



2024 Climate Scenario Analysis Report

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MOBIS

HYUNDAI MOBIS
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Overview

Background

To participate in global efforts to address the climate crisis, Hyundai Mobis has declared its commitment to achieve carbon neutrality by 2045 and is implementing greenhouse gas reductions in accordance with four strategic pillars. This report identifies climate risks and opportunities that could impact the company and projects short-, medium-, and long-term financial impacts of each factor using various scenarios. Based on this analysis, we will review and supplement our carbon neutrality implementation plan and greenhouse gas reduction pathways to achieve our goals, thereby continuously enhancing our resilience in addressing climate change.

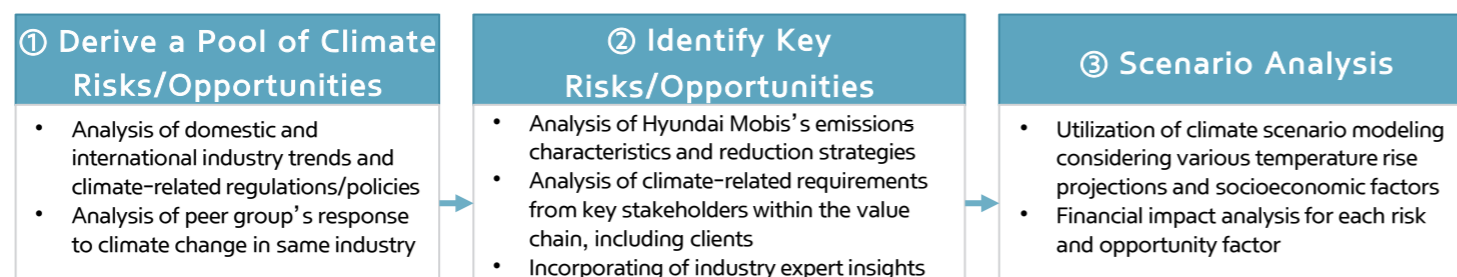
Scope of Analysis

This scenario analysis was conducted on domestic and overseas business sites and major subsidiaries within the operational boundary, accounting for approximately 99% of Hyundai Mobis's consolidated sales basis. To analyze the periodic impacts of potential climate risks and opportunities, we set 2025, 2030, and 2040 as short-, medium-, and long-term time horizons, respectively, considering the implementation period of our carbon neutrality strategy. We then analyzed the potential impacts of climate risks and opportunities for each of these time periods.

Analysis boundary	Time horizons
<ul style="list-style-type: none"> Domestic and overseas production and logistics sites within the operational boundaries Major subsidiaries ※ For transition risks and opportunities, the analysis partially includes the company's value chain (upstream/downstream) 	<ul style="list-style-type: none"> Short-term: ~2025 year Mid-term: ~2030 year Long-term: ~2040 year ※ Physical Risk : With the importance of long-term impact, including results for up to 2050 year

Analysis Process

This scenario analysis was conducted based on the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). Domestic and international climate-related regulations, industry outlooks, and the climate change response status of peer companies were examined to derive a pool of climate risks and opportunities. Based on this pool, we identified key risks and opportunities that are expected to have a significant impact on our sustainable business activities. To facilitate systematic, specific, and adaptable responses to climate change, we employed four scenarios reflecting various future states to analyze the impacts of these key risks and opportunities.



¹⁾ RCP: Representative Concentration Pathways

²⁾ SSP : Shared Socioeconomic Pathways

³⁾ STEPS(Stated Policies Scenario): A scenario considering current policies including confirmed reduction plans in major countries

⁴⁾ APS(Announced Pledges Scenario): A scenario assumes that carbon neutrality goals and reduction targets (NDCs) of major countries will be met in full and on time

⁵⁾ NZE(Net Zero Emission by 2050 Scenario): A scenario assuming net-zero emissions in the energy sector by 2050 and limiting average temperature rise to below 1.5° C will be achieved

⁶⁾ IEA World Energy Outlook: Annual reports published by the IEA, projecting energy market outlooks based on scenarios (STEPS, APS, NZE)

Climate Scenario Used for Analysis

We selected scenarios from the IPCC and IEA that allows analysis of climate and energy-related market factors. These selections were made from a range of climate change scenarios based on current scientific research and socioeconomic factors such as population changes and urbanization. For physical risk analysis, IPCC's Shared Socioeconomic Pathways (SSP) scenarios were used and for transition risk and opportunity analysis, IEA's Stated Policies Scenario (STEPS), Announced Pledges Scenario (APS), and Net Zero Emissions by 2050 Scenario (NZE) were used. We considered both scenarios maintaining current levels of mitigation policies (SSP5-8.5, IEA STEPS) and scenarios with aggressive mitigation measures capable of addressing global regulations (SSP1-2.6, IEA NZE). This comprehensive approach allowed us to analyze the financial impacts across various potential future states.

