

## Task Force for Climate-Related Financial Disclosures, TCFD

According to the WEF's "Global Risk Report 2022", the "Climate action failure risk" has surpassed the "Extreme weather risk" to become the No.1 risk in the world, showing that the climate crisis is a material issue that enterprises have to actively respond to without delay. For a complete assessment of climate-related risks and opportunities, SYSTEX refers to the Task Force on Climate-related Financial Disclosures (TCFD) as an analysis framework.

Recommended Disclosure	Details
<b>[Governance] Disclose the organization's governance around climate-related risks and opportunities.</b>	
(a) Describe the board's oversight of climate related risks and opportunities.	<ul style="list-style-type: none"> <li>■ SYSTEX has incorporated climate-related risks and opportunities into risk management. The Chief Sustainability Officer (CSO) reports annually to the Chairman of the Board on climate-related management processes, including strategic goals, action plans and performance.</li> <li>■ The Board holds a meeting every two months on average to discuss business strategy issues and major events, such as governance, environment, social, risks and opportunities, etc.</li> <li>■ In order to monitor and oversee progress against goals and targets for addressing climate-related issues, the Board has established the Audit Committee to monitor existential or potential risks. The Crisis Management Group, as the primary responsible unit for risk management, is fully responsible for risk management strategy, developing risk management guiding principles and reporting directly to the Group President.</li> </ul>
(b) Describe management's role in assessing and managing climate related risks and opportunities.	<ul style="list-style-type: none"> <li>■ The Sustainability Group is assigned climate-related responsibilities: SYSTEX has set up the "Sustainability Group" in 2020 with the highest governance level as the Chairman of the Board. The Chairman assigned the CSO as the Group leader to coordinate climate-related risk assessment, formulate relevant strategies, goals and action plans, and regularly monitor the performance of ESG projects. The "Environment Team" under the "Sustainability Group" is responsible for the planning and implementation of climate change issues and environmental-related projects.</li> <li>■ The associated organizational structure: (1) For more details on "SYSTEX ESG Governance Structure", please refer to <a href="https://tw.system.com/en/corporate-">https://tw.system.com/en/corporate-</a></li> </ul>

