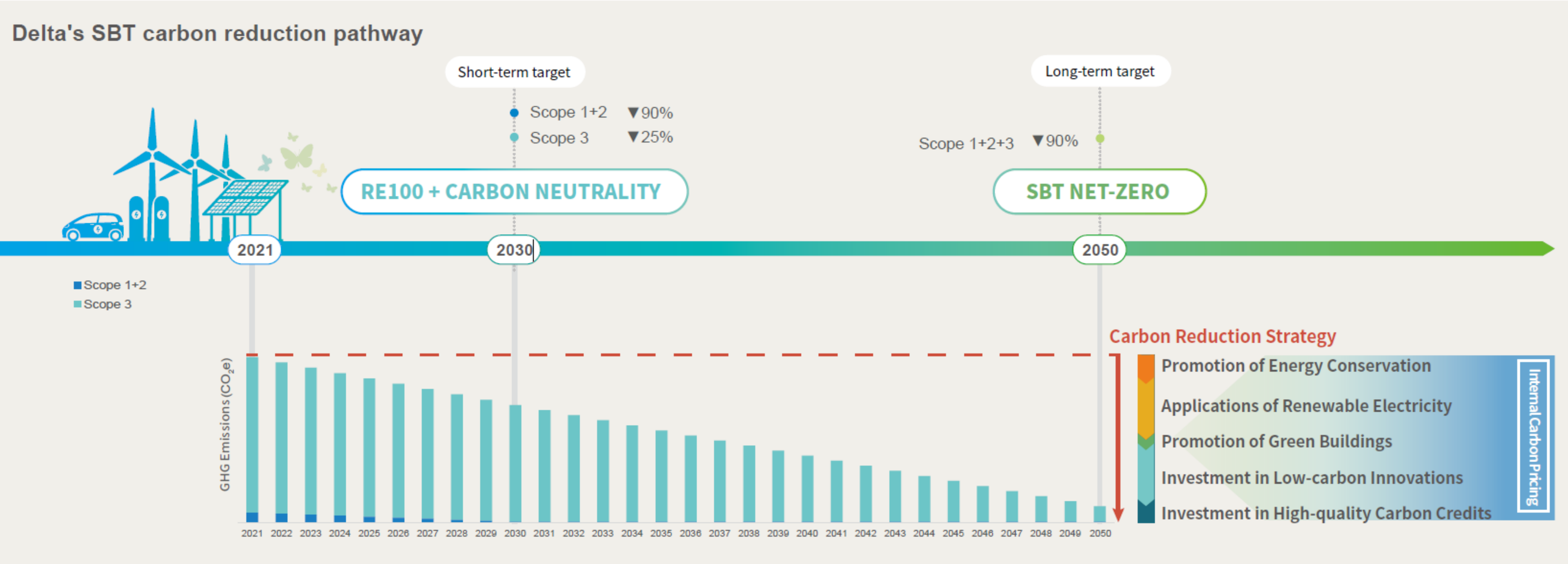
Delta Electronics Climate Change Strategy and Management

Delta Electronics

2024

Delta's SBT Carbon Reduction Pathway



Commitments to International Initiatives

WE MEAN BUSINESS COALITION | SCIENCE BASED TARGETS | TCFD | CLIMATE GROUP EV100 | RE100 CLIMATE GROUP | SCIENCE BASED TARGETS, THE NET ZERO STANDARD, ACCELERATING TO ZERO COALITION

2015 Commitments for "We Mean Business"	2017 Pass SBTi Evaluation	2018 Commit to EV100	2021 Commit to RE100	2022 Net-zero SBT Pass SBTi Evaluation
• Science-based emissions reduction targets (SBT) • Climate change information in main reports (TCFD) • Responsible Corporate Engagement in Climate Policy	SBT target: Reducing carbon intensity by 56.6% by 2025 with 2014 as the base year • The 1st in Taiwan and the 87th in the world to pass the evaluation	Scope: Delta's major operation sites Commitment: • Expansion of EV charging facilities • Switch to using EVs for company vehicles by 2030 • Incentives for employees and customers to use EVs	Use 100% renewable electricity in global operations by 2030	Achieve net zero emissions at all global operating sites by 2050 Signed the ZEV declaration during the COP27

Carbon Neutrality: Achieve carbon neutrality by 2030

Race to Zero: Sign Business Ambition for 1.5℃

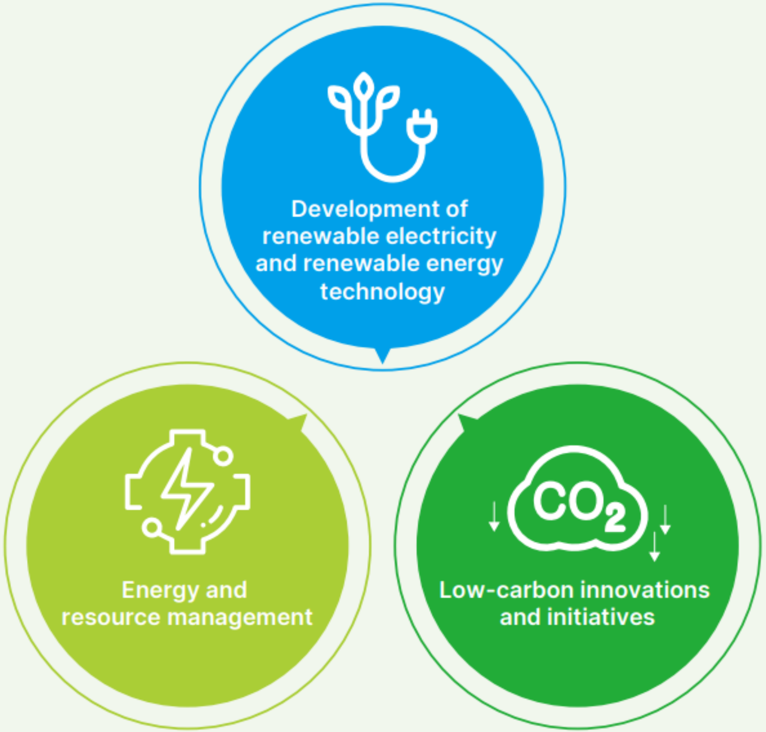
DELTA

Delta's Internal Carbon Pricing

To enhance incentives for reducing carbon emissions and performance management, Delta introduced carbon fee mechanisms in 2021 and set the internal carbon price at 300 USD per ton based on the internal and external carbon costs of our global production plants including regulatory penalties, carbon trading prices, case studies of benchmark international companies, and the Company's investment in renewable energy solutions and renewable electricity purchase costs.

Delta‘s implementation system for its internal carbon pricing mechanisms collects carbon fees from business groups at a rate of 300 USD per metric ton. The fees are included in Delta’s carbon fee fund. The carbon fee charged through the internal carbon pricing mechanism is reflected in the monthly management report and linked to the performance evaluation of the top executives of business groups to incentivize investments in carbon reduction applications in global operation sites. The three major applications of Delta‘s internal carbon pricing include supporting the development of renewable electricity and renewable energy technology, energy and resource management, and low-carbon innovations and initiatives. We seek to uncover business opportunities in these technologies as reference for decision making by business groups and for the integration of carbon cost management.

Three major applications of Delta's internal carbon pricing



Climate Risk assessment

Risk Assessment Process

Identify possible risks, assess the degree of impact, and formulate control response plans.

Step 01

List possible risks based on climate risk items

- Describe the risk content as specifically as possible
- Attach information source

Step 02

Assess the possibility of each risk

Step 03

Assess the impact of each risk

- If the degree of impact is different in different aspects, whichever is highest.
- The formula will automatically figure out the severity of the risk.

Step 04

Choose risk management principles for each risk

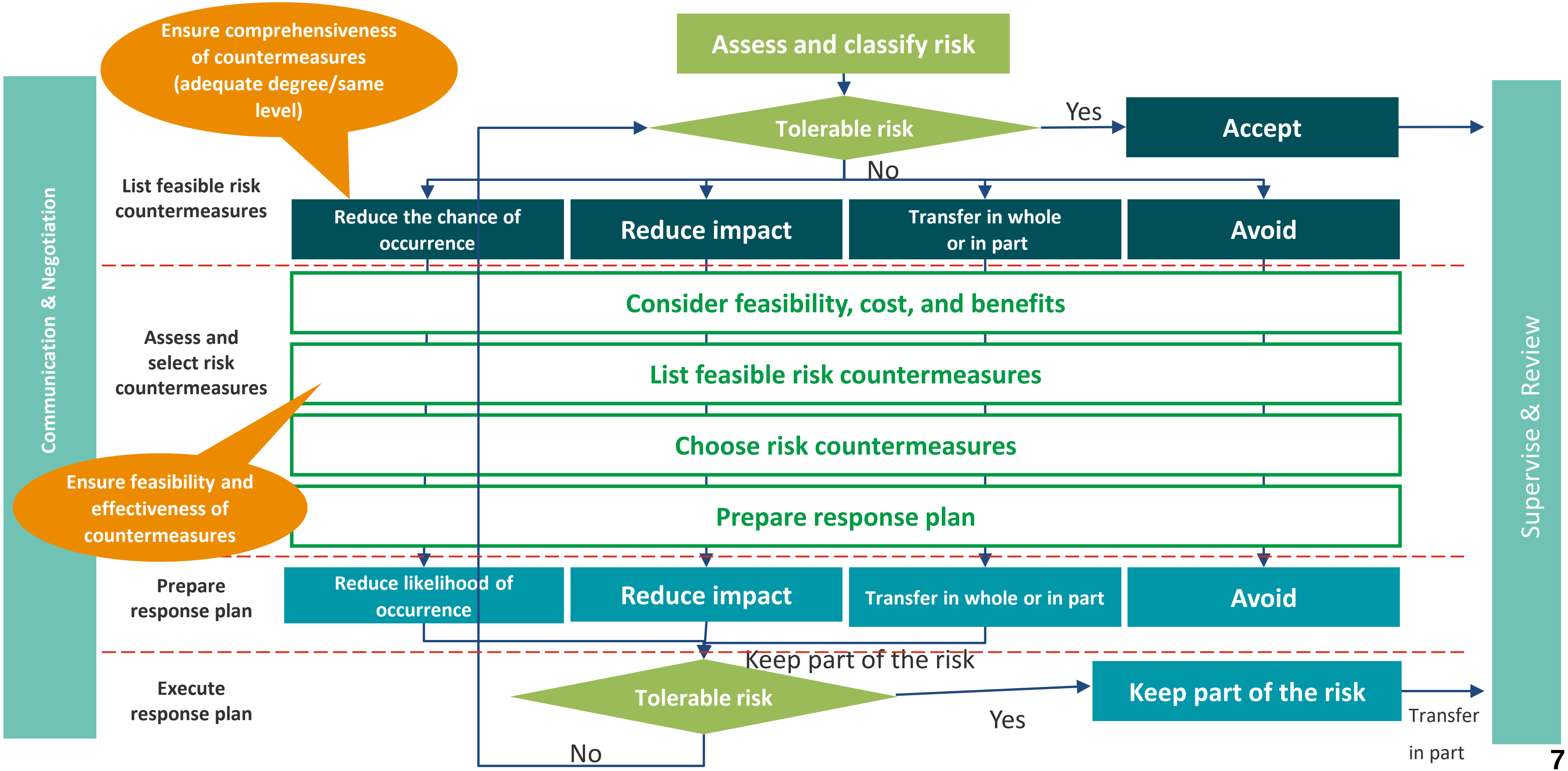
- Please select the most suitable one from the 4T risk management principles according to the risk content and severity in Step3.

