Innovating for a Better Future

2023 Task Force on Climate - related Financial Disclosures (TCFD) Framework

onsemi™

Task Force on Climate-related Financial Disclosures (TCFD) Framework

TCFD RECOMMENDED DISCLOSURE	LOCATION OF DISCLOSURE	BRIEF DESCRIPTION
Governance		
Disclose the organization's governance around climate-related risks and opportunities.		
(a) Describe the board's oversight of climate-related risks and opportunities.	CDP Climate Change, C1.1, C1.1a, C1.1b	As stated in its charter, the Governance and Sustainability (GS) Committee of the Board of Directors is tasked with formal responsibility and oversight of matters related to environmental, health and safety (EHS), environmental, social and governance (ESG) and sustainability issues at **onsemi**. The committee also oversees ESG, climate-related and sustainability-related initiatives regarding related strategy, risk management, opportunities, major capital expenditure and investments. The GS Committee holds at least four regular meetings per year and is composed of three or more independent members of the Board. Additionally, the entire Board reviews progress against climate and sustainability-related goals and targets, including progress towards **onsemi's** goal to achieve net zero emissions by 2040 (Net Zero 2040) across Scopes 1, 2 and 3 and other metrics like energy usage, waste generation and water withdrawal. Progress of the company's sustainability projects is communicated by the Chief Marketing Officer on a quarterly basis for review by the Board.

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Governance		
(b) Describe management's role in assessing and managing climate-related risks and opportunities.	CDP Climate Change, Questions C1.2, C1.3, C1.3a	At **onsemi**, climate-related risks and opportunities are assessed, managed and realized at the highest level of the organization. We believe that the responsibility of operationalizing mitigation and adaptation strategies in response to climate-related risks and opportunities must be integrated at every level of the company, ensuring the success of our risk management program and giving us the ability to act nimbly at all levels when needed. Our ERM program is overseen by a Risk Committee comprising the CEO, CLO, CFO, CSO and EVP of Operations & Manufacturing. The Risk Committee is responsible for the identification, management and mitigation of risks faced by **onsemi**. To maintain accountability at the highest functional level, executive staff members are appointed as risk sponsors for individual risks and work with risk owners who manage the risk on a day-to-day basis. ERM findings are communicated to the Risk Committee monthly to ensure that this information is communicated to executive staff and our Board of Directors. Climate-related risks and opportunities impact business units (BUs) and functional departments across the organization in unique and nuanced ways. BU and department leaders are responsible for understanding, monitoring and acting as the risk and opportunity landscape changes, ensuring they have the information, capacity and resources needed to respond quickly and effectively to trigger events. Groups engaged in climate-related risk and opportunity assessment include our three BUs, finance, legal, manufacturing, business continuity, new product development, supply chain, ESG, human resources and customer experience.

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Strategy		
Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy and financial planning where such information is material.		
(a) Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term.	CDP Climate Change, Questions C2.3, C2.3a, C2.4, C2.4a	At **onsemi**, we have identified potential climate-related risks and opportunities that could impact our business continuity, strategy and financial planning. Risks identified include transitional and physical risks with the capacity to impact our own operation and value chain, including our financials, supply chain, workforce, company disclosure and reputation. Climate-related opportunities identified include transitional and physical opportunities related to increased demand of **onsemi** products and an increase in tangible and intangible asset values. Our identified climate-related risks and opportunities can impact **onsemi** over the near, medium and long term depending on the risk or opportunity development and maturity. For a full list of **onsemi's** climate-related risks and opportunities, see the Risk and Opportunity Disclosure tables below.
(b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.	CDP Climate Change, Questions C3.1, C3.3, C3.4	Identified climate-related risks and opportunities may pose potential impacts to our business across different impact categories such as finance, supply chain, customer demand and direct operations. These impacts can be general and applicable across our business and value chain, or they can be location-based, requiring specific plans and actions localized to the region or country where the risk or opportunity is realized. Realized potential impacts of the identified climate-related risks and opportunities are to be integrated into strategic decision-making across **onsemi** in business continuity planning, capital expenditure planning and new product development.
(c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios including a 2°C or lower scenario.	CDP Climate Change, Questions C3.2, C3.2b	Using three plausible, distinctive, consistent, relevant and challenging climate scenarios, **onsemi** executive leadership, various functional owners and the ESG team participated in a climate scenario analysis to inform a climate adaptation and resilience plan for implementation at the company. Scenarios used assume various degrees of warming by 2100 and include social, technological, economic and political developments considered plausible under each warming trajectory. The three scenarios used to inform the development of a climate action plan for **onsemi** include: 1. Failure to Decarbonize: runaway climate change resulting in warming above 3°C by 2100, international cooperation breakdowns and increased potential for irreversible effects of climate change. 2. Orderly Decarbonization: orderly decarbonization resulting in warming limited to 1.5°C by 2100, advancement, development and adoption of sustainable technology and global policies for decarbonization, including carbon pricing. 3. Disorderly Decarbonization: disorderly decarbonization resulting in warming around 2°C by 2100, the abrupt and uneven introduction of climate policies and increased financial consequences of climate change. Through this exercise, relevant climate-related risks and opportunities were identified and socialized for inclusion in our overall business strategy. We're exploring the development of internal controls and procedures, adaptation and mitigation plans, identification of trigger events to inform future action and no-regret actions to be taken in response to the outcomes of our climate scenario analysis.