Adopted Scenarios	Physical Risks		Transition risks/Opportunities		
	IPCC		IEA		
	RCP ¹⁾	✓ SSP ²⁾	✓ STEPS ³⁾	✓ APS ⁴⁾	✓ NZE ⁵⁾
Key assumptions and features	<ul style="list-style-type: none"> Identify temperature-specific climate scenarios based on the radiative forcing of the Earth in 2100 	<ul style="list-style-type: none"> Added socioeconomic factors such as population change and urbanization to the RCP scenarios 	<ul style="list-style-type: none"> Assume that current global policy trends, including country-specific NDCs, are maintained (as of August 2023, not assume full achievement of all policies) 	<ul style="list-style-type: none"> Assume full implementation (achievement) of policies and plans considered in the STEPS scenario 	<ul style="list-style-type: none"> Assume net-zero CO₂ emissions from the energy sector by 2050 (limiting temperature rise to 1.5°C or below)
Temperature Rise (in 2100)	RCP 2.6 : 1.0°C RCP 4.5 : 1.8°C RCP 6.0 : 2.2°C RCP 8.5 : 3.7°C	SSP 1-1.9 : 1.4°C SSP 1-2.6 : 1.8°C SSP 2-4.5 : 2.7°C SSP 3-7.0 : 3.6°C SSP 5-8.5 : 4.4°C	2.4°C	1.7°C	1.4°C
Source	IPCC 5 th Assessment Report (AR5)	IPCC 6 th Assessment report (AR6)	IEA World Energy Outlook ⁶⁾		

※ Considerations for Analysis

This year's scenario analysis was conducted by estimating forecasts until 2040 based on 2023 data. For physical risks, we utilized the Jupiter Intelligence Tool to analyze regional and facility type-specific impacts of the acute risks (floods, wildfires, typhoons) and chronic risks (heatwaves). For transition risks and opportunities, we analyzed the financial impact of each risk opportunity factor based on projected emissions under current trajectory and target emissions under our net-zero scenario's pathway. In our current scenario analysis, the methodology and data scope are refined compared to 2023 analysis. For certain factors, the analysis was performed by supplementing the data scope and calculation methodology used in the previous year's scenario analysis, such as subdividing the data applied to the scenario and expanding the scope of data application from domestic to overseas business sites. Additionally, when forecasting future prices for electricity and emissions allowance, country-specific policies and inflation rates were reflected based on the actual purchase price in 2023. Hyundai Mobis will continue to improve the data and calculation methodology to improve the reliability of scenario analysis results.

Climate Risk and Opportunity Factors

Key Risks and Opportunities

In response to the changing internal and external environments, Hyundai Mobis identified and measured the impacts. Hyundai Mobis conducted a quantitative analysis of the financial impact of key risks and opportunities that could have a significant impact on our company.