Step 05

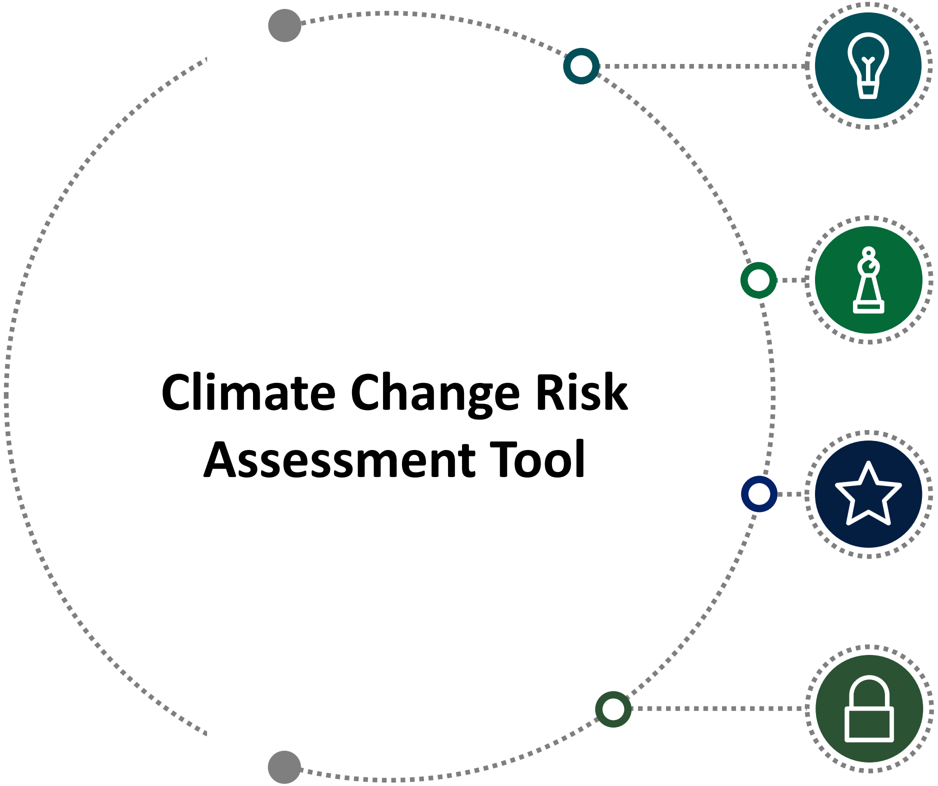
Anticipate the future risk management action

- Please plan the measures against this risk in the future according to the risk principle selected in Step 4.

From Risk Countermeasures to Response Plans



Climate Change Risk Assessment Tool Structure



Climate change risk description

- Risk item definition and TCFD classification
- Practical examples of risk items
- Proper noun explanation
- Department suggestion submission

Impact likelihood and degree

- The aspects of impacts of climate change
- Definition of impact likelihood
- Definition of impact magnitude

Risk identification and analysis

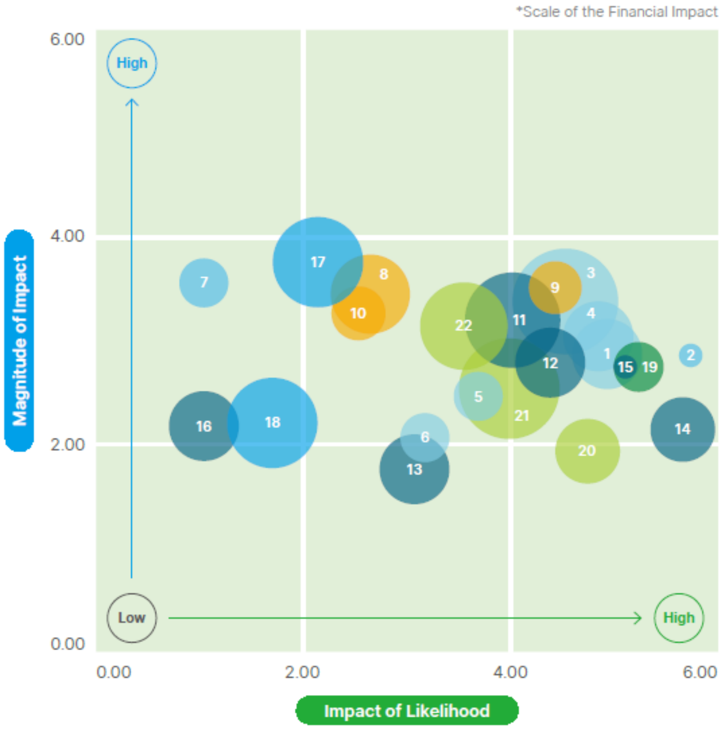
- Assess potential climate change risks
- Assess impact likelihood
- Assess impact magnitude

Manage climate change risks

- Inspect risk calculation results
- Determine management principles for each risk
- Anticipate future actions

Results of the Latest Climate Change Assessment

Delta Climate Risk Analysis Matrix



Top 5 Risks

Policy and Regulatory Risks
1. Domestic and international GHG reduction requirements
2. Voluntary regulations
3. Uncertainties in laws and policies
4. Carbon tax and related regulations
5. Mandatory regulations for products and services
6. Renewable energy regulations
7. Risks of litigation

Technology Risks
8. Products and services replaced by other low-carbon products and services
9. Cost of the transition to low-carbon technologies
10. Failed investment in new technologies

Market Risks
11. Customers change criteria for supplier selection
12. Customers change product specifications and requirements
13. Consumers shift to low-carbon products
14. Requirements for suppliers to reduce greenhouse gas emissions
15. Increase in the cost of raw materials
16. Lack of contribution from company in climate change, which affects investors' and banks' willingness to invest

Reputation Risks
17. Industry stigmatization
18. Adverse news on climate change that damages the Company's reputation

Immediate Physical Risks
19. Increase in the severity of extreme weather events

Long-Term Physical Risks
20. Customers change criteria for supplier selection
21. Customers change product specifications and requirements
22. Consumers shift to low-carbon products

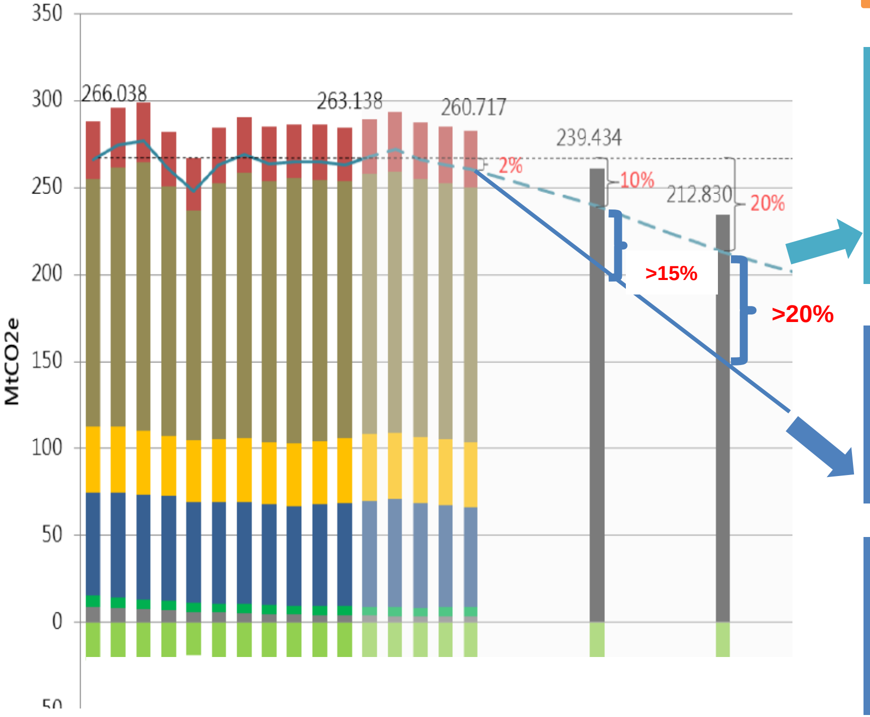
* Reference: Delta Electronic 2022 ESG Report

Transition Risk: Scenario analysis

Transition Risk

potential GHG & renewable electricity policy, carbon tax and related regulation

- **Assessment scope of the project: Taiwanese market**
- Expected assessment time: 2025, 2030



Goal: Explore the possible increase in market opportunities for energy storage products due to increased demand for renewable energies under different reduction scenarios

Scenario 1:
NDC Carbon Reduction Path
- 2025: 10%
- 2030: 20%

National electricity carbon emissions factor (kg/kWh)
- 2025: 0.394
- 2030: 0.376

Ratio of renewable energies
- 2025: 20%
- 2030: 24%

Scenario 2:
Beyond 2°C (IEA B2DS)
- 2025: 15%
- 2030: 40%

Scenario 2: National electricity carbon emissions factor (kg/kWh)
- 2025: 0.330
- 2030: 0.229

Ratio of renewable energies
2025: 33%
2030: 54%

Scenario 3:
Net Zero
- 2050: Net Zero

- Potential financial loss from changing policies is estimated at $7.81 M.
- Delta has been focusing on adaptation. In 2023, related spending on operations to match policy demand was $4.6 M.