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Risk Management		
Disclose how the organization identifies, assesses and manages climate-related risks.		
(a) Describe the organization's processes for identifying and assessing climate-related risks.	CDP Climate Change, Questions C1.2, C2.1, C2.1a, C2.1b, C2.2, C2.2a	**onsemi** uses scenario analysis to understand the impacts of climate change on our business operations, corporate strategy and value chain. By understanding the presumed operational context of different decarbonization trajectories, we can identify potential climate-related physical and transitional risks that could conceivably pose an impact to our business and strategy. These scenarios are not intended to predict the future, but instead help us understand our potential risk exposure and build resilience through activities to enhance our preparedness.
(b) Describe the organization's processes for managing climate-related risks.	CDP Climate Change, Questions C2.2, C2.2a, C2.3, C2.3a	Through our scenario analysis, we have identified various action planning and trigger monitoring activities to build resilience to potential climate-related risks. We're exploring the development of internal controls and procedures, adaptation and mitigation plans, identification of trigger events to inform future action and no-regret actions to be taken in response to the outcomes of our climate scenario analysis. Owners will be assigned to monitor and manage relevant climate-related risks to ensure actions are being taken when appropriate to ensure the resilience of business operations and strategies.
(c) Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management.	CDP Climate Change, Questions C2.2, C2.2a	The process of identifying, assessing and managing corporate risks falls within ERM. Our climate-related risks identified through scenario analysis have been mapped to relevant risk definitions within our current risk registrar for ease of integration into our ERM framework. Risk owners have been identified and assigned to ensure continuous management of identified climate-related risks.

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Metrics and Targets		
Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.		
(a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	CDP Climate Change, Sections C5, C6, C7, C8	Our scenario analysis detailed important metrics to help us assess and monitor climate-related risks and opportunities in line with our strategy and risk management process. Monitored metrics include: • Product energy, water and emissions intensity • R&D expenditures for low-carbon products • Percentage of expenditure on energy efficiency • Total energy consumption included percentage from renewables • Total greenhouse gas emissions • Investment in climate adaptation measures • R&D expenditure on products that support customer decarbonization
(b) Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks.	CDP Climate Change, Sections C5, C6, C7, C8	In Fiscal Year (FY) 2023, our GHG emissions were as follows: Scope 1 – 828,620 $MTCO_2e$ Scope 2 – 727,464 $MTCO_2e$ Scope 3 – 1,573,417 $MTCO_2e$ For a breakdown of Scope 3 by category, see the **Annual Inventory of Energy Consumption and Emissions** section of our 2023 Sustainability Report, pg. 25. As regions and nations develop regulations aimed at accelerating local or global decarbonization efforts, **onsemi** may encounter risks associated with our GHG emissions including carbon prices and carbon border adjustments. These can result in increased operational expenditures if we continue to emit GHG emissions through our business operation activities.