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	<p><a href="#">sustainability/</a></p> <p>(2) For more details on "SYSTEX Risk Management Organizational Structure", please refer to <a href="https://tw.systex.com/en/risk_management/">https://tw.systex.com/en/risk_management/</a></p> <p>■ Management's process for monitoring climate-related issues: The highest governance level of the "Sustainability Group" is the Chairman, who has assigned the CSO as the Group leader to direct the "Environment Team" to be responsible for the promotion, planning and implementation of environmental-related projects, and in accordance with the " Rules of Risk Management" to control relevant risks and standardize all climate-related operating processes. Therefore, the CSO will report to the Chairman on the promoting progress of climate-related projects from time to time.</p>																																			
<p>[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.</p>																																				
(a) Describe the climate related risks and opportunities the organization has identified over the short, medium, and long term.	<p>■ The short-, medium- and long-term climate-related risks and opportunities:</p> <table><tr><th colspan="2">Type</th><th>Short-term</th><th>Mid-term</th><th>Long-term</th></tr><tr><td rowspan="2">Risk</td><td>Transition Risks</td><td><ul style="list-style-type: none"><li>• Changing customer behavior</li><li>• Changes in cost of low-emission energy</li><li>• Increased stakeholder concern</li></ul></td><td><ul style="list-style-type: none"><li>• Increased pricing of GHG emissions</li><li>• Costs to transition to lower emissions technology</li></ul></td><td><ul style="list-style-type: none"><li>• Substitution of existing products and services with lower emissions options</li></ul></td></tr><tr><td>Physical Risks</td><td><ul style="list-style-type: none"><li>• Extreme weather events occur</li></ul></td><td><ul style="list-style-type: none"><li>• Changes in precipitation patterns</li></ul></td><td><ul style="list-style-type: none"><li>• Rising mean temperatures</li></ul></td></tr><tr><td rowspan="5">Opportunity</td><td>Resource Efficiency</td><td><ul style="list-style-type: none"><li>• Reduced water usage and consumption</li></ul></td><td><ul style="list-style-type: none"><li>• Use of more efficient service processes</li></ul></td><td><ul style="list-style-type: none"><li>• Move to more efficient buildings</li></ul></td></tr><tr><td>Energy Source</td><td><ul style="list-style-type: none"><li>• Use of lower-emission sources of energy</li></ul></td><td><ul style="list-style-type: none"><li>• Use of new technologies</li><li>• Participation in carbon market</li></ul></td><td></td></tr><tr><td>Products &amp; Services</td><td><ul style="list-style-type: none"><li>• Development and/or expansion of low emission goods and services</li></ul></td><td><ul style="list-style-type: none"><li>• Development of climate adaptation and insurance risk solutions</li></ul></td><td></td></tr><tr><td>Markets</td><td></td><td><ul style="list-style-type: none"><li>• Use of public-sector incentives</li></ul></td><td><ul style="list-style-type: none"><li>• Access to new markets</li></ul></td></tr><tr><td>Resilience</td><td><ul style="list-style-type: none"><li>• Adoption of energy efficiency measures</li></ul></td><td><ul style="list-style-type: none"><li>• Resource diversification</li></ul></td><td><ul style="list-style-type: none"><li>• Participation in renewable energy programs</li></ul></td></tr></table>	Type		Short-term	Mid-term	Long-term	Risk	Transition Risks	<ul style="list-style-type: none"><li>• Changing customer behavior</li><li>• Changes in cost of low-emission energy</li><li>• Increased stakeholder concern</li></ul>	<ul style="list-style-type: none"><li>• Increased pricing of GHG emissions</li><li>• Costs to transition to lower emissions technology</li></ul>	<ul style="list-style-type: none"><li>• Substitution of existing products and services with lower emissions options</li></ul>	Physical Risks	<ul style="list-style-type: none"><li>• Extreme weather events occur</li></ul>	<ul style="list-style-type: none"><li>• Changes in precipitation patterns</li></ul>	<ul style="list-style-type: none"><li>• Rising mean temperatures</li></ul>	Opportunity	Resource Efficiency	<ul style="list-style-type: none"><li>• Reduced water usage and consumption</li></ul>	<ul style="list-style-type: none"><li>• Use of more efficient service processes</li></ul>	<ul style="list-style-type: none"><li>• Move to more efficient buildings</li></ul>	Energy Source	<ul style="list-style-type: none"><li>• Use of lower-emission sources of energy</li></ul>	<ul style="list-style-type: none"><li>• Use of new technologies</li><li>• Participation in carbon market</li></ul>		Products & Services	<ul style="list-style-type: none"><li>• Development and/or expansion of low emission goods and services</li></ul>	<ul style="list-style-type: none"><li>• Development of climate adaptation and insurance risk solutions</li></ul>		Markets		<ul style="list-style-type: none"><li>• Use of public-sector incentives</li></ul>	<ul style="list-style-type: none"><li>• Access to new markets</li></ul>	Resilience	<ul style="list-style-type: none"><li>• Adoption of energy efficiency measures</li></ul>	<ul style="list-style-type: none"><li>• Resource diversification</li></ul>	<ul style="list-style-type: none"><li>• Participation in renewable energy programs</li></ul>
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## Recommended Disclosure

## Details

■ The specific time horizon description: the short-term is within 1-2 years, the medium-term is 3-10 years, and the long-term is more than 10 years.

■ Financial impacts due to risks and opportunities:

	Risk Type	Opportunity Type	Financial Impact ( Positive: + ; Negative: - )	Our Response
Transition Risks	<ul style="list-style-type: none"> <li>Changing customer behavior</li> <li>Increased stakeholder concern</li> <li>Substitution of existing products and services with lower emissions options</li> </ul>	<ul style="list-style-type: none"> <li>Use of more efficient service processes</li> <li>Use of new technologies</li> <li>Increased lower-emission services</li> <li>Development of climate adaptation and insurance risk solutions</li> <li>Access to new markets</li> </ul>	<p>(-) Increased cost of innovation due to changes in customer service processes</p> <p>(+) Returns on investment in low-emission technology</p> <p>(+) Reputational benefits from improved service processes and efficiencies</p> <p>(+) Increased customer demand and revenues due to shift in customer preferences</p>	<ul style="list-style-type: none"> <li>Establish a one-stop "SYSTEX Green Technology Carbon Reduction Roadmap" to achieve common green benefits</li> <li>Set up an operation center in the Shalun Smart Green Energy Science City as a demonstration base</li> <li>Innovate green and low-carbon services, and continue to develop ESG solutions, such as E-solutions to reduce paper usage</li> </ul>
	<ul style="list-style-type: none"> <li>Net Zero Commitment</li> </ul>	<ul style="list-style-type: none"> <li>Use of lower-emission sources of energy</li> <li>Participation in carbon market</li> <li>Resource diversification</li> <li>Participation in renewable energy programs</li> </ul>	<p>(-) Increased operating costs due to replaced office energy-saving equipment</p> <p>(+) Reduced operating costs due to improved energy efficiency</p> <p>(+) Reputational benefits and increased customer demand</p> <p>(+) Reduced exposure to GHG emissions</p>	<ul style="list-style-type: none"> <li>Participate in global initiatives (e.g., CDP)</li> <li>Set up the goal of "Net Zero by 2050"</li> <li>Introduce environmental-related ISO certifications</li> <li>Promote internal energy efficiency projects, such as energy conservation, water conservation, and waste reduction</li> <li>Strengthen internal energy-saving promotion and conduct relevant training courses</li> <li>Set up the goal of "100 Renewable Energy Usage by 2050"</li> </ul>