Transition Risk

technology, regulation change, and potential clients' demand

	2025		2030		2050
Major Scenarios	**NDC**	**Beyond 2°C(IEA B2DS)**	**NDC**	**Beyond 2°C(IEA B2DS)**	**Net Zero**
Electricity emission factor (kg/kWh)	0.394	0.330	0.376	0.229	0.204
Ratio of renewable energy (%)	20%	33%	24%	54%	60%
Capacity of renewable energy device (GW)	26.9	44.4	31.8	72.0	135
Capacity of energy storage system (MW)	590 Built in-house: 160 Private purchases: 430	2,338	1,082	5,096	11,400
Discharge time (hr)	1 hour				
Potential Market (Demands from clients measured in MW)	590	2,338	1,082	5,096	11,400

Retrospectively estimate the possible national energy mix by using the predicted electricity carbon emissions factor, and to derive the renewable energies and energy storage devices (critical factor)

Key Assumption:
- The current technology will remain competitive for > 10 years.
- Assets lifetime > 10 years
- Evaluated using a balanced model
- The non-renewable operating reserve capacity remains constant across different scenarios (remains at 3.2GW)
- Ancillary capacity increase will all be made using energy storage device under different scenarios

Transition Risk

potential policy impact on upstream activities

	2025		2030		2050
Major Scenarios	**NDC**	**Beyond 2°C(IEA B2DS)**	**NDC**	**Beyond 2°C(IEA B2DS)**	**Net Zero**
Electricity emission factor (kg/kWh)	0.394	0.330	0.376	0.229	0.204
Ratio of renewable energy (%)	20%	33%	24%	54%	60%
Remained amount of GHG (kg) if no voluntary reduction actions	0.394*633,500,000 kWh*(1+8%)^4 year = 339,576,684	0.330*633,500,000 kWh*(1+8%)^4 year =284,417,020	0.376*633,500,000 kWh*(1+8%)^9 year =665,022,960	0.229*633,500,000 kWh*(1+8%)^9 year =289,998,600	0.204*633,500,000 kWh*(1+8%)^29 year =1,204,108,704
Incremental costs (USD)	3,395,770	2,844,170	6,650,230	2,899,990	12,041,090
Incremental costs transferred from upstream activities (USD)	**339,577**	**284,417**	**665,023**	**289,999**	**1,204,109**

*Assume that the carbon footprint from Delta’s upstream is equivalent to Delta’s own energy consumption and share the same increase rate.
*Current electricity consumption of the overall production plants = 633,500,000 kWh
*Assume the carbon fee remain USD 10/ton in Taiwan
*Assume that 10% of the cost will be transferred to Delta

Transition Risk

potential policy impact on direct operation and market – Below & Above 2°C

NGFS Scenarios (Scaled to 2050)	NGFS Below 2°C	NGFS Above 2°Cs	
	Net Zero 2050	NDC	Current Policies
Renewable Energy Demand	210 to 300 EJ per Year	14 to 60% less	29 to 73% less
Non-Electric Energy Demand from Building, Industry and Transportation	200 to 210 EJ per Year	12 to 25% more (Electrification stagnated)	25 to 50% more (Electrification stagnated)
Potential Revenue Impact - 2050	-	$5.5 to 27.6 billion	$11.5 to 33.5 billion

- Delta's own carbon reduction pathway through SBTi generally aligns with the Net Zero 2050 pathway.
- Delta's has substantial revenue share from renewable energy, EV and energy efficiency products. Projected revenue in 2050 in these categories is projected at 45.9 billion USD.
- Reduced demand on renewable energy and electrification of building, industry and transportation and high efficiency products will negatively affect revenue.
- Renewable energy and EV adoption relies largely on government incentives through rebates or tax credits. No increased pressure of electrification means less incentives, resulting in less investment and thus less revenue for Delta.

Transition Risk

Comparison of the 4 scenarios:

- In the model settings, we compared the growth of the same scenario in different years. The overall energy storage market is expected to grow more than twice as much in 2030 compared to 2025 in the B2DS.
- In the NDC scenario, the overall energy storage market is expected to grow almost twice as much in 2030 as in 2025.
- If we compare the current NDC with B2DS scenarios in the same year, the estimated overall energy storage market in 2030 in the B2DS is 4.7 times larger than in the NDC scenario. This indicates that the B2DS significantly drives demand for energy storage solutions, therefore, it is better if B2DS is the policy for Taiwan.
- In the proposed net zero scenario, assumed that the market has unlimited capacity, the overall energy storage market in 2050 is 2.23 times larger than the current NDC scenario.
- NGFS scenarios were assessed independently to look into risks resulting from above 2°C policy and market shifts.

Results of Delta's strategic comparison scenario analysis:

- Before 2025, Delta's internal strategy for energy storage solutions is consistent with NDC.
- However, if the policy environment in the B2DS takes shape, we expect a doubling of net increase in revenue compared to the baseline value.
- In long run where Delta committed to net zero by 2050, above 2°C scenarios will negatively impact revenue up to 73%.

Transition Risk

Focal Questions

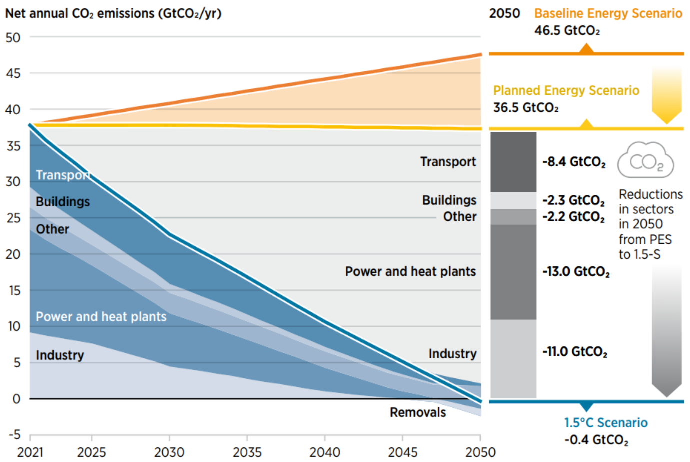
How does a global GHG reduction roadmap affect our companies GHG reduction pathway?

Scenarios

Transition scenarios IRENA Assumptions

- The annual reduction needed by IRENA will be consistent through 2050.
- Baseline emissions equal to IRENA PES scenario in 2021.
- Emission reduction will happen at the same rate across industrial sector.
- Delta's current emission reduction pathway is also consistent annually

FIGURE 1.10 Projected trends in global CO_2 emissions under three scenarios, 2020-2050



Methods

We compared our SBT roadmap with the IRENA decarb projection. We selected two decarb roadmaps (quickest and slowest within SBT commitment) and compared them to IRENA.

Results

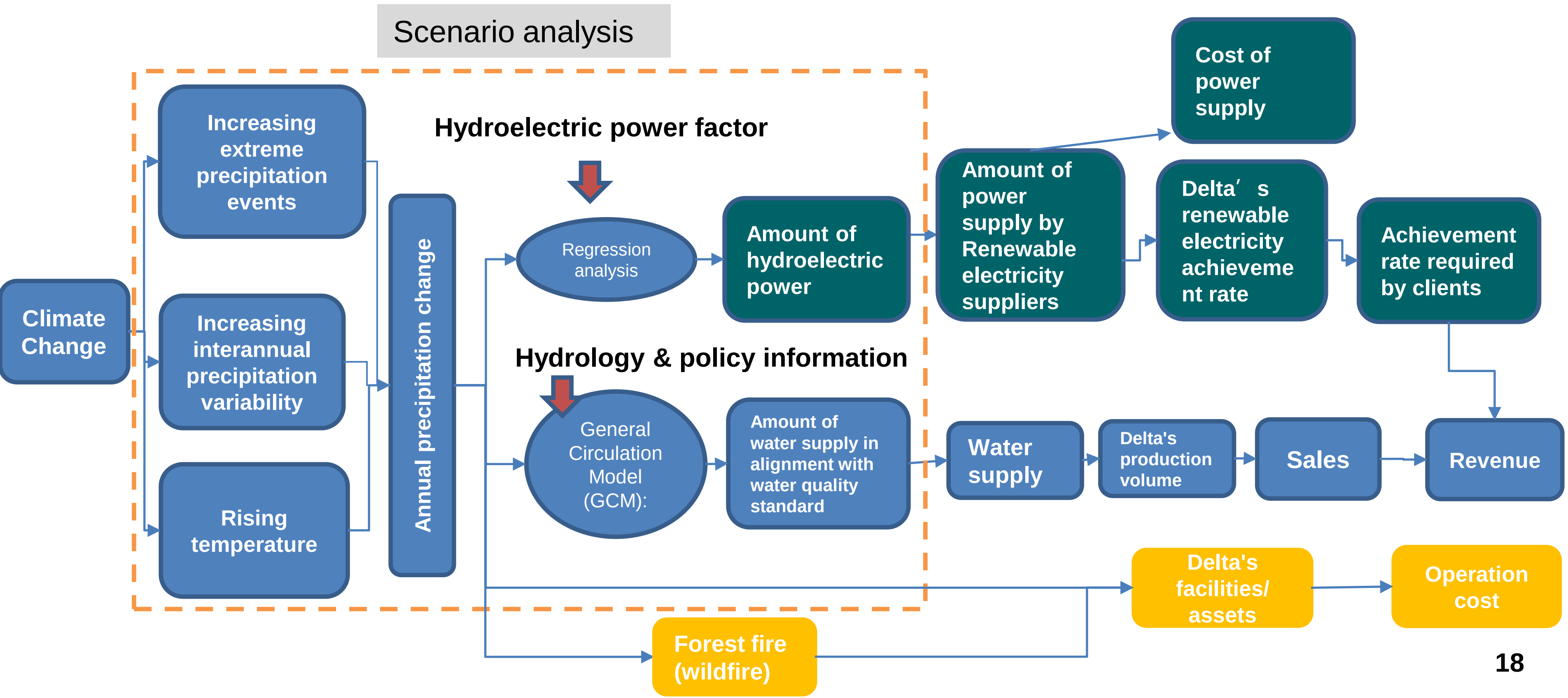
IRENA decarb has an overall 3.44% reduction per year across industries, where our roadmaps range from 2.5% to 3% per year. Considering the total baseline emissions we have, we have to achieve 13% to 28% more reduction every year to meet the IRENA scenario.