Category		Risk and Opportunity Factors		Time horizons	Description of risks/opportunities	Financial impact			
						Short-term	Mid-term	Long-term	
Physical	Acute	✓ P1	Flood	Long-term	Increased exposure to flooding due to climate disasters such as floods and heavy rainfall, leading to damage to assets such as buildings and equipment	Medium	Medium	Medium	
		✓ P2	Wildfire	Long-term	Annual asset losses and revenue decreases due to production interruptions caused by wildfires within a 1 km ² vicinity	Low	Low	Low	
		✓ P3	Typhoon	Long-term	Increased likelihood of damage from typhoons and strong winds due to persistent tropical and temperate cyclones	High	High	High	
	Chronic	✓ P4	Heatwave	Long-term	Decreased productivity due to chronic climate pattern changes resulting from prolonged abnormal high temperatures	Medium	Medium	Medium	
Transition	Risk	Regulation	✓ T1	Rise in greenhouse gas emission allowance price	Mid-term	Increased costs for purchasing greenhouse gas emission allowances due to strengthened climate change policies and regulations	Low	Medium	Medium
		Technical	T6	Transition costs for low-carbon technology	Mid-term	Increased costs for technology/fuel transitions and infrastructure for low-carbon facilities	Low	Low	Low
		Market	T7	Customer behavioral changes	Short-term	Revenue losses from decreased contract prioritization due to non-compliance with customer climate change requirements	High	High	-
			✓ T8	Rise in power costs	Long-term	Increased electricity procurement costs due to national electricity rate hikes	High	High	High
		Reputational	T11	Increasing stakeholder requirements for climate change response	Mid-term	Decreased market value due to negative stakeholder opinions for failing to address climate change-related demands	Medium	Medium	Medium
Transition	Opportunity	Resource Efficiency	O1	Use of efficient production and distribution processes	Mid-term	Increased productivity and reduced utility costs from energy-efficient operating systems and reduction technologies	Medium	Medium	High
		Energy Consumption	✓ O2	Participation in carbon market (emission allowance sales)	Mid-term	Activation of the emission allowance market and reduction of greenhouse gas emissions increase opportunities to monetize surplus emission allowances	Low	Low	Medium
		Product Service	✓ O3	Development and expansion of low-carbon products	Short-term	Increased revenue due to rising demand for low-carbon and carbon-avoidance products	High	High	-
		Resilience	✓ O8	Reduction in greenhouse gas emissions via transition to renewable energy sources	Mid-term	Transitioning to renewable energy for electricity use reduces greenhouse gas emissions and related emission allowance purchase costs	Low	Medium	Medium
			✓ O10	Transition to low-emission vehicles	Mid-term	Transitioning from conventional internal combustion engines to low / zero carbon vehicles reduces maintenance and emission allowance costs	Low	Low	Low

✓ Conducted quantitative analysis of financial impacts

※ Financial impact : Physical factors are measured based on SSP5-8.5 (4.4C) and transition factors are measured based on NZE (1.4C) scenarios

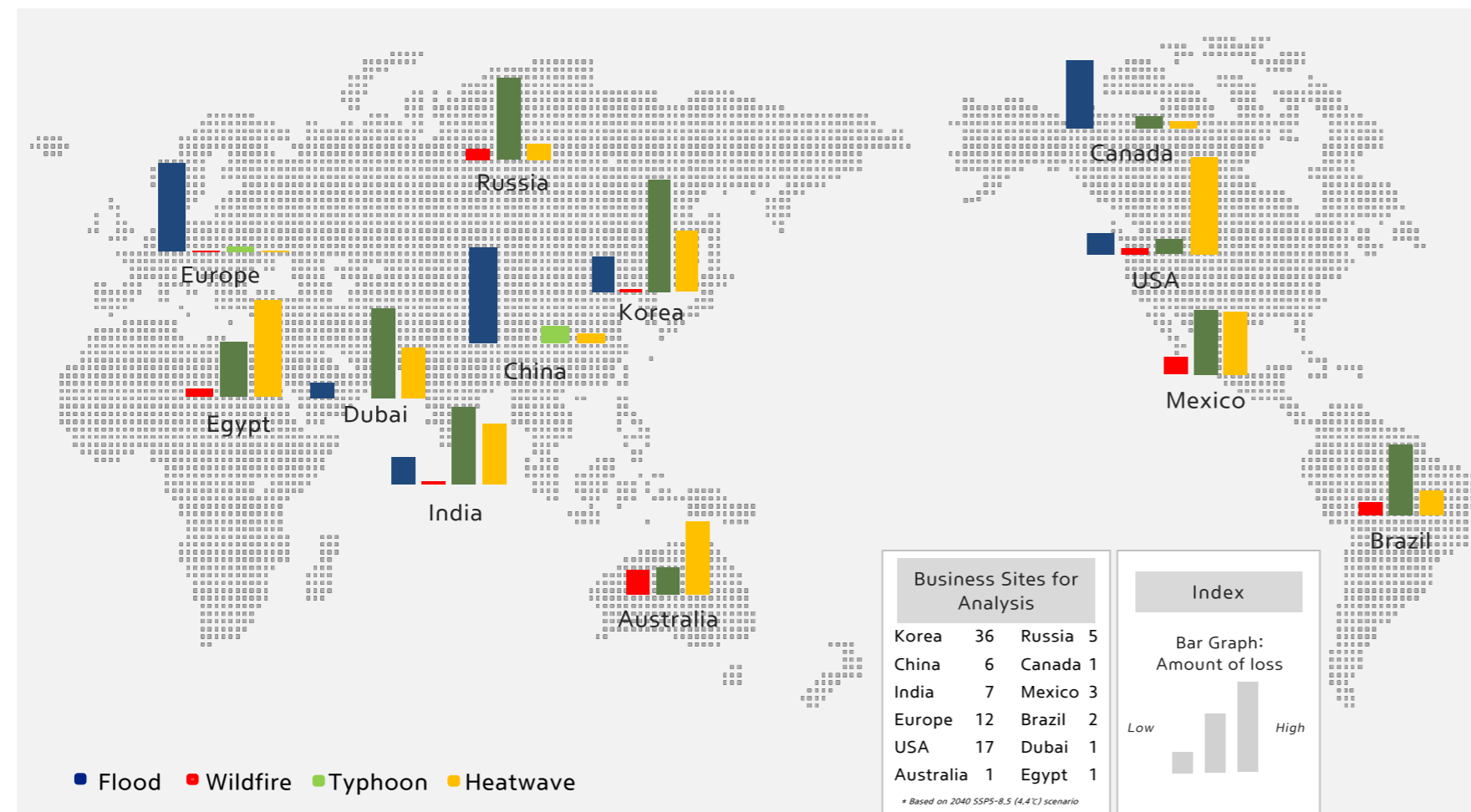
Impact Analysis of Climate Risks and Opportunities