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					<ul style="list-style-type: none"><li>• Evaluate green building programs</li></ul>	
		<ul style="list-style-type: none"><li>• Changes in cost of low-emission energy</li><li>• Increased pricing of GHG emissions</li></ul>	<ul style="list-style-type: none"><li>• Participation in carbon market</li><li>• Development of climate adaptation and insurance risk solution</li><li>• Use of public-sector incentives</li></ul>	<ul style="list-style-type: none"><li>(-) Increased costs of t-REC due to insufficient renewable energy supply</li><li>(-) Increased operating costs due to higher carbon prices for compliance</li><li>(+) Reduced operating costs due to use of lowest cost abatement</li><li>(+) Reduced exposure to GHG emissions and therefore less sensitivity to changes in cost of carbon</li></ul>	<ul style="list-style-type: none"><li>• Sing the "Corporate renewable power purchase agreement, CPPA" with renewable energy suppliers</li><li>• Innovate green and low-carbon services, and continue to develop environmental solutions</li><li>• Evaluate the establishment of renewable energy related equipment</li></ul>	
		Physical Risks	<ul style="list-style-type: none"><li>• Extreme weather events occur, including floods, droughts and typhoons</li></ul>	<ul style="list-style-type: none"><li>• Move to more efficient buildings</li><li>• Development of climate adaptation and insurance risk solution</li><li>• Reduced water usage and consumption</li></ul>	<ul style="list-style-type: none"><li>(-) Increased capital costs (e.g., damage to facilities)</li><li>(-) Reduced revenues due to business interruption</li><li>(-) Reduced revenue and higher costs from negative impacts on workforce (e.g., health, safety, absenteeism)</li><li>(+) Increased value of fixed assets (e.g., highly rated energy efficient buildings)</li><li>(+) Protect against potential losses from business interruptions through enhancing climate resilience</li></ul>	<ul style="list-style-type: none"><li>• Introduce ISO 45001 Occupational Health and Safety System Certification</li><li>• Set up a Disaster Response Team and develop the "Disaster Resolution Procedures", "Disaster Response and Tracking Processes", and personal safety related tracking procedures</li><li>• Conduct regular crisis drills</li></ul>

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		<ul style="list-style-type: none"><li>• Rising mean temperatures</li></ul>	<ul style="list-style-type: none"><li>• Adoption of energy efficiency measures</li><li>• Move to more efficient buildings</li><li>• Development of climate adaptation and insurance risk solution</li></ul>	<p>(-) Increased operating costs and carbon emissions due to increasing electricity consumption</p> <p>(+) Improved energy efficiency due to energy-saving measures</p> <p>(+) Increased value of fixed assets (e.g., highly rated energy efficient buildings)</p>	<ul style="list-style-type: none"><li>• Introduce ISO 14001 Environment Management System Certification and ISO 50001 Energy Management System Certification</li><li>• Establish the AI Energy Management System to optimize energy efficiency at all times</li></ul>
(b)	Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	<ul style="list-style-type: none"><li>■ For more details on "SYSTEX Risk Assessment", please refer to <a href="https://tw.systex.com/en/risk_management/">https://tw.systex.com/en/risk_management/</a></li><li>■ For more details on climate-related risks and opportunities for business, strategic and financial plans, please see "Our Response" in the table of "Financial impacts due to risks and opportunities" above.</li></ul>			
(c)	Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	<ul style="list-style-type: none"><li>■ Climate-related Scenarios: analysis of transition risks and physical risks for two climate-related scenarios of "IEA NZE 2050" and "RCP8.5"</li></ul> <p>(1) IEA NZE 2050:</p> <p>According to the "2050 Net Zero Emission scenario" of the International Energy Agency, the global warming will be controlled with 1.5°C, and the energy transition will be promoted by replacing fossil fuels with low-emission electricity. It is expected that the carbon price will double in 2050 compared to 2030, and energy intensity will be reduced by 1% per year. Therefore, with an estimated 20% reduction in electricity consumption and a doubling of energy costs, the electricity costs are expected to increase by 60%.</p>			