* Reference: WORLD ENERGY TRANSITIONS OUTLOOK 1.5° C PATHWAY

Physical Risk: Scenario analysis

Physical Risk

Impact & Assessment Process



Physical Risk

Focal Questions and Scenarios

Focal Questions

How climate change increases probability of having flood, heatwave and drought, which will damage Delta's assets and thus significantly increase our CAPEX and OPEX. Furthermore, if any of our suppliers are exposed to similar risk.

Scenarios

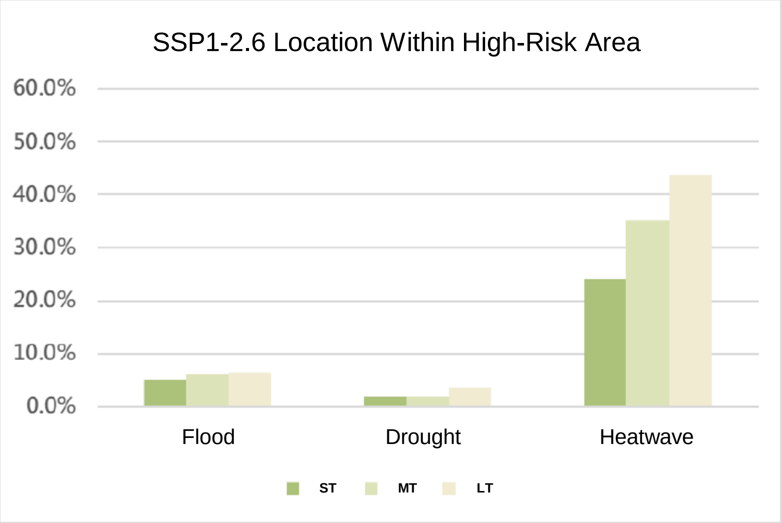
		SSP1-1.9	SSP1-2.6	SSP2-4.5	SSP3-7.0	SSP5-8.5
Own operation Supplier operation	Damage of Asset		v			v

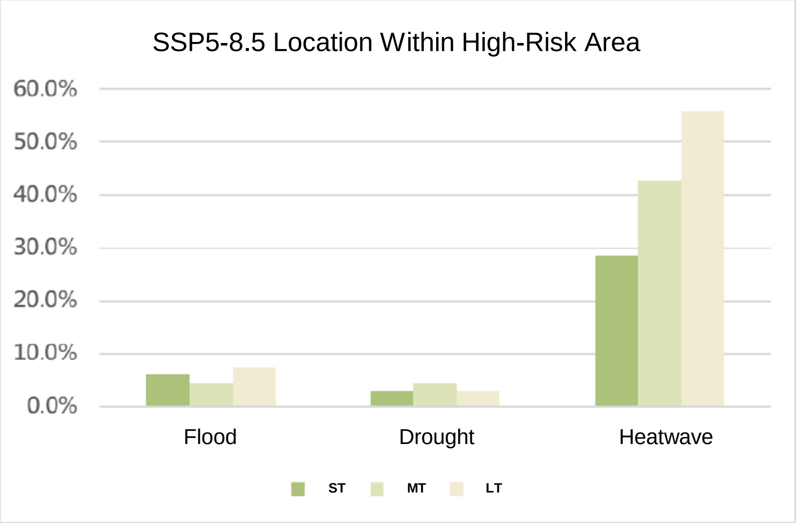
Methods

- Coverage: All Delta owned and leased locations; all Delta suppliers.
- Risk qualifiers (global):
  - Flood – 99 percentile of normal precipitation
  - Heatwave – 5 degree Celsius more than average (WMO)
  - Drought – SPI-3 Index
- Impact Quantification (global):
  - Flood – Days of cumulative impact from 99 percentile precipitation (DD Method)
  - Heatwave – Days of cumulative impact from 5 degree Celsius more than average (DD Method)
  - Drought – Maximum consecutive days without precipitation
- TCCIP AR6 and IPCC AR6 data used
- Timeframes: Short-term (<5 years), mid-term (5 to 10 years) and long-term (>10 years)

Physical Risk

Focal Questions and Scenarios Risk of Flood, heatwave and drought





- Heatwave has the most significant risk factor than flood and drought in both scenarios. Furthermore, as time goes, more Delta locations will be exposed to extreme heat risk.
- Conversely, there is no prominent trend of risks from flood and drought for Delta locations.
- Heatwave is shown to have huge impact to companies' asset, and is very likely to affect Delta.

Physical Risk

Focal Questions and Scenarios Risk of Increased flood, heatwave and drought

Timeframe	Flood		Heatwave		Drought	
	SSP1-2.6	SSP5-8.5	SSP1-2.6	SSP5-8.5	SSP1-2.6	SSP5-8.5
Short-Term	0.5	0.5	1.0	3.0	6.0	5.5
Mid-Term	1.5	0.5	8.0	8.5	6.0	6.0
Long-Term	1.5	1.0	9.5	26.5	6.0	6.0

* Numbers shown are percentage of supplier sites in the corresponding risk area.

- Asian and North American countries are more severely affected by heatwave. For both scenarios, risk of heatwave increase as time goes.
- Heatwave has the biggest impact to company asset compared to other extreme climates; therefore, will pose high financial and health risks to both Delta and its suppliers, significantly increase CAPEX and OPEX if no adaptation is performed.

Impact

- The asset loss is calculated according to S&P's "Quantifying the financial costs of climate change physical risks for companies (2023)".
- Based on our data showing a potential company growth of 8% per year, Delta is at risk to lose from $304 million to $3.29 billion by 2050 (average $1.80B).
- Physical adaptation cost is estimated at $1.2 billion to prevent the loss.

Physical Risk

Focal Questions and Scenarios

Focal Questions

How climate change affects regional air quality, which will in term affect Delta’s employee health and thus negatively impact our operation

Scenarios

		SSP1-1.9	SSP1-2.6	SSP2-4.5	SSP3-7.0	SSP5-8.5
Own operation	Production disruption		v			v

Methods

- WHO PM2.5 AQG as standard (15 µg/m^3, 24 hr-avg)
- Observe and sum days when local PM2.5 concentration is higher than WHO AQG
    - Jurisdictional district as the smallest statistical space
    - If multiple cities are in the same district, maximum day count (of included cities) is used to represent such district
    - 50 km2 grid for global data, 5 km2 grid for Taiwan
- CMIP6/AR6 data used

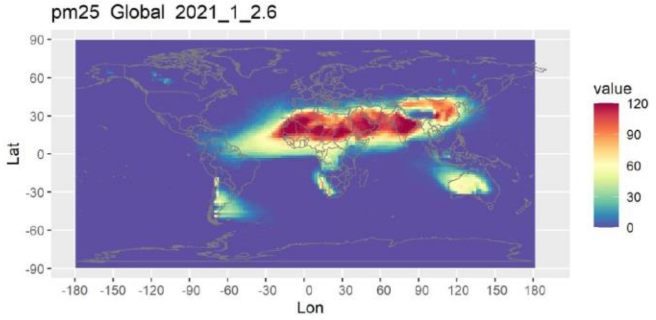
Physical Risk

Focal Questions and Scenarios: Risk of Increased PM2.5 Concentration

- Global warming would negative impact regional air quality
- Scenario analysis has shown increased PM2.5 concentration that is likely to cause health problems
- Asian countries would be affected the most