Results of Physical Risk Analysis

Hyundai Mobis utilized the climate modeling tool from Jupiter Intelligence to assess the financial impacts of climate disasters on both domestic and overseas business sites. Among various risk factors, flood, typhoon, wildfire and heatwave were selected as those expected to have a significant impact on Hyundai Mobis. The impact was analyzed by applying the SSP 1-2.6 (1.8° C), SSP 2-4.5 (2.7° C), and SSP 5-8.5 (4.4° C) scenarios, considering the probability of occurrence of acute risks (flood, wildfire, typhoon) and chronic risks (heatwave). SSP 1-1.9, a scenario with low temperature rise, SSP 3-7.0, a scenario similar to SSP 2-4.5, were excluded from the analysis as their financial impact was expected to be low. An assessment of four physical risks' potential impacts and financial losses on assets and revenue loss for 92 key domestic and overseas business sites is presented in this report.

Impact Distribution by Physical Risk factors

Based on the analysis using the Jupiter Intelligence Tool, the Northeast Asia region (China and South Korea), where many business sites are located, is expected to experience the highest potential impact. For other regions, the highest financial impacts of flood, wildfire and typhoon varied by regions.



Financial Impact by Region

● Very Low ● Low ● Moderate ● High ● Very High

Region	Scenario	Acute						Chronic	
		Flood		Wildfire		Typhoon		Heatwave	
		2030	2040	2030	2040	2030	2040	2030	2040
Northeast Asia	SSP1-2.6 (1.8C)	High	High	High	High	High	High	High	High
	SSP5-8.5 (4.4C)	High	High	High	High	High	High	High	High
Southwest Asia/Australia	SSP1-2.6 (1.8C)	Low	Low	Low	Low	Low	Low	Low	Low
	SSP5-8.5 (4.4C)	Low	Low	Low	Low	Low	Low	Low	Low
Americas	SSP1-2.6 (1.8C)	Low	Low	Low	Low	Low	Low	Low	Low
	SSP5-8.5 (4.4C)	Low	Low	Low	Low	Low	Low	Low	Low
Europe/Russia	SSP1-2.6 (1.8C)	Low	Low	Low	Low	Low	Low	Low	Low
	SSP5-8.5 (4.4C)	Low	Low	Low	Low	Low	Low	Low	Low
Middle East/North Africa	SSP1-2.6 (1.8C)	Low	Low	Low	Low	Low	Low	Low	Low
	SSP5-8.5 (4.4C)	Low	Low	Low	Low	Low	Low	Low	Low

※ The financial impact was analyzed by distinguishing the degree of impact for each factor.

Financial Impact Analysis by Site Type

Type	Scenario	Acute						Chronic	
		Flood		Wildfire		Typhoon		Heatwave	
		2030	2040	2030	2040	2030	2040	2030	2040
Offices /R&D Centers	SSP1-2.6(1.8C)	Low	Low	Low	Low	Low	Low	Low	Low
	SSP5-8.5 (4.4C)	Low	Low	Low	Low	Low	Low	Low	Low
Part Centers /PDC, etc.	SSP1-2.6 (1.8C)	Low	Low	Low	Low	Low	Low	Low	Low
	SSP5-8.5 (4.4C)	Low	Low	Low	Low	Low	Low	Low	Low
Manufacturing	SSP1-2.6 (1.8C)	Low	Low	Low	Low	High	High	Low	Low
	SSP5-8.5 (4.4C)	Low	Low	Low	Low	High	High	Low	Low