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(c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	CDP Climate Change, Questions C4.1, C4.1b, C4.2, C4.2b, C4.3, C4.3a, C4.3b, C4.3c **onsemi** blog, **2040 Emissions Goal for onsemi**	We have a goal of achieving net zero emissions by 2040 (Net Zero 2040) across Scopes 1, 2 and 3, along with using 50 percent renewable energy by 2030 and 100 percent renewable energy by 2040. This goal will guide how we operate our business over the coming years and is essential to ensuring we operate in a socially thoughtful and environmentally responsible manner. We are working to create a climate transition plan to meet Net Zero 2040. We're exploring the use of available levers for reducing emissions across Scopes 1 and 2 internally at our facilities, along with pathways for engaging suppliers and other reduction strategies in the value chain for Scope 3 emissions reductions outside **onsemi**'s direct control. We're determining the appropriate milestone tasks, metrics and key performance indicators to use for our climate transition plan, allowing us to track our progress over time. By identifying and monitoring our climate-related risks and opportunities, we can work to set further targets used to build resilience and reduce potential negative impacts from identified risks and realize potential positive impacts from identified opportunities.

Risk and Opportunity Disclosures Tables Continue on pg. 97

Risk and Opportunity Disclosures

Transition risks

Transition risks were most prevalent under the Orderly Decarbonization and Disorderly Decarbonization scenarios.

RISK	VALUE CHAIN	FINANCIAL IMPACT	TIMEFRAME OF IMPACT	ONSEMI RESPONSE
Risk Management				
Introduction of national carbon pricing schemes and/or carbon border adjustment mechanisms	Own operations	Increased expenditure associated with manufacturing and corporate activity. Potential reduction in product margins. Increased exposure to legal liability.	Negligible impact at present; however, impact increases in the medium term (before 2030) under some scenarios.	**onsemi's** approach to enhancing the resilience of its own operations to transition risks includes: • **Achieving net zero emissions:** through energy efficiency projects, renewable energy procurement and reducing greenhouse gas emissions from process gases through process swaps, gas swaps and abatement technology. • **Integration with strategic planning and risk management:** such as exploration of incorporating an internal carbon price in capital expenditure planning. • **Enhancing disclosure:** through ongoing alignment with global climate-related reporting frameworks and comprehensive data/ information controls.
Regulatory limits on carbon-related processes	Own operations	Reduced revenue from the reduction in production capacity. Increased exposure to legal liability.	Negligible impact at present; however, impact increases in the medium term (before 2030) under some scenarios.	
Varied availability of renewable energy in locations where **onsemi** operates	Own operations	Increased expenditure associated with sourcing renewable energy (in order to meet regulation and/or strategic objectives).	Some impact at present, the impact increases into the medium term (before 2030), mostly in the Failure to Decarbonize scenario.	
Increased sustainability reporting and assurance requirements	Own operations	Increased expenditure on staff and data/information systems and controls	Impact is present today and increases in the medium term (before 2030) under some scenarios.	
Carbon pricing schemes and/ or carbon border adjustment mechanisms applied to **onsemi** suppliers and their emissions	Supply chain	Increased expenditure for raw materials, products and services, as suppliers pass costs on to **onsemi**. Potential reduction in product margins.	Negligible impact at present; however, impact increases in the medium term (before 2030) under some scenarios.	**onsemi's** approach to enhancing the resilience of its supply chain to transition risks includes: • **Understanding emissions:** developing a baseline of supplier emissions through our Scope 3 emissions inventory. • **Supplier engagement:** we are exploring ways to incorporate public reporting of GHG emissions by our suppliers and other ESG matters into our supplier scorecard, which is used to track and encourage enhancement of supplier performance.
Limitations on access or availability to raw materials such as rare earth minerals due to increasing regulations	Supply chain	Reduced revenue if raw materials cannot be supplied to meet demand, and increased expenditure associated with sourcing alternate suppliers and materials.	Negligible impact at present; however, impact increases in the medium term (before 2030) under some scenarios.	
Pressure to demonstrate deforestation-free supply chain	Supply chain	Increased expenditure associated with investigating deforestation in **onsemi's** supply chain, and potentially switching suppliers.	Negligible impact at present; however, impact increases in the medium term (before 2030) under some scenarios.	