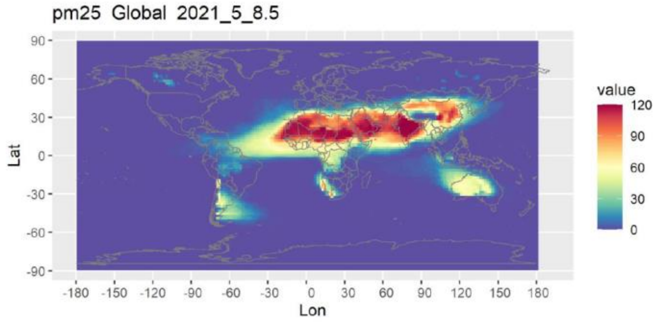
SSP1-2.6

2021-2030



SSP5-8.5

2021-2030



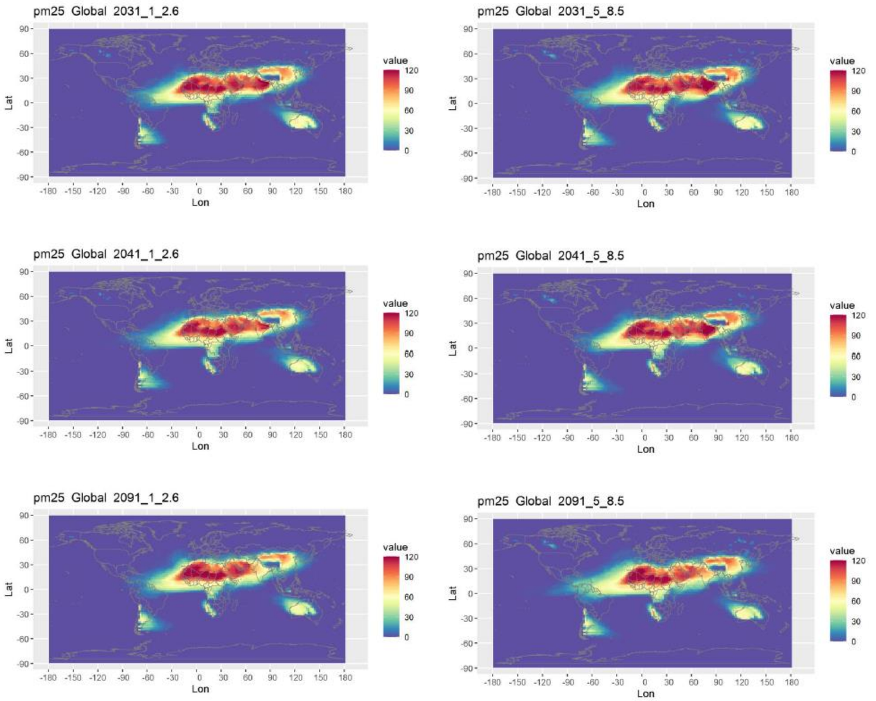
Physical Risk

Focal Questions and Scenarios: Risk of Increased PM2.5 Concentration

- Both scenarios showed increased PM2.5 concentration and WHO AQG exceedance
- In long-term, SSP5-8.5 is up to 28% more severe than SSP1-2.6
- Resolution for longer timeframe is lower, but showed similar trend

SSP1-2.6

SSP5-8.5



2031-2040

2041-2050

2091-2100

Physical Risk

Focal Questions and Scenarios: Risk of Increased PM2.5 Concentration

Continent (Cities Studied)	2021 - 2030		2031 - 2040		2041 - 2050	
	SSP1-2.6	SSP5-8.5	SSP1-2.6	SSP5-8.5	SSP1-2.6	SSP5-8.5
Asia (56)	64.536	68.589	51.696	58.696	44	56.589
Americas (24)	1.292	1.458	1.208	1.833	1.25	1.541
Europe (28)	1.357	0.429	0.821	0.321	0.607	1.214
Oceania (2)	0	0	0	0	0	0
Africa (1)	68	73	68	62	63	61

* Numbers shown are days where 24-hr avg PM2.5 concentration exceeds WHO AQG

- Asian countries are more severely affected, with increased exceedances through every decades.
- Although days of exceedances decrease in future intervals, the difference between scenario increased, showing SSP5-8.5 could have worse health impacts

Impact

The risk from asthma-induced hospitalization could impact our operation due to reduced work hours, missed workdays, and increased health spending.

Physical Risk

Focal Questions and Scenarios

Focal Questions

How precipitation changes will impact our upstream activities (hydro-electricity supplier, material supplier), own operations (production, assets), and downstream activities (sales)

Scenarios

		RCP 2.6	RCP 4.5	RCP 6.0	RCP 8.5
Upstream	Material suppliers				V
Upstream/own operation	hydro-electricity supplier	v	v	v	v
Own operation	Production disruption	v			v
Own operation	Assets				v
Downstream	Sales		v		

Data Source

- TCCIP (Taiwan Climate Change Precipitation Information and Adaptation Knowledge Platform), Taipower, Used TCCIP's 5*5 km gridded data of Taiwan.
- Including the data of rainfall observation stations of Central Weather Bureau, MOTC; Water Resources Agency, MOEA; Environmental Protection Administration, Executive Yuan; and Agricultural Research Institute and Forestry Research Institute, Council of Agriculture, Executive Yuan.
- The data period is from 1960 to 2019.

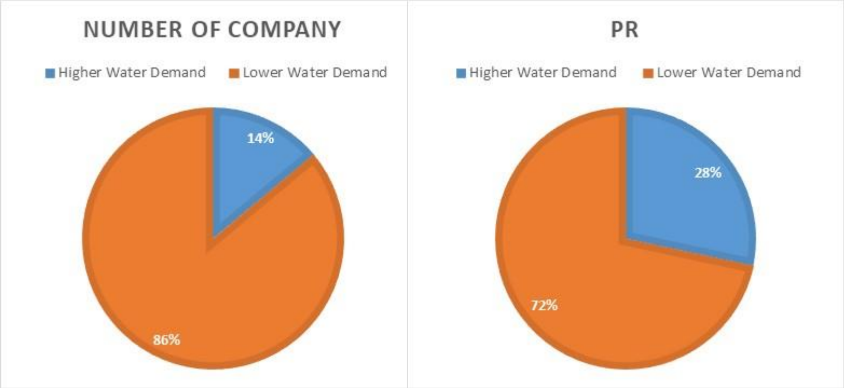
Physical Risk

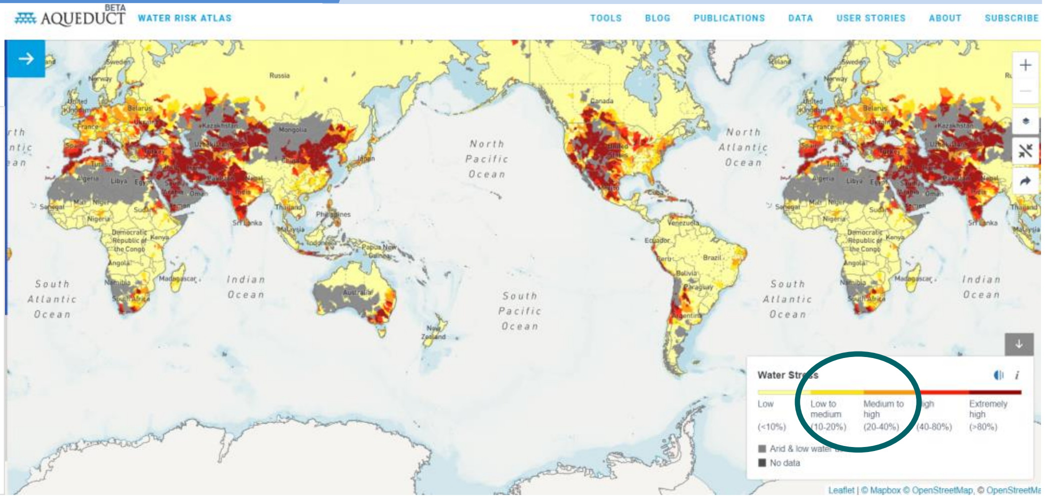
the impact of water risk on our UPSTREAM activities under RCP 8.5 for our material suppliers

Scope: Upstream Activities
Method: Assess the proportion of raw materials that consume a greater volume of process water in the upstream purchasesaaaa

Composition analysis:
The number of suppliers accounts for about 14%, and the procurement accounts for about 28% in 2021.

According to the WRI Aqueduct RCP8.5 scenario, these suppliers are mainly in areas where the water risk level is low to medium and medium to high





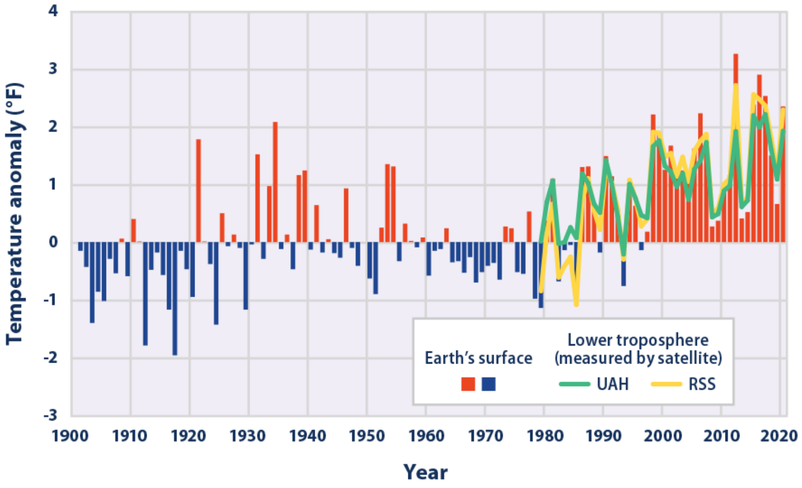
Pessimistic
The "pessimistic" scenario (SSP3 RCP8.5) represents a fragmented world with uneven economic development, higher population growth, lower GDP growth, and a lower rate of urbanization, all of which potentially affect water usage; and steadily rising global carbon emissions, with CO2 concentrations reaching ~1370 ppm by 2100 and global mean temperatures increasing by 2.6–4.8°C relative to 1986–2005 levels.
Source:
Aqueduct 2015

Physical Risk

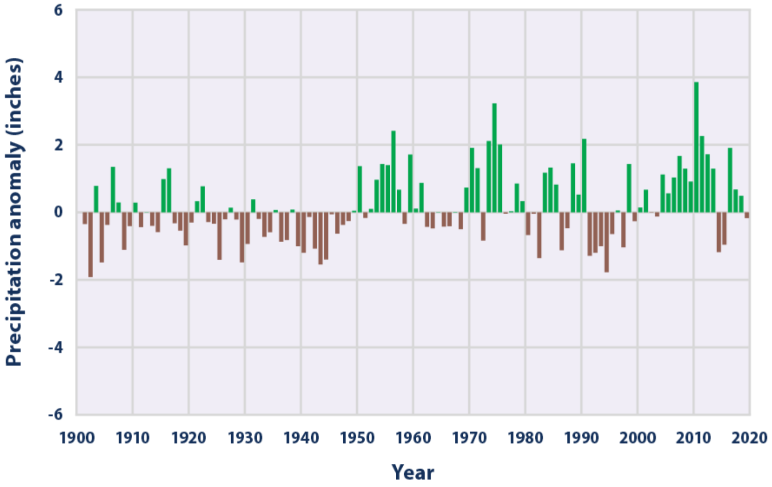
The background of climate change on precipitation

- Precipitation can have wide-ranging effects on human well-being and ecosystems.
- As average temperatures at the Earth's surface rise, more evaporation occurs, which, in turn, increases overall precipitation.
- By shifting the wind patterns and ocean currents that drive the world's climate system, climate change will also cause some areas to experience decreased precipitation.

