SIEMENS

Water Risk Assessment Report
Prepared for Coherent Corp
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Water Risk Screening Overview

Siemens completed a water risk screening analysis for Coherent Corp's (Coherent) global facility portfolio consisting of 130 locations. The World Resource Institute (WRI) Aqueduct Water Risk Atlas was used to identify water risks and prioritize locations for further analysis. Siemens entered Coherent locations within the WRI Aqueduct Tool and summarized potential risk categories (i.e., Physical Risk Quantity, Physical Risk Quality, and Regulatory & Reputation Risk). The Aqueduct Risk Atlas identified fifteen Coherent locations which scored within the "extremely high risk" classification in the Physical Risk Quantity category and four Coherent location that scored within the "extremely high risk" classification in the Physical Risk Quality category. Water stress, water depletion, and interannual variability are the indicators responsible for the "extremely high risk" scoring for the Physical Risk Quantity category. Untreated Connected Wastewater was responsible for the "extremely high risk" scoring for the Physical Risk Quality category. Locations scoring in the "extremely high risk" category were prioritized based on the fiscal year 2024 annual water usage at the locations.

Water Risk Screening Results
Risk Filter Methodology

The World Resource Institute (WRI) offers a suite of four Aqueduct tools, including the Water Risk Atlas used in this assessment from the latest iteration, Aqueduct 4.0. WRI designed this tool to help companies understand water-related risks and opportunities that are emerging around the world. The Aqueduct tools can be found at https://www.wri.org/aqueduct.

Aqueduct uses open-source, peer-reviewed data, as well as collaboration with governments, universities, and research institutions to map water-related risks. All data, code, and methodology can be found on their website as part of their open data commitment. Aqueduct uses the geographic location inputted to identify the level of risk for thirteen indicators across three risk categories, see below. The risk of each indicator is then weighted based on the impact on the selected industry. For this analysis, the semiconductor industry was selected for Coherent's locations.
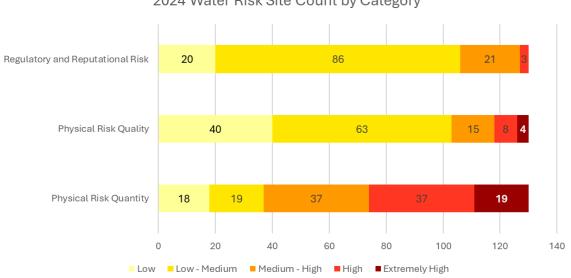
After analyzing the inputted geographic location, an industry-weighted score is provided for each aggregated risk category. WRI scores are provided on a scale of 0 to 5, classified from "low risk" to "extremely high risk". For this report, Siemens used an "extremely high risk" classification of any of the three-risk category as the threshold for warranting further location investigation.

Overall Water Risk　◖ *i*

Low	Low - Medium	Medium-high	High	Extremely high
(0-1)	(1-2)	(2-3)	(3-4)	(4-5)

