# **UCT California Climate Risk Report**

This report has been prepared in accordance with the recommendations as set forth in the final report published in June 2017 by the Taskforce on Climate-related Financial Disclosures (TCFD), to demonstrate Ultra Clean Holdings, Inc. (UCT)'s compliance with California Climate Bill 261 ahead of its 2026 publication. The evaluation of climate-related risks and opportunities was conducted over the course of 2025, drawing primarily on FY2024 data and, where applicable, partial data from 2025.

### Governance

The company's governance structure provides clear oversight of climate-related risks and opportunities. Our steering committee on environmental, social, and governance (ESG) matters, the Nominating, Social and Corporate Governance Committee (NSGC), supports the Board of Directors (the Board) in monitoring risks related to Board composition, organizational structure, and broader ESG matters, including climate-related issues. The NSGC oversees ESG initiatives and reports at least twice a year to the Board. The Board has ultimate responsibility and maintains active oversight of risk management both collectively and through its committees. Each year, the Board reviews management reports covering material risks - including operational (including supply chain), financial, legal, cyber, ESG, and strategic risks. In addition, each Board committee is responsible for overseeing risks relevant to its specific mandate, ensuring comprehensive governance across the organization and compliance with regulations relevant in each geographical jurisdiction.

The oversight structure for climate-related matters is delegated among three principal Board committees as outlined in Table 1:

**Table 1: Governance structure** 

No.	Committee	Climate/environmental responsibility
1.	Nominating, Social and Corporate Governance Committee	This committee assists the Board in overseeing risks associated with Board organization, membership, structure, and ESG. It specifically provides oversight and guidance for ESG matters focusing on environmental and governance components.
2.	Compensation and People Committee	This committee provides oversight and guidance for the social component of ESG, including talent, employee retention, and the promotion of diversity, equity, and inclusion.
3.	Audit Committee	This committee oversees risks relating to our information controls and security (cyber-risk). It also oversees policies and results with respect to risk assessment and risk management, including risks related to data protection and cybersecurity, as they pertain to the integrity of the financial data.

The organization recognizes the critical importance of incorporating climate risk into our financial planning processes. Working with limited resources, capabilities, and expertise, we are actively developing a formal process that incorporates the identification and assessment of climate-related

risks into our financial planning. This initiative encompasses both the annual bottom-up budgeting process and the formulation of a high-level strategic plan, along with long-term forecasting.

As part of our ongoing approach to governance, UCT regularly engages external experts to support the leadership and the Board in understanding risk and implementing our strategy. This ensures we get relevant, up-to-date information to inform our decision making.

Furthermore, the results of our climate risk assessment will serve as the foundation for developing a strategic plan that supports a transition to a low-carbon economy and promotes business resilience.

# Strategy

Assessment of climate-related risks and opportunities

We are currently in the foundational phase of our climate risk assessment process. Throughout this reporting year, we have taken essential steps to identify and prioritize both physical and transition risks and opportunities pertinent to our business operations and value chain. The identified risks and opportunities will inform our future scenario analysis.

In 2025, we engaged a specialist climate consultancy to perform an initial assessment aimed at identifying climate-related risks and opportunities in accordance with the TCFD recommendations. The assessment focused on identifying and prioritizing both physical and transition climate-related risks and opportunities across our operations and value chain.

The assessment considered two main categories:

- **Physical risks and opportunities**: Focused on physical locations, including office and manufacturing sites
- **Transition risks and opportunities**: Examined our operational footprint, including our upstream supply chain (raw materials and transportation providers) and downstream value chain (sector dynamics, product demand, market drivers, and client expectations).

In accordance with the TCFD framework, the following definitions were applied:

- **Physical climate risks:** These refer to the potential impacts associated with acute risks, such as the increased severity of hurricanes and droughts, as well as chronic risks, which involve longer-term shifts in climate patterns, like sustained increases in temperatures.
- Transition climate risks and opportunities: These are associated with the implications
  of moving toward a low-carbon economy, encompassing factors such as the introduction
  of carbon pricing mechanisms, evolving policy requirements, and market supply and
  demand changes due to the climate transition.

In this assessment, the time horizon was defined according to asset lifecycles and the anticipated timing of climate impacts related to climate-related risks and opportunities. For this initial assessment, the timeframes were set as:

Current: 2025Medium-term: 2030Long-term: 2050

The time horizon for the climate risk assessment is different from that applied to our science-based targets (see the Metrics and Targets section). However, it is consistent with our recent CDP submissions, which define the following periods:

Short term: 1-5 yrsMedium term: 6-15 yrsLong term: 25 yrs

#### Physical risk assessment

The identification of physical risks involved a thorough review of the company's sites, including asset types and locations to assess their vulnerability and exposure. This review encompassed 13 potential hazards across two asset types and considered the impacts on three business components as outlined below in Table 2.