※ Financial impact analysis of all factors by business site type

Impact Analysis of Climate Risks and Opportunities

Results of Physical Risk Analysis

Factors		Risk Description	Methodology	Financial Impact	Response Plan																
Acute	P1	Flood	<p>To assess the financial impact of floods, wildfires, and typhoons, we calculated total losses by combining direct asset damage losses and indirect revenue losses due to production disruptions (operational shutdowns). For asset damage losses, we conducted scenario analyses considering asset types, building contents, and inventory values at major domestic and overseas business sites. For operational disruption losses, we estimated the annual average loss based on projected revenue losses during expected downtime periods for each scenario.</p> <p>Σ(Asset Damage Losses + Operational Disruption Losses)</p>	<p>(Unit: KRW 100 million)</p> <table border="1"> <thead> <tr> <th>Scenario</th> <th>'30Y</th> <th>'40Y</th> <th>'50Y</th> </tr> </thead> <tbody> <tr> <td>SSP1-2.6 (1.8°C)</td> <td>2,654</td> <td>2,681</td> <td>2,773</td> </tr> <tr> <td>SSP2-4.5 (2.7°C)</td> <td>2,612</td> <td>2,640</td> <td>2,686</td> </tr> <tr> <td>SSP5-8.5 (4.4°C)</td> <td>2,607</td> <td>2,644</td> <td>2,660</td> </tr> </tbody> </table> <p>※ Changes from the previous year: Addition of financial impacts from wildfire and typhoon</p>	Scenario	'30Y	'40Y	'50Y	SSP1-2.6 (1.8°C)	2,654	2,681	2,773	SSP2-4.5 (2.7°C)	2,612	2,640	2,686	SSP5-8.5 (4.4°C)	2,607	2,644	2,660	<p>To address extreme weather events, Hyundai Mobis has established emergency response manuals to prepare for asset loss and human casualties. The company is enhancing its employees' emergency response capabilities by developing climate disaster-specific scenarios and processes, conducting regular training and drills, and reviewing building design and specifications at each site to reduce exposure to climate risks.</p> <p>Specifically, to mitigate the impacts of heavy rain and floods, Hyundai Mobis has improved roof scupper specifications to reduce roof load by more than 50% and enhance drainage functionality, applying these improvements to new facilities as well.</p> <p>Additionally, the company is preparing for the rapid recovery of information systems in the event of physical external risks, such as climate disasters, by establishing business plans and disaster recovery infrastructure.</p>
	Scenario	'30Y			'40Y	'50Y															
	SSP1-2.6 (1.8°C)	2,654			2,681	2,773															
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P2	Wildfire	<p>Annual wildfires within a 1km² vicinity can cause damage not only to company facilities and assets, but also to nearby infrastructure like roads, power/communication networks, and water supply systems. Even relatively low-frequency events can therefore have impacts on a company's assets and business activities.</p>																			
P3	Typhoon	<p>Persistent tropical or temperate cyclones leading to typhoons can cause power outages and facility damage, resulting in production interruptions.</p>																			
Chronic	P4	Heat-wave	<p>To evaluate the financial impact of heat waves, we estimated productivity losses by analyzing the annual projected heat wave days exceeding 32° C or 35° C at each business site and the corresponding labor productivity ratio relative to affected working hours.</p> <p>We also calculated rated associated costs by estimating cooling operation requirements based on projected number of cooling operation days according to projected heat wave days and the probability of cooling system availability for each business site (asset).</p> <p>Σ(Labor Productivity Loss + Cooling Costs related to heat wave)</p>	<p>(Unit: KRW 100 million)</p> <table border="1"> <thead> <tr> <th>Scenario</th> <th>'30Y</th> <th>'40Y</th> <th>'50Y</th> </tr> </thead> <tbody> <tr> <td>SSP1-2.6 (1.8°C)</td> <td>449</td> <td>1,048</td> <td>1,930</td> </tr> <tr> <td>SSP2-4.5 (2.7°C)</td> <td>362</td> <td>776</td> <td>1,298</td> </tr> <tr> <td>SSP5-8.5 (4.4°C)</td> <td>455</td> <td>732</td> <td>1,144</td> </tr> </tbody> </table>	Scenario	'30Y	'40Y	'50Y	SSP1-2.6 (1.8°C)	449	1,048	1,930	SSP2-4.5 (2.7°C)	362	776	1,298	SSP5-8.5 (4.4°C)	455	732	1,144	<p>In response to heat waves, Hyundai Mobis has strengthened the external temperature conditions for HVAC systems to maintain optimal working conditions and improve operational efficiency. In 2023, the company implemented a smart air conditioning control system at the Ulsan Electrification Plant to optimize indoor temperature management. To safeguard employee health, each business site operates health management offices staffed with professional medical personnel to prevent illnesses and handle emergencies promptly.</p>
Scenario	'30Y	'40Y	'50Y																		
SSP1-2.6 (1.8°C)	449	1,048	1,930																		
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Impact Analysis of Climate Risks and Opportunities