Temperatures Worldwide



Precipitation Worldwide



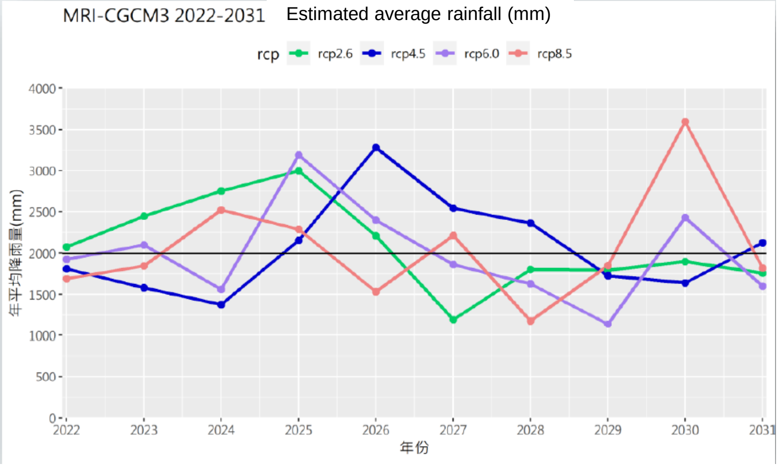
Source: https://www.epa.gov/climate-indicators/climate-change-indicators-us-and-global-precipitation

Upstream

Physical Risk

Precipitation Estimation

- Estimated the annual precipitation in the watershed area of Jiji Weir in the following 10 years (2022-2031) in each RCP scenario (2.6, 4.5, 6.0, and 8.5) using the model MRI-CGCM3; the estimated annual average precipitation in each scenario is 2093.1mm, 2060.4mm, 1983.3mm, and 2054.5mm, respectively.
- The black line is the average annual precipitation (1996.3mm) of the watershed area over the past 20 years



年份 \ 情境	RCP2.6	RCP4.5	RCP6.0	RCP8.5
2022	2074.1	1811.2	1925.1	1693.2
2023	2447.8	1578.7	2097.5	1847.3
2024	2752.7	1378.3	1562.1	2522.5
2025	3000.7	2153.0	3188.0	2288.8
2026	2208.6	3281.5	2399.8	1530.9
2027	1195.5	2542.6	1861.1	2215.7
2028	1803.3	2365.8	1627.1	1181.9
2029	1792.7	1727.6	1138.9	1849.9
2030	1896.8	1638.7	2431.5	3594.8
2031	1758.5	2126.4	1601.8	1819.5

Estimated Accumulative rainfall (mm)

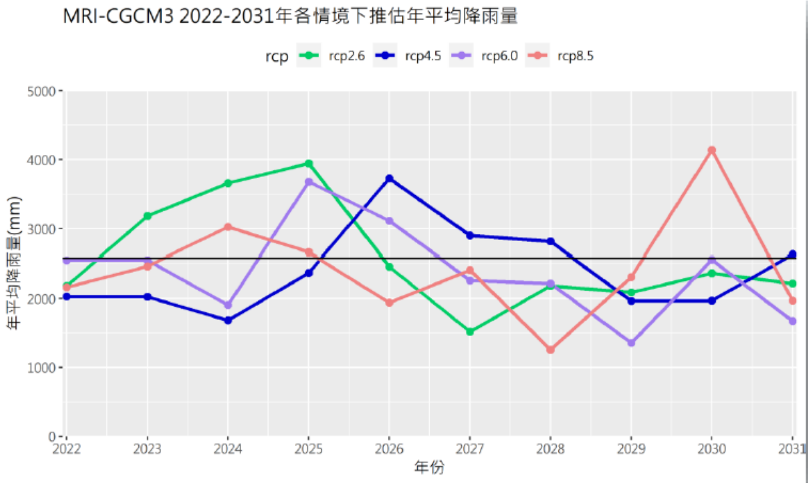
Source: Delta Electronics' research results

Upstream

Physical Risk

Precipitation Estimation

- Estimated the annual precipitation in the confluence area in the following 10 years (2022-2031) in each RCP scenario (2.6, 4.5, 6.0, and 8.5) using the model MRI-CGCM3; the estimated annual average precipitation in each scenario is 2581.7mm, 2413.6mm, 2387.5mm, and 2435.5mm, respectively.
- The black line is the average annual precipitation (2583.4mm) of the confluence area over the past 20 years



年份 \ 情境	RCP2.6	RCP4.5	RCP6.0	RCP8.5
2022	2184.2	2028.9	2549.5	2165.3
2023	3184.4	2027.3	2552.7	2466.3
2024	3661.9	1685.3	1904.0	3025.7
2025	3947.1	2372.6	3678.8	2666.1
2026	2460.6	3728.8	3114.5	1940.3
2027	1521.3	2902.4	2263.9	2413.0
2028	2181.3	2819.6	2217.8	1257.7
2029	2089.9	1965.3	1358.4	2311.8
2030	2366.9	1971.8	2560.6	4138.1
2031	2219.2	2633.6	1674.4	1970.2

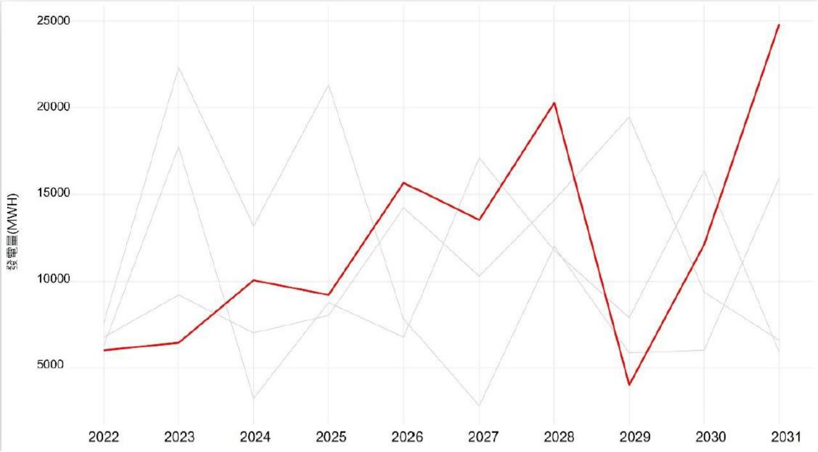
Estimated Accumulative rainfall (mm)

Source: Delta Electronics' research results

Physical Risk

Total Electricity Generation Estimation

- Used the aforementioned regression model to estimate the total annual power generated in each scenario.
- In the case of RCP4.5 (red line), the power generated varies greatly year by year due to precipitation variability. It is estimated that the smallest amount of the total annual power generated is 4,000 MWh in 2029, and the largest amount is 24,000 MWh in 2031



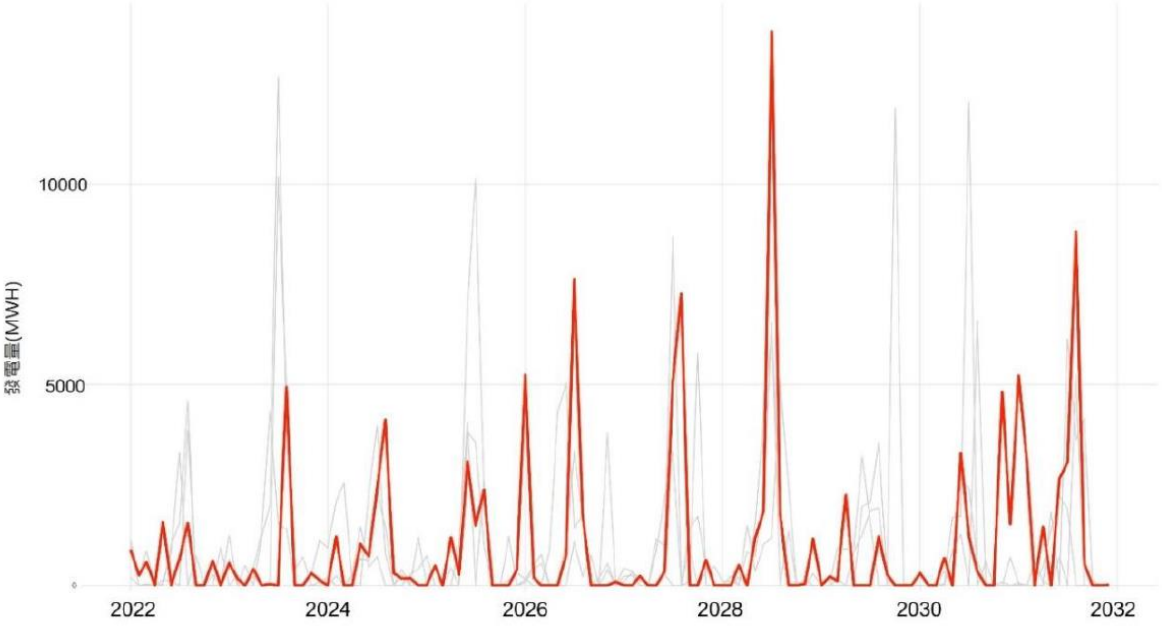
Source: Delta Electronics' research results

Upstream

Physical Risk

Monthly Electricity Generation Estimation

The estimated monthly power generated in each RCP scenario (RCP 2.6, 4.5, 6.0, and 8.5) in the following 10 years (2022 to 2031) shows an upward trend, and it also shows that the low points of power generated are mostly in February, March, September, and October, which is aligned with Taiwan's climatic conditions and the observed trend of power generated in the past.