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	<p>■ (2) RCP8.5:</p> <p>According to the RCP8.5 scenario, it is estimated that the global mean temperature will increase by about 1.62°C in 2030, which is expected to increase electricity consumption by 9.7%. Therefore, in the case of a 25% increase in electricity prices in 2030, the electricity costs are expected to increase by 37%. Meanwhile, it is estimated that the global mean temperature will increase by about 2.59°C in 2050, which is expected to increase electricity consumption by 15.5%. Therefore, in the case of a 100% increase in electricity prices in 2030, the electricity costs are expected to increase by 131%.</p>
<p><b>[Risk Management] Disclose how the organization identifies, assesses, and manages climate-related risks.</b></p>	
<p>(a) Describe the Organization's processes for identifying and assessing climate related risks.</p>	<p>■ Processes for identifying and assessing climate-related risks:</p> <p>The "Sustainability Group" reassesses climate-related risks every two year, assessing the impacts of transition risks and physical risks, so as to formulate corresponding strategies, goals and plans. The "Environment Team" affiliated to the "Sustainability Group" is responsible for the promotion, planning and implementation of environmental-related projects, and then its leader, the CSO, reports the progress of climate-related projects to the Chairman on from time to time.</p>
<p>(b) Describe the Organization's processes for managing climate related risks.</p>	<p>■ Processes for managing climate-related risks:</p> <p>SYSTEX has incorporated climate-related risks and opportunities into risk management, and the CSO regularly reports to the Chairman on the management progress of climate-related projects, including strategies, goals and performance. Meanwhile, through conducting environmental-related ISO certifications, SYSTEX reviews the performance and effectiveness of climate mitigation-related projects, and then regularly discloses the results of implementation.</p> <p>■ Major risks identified through climate-related risk assessment: carbon price mechanism, changing customer behavior, and Net Zero Commitment</p>

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(c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	<p>■ Integrating climate-related risks with organization's overall risk management:</p> <p>(1) SYSTEX has incorporated climate-related risks and opportunities into risk management. The "Sustainability Group" reassesses climate-related risks every two year, assessing the impacts of transition risks and physical risks, so as to formulate corresponding strategies, goals and plans. The highest governance level of the "Sustainability Group" is the Chairman, who has assigned the CSO as the Group leader to coordinate climate-related risk assessment, formulating relevant strategies, goals and practice plans, and regularly monitoring the implementation of ESG plans.</p> <p>(2) The "Environment Team" affiliated to the "Sustainability Group" is responsible for the planning and implementation of climate crisis mitigation and environment-related projects, including conducting ISO certifications and carrying out other energy-saving and carbon-reduction measures.</p> <p>(3) As the leader of the "Sustainability Group", the CSO reports annually to the Chairman on progress and performance of ESG projects.</p>
<p><b>[Metrics and Targets] Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.</b></p>	
(a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	<p>■ Key metrics:</p> <p>(1) Resource conservation and waste reduction: water conservation, energy conservation and waste reduction</p> <p>(2) Continuously conduct ISO certifications</p> <p>(3) Renewable energy consumption</p>
(b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG)	<p>■ Greenhouse gas emissions:</p> <p>According to the guidelines of "ISO 14064-1: 2018", SYSTEX collects and discloses emissions sources covering "Direct GHG Emissions (Category 1)", "Indirect GHG Emissions from Imported Energy (Category 2)", and "Other Indirect GHG</p>

Recommended Disclosure	Details
emissions, and the related risks.	Emissions (Category 3-6)", and has been verified by an independent 3-party. The boundary of GHG inventory is the headquarters building.
(c) Describe the targets used by the organization to manage climate related risks and opportunities and performance against targets.	<p>■ SYSTEX sets climate-related short-term, medium-term and long-term goals, and promotes various projects to achieve the goals through the internal management mechanisms. For more details on "SYSTEX Environment Goals, Target of Net Zero Emissions and Performance", please refer to <a href="https://tw.system.com/en/sustainable-environmental-policy/">https://tw.system.com/en/sustainable-environmental-policy/</a></p>

# SYSTEX