Table 2: Summary of physical risks assessed

Asset types	Acute hazards	Chronic hazards	Business components
<ul> <li>Manufacturing sites (25)</li> <li>Offices (9)</li> </ul>	<ul> <li>Riverine flooding</li> <li>Coastal flooding</li> <li>Heavy rainfall</li> <li>Drought</li> <li>Windstorms</li> <li>Wildfires</li> <li>Heat waves</li> <li>Tropical cyclones</li> <li>Extreme snowfall</li> <li>Cold waves</li> </ul>	<ul><li>Water scarcity</li><li>Heat stress</li></ul>	<ul> <li>Physical assets and infrastructure</li> <li>Workforce</li> <li>Value chain, logistics, key inputs &amp; resources</li> </ul>

In total, eight physical hazards were identified as high-priority climate risks. The analysis of risk from these hazards was focused on locations that were scored as a high or very high risk for the potential exposure. Based on site level risk ratings, consolidated country level risk ratings were developed.

#### Transition risk and opportunity assessment

The assessment of transition risks and opportunities was conducted to identify and prioritize risks that are potentially material to our company's operations and value chain. This assessment evaluated transition risks and opportunities at both global and regional levels, focusing on potential risks in various categories, including market dynamics, policy and legal frameworks, technology, reputation, and opportunities in resource efficiency, energy sources, and products and services.

The prioritized transition climate risks and opportunities were identified based on the exposure and vulnerability of our value chain, as well as their potential financial and operational impacts, in alignment with IPCC guidelines. The results are described in Table 3.

Table 3: Summary of transition risks and opportunities assessed

Risk/ opportunity	Transition category	Description	Value chain impacted
Risk	Policy / Legal	Increase in climate-related disclosure and reporting requirements	Own operations
Risk	Technology	Decarbonization of hard to abate processes	Own operations and upstream supply
Risk	Policy / Legal	Introduction of carbon pricing	Own operations and downstream clients
Risk	Reputational	Increased scrutiny from regulators and customers for corporate climate performance	Own operations
Risk	Market	Market volatility and risk of material scarcity in critical supply chains	Upstream supply
Opportunity	Product and Services	Responsible material sourcing and customer procurement alignment	Upstream supply
Opportunity	Market	Increased demand for electronic equipment and services including semiconductors and microchips	Own operations and downstream clients

In total, 14 transition risks and opportunities were identified with seven risks and opportunities prioritized for further assessment, consisting of five risks and two opportunities.

Impact of climate-related risks on business, strategy, and financial planning

UCT characterizes climate-related risks as factors that could potentially disrupt essential operations or physical locations, as well as affect workforce availability. These risks may, in turn, influence our broader business strategy and financial planning.

To assess the criticality of our operations, UCT considers various business inputs, including revenue sources, workforce distribution and internal financial materiality thresholds to evaluate potential exposure.

Currently, we are working to identify priority locations that demonstrate significant dependencies, impacts, and opportunities related to climate change. These locations are selected based on qualitative assessments to ensure a comprehensive understanding of the associated risks.

In this initial assessment we have not undertaken a detailed financial impact assessment of the prioritized transition risks. We anticipate the following trends to impact our business as will be areas to explore to further understand the business and financial impacts:

- Policy trajectory and climate reporting: Climate-related policy and regulatory requirements are expected to follow a steep upward trajectory to meet global climate goals. This trend is already evident in major initiatives like the European Green Deal and increasing state-level disclosure mandates, such as California's SB 261. Reporting requirements are anticipated to peak around 2030, reflecting a period of intense standardization and compliance implementation across jurisdictions. Moving toward 2050, regulations are expected to remain robust, but at a more gradual and stable pace. Similarly, the adoption of carbon pricing mechanisms, including carbon taxes and emissions trading schemes, is expected to increase significantly.
- Market risks and supply chain challenges: The transition presents significant risks, primarily associated with material scarcity and reputational damage. Companies may face high exposure to market volatility and material scarcity, driven by strong demand, limited production capacity, and geopolitical risks. This exposure is anticipated to intensify toward 2040 as population growth and the expansion of digitalization and Al-driven industries increase demand for critical materials. By 2050, material scarcity could become a structural challenge if resource extraction and circularity efforts fail to keep pace, making investment in resilient, circular, and localized supply chains crucial for maintaining competitiveness. Concurrently, companies operating in markets with stringent carbon pricing face rising reputational risks if they fail to align with low-carbon expectations, risking being perceived as non-competitive and eroding brand trust.
- Opportunities in sustainability and technology: The climate transition creates substantial market opportunities, especially for early movers in sustainable practices and advanced technology. The opportunity in responsible sourcing is emerging and is expected to peak around 2030, where embedding these practices becomes a standard expectation for multinational buyers. Companies that provide verified reporting and align proactively with customer sustainability goals may be able to significantly increase market share and establish long-term partnerships. While this opportunity stabilizes toward 2050 as it becomes baseline practice, competitive advantage will then hinge on innovation and circularity. Simultaneously, the growing global demand for electronic equipment, including semiconductors and microchips, driven by sectors like renewable energy and electric vehicles, offers a long-term competitive opportunity to companies positioned as early movers and technology leaders in supplying these high-tech components through 2050.

As we are currently developing our climate risk assessment process, this initial assessment to identify and prioritize both physical and transition risks and opportunities pertinent to our business operations and value chain will support the development of future scenario analysis, a comprehensive monitoring and evaluation framework, and a systematic approach for reviewing and evaluating climate-related risks as part of our Enterprise Risk Management (ERM) practice.

In future the prioritized risks will be translated into adaptation and mitigation measures and recommendations aimed at enhancing the company's climate resilience, subsequently informing future scenario analyses. Scenario analysis for the identified risks and opportunities is planned to be conducted in the coming years in accordance with the SB261 requirements. Consequently, we are actively working to address key gaps that will enable us to develop a quantitative assessment of the impacts of our climate risks, covering both physical and transition aspects.

As we progress with our climate strategy, we will leverage our prioritized risk list to enhance our understanding of the impacts of climate change on our operations and continuity. Although these insights have not yet been fully incorporated into financial modeling, they serve as a critical

foundation for future integration. We anticipate that this comprehensive assessment will be included in future reporting cycles.

### Resilience of UCT's strategy to climate risks and opportunities

The assessment included a high-level resilience screening that evaluated UCT's current adaptation and mitigation measures for prioritized climate-related risks and opportunities based on stakeholder feedback. The results from this screening will inform recommendations for actions to enhance climate resilience across UCT's business.

We reviewed 15 prioritized physical and transition risks and opportunities against both **existing** (initiatives currently in place) and **planned** actions (initiatives which are currently being implemented). These actions include strengthening of physical assets, enhancing operational preparedness, and implementing low-carbon and energy efficiency initiatives. Where relevant we also considered **additional** initiatives that may be explored for future implementation.

Some measures were cross-functional and will mitigate multiple physical and/or transition risks simultaneously.

UCT has four existing programs that strengthen the business's resilience to increasing climaterelated risks, selected for their relevance to the organization as recommended by the TCFD:

- Business Continuity Plan (BCP): Includes resilience measures against water shortages, tropical cyclones and landslides.
- The UCT Employee Health and Safety (EHS) Program supports workers through bus transportation and extreme events and ensure site safety.
- Semiconductor Climate Consortium (SCC): As a founding member, UCT plays a leading role in supporting sectoral targets. Our science-based target submission and emission reduction roadmap are designed to mitigate risks such as carbon pricing and regulatory changes.
- Responsible Business Alliance (RBA): Through membership, our procurement team regularly reviews our dual sourcing and responsible sourcing policies, including initiatives for rare metal recovery.

UCT has already implemented several projects and initiatives across our global operations and supply chain to support business resilience, focusing on emissions reduction and resource efficiency. Some of our key initiatives include:

- Incorporating energy efficiency considerations into capacity expansions across our global facilities as well as retrofitting LED lighting for existing sites
- Installing solar PV at our Malaysia location to reduce energy consumption
- Opening a LEED-aligned facility in Arizona incorporating natural light design, LED lighting, motion sensors, and energy efficient HVACs
- Implementing an Environmentally Clean Process (ECP) enabling the recovery of up to 95% of tantalum, reducing wastewater, and using chemical-free processes where possible

- Minimizing transportation emissions by strategically positioning sites close to customers and developing regional supply chains.
- Participating in the Responsible Business Alliance's Responsible Minerals Assurance Process for Tantalum.
- Developing our science-based targets aligned GHG inventory, decarbonization roadmap and targets

Based on the resilience screening, seven of the prioritized risks were identified as requiring additional resilience measures to address the existing gaps as outlined in Table 4.