Risk Category	Indicator	Description
PHYSICAL RISKS QUANTITY	Water Stress	Baseline water stress measures the ratio of total water demand to available renewable surface and groundwater supplies. Water demand include domestic, industrial, irrigation, and livestock uses.
	Water Depletion	Baseline water depletion measures the ratio of total water consumption to available renewable water supplies. Total water consumption includes domestic, industrial, irrigation, and livestock consumptive uses. Baseline water depletion is similar to baseline water stress; however, instead of looking at total water demand (consumptive plus nonconsumptive), baseline water depletion is calculated using consumptive withdrawal only.
	Interannual Variability	Interannual variability measures the average between-year variability of available water supply, including both renewable surface and groundwater supplies.
	Seasonal Variability	Seasonal variability measures the average within-year variability of available water supply, including both renewable surface and groundwater supplies.
	Groundwater Table Decline	Groundwater table decline measures the average decline of the groundwater table as the average change for the period of study (1990–2014).
	Riverine flood risk	Riverine flood risk measures the percentage of population expected to be affected by Riverine flooding in an average year, accounting for existing flood-protection standards. Flood risk is assessed using hazard (inundation caused by river overflow), exposure (population in flood zone), and vulnerability.
	Coastal flood risk	Coastal flood risk measures the percentage of the population expected to be affected by coastal flooding in an average year, accounting for existing flood protection standards. Flood risk is assessed using hazard (inundation caused by storm surge), exposure (population in flood zone), and vulnerability.
	Drought Risk	Drought risk measures where droughts are likely to occur, the population and assets exposed, and the vulnerability of the population and assets to adverse effects.
PHYSICAL RISKS QUALITY	Untreated Connected Wastewater	Untreated connected wastewater measures the percentage of domestic wastewater that is connected through a sewerage system and not treated to at least a primary treatment level. Wastewater discharge without adequate treatment could expose water bodies, the general public, and ecosystems to pollutants such as pathogens and nutrients.
	Coastal Eutrophication Potential	Coastal eutrophication potential (CEP) measures the potential for riverine loadings of nitrogen (N), phosphorus (P), and silica (Si) to stimulate harmful algal blooms in coastal waters.
REGULATORY AND REPUTATIONAL RISK	Unimproved/No Drinking Water	Unimproved/no drinking water reflects the percentage of the population collecting drinking water from an unprotected dug well or spring, or directly from a river, dam, lake, pond, stream, canal, or irrigation canal.
	Unimproved/No Sanitation	Unimproved/no sanitation reflects the percentage of the population using pit latrines without a slab or platform, hanging/bucket latrines, or directly disposing human waste in fields, forests, bushes, open bodies of water, beaches, other open spaces, or with solid waste.
	Peak RepRisk Country ESG Risk Index	The Peak RepRisk country ESG risk index quantifies business conduct risk exposure related to environmental, social, and governance (ESG) issues in the corresponding country. The index provides insights into potential financial, reputational, and compliance risks, such as human rights violations and environmental destruction.

Coherent Corp's Water Risk Results

The complete Coherent global portfolio consisting of 130 sites were analyzed using the Aqueduct Water Risk Atlas tool. See semiconductor-weighted risk scoring by category below. Nineteen sites across fifteen locations scored within the "extremely high risk" classification in the Physical Risk Quantity category due to high indicators of water stress, water depletion, and interannual variability. Additionally, Ho Chi Minh City, Vietnam and Hyderabad, India scored within the "extremely high risk" classification in the Physical Risk Quality category due to a high indicator of untreated connected wastewater. No locations scored within the "extremely high risk" classification in the Regulatory and Reputation Risk category.

2024 Water Risk Site Count by Category

Category	Low	Low - Medium	Medium - High	High	Extremely High
Regulatory and Reputational Risk	20	86	21	3	
Physical Risk Quality	40	63	15	8	4
Physical Risk Quantity	18	19	37	37	19

Of the fifteen locations scoring within the "extremely high risk" category for Physical Risk Quantity, shown below, six consumed more than a million gallons of water in fiscal year 2024. These high risk and high consumption locations are considered to be a high priority for future investigation.

Location	Water Usage	Baseline Water Stress	Baseline Water Depletion	Interannual Variability	Riverine Flood Risk
Wuxi, China	95,870,463	extremely high risk	low-medium risk	low-medium risk	high risk
Suzhou, China (4 sites)	11,012,974	extremely high risk	low-medium risk	low-medium risk	high risk
Shanghai, China (2 sites)	2,355,081	extremely high risk	low-medium risk	low-medium risk	medium-high risk
Murrieta, CA, USA	2,119,791	extremely high risk	extremely high risk	extremely high risk	medium-high risk
Hyderabad, India	1,915,578	extremely high risk	extremely high risk	high risk	high risk
Tustin, CA, USA	1,524,217	extremely high risk	extremely high risk	extremely high risk	medium-high risk
Temecula, CA, USA	619,387	extremely high risk	extremely high risk	extremely high risk	medium-high risk
Longmont, CO, USA	533,700	extremely high risk	extremely high risk	low-medium risk	low risk
Stockholm, Sweden	214,515	extremely high risk	high risk	high risk	high risk
Monrovia, CA, USA	143,012	extremely high risk	extremely high risk	medium-high risk	low-medium risk
Bangkok, Thailand	108,046	extremely high risk	high risk	low-medium risk	high risk
Beijing, China	106,482	extremely high risk	high risk	low-medium risk	medium-high risk
Hallandale Beach, FL	38,932	high risk	medium-high risk	medium-high risk	high risk
Herzliya Pituah, Israel	19,013	extremely high risk	high risk	medium-high risk	high risk
Chennai, India	TBD*	extremely high risk	extremely high risk	low-medium risk	low-medium risk

*New location, water usage data not yet available