Source: Delta Electronics' research results

Physical Risk

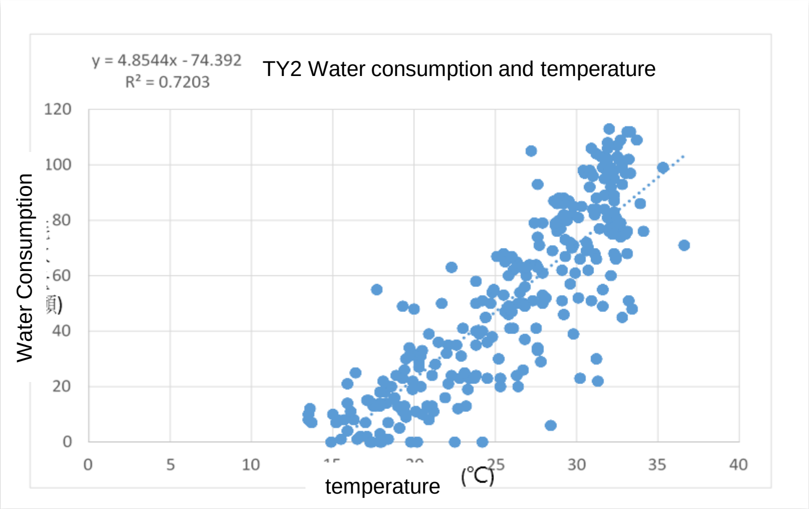
the impact of precipitation on Delta

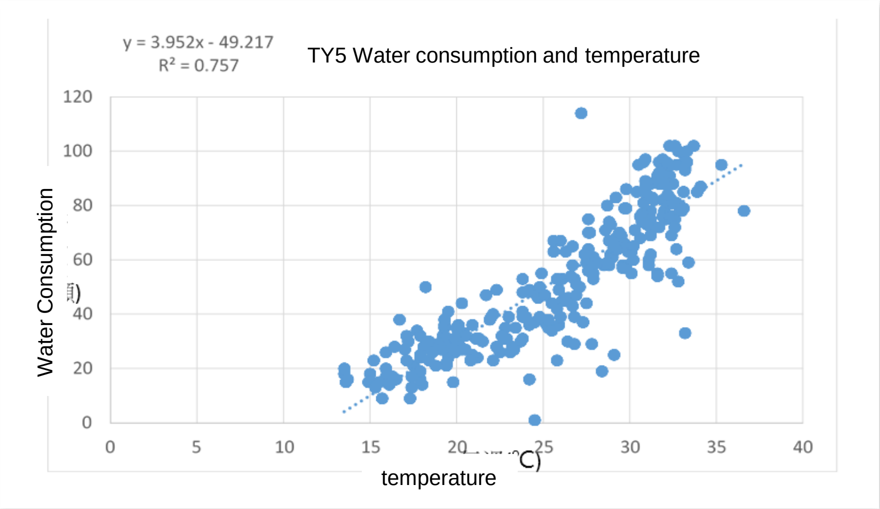
	Item	RCP 4.5 – minimum	RCP 4.5 – maximum
Upstream	Range of Electricity Generation Estimation	4,000 MWh	24,000 MWh
Own Operation	Costs of electricity and other costs required	1,391,000 USD	3,905,000 USD
Downstream	Sales loss (revenue)	328,973,000 USD	No loss

*Assume that Delta's own electricity consumption in Taiwan remains the same
*Assume under a take-or-pay agreement

Physical Risk

Simulation of Cooling Water Consumption at the Plants in 2030s





When the temperature rises by 1°C,

- Delta Plant 2's daily cooling water consumption will increase by 4.85 metric tons
- Delta Plant 5's daily cooling water consumption will increase by 3.95 metric tons

→ The two plants face different future climate impacts, which may be attributed to the areas of the plants or the new and old equipment

Source: Delta Electronics' research results

Physical Risk

Simulation of Cooling Water Consumption at the Plants in 2030s

Plant	Cooling water consumption
Plant 2	17,152
Plant 5	17,703

Results of Simulation		RCP 2.6 Changes in future water consumption	RCP 8.5 Changes in future water consumption
Plant 2	Increase in cooling water consumption	2,120(ton/year)	1,584(ton/year)
	Increase rate of cooling water/Increase rate of total water consumption	+12.4% ± 3.6%	+9.2% ± 3.4%
Plant 5	Increase in cooling water consumption	1,726 (ton/year)	1,290(ton/year)
	Increase rate of cooling water/Increase rate of total water consumption	+9.8% ± 2.7%	+7.3% ± 2.7%

Physical Risk

the impact of rising temperature on assets under RCP 8.5

Item	Impact	Account Title Impacted	Calculation Formula or Description	Asset/Activity Life Cycle
Chillers	• Increase in the power consumption of chillers • Increase in electricity bills	Increase in operating costs	Chiller operating hours x power consumption increase coefficient x estimated temperature increase x average electricity price	1
	• Increase in the water consumption of chillers • Increase in water bills	Increase in operating costs	Chiller operating hours x water consumption increase coefficient x estimated temperature increase x average water fee	1
	• Increase in maintenance fee	Increase in operating costs	Annual maintenance of RTHD, quarterly maintenance of RTHD, quarterly maintenance of CVHF, RTHD evaporator cleaning, AHU non-woven fabric replacement (33 units), CVHF annual major maintenance	1
Other air conditioners	• Increase in maintenance fee	Increase in operating costs		1
Energy-efficient equipment	• Increase in the amount of investment	Increase in fixed assets	Energy-efficient air conditioning, energy-efficient air compressor, energy-efficient air discharge, and electricity recovery equipment	>5

Physical Risk

the impact of increased temperature on assets under RCP 8.5

Results under RCP 8.5

- Impact on temperature: IPCC AR5 RCP 8.5 scenario: Temperature increase by 0.56°C between 2010 and 2030
- Converted into an average annual temperature increase of 0.03°C
- Application: Increase of costs with temperature increase by 1°C
- Cases: Plant TN & WJ

	Potential Financial Impact	Cost of Management
Cash and cash equivalents	(21)	(57,220)
Property, plant and equipment	-	44,447
Total assets	(21)	(12,773)

Unit: Thousands of NTD

Adaptation

Risk Management Principles

The general response strategies for risks can be divided into four categories, which are also known as the 4T principles based on the acronym.

1 Transfer

Transfer the risk to a third party, such as taking out insurance or outsourcing relevant business, to achieve the effect of transferring part of the risk.

3 Terminate

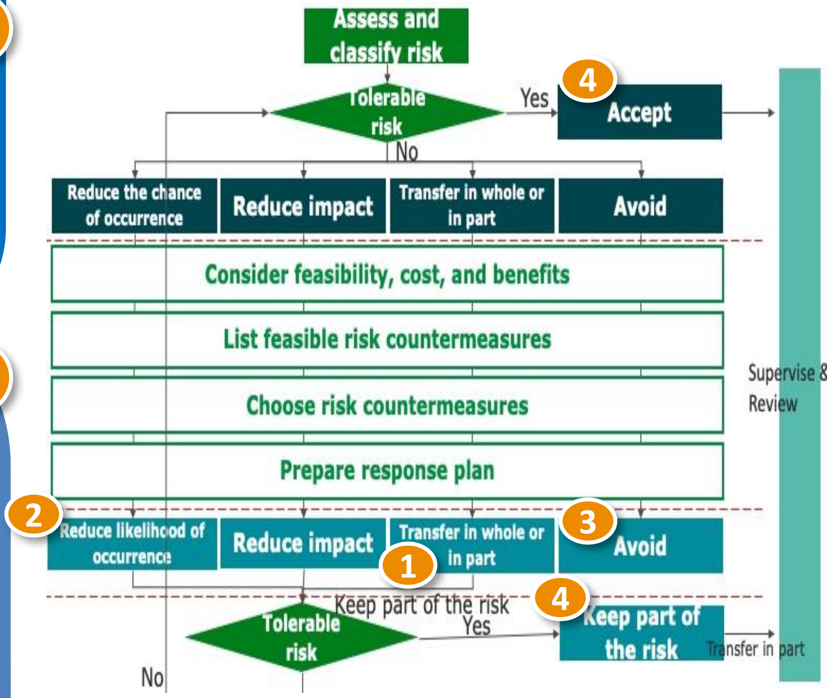
Through plan changes, the likelihood of specific risks can be completely avoided. For example, the production of a certain product has a huge impact on the environment, and the production is stopped when the situation cannot be improved.

2 Treat

Take measures to reduce the likelihood of risk occurrence and reduce the impact, or achieve both goals at the same time. Treating a risk may not completely eliminate the risk but can control the risk to an acceptable level.

4 Tolerate

If the ability to take effective actions against a risk is already quite limited, or the benefits of taking actions are out of proportion to the costs paid, it will be more suitable to accept the current situation and continue to observe.



Delta Location Physical Risks identification and analysis

The results showed that there may be many types of physical risks in the next five to ten years and most were associated with water resources. The results also reminded us of the possibility of wildfire, which was not among the risks we have monitored in the past and requires more attention.