Table 4: Summary of prioritized risks and opportunities without sufficient targeted resilience measures

Physical risks	Transition risks	Transition opportunities
<ul><li>Drought</li><li>Water scarcity</li><li>Heat wave</li><li>Tropical cyclone</li></ul>	<ul> <li>Carbon pricing</li> <li>Market volatility and risk of material scarcity in critical supply chains</li> </ul>	<ul> <li>Increased demand for electronic equipment and services including semiconductors and microchips</li> </ul>

We identified several potential additional resilience measures to address existing gaps. UCT will focus our future efforts on a few critical areas to strengthen resilience and manage risks, and we are currently reviewing the next steps with our internal management and leadership teams. The company is considering:

- Developing mitigation plans for heat waves and expanding our water conservation measures to protect critical Air Conditioning and Mechanical Ventilation (ACMV) systems against drought.
- Updating our Business Continuity Plan (BCP) to better handle operational disruptions caused by severe weather events like tropical cyclones.
- Establishing processes to analyze and respond to carbon pricing regimes, necessary for cost management in a changing regulatory landscape
- Incorporate supplier constraints and material scarcity into resilience planning.

The results and selected measures outlined above will be integrated into UCT's Enterprise Risk Management framework to develop mitigation and adaptation actions that enhance business resilience.

# Risk management

Processes for identifying and assessing climate-related risks

UCT has recognized climate-related risks and opportunities in alignment with the Intergovernmental Panel on Climate Change's (IPCC) risk terminology, defining risk as a dynamic interplay of hazard, exposure, and vulnerability.

Potential exposure to physical risks was evaluated using climate modeling grounded in scientific research and literature. For each asset type (manufacturing and office), a vulnerability assessment was conducted, with ratings assigned to asset components based on their sensitivity to both acute and chronic risks. These ratings were further informed by interviews with relevant internal stakeholders.

A comprehensive list of transition risks and opportunities was also developed, reflecting their relevance to UCT's business sector and value chain, and incorporating industry trends and peer benchmarking. Inherent vulnerability was assessed based on the sector, while exposure was assessed through desktop research. The prioritization of risks, together with assessments of potential exposure and vulnerability, was guided by input from internal stakeholder interviews.

Both physical and transition risk assessments were conducted using the timeframes of 2030 and 2050, evaluating how exposure may evolve over this period in relation to disaster tendencies, industry trends, policies, and consumer drivers. This information will be used to prioritize risks and opportunities for resilience screening, strategy development, and future scenario analyses.

As we establish a formal process for identifying and assessing climate risks, collaboration with external consultants will provide valuable feedback. This input will support the integration of climate risk into UCT's existing Enterprise Risk Management (ERM) framework, enabling the organization to make informed strategic decisions aligned with sustainability goals and long-term business objectives.

# Metrics & targets

We measure our greenhouse gas (GHG) emissions in accordance with the GHG Protocol and currently record this data on the Envizi platform. Since FY24, we expanded our GHG accounting to include Scope 3, covering all relevant emission categories as outlined in Table 5.

In FY24, our GHG contributions were largely from Scope 3 emissions, accounting for 98% of the total inventory. We are actively working on improving our Scope 3 data collection processes.

Table 5: GHG inventory data

Scope	Category	GHG emissions (tCO₂e)	% of total
	Liquid fuels	343	0.8%
Scope 1	Natural gas	1,095	2.5%
	Refined petroleum products	81	0.2%
	Stationary fuels	3	<0.1%
	Fugitive emissions	2,563	5.8%
0	Purchased electricity (market based)	40,448	90.8%
Scope 2	Purchased electricity (location based)	38,501	N/A
Total Scope 1 & 2 (market based)		44,535	100.0%
Scope 3	Cat 01 - Purchased goods and services	249,983	9.7%

Scope	Category	GHG emissions (tCO₂e)	% of total
	Cat 02 - Capital goods	35,593	1.4%
	Cat 03 - Fuel & energy related activities	7,865	0.3%
	Cat 04 - Upstream transportation & distribution	747,892	29.2%
	Cat 05 - Waste generated in operations	4,782	0.2%
	Cat 06 - Business travel	132,153	5.2%
	Cat 07 - Employee commute	7,905	0.3%
	Cat 08 - Upstream leased assets	918	<0.1%
	Cat 09 - Downstream transportation & distribution	24,432	1.0%
	Cat 11 - Use of sold products	1,352,521	52.7%
	Cat 12 - End-of-life treatment of sold products	56	0.0%
	Cat 15 - Investment	1,752	<0.1%
Total Scope 3		2,565,857	100.0%
<b>Total Scope</b>	1-3	2,654,928	