Results of Transition Risk Analysis

Factors		Risk Description	Methodology	Financial Impact	Response Plan																				
T1	Rise in greenhouse gas emission allowance price	As Hyundai Mobis is subject to the greenhouse gas emissions trading system, we are required to purchase emission allowances for any emissions exceeding the government-allocated quotas and submit them to the government. To achieve the Nationally Determined Contributions (NDC), South Korean government is expected to tighten regulations by reducing the free allocation ratio of emission allowances to companies. This tightening of regulations is anticipated to intensify competition among firms for purchasing emission allowances, thereby increasing market prices and the associated purchase costs over time.	<p>The estimated greenhouse gas emission allowance price for domestic business sites was determined by calculating the difference between the annual Scope 1 and 2 projected emissions and the expected free allocation (based on GHG reduction targets), and then applying the IEA's carbon price projections.</p> <p>$\Sigma(\text{Projected Emissions} - \text{Expected Free Allocation}) \times \text{Emission Allowance Price}$</p>	<p>(Unit: KRW 100 million)</p> <table border="1"> <thead> <tr> <th>Scenario</th> <th>Short-term (2025)</th> <th>Mid-term (2030)</th> <th>Long-term (2040)</th> <th>Cumulative (~2040)</th> </tr> </thead> <tbody> <tr> <td>STEPS(2.4°C)</td> <td>6</td> <td>36</td> <td>133</td> <td>950</td> </tr> <tr> <td>APS(1.7°C)</td> <td>9</td> <td>116</td> <td>348</td> <td>2,642</td> </tr> <tr> <td>NZE(1.5°C)</td> <td>9</td> <td>120</td> <td>407</td> <td>2,936</td> </tr> </tbody> </table>	Scenario	Short-term (2025)	Mid-term (2030)	Long-term (2040)	Cumulative (~2040)	STEPS(2.4°C)	6	36	133	950	APS(1.7°C)	9	116	348	2,642	NZE(1.5°C)	9	120	407	2,936	Hyundai Mobis has declared a carbon neutrality target to reduce greenhouse gas emissions at its own operations to zero by 2040 and is implementing phased reductions. Through proactive efforts such as renewable energy transition, replacement of outdated equipment and energy efficiency improvement, the company aims to minimize the impact of rising greenhouse gas emission allowance prices on the cost of purchasing emission allowances.
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T8	Rise in power costs	The increase in fuel costs due to the Russia-Ukraine conflict and policies phasing out nuclear power are expected to lead to inevitable rises in national electricity rates. Given that Scope 2 emissions account for 85% of Hyundai Mobis's total greenhouse gas emissions (based on a three-year average), the company is highly sensitive to fluctuations in electricity market prices. Consequently, increases in electricity prices in both domestic and overseas markets are expected to raise Hyundai Mobis's electricity usage costs.	<p>For domestic electricity prices, we considered the national power supply plan, the 2050 Carbon Neutrality Plan's power mix, and generation cost projections. For overseas electricity prices, we accounted for the inflation rates of the top emitting countries.</p> <p>$\Sigma(\text{Projected Electricity Consumption} \times \text{Electricity unit Price})$</p> <p>※ Electricity unit Price : In the case of IEA scenario, the unit price increase rate for each scenario is applied from 2031, assuming a reduction in electricity unit price by 2030</p>	<p>(Unit: KRW 100 million)</p> <table border="1"> <thead> <tr> <th>Scenario</th> <th>Short-term (2025)</th> <th>Mid-term (2030)</th> <th>Long-term (2040)</th> <th>Cumulative (~2040)</th> </tr> </thead> <tbody> <tr> <td>STEPS(2.4°C)</td> <td>2,081</td> <td>2,928</td> <td>4,518</td> <td>53,530</td> </tr> <tr> <td>APS(1.7°C)</td> <td>2,081</td> <td>2,928</td> <td>4,599</td> <td>53,910</td> </tr> <tr> <td>NZE(1.5°C)</td> <td>2,081</td> <td>2,928</td> <td>4,846</td> <td>55,202</td> </tr> </tbody> </table> <p>※ Changes from the previous year: Expansion of scope from domestic sites to both domestic and overseas business sites.</p>	Scenario	Short-term (2025)	Mid-term (2030)	Long-term (2040)	Cumulative (~2040)	STEPS(2.4°C)	2,081	2,928	4,518	53,530	APS(1.7°C)	2,081	2,928	4,599	53,910	NZE(1.5°C)	2,081	2,928	4,846	55,202	Hyundai Mobis will reduce risk costs due to increases in electricity rates by converting electricity produced using fossil fuels into renewable energy by using various renewable energy conversion methods such as solar power generation, REC(Renewable Energy Certificate), and PPAs(Power Purchase Agreements).
Scenario	Short-term (2025)	Mid-term (2030)	Long-term (2040)	Cumulative (~2040)																					
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Impact Analysis of Climate Risks and Opportunities

