

**Purpose, e.g. compliance**

Voluntary Offsetting

---

**Credit origination or credit purchase**

Credit purchase

**Project type**

Solar

**Project identification**

In India, rural, low income populations continue to be underserved by access to renewable energy, despite its growth at the national level. The aim of the SELCO Solar Energy Access project - a joint initiative with SELCO Solar Pvt (SELCO) and Natural Capital Partners – is to enhance energy access, primarily for bottom-of-the-pyramid households, by distributing an array of solar products including solar lighting, solar water heating, and solar PV. With the support of carbon finance, the project aims to empower users by providing a complete solution package; including products, servicing and financing.

**Verified to which standard**

VCS (Verified Carbon Standard)

**Number of credits (metric tonnes CO2e)**

15558

**Number of credits (metric tonnes CO2e): Risk adjusted volume**

15558

**Credits cancelled**

Yes

**Purpose, e.g. compliance**

Voluntary Offsetting

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## C11.3

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

Yes

## C11.3a

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### (C11.3a) Provide details of how your organization uses an internal price on carbon.

#### Objective for implementing an internal carbon price

Drive low-carbon investment

#### GHG Scope

Scope 1

Scope 2

Scope 3

#### Application

Through our commitment to purchase renewable energy certificates and carbon offsets to compensate for our scope 1, scope 2 and selected scope 3 sources (as prescribed by the Carbon Neutral Protocol), we have acted to create a company-wide internal price on carbon.

#### Actual price(s) used (Currency /metric ton)

10

#### Variance of price(s) used

The price varies based on the cost to compensate our GHG emissions.

#### Type of internal carbon price

Implicit price

#### Impact & implication

The annual cost to deliver our carbon neutrality commitment is being factored into the evaluation of opportunities to procure renewable energy and in so doing is incentivizing and enabling our transition to a lower-carbon business.

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## C12. Engagement

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### C12.1

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

Yes, our customers

### C12.1b

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#### (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 education customers about your climate change performance and strategy

##### % of customers by number

14

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

##### Portfolio coverage (total or outstanding)

<Not Applicable>

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

We target our engagement with customers who show a direct interest in our climate related programs and commitments. These customers demonstrate their interest in various ways, including via the CDP Supply Chain survey, through RFP questionnaires, supplier audits and reviews and direct communications. We aim to be responsive to all customer inquiries regarding our climate related programs. We engage with customers by providing information directly, for example in meetings or via email, through participation in the CDP Supply Chain survey and by responding to RFP questionnaires. We also direct customers to published information about our programs on our website, in press releases and our CSR Report. We have reported % of customers in revenue terms as we feel this is a more meaningful indicator of the relevancy of these customers to our business than the number of customers.

##### Impact of engagement, including measures of success

We measure success based on the number and type of positive engagements we have with customers regarding our climate programs. We have received positive feedback from customers who are themselves leaders on climate action and who have demonstrated that they expect us to have strong climate commitments. This is an important measure of success for us and indicates that our engagement is effective.

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### C12.3

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**(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?**

Trade associations

### C12.3b

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**(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?**

Yes

### C12.3c

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**(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.**

**Trade association**

The Information Technology Industry Association (ITI)

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

ITI has published a Statement on Climate Change. In this statement, the ITI sets out its position that there is strong scientific evidence that climate change – accelerated by human activity – is occurring, and that the resulting environmental, economic and social challenges warrant coordinated and timely response from governments and the private sector. The statement also states that ITI and its member companies are responding through three strategic commitments: (1) reducing the carbon footprint of our operations; (2) reducing the carbon footprint of our products over their lifecycle; and (3) delivering the ongoing innovations needed to transition the world to a vibrant, sustainable low-carbon global economy. ITI supports these efforts by sharing best practices and by supporting government policies that increase relevant public and private sector collaboration, on the basis that accelerating the transition to a sustainable low-carbon economy will produce multiple benefits for economic growth, public health, resilience to natural disasters, and the health of the global environment.

**How have you influenced, or are you attempting to influence their position?**

We are not attempting to influence the position of ITI on climate change related matters. However, we support the Trade Association's position as described in ITI Statement on Climate Change.

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### C12.3f

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**(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?**

Synopsys' engagement with policy makers via Trade Associations is overseen by our Corporate Affairs group. Our policy engagement efforts are focused on material issues for our business including workforce, trade and cybersecurity. We do not currently engage directly with policy makers on climate change related policy.

### C12.4

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**(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 voluntary communications

**Status**

Complete

**Attach the document**

Synopsys-2019-CSR-Report.pdf

**Page/Section reference**

Page 6 Page 11 Page 12 Page 13

**Content elements**

Governance

Strategy

Emissions figures

**Comment**

In 2019, we published our first CSR Report which provides information about our 2018 GHG emissions, our carbon neutrality initiative, product energy efficiency features, green building commitments and employee engagement activities.

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### C15. Signoff

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C-FI

(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	General Counsel & Corporate Secretary	Other C-Suite Officer

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	

SC0.2

(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP?

Please select

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
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SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

Please select

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

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(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?  
Please select

SC3.1

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(SC3.1) Do you want to enroll in the 2020-2021 CDP Action Exchange initiative?  
Please select

SC3.2

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(SC3.2) Is your company a participating supplier in CDP's 2019-2020 Action Exchange initiative?  
Please select

SC4.1

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(SC4.1) Are you providing product level data for your organization's goods or services?  
Please select

Submit your response

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In which language are you submitting your response?  
English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission	Are you ready to submit the additional Supply Chain Questions?
I am submitting my response	Investors Customers	Public	Yes, submit Supply Chain Questions now

Please confirm below

I have read and accept the applicable Terms