As a founding member of the Semiconductor Climate Consortium (SCC), we have established concrete and ambitious targets that demonstrate our commitment to industry leadership. These targets are shaped by both our participation in the SCC and the expectations of our customers. We are also in the process of getting our science-based targets (SBTs) validated by the Science Based Targets initiative (SBTi). A summary of our targets is provided in Table 6.

Table 6: Summary of targets

Target type	Goal and description	
SBT near-term targets	<ul> <li>Reduce Scope 1 and 2 GHG emissions by 63.00% by 2035 from a 2024 base year</li> <li>Reduce Scope 3 GHG emissions, from purchased goods and services, capital goods, business travel and use of sold products, 63.00% by 2035 from a 2024 base year</li> </ul>	

Target type	Goal and description
SBT long-term targets	<ul> <li>Reach net-zero GHG emissions across the value chain by FY2050</li> <li>Reduce Scope 1 and 2 by 90.00% by 2050 from a 2024 base year.</li> <li>Reduce Scope 3 GHG emissions from purchased goods and services, capital goods, upstream transport and distribution, business travel and use of sold products, 90.00% by 2050 from a 2024 base year</li> </ul>
Other near-term targets	<ul> <li>20% reduction in Scope 1 and Scope 2 GHG emissions by 2030 from a 2024 baseline</li> </ul>
Operational/ safety	<ul> <li>Zero environmental impact incidents. Safety incident levels across Products and Services Divisions are consistently below industry benchmarks.</li> </ul>
Supplier commitment	Ongoing compliance and certification requiring written certification from strategic direct product suppliers that materials comply with laws regarding slavery and human trafficking. Actively works through RBA audits for supplier factories, satisfying customer demands.

We utilized established baseline data for Scope 1 and 2, and Scope 3 and the targets described in Table 6 to develop an emission reduction roadmap aligned with our business and operations strategy. This roadmap sets out both near-term and long-term emissions reduction goals consistent with the SBTi's. framework.

While we have implemented several cost-effective reduction initiatives -- such as transitioning to LED lighting and negotiating energy contracts - these efforts are largely confined to specific sites and do not yet reflect a comprehensive, company-wide strategy.

At the same time, we are reducing air freight -- particularly express shipments -- by shifting to ocean freight in alignment with our ESG objectives. Over the past two years, we have also localized and regionalized material sourcing -- for example, moving procurement from China to suppliers in the U.S. -- to reduce transportation emissions and enhance efficiency.

Additional decarbonization levers currently being explored include:

- Shifting from grid electricity to renewable energy
- Replacing HFC refrigerants by natural refrigerants
- Electrification of manufacturing shift from natural gas to renewable electricity
- Upgrading lighting systems including replacing traditional light bulbs by LED light bulbs, and installing motion detectors
- Conversion of air-cooled chillers to water-cooled chillers
- Installation of on-site PV

Our plan is to develop metrics and targets that extend beyond the SBT framework, specifically addressing areas such as water, waste, and energy.

## Statement of exclusions

Our organization is currently in the foundational phase of its climate risk assessment process. During this reporting year, we have taken essential steps to identify and prioritize both physical and transition risks and opportunities relevant to our business operations and value chain.

The insights gained will inform our future scenario analyses, support the development of a comprehensive monitoring and evaluation framework, and enable us to reassess our Enterprise Risk Management (ERM) practices. This will help establish a systematic approach for reviewing and evaluating climate-related risks across the organization.

For all identified risks, UCT has not yet conducted a full scenario analysis (i.e., a fully quantified, end-to-end assessment with detailed scenario design and systematic linkage to business drivers), a comprehensive financial exposure assessment to build on existing ad-hoc evaluations and determine potential materiality, or a full resilience analysis to identify additional existing resilience measures and evaluate potential future options. As a result, UCT cannot currently disclose the specific financial implications for all identified risks.

These gaps are recognized as priorities for future enhancement of our climate-related financial risk disclosure. UCT will consider conducting appropriate additional assessments to develop initial scenario analyses, deepen the level of this analysis over time, quantify financial exposure where feasible, and further strengthen and document resilience measures.