Results of Transition Opportunity Analysis

Factors		Opportunity Description	Methodology	Financial Impact	Response Plan																				
O2	Participation in carbon market (Emission allowance sales)	Hyundai Mobis can generate revenue by selling surplus emission allowances obtained through the reduction of Scope 1, 2 emissions at its domestic business sites and subsidiaries in the emissions trading market.	We estimated calculated the quantity of surplus emission allowances based on the expected free allocation and annual target emissions, and then applied the carbon price of the IEA scenario as the emission price to calculate the profit from selling surplus emission allowances. $\Sigma \{(\text{Expected Free Allocation} - \text{Target Emissions}) \times \text{Emission Allowance Price}\}$	(Unit: KRW 100 million) <table border="1"> <thead> <tr> <th>Scenario</th> <th>Short-term (2025)</th> <th>Mid-term (2030)</th> <th>Long-term (2040)</th> <th>Cumulative (~2040)</th> </tr> </thead> <tbody> <tr> <td>STEPS(2.4°C)</td> <td>3</td> <td>27</td> <td>48</td> <td>458</td> </tr> <tr> <td>APS(1.7°C)</td> <td>5</td> <td>87</td> <td>124</td> <td>1,274</td> </tr> <tr> <td>NZE(1.5°C)</td> <td>5</td> <td>90</td> <td>145</td> <td>1,400</td> </tr> </tbody> </table>	Scenario	Short-term (2025)	Mid-term (2030)	Long-term (2040)	Cumulative (~2040)	STEPS(2.4°C)	3	27	48	458	APS(1.7°C)	5	87	124	1,274	NZE(1.5°C)	5	90	145	1,400	Hyundai Mobis has established four strategic pillars for carbon neutrality and is implementing them step by step. In particular, we are using KPI to manage energy usage at all workplaces and strive to reduce energy usage to reduce the emissions at workplaces through conversion to renewable energy and energy efficiency. Moving forward, Hyundai Mobis will strive to generate revenue by selling surplus emission allowances resulting from greenhouse gas reductions in the carbon market.
Scenario	Short-term (2025)	Mid-term (2030)	Long-term (2040)	Cumulative (~2040)																					
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O3	Development and expansion of low-carbon products	In response to surging demand of eco-friendly cars, domestic and overseas automakers are transitioning their product portfolios to electrification parts. With growing demand for electrification parts, Hyundai Mobis's annual related sales have been increasing and are projected to continue rising.	To achieve the mid- to long-term electrification parts sales target until 2031, we applied a compound annual growth rate of 14.7% to estimate the sales figures up to the target year. $\Sigma(\text{Sale of Electrification Parts} \times \text{Compound Annual Growth Rate})$	(Unit: KRW 1 trillion) <table border="1"> <thead> <tr> <th>Category</th> <th>Short-term (2025)</th> <th>Mid- to Long term (2031)</th> <th>Cumulative (~2031)</th> </tr> </thead> <tbody> <tr> <td>Sale of electrification parts</td> <td>16.1</td> <td>36.5</td> <td>190</td> </tr> </tbody> </table>	Category	Short-term (2025)	Mid- to Long term (2031)	Cumulative (~2031)	Sale of electrification parts	16.1	36.5	190	Hyundai Mobis set a target of average annual growth rate of 14.7% in electrification parts sales until 2031. The company is currently enhancing profitability through commonization of parts and production lines. Hyundai Mobis will strengthen its production capacity aligned with the growing volume of electric vehicles and the expansion of models using dedicated platforms (E-GMP).												
Category	Short-term (2025)	Mid- to Long term (2031)	Cumulative (~2031)																						
Sale of electrification parts	16.1	36.5	190																						