Delta main plant	In 5 years	In 10 years	In 11 years and beyond
Taiwan	(H) Wildfire (H) Landslide (H) Cyclone (H) Extreme heat	(H) Urban flood (H) Coastal flood (H) River flood (H) Water scarcity	(H) Earthquake (L) Volcano (H) Tsunami
Suzhou	(H) Extreme heat (H) Wildfire	(H) River flood (M) Urban flood (H) Coastal flood (M) Water scarcity (H) Cyclone	(H) Tsunami (L) Landslide (L) Earthquake
Dongguan	(H) Extreme heat (H) Wildfire	(H) River flood (H) Urban flood (H) Coastal flood (M) Water scarcity (H) Cyclone	(L) Landslide (L) Earthquake (M) Tsunami
Wellgrow Plant	(H) Extreme heat (H) Wildfire	(H) River flood (H) Urban flood (H) Coastal flood (M) Water scarcity (H) Cyclone	(L) Earthquake (L) Tsunami (L) Landslide
Bangpoo	(H) Extreme heat (H) Wildfire	(H) Coastal flood (M) River flood (H) Cyclone (M) Water scarcity (H) Urban flood	(L) Earthquake (L) Landslide (L) Tsunami
India	(H) Earthquake (H) Extreme heat (H) Landslide (H) Wildfire (H) Water scarcity	(H) River flood (H) Coastal flood (H) Urban flood (H) Cyclone	(L) Volcano (M) Tsunami

(H) High (M) Medium (L) Low (L) Very Low

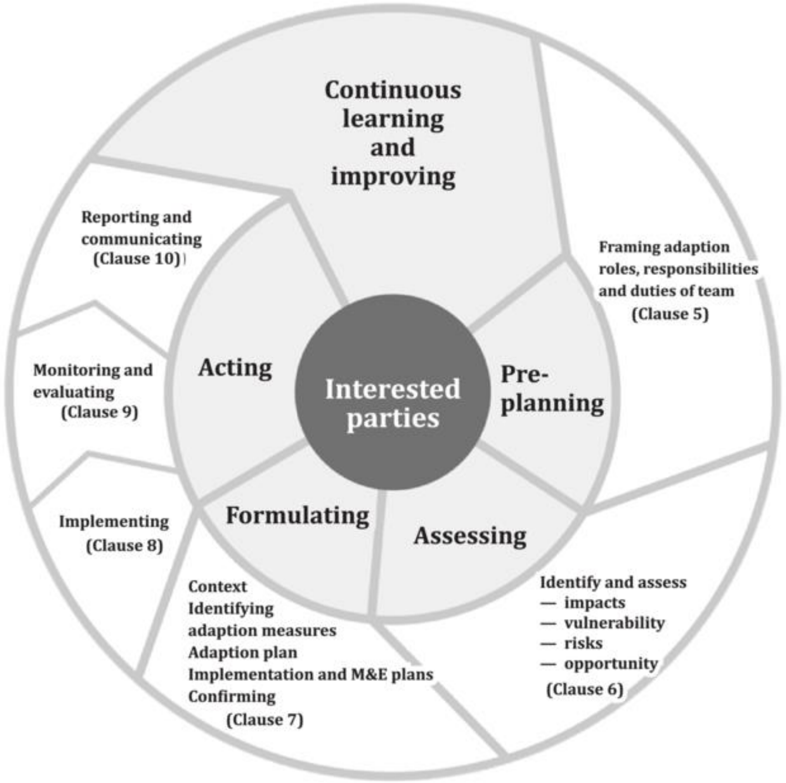
Reference: Online tools launched by the partnership between Global Facility for Disaster Reduction and Recovery (GFDRR) and the World Bank (thinkhazard.org)

Projected Future Temperature Change of Delta Production Sites In Taiwan

Location		Scenario	2021-2025	2025-2030	2030-2050	GCM
Area	Production Sites		Average Year Temp.(℃)			
Taoyuan	TY CL RD 	RCP 2.6	23.49	23.3	23.73	HadGEM2-AO
		RCP 8.5	22.78	22.9	23.98	HadGEM2-AO
Hsinchu	CYN 	RCP 2.6	23.86	23.69	24.08	HadGEM2-AO
		RCP 8.5	23.3	23.38	24.46	HadGEM2-AO
Taichung	Office 	RCP 2.6	23.84	24.13	24.32	MIROC5
		RCP 8.5	23.94	24.41	24.66	MIROC5
Tainan	Office 	RCP 2.6	24.53	25.25	25.17	MIROC5
		RCP 8.5	24.92	25.45	25.15	MIROC5

Adaptation Planning Principles ISO 14090

- Risk Prioritization and Gap Analysis in terms of adaptive capacity
- Individualize based on climate change and organization needs
- Adapt a robust management procedure that's agile to changes
- Establish clear communication channels and evaluation methodologies
- Consider trends and changes, and conduct regular evaluation and update throughout the planning and implementation lifecycle
- Policymaking compatible with industrial, governmental and institutional regulations
- Take into account feedbacks during implementation and stay flexible



Picture Credit: ISO 14091

Adaptation Planning

within 5 years

Climate Risk Item	Scope of impact	Level of impact	Location	Adaptation Measures and Target
Extreme Weather Events	Upstream (including suppliers)	Medium	Global	Share the water conservation experience of Delta's own plants and green buildings with suppliers in high-risks areas to plan for climate change mitigation and adaptation.
				Formulate plans in advance and execute backup mechanisms, including the maintenance of reasonable and safe material inventories in response to supply chain risks to mitigate production capacity shocks and maintain flexibility in product production plans.
				Evaluate suppliers' water resource management and short, medium, and long-term response strategies based on the feedback in the questionnaire to strengthen the sustainability of the value chain and enhance the Company's influence in achieving corporate sustainability.
	Upstream & Existing Operations	High	Taiwan Suzhou Dongguan	Procure mixed-renewable electricity from various energy sources such as wind, solar, and hydro to enhance drought resilience. Develop scenario analysis to predict weather patterns, and optimize our renewable electricity strategies. Integrate Delta’s core competence in renewable energy solutions, storage, and management system to maximize the overall benefit and build the resilience of the plants in response to natural disasters.

Adaptation Planning

within 5 years

Climate Risk Item	Scope of impact	Level of impact	Location	Adaptation Measures and Target
Extreme Weather Events	Existing operations (cover 100% of total revenues)	Medium	Taiwan China: Suzhou Dongguan Thailand: Wellgrow Bangpoo India: Gurgaon Rudrapur	Establish water conservation targets and evaluated the current conditions and future water shortage risks according to RCP 2.6 (2°C warming) and RCP 8.5 (Business as Usual, BAU) scenarios of IPCC AR4 to enhance regional water resource resilience and achieve sustainability in water consumption.
				Prioritize the response to severe water shortage events and make use of opportunities for climate change adaptation actions such as the early replacement of equipment with high water consumption.
				Increase wastewater treatment and recycling, reduce dependency on tap water.
				Implementation and exercises for the Business Continuity Plan (BCP)
	New operating site (100% of new operations)	Medium	India: Krishnagiri Thailand: Bangpoo China: WJ、WH、CZ Taiwan: CL	Consider climate-related factors for site selection conditions.
				Increase flood discharge and prevention facilities in the surroundings.
				Add water storage tanks to meet the water demand for at least 2–3 days and to improve the resilience.
				Set up dual water supply systems to strengthen water dispatch.
				Increase rainwater recycling facilities to reduce the demand for tap water.
				Meet green building and WELL certifications.
	Downstream (including customers)	Medium	Coastal port	Assess the risk of storage location under climate change and flexibly adjust the place of shipment, or adopt other alternative storage plans

Adaptation Planning

within 5 years

Climate Risk Item	Scope of impact	Level of impact	Location	Adaptation Measures and Target
Water Scarcity Flood	Existing operations (cover 100% of total revenues	Medium	Taiwan China: Suzhou Dongguan Thailand: Wellgrow Bangpoo India: Gurgaon Rudrapur	Make plans and arrangement for backup water supply, and establish a recycled water system to reduce the demand for sub-grade water consumption.
				Strengthen emergency back-up provisions and planning (water consumption).
				Install water meters and other systems for monitoring and water-saving service management.
				Strengthen the use of reclaimed water.
				Re-examining and maintaining all old pipelines.
	New operating site(100% of new operations)	Medium	-	Establish a waste water reclamation system to reduce demands for secondary use (water consumption).
				Increase the area of natural wetlands near the company operations.

Adaptation Planning

within 5 years

Climate Risk Item	Scope of impact	Level of impact	Location	Adaptation Measures and Target
Water Scarcity Flood Extreme Heat	Upstream (including suppliers)	Medium	Global	Keep abreast of the transportation system to avoid blockage of the shipment path due to climate change, and from strategic alliances with other exporters, such as a shipping fleet.
	New operating site (100% of new operations)	Low	-	Restore the ecosystem functions and services in a large area. Select the operation sites in eco-industrial park with a high percentage of resources recycled, including water, electricity, heat, and raw materials.
	Downstream (including customers)	Low	Coastal port	Keep abreast of the transportation system to avoid blockage of the shipment path due to climate change, and from strategic alliances with other exporters, such as a shipping fleet.

Opportunities from Adaptation

- Energy storage and infrastructure is vital to adapt to climate change through the usage of clean energy.
- Strong market demand is going to continue for these products because of the need to store clean energy and upgrade basic infrastructure to support the change.
- Delta has been investing heavily in the energy storage and infrastructure sector, which creates advantage of development.
- Related business unit hits about $7 billion in revenue in 2023.
- Predicted revenue in 5 years according to internal estimation of company grow can reach around $11 billion.
- Increased R&D spending is the key to capture this opportunity, which will be around $3.98 billion in 5 years.

2023 Delta Electronics TCFD & TNFD Report

* For detailed climate risk disclosure, please refer to the 2023 Delta Electronics TCFD & TNFD Report

Smarter. Greener. Together.