Physical risks

Physical risks were most prevalent under the Failure to Decarbonize scenario.

RISK	VALUE CHAIN	FINANCIAL IMPACT	TIMEFRAME OF IMPACT	ONSEMI RESPONSE
Production disruption from extreme weather (including indirect impacts such as government-imposed power restrictions and/or impacts to surrounding infrastructure)	Own operations	Reduced revenue from lost production and increased expenditure associated with restarting production.	Impact already occurs in some locations, frequency and severity of impact increases in the medium term under all scenarios.	**onsemi's** approach to enhancing the resilience of its own operations to physical risks includes: • **Enhanced business continuity planning:** we are exploring incorporating future scenarios into existing business continuity planning, prioritizing sites at higher risk of climate-related impact. • **Infrastructure planning:** exploring the consideration of climate scenarios when planning for facility and/or equipment upgrades or acquisitions. • **Accelerated resource efficiency:** adopting energy conservation and efficiency measures and increasing water recycling practices, reducing the number of resources needed to operate effectively.
Damage to **onsemi** facilities	Own operations	Increased expenditure to repair facilities and increased insurance costs.	Impact already occurs in some locations, frequency and severity of impact increases in the medium term under all scenarios.	
Limits to energy and water availability in specific locations at specific times of year	Own operations	Reduced revenue from lost production. Increased expenditure is associated with higher energy and water costs.	Impact already occurs in some locations, frequency and severity of impact increases in the medium term under all scenarios.	
Extreme weather impacts employee health, safety and productivity	Own operations	Increased expenditure and liability risk. Potential reduced revenue associated with lost production from absenteeism.	Impact already occurs in some locations, frequency and severity of impact increases in the medium term under all scenarios.	

RISK	VALUE CHAIN	FINANCIAL IMPACT	TIMEFRAME OF IMPACT	ONSEMI RESPONSE
Extreme weather impacts **onsemi** supplier locations and/or supply chain logistics	Supply chain	Reduced revenue from lost production.	Impact already occurs in some locations, frequency and severity of impact increases in the medium term under all scenarios.	**onsemi's** approach to enhancing the resilience of its supply chain to physical risks includes: • **Existing suppliers:** Exploring incorporation of future scenarios into supplier engagement, including audit specifications. • **Prospective suppliers:** Exploring incorporation of future scenarios into business continuity requirements.

Climate-related opportunities

Climate-related opportunities are most prevalent under the Orderly Decarbonization and Disorderly Decarbonization scenarios.

OPPORTUNITY	VALUE CHAIN	FINANCIAL IMPACT	TIMEFRAME OF IMPACT	ONSEMI RESPONSE
onsemi products supporting electrification of transport, infrastructure and wider renewable energy	Customer/ market demand	Increased revenue associated with increased market demand for electrification technologies.	Impact already occurs in some locations and sectors; impact may increase within existing geographies/sectors and expand to new geographies/sectors under some scenarios.	**onsemi's** approach to capitalizing on climate-related opportunities includes: • **Sustainable product ecosystem: onsemi's** strategy targets the use of our products in decarbonization and efficiency applications such as electric vehicles, factory automation and renewable energy infrastructure • **Integration into strategic planning: onsemi** incorporates climate-related opportunities, including market developments in decarbonization technology, in its processes for new product development, expansion of manufacturing capacity and other strategic planning processes.
onsemi products supporting solutions for energy, water and other resource efficiency	Customer/ market demand	Increased revenue associated with increased market demand for technology solutions that increase resource efficiency.	Impact already occurs in some locations and sectors; impact may increase within existing geographies/sectors and expand to new geographies/sectors under some scenarios.	
onsemi products supporting technology for avoided emissions and carbon removals	Customer/ market demand	Increased revenue associated with increased market demand for avoided emissions and carbon removal technology.	Negligible impact at present; however, impact increases in the medium term (before 2030) under some scenarios.	

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Report Revision History

VERSION	DESCRIPTION OF REVISION AND REASON	EFFECTIVE DATE
A	2023 Sustainability Report Document Initial Release	26 June 2024

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