O8	Reduction in greenhouse gas emissions via transition to renewable energy sources	The implementation of the EU's REPowerEU and the IRA in North America are gradually expanding the renewable energy market. In line with its carbon neutrality strategy, Hyundai Mobis is accelerating the transition to renewable energy at its business sites, and it can lead to a reduction in carbon costs including emission allowance purchase cost.	Carbon costs of not transitioning to renewable energy were calculated by applying the national carbon prices to excess Scope 2 emissions compared to projected free allowances for domestic operations, and excess compared to Scope 2 target emissions for overseas operations. $\Sigma(\text{Carbon costs of not transitioning to renewable energy sources} - \text{Renewable Energy Transition Cost})$	(Unit: KRW 100 million) <table border="1"> <thead> <tr> <th>Scenario</th> <th>Short-term (2025)</th> <th>Mid-term (2030)</th> <th>Long-term (2040)</th> <th>Cumulative (~2040)</th> </tr> </thead> <tbody> <tr> <td>STEPS(2.4°C)</td> <td>39</td> <td>153</td> <td>348</td> <td>3155</td> </tr> <tr> <td>APS(1.7°C)</td> <td>44</td> <td>212</td> <td>679</td> <td>5569</td> </tr> <tr> <td>NZE(1.5°C)</td> <td>44</td> <td>264</td> <td>818</td> <td>6274</td> </tr> </tbody> </table>	Scenario	Short-term (2025)	Mid-term (2030)	Long-term (2040)	Cumulative (~2040)	STEPS(2.4°C)	39	153	348	3155	APS(1.7°C)	44	212	679	5569	NZE(1.5°C)	44	264	818	6274	In April 2022, Hyundai Mobis became the first company in the Korean automotive industry to join the RE100 initiative. The company is implementing renewable energy transitions in major business sites including Slovakia, Germany, Turkey through the purchase of certificates and participation in green pricing program. We are also planning to promote conversion step by step by utilizing various renewable energy such as PPA and so on
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O10	Transition to Eco-friendly vehicles	Driven by law and initiatives such as the Korean government's Clean Air Conservation Act and K-EV100, companies are expected to expand their conversion to eco-friendly cars. Hyundai Mobis plans to reduce Scope 1 greenhouse gas emissions from vehicle emissions by participating in K-EV100, resulting in fuel use and carbon cost savings.	Carbon cost savings were converted by applying emission allowance prices to the reduction amount in accordance with the annual K-EV100 conversion goal of domestic workplaces. In addition, the total carbon cost savings were calculated by considering the difference in the cost of renting, selling and purchasing, and fuel costs before and after the conversion. $\Sigma(\text{Carbon price amount of reduction in conversion} + \text{difference in conversion cost} + \text{difference in fuel cost before and after conversion})$	(Unit: KRW 100 million) <table border="1"> <thead> <tr> <th>Scenario</th> <th>Short-term (2025)</th> <th>Mid-term (2030)</th> <th>Long-term (2040)</th> <th>Cumulative (~2040)</th> </tr> </thead> <tbody> <tr> <td>STEPS(2.4°C)</td> <td>(1)</td> <td>(3)</td> <td>0.4</td> <td>(8)</td> </tr> <tr> <td>APS(1.7°C)</td> <td>(1)</td> <td>(2)</td> <td>2</td> <td>5</td> </tr> <tr> <td>NZE(1.5°C)</td> <td>(1)</td> <td>(2)</td> <td>2</td> <td>7</td> </tr> </tbody> </table> ※ From 2031 onward, only the operating costs of converted low-emission vehicles are considered	Scenario	Short-term (2025)	Mid-term (2030)	Long-term (2040)	Cumulative (~2040)	STEPS(2.4°C)	(1)	(3)	0.4	(8)	APS(1.7°C)	(1)	(2)	2	5	NZE(1.5°C)	(1)	(2)	2	7	As a participant in the K-EV100 initiative, Hyundai Mobis has set a goal to convert 100% of its corporate vehicles at domestic and overseas business sites to eco-friendly vehicles by 2030 and is implementing this transition in phases.
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The one for all mobility

Disclaimer

The figures included in this report are estimates of the long-term effects of climate risks and opportunities on the company up to 2040, based on various potential scenarios that could occur domestically and internationally. The scenario analysis was conducted in collaboration with Samjong KPMG. Climate risks and opportunities that Hyundai Mobis considers important may change in the future depending on changes in the internal and external environment. We will continuously monitor risk and opportunity factors, inspect and supplement plans when necessary, and strive to communicate with